SMART BUILDINGS

Compact Home Catalog

Protection and comfort systems for your home



ABB is the world-leading provider of smarter home, smarter building and intelligent community solutions with a pragmatic and innovative spirit, as well as total contribution to social and environmental responsibility and sustainability.

Through innovative protection, metering and command devices, as well as distribution enclosures, we make greater energy efficiency and increased security easier than ever.

Table of contents

004–035 **Introduction**

036–115 **Protection**

116–145 **Command and signaling**

146–157 **Comfort**

160–197 **Energy efficiency**

198–286 **Consumer units and junction boxes**

Introduction

Table of contents

006–007 **Safety at home with ABB**

008–009 **Applications and solutions**

010–011 **Smart protection for lasting comfort**

012–013 **Expertise that lets you think big**

014–015 **Greater comfort, full protection**

016–017 **An offering designed to meet present and future needs**

018–024 **Efficiency, protection, comfort: measuring a system's value**

025–035 **Application examples**

Safety at home with ABB

Thanks to its expertise, ABB offers best-in-class solutions for your home. The comprehensive portfolio of miniature circuit breakers, residual current devices, surge protective devices, as well as control, signaling, measuring and smart accessories help you create buildings of the future, today.

By definition home is where you will find maximum comfort and protection because when we feel safe, we can relax. Therefore comfort is closely linked to protection, with regard to personal safety, energy savings, environmental sustainability and economic advantages.

Nowadays, new buildings are based on constantly developing building standards and regulations: state-of-the-art materials and products are designed, installed and operated to ensure once unimaginable levels of comfort, security, design and energy efficiency. Within this rapid evolution, plants – whether electric, thermo-hydraulic, data transmission or any other kind – are the nerves and intelligence of all buildings.

They allow us to manage and optimise our use of energy, climate, sound, alarms, communications and to synchronise any device – electric, electronic, mechanical, hydraulic – based on time of day, use conditions and user expectations.



Through its Compact Home range, ABB makes a full product range available to residential building plant designers and installers. Reliable, easy-to-use and based on advanced technology these products are the result of continuous and intense research and know how of the world-leading provider of smarter home and smarter building solutions.

Today ABB offers all the products, systems and services needed to guarantee maximum domestic comfort and protection, in any environment or context.

ABB's Compact Home range includes devices and equipment used to reliably manage utilities: these solutions enable you to optimise, integrate and make safety, protection and comfort systems inside and outside your home more efficient, from kitchen to bathroom, lounge to bedroom, garage to garden. Range integration and modularity are two of the basic concepts of ABB's Compact Home. All products are versatile and can be easily upgraded and extended with other solutions chosen from the vast ABB solution portfolio.

Devices installed in the control panel or switchboard are flanked by Compact Home range control and automation solutions based on the most modern aesthetic and design concepts, but also provided with analogical and digital functions and bus or wireless communications.





A technology that isn't to see, but is to live

The endless personalization and integration possibilities of ABB's residential solutions allow you to tailor systems eactly to your requirements, combining protection, safety, comfort and savings.

Protection
Protecting means safeguarding users, environments and equipment against risks and damage linked to faults or inproper usage.

Surges, overloads, short circuits or earth leakage currents are dangerous situations which, with no adequate control and protective measures, can damage the plant and lead to bad accidents.

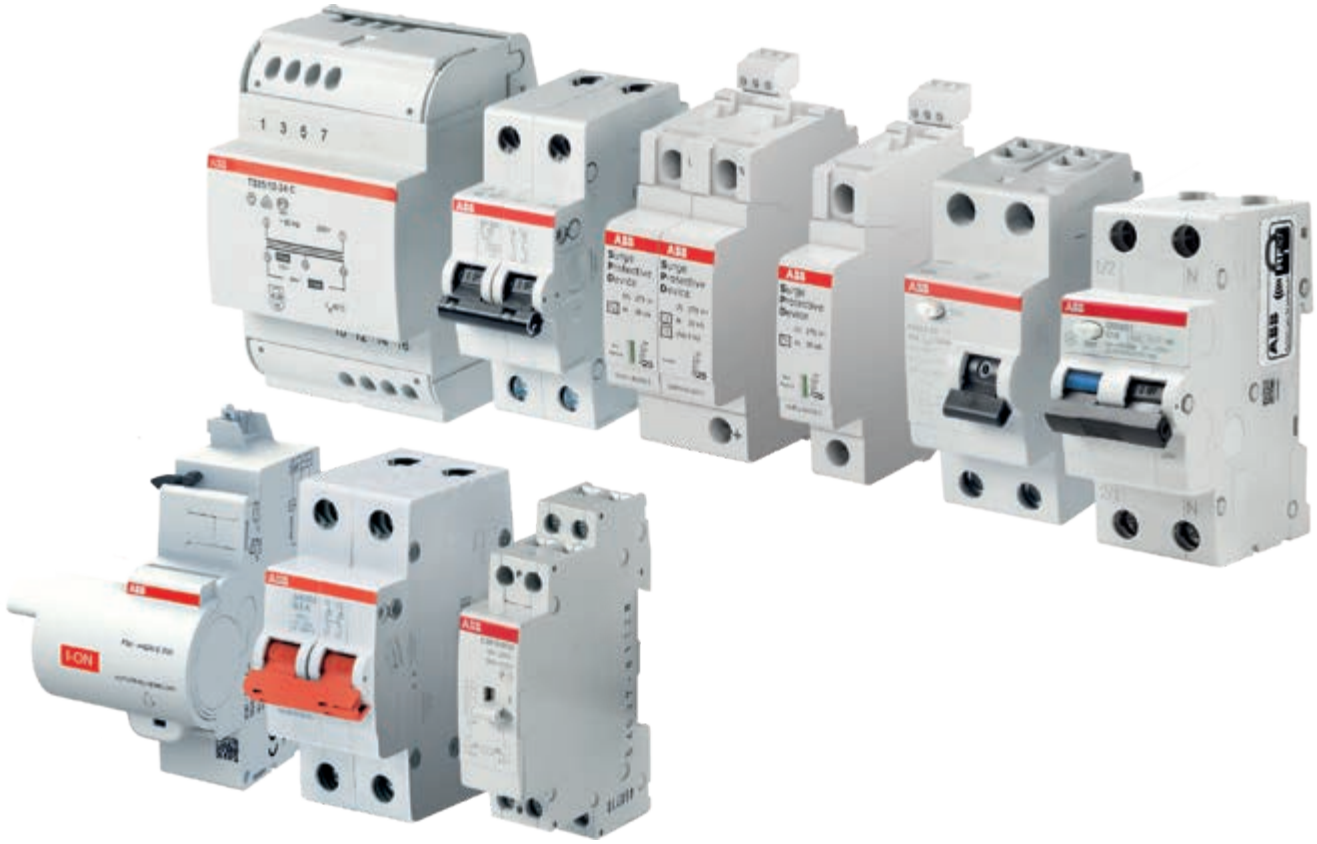
To protect installations and investments against these hazards, the Compact Home range provides miniature circuit breakers (MCBs), residual current devices (RCDs) and further protection devices. Additonally, the Compact Home range gives users peace-of-mind that their plants always satisfy parameters established by the most binding international standards.

Safety
Protecting one's personal, domestic environment against unauthorized access has always been one of our most important needs. ABB offers a number of safety solutions guaranteeing control over the surrounding environment to avoid intrusion and dangerous situations.

The Compact Home range includes integrated anti-intrusion, video control, video entry-phones and building automation systems.

Reliable, flexible and affordable, these products come in both the bus and wireless versions and allow you to control and interact with your environment, locally or from a distance, by mobile phone or through internet.

These systems are flanked by effective controls and modular alarms on DIN Rails, installable in any ABB switchboard or small control panel.



Comfort
Our home usually is the place where we expect greater comfort and well-being.

Modern technologies provide all the necessary features to make our home comfortable, smart, and efficient.

ABB's Compact Home products make the different plant omponents functionally adaptable to the user's comfort. All the functions that can be controlled such as blinds, lighting, heating, air-conditioning or door communication are designed to make life simpler and smarter.

Savings
Increasing energy costs and environmental sensitivity have stimulated users to pay greater attention to energy usage and efficiency.

Even at home, those small daily gestures – like using the cheapest tariff brackets appropriately – can have a fundamental impact on both your home budget and a more rational use of our planet's resources.

The ABB Compact Home catalogue offers several products with innovative functions, with efficiency and energy savings as their main target.



Smart protection for lasting comfort
Applications for an apartment



1. Protection of the stove and other kitchen equipment
There are many situations in which a short-circuit can occur, e.g. bad insulation of kitchen equipment and connection to water. Without suitable cable protection, not only the connection cable of the kitchen equipment would become charred, but also the cable installed in the wall behind the socket outlet. In worst case there also is a hazard for people.
ABB's MCBs protect you and your installation in the best way – easy and safe installation is possible.



2. Separate protection of media and TV circuits
In newer installations, TV and media circuits are protected separately. Due to the electronics used in this kind of loads they could inject harmonics into the system and maybe it interferes with other electrical equipment. MCBs provide the best protection in cases of overload and short-circuit. ABB's MCBs protect you and your installation in the best way – easy and safe installation is possible.



3. Main residual current protection
In order to ensure safety and continuity of service, ABB offers selective type RCCB F200 S solution to perform selectivity with the RCDs protecting terminal circuits.



4. People and circuit protection
RCBOs permit continuity of service disconnecting only the circuit having a overcurrent or earth leakage issue, keeping the rest of the house operative.



5. Surge protection
Compact and easy to install, the DIN Rail OVR Type 2 range provides high overvoltage protection to your sensible equipment and to your apartment.



6. Prevention of overloads
Load management relay LCR prevents tripping of the main circuit breaker by sequentially switching off non-prioritary loads when preset threshold is exceeded. One red LED and an integrated buzzer indicate the OFF condition. At preset time intervals, the device automatically attempts to reconnect to the previously disabled load.



7. Safety for auxiliary circuits
Door entry and bathroom safety pushbuttons should always be supplied in SELV (safety extra low voltage) for safety reasons. TS transformers supply these auxiliary circuits; in case of short circuit TS are made to disconnect automatically the secondary winding and restore their feature automatically as soon as fault is repaired.



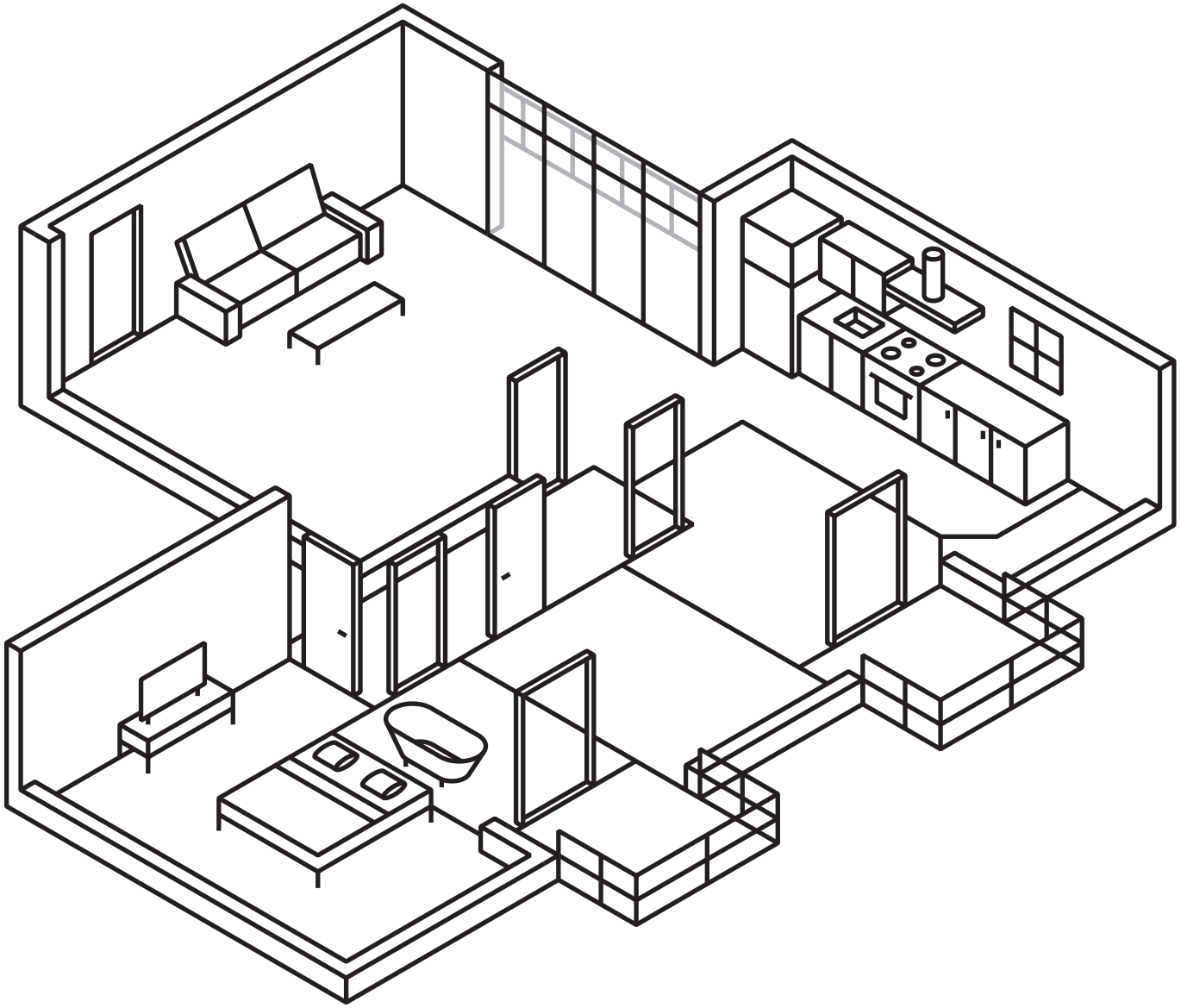
8. Bioarchitecture made real
E235 mains disconnection switch ensures no electricity in wiring accessories and electric devices on bedroom circuits when sleeping. Of course as soon as user switches on a load, electricity immediately flows again to supply it.



9. Object metering
Heating and ventilation pumps are obvious candidates for object metering in the home. Also electronic equipments such as washing machines and dishwashers are possible objects to measure.



10. UK600 – a smarter space for your installation ideas
The UK600 series offers new possibilities in terms of application areas, flexibility and design. Its product portfolio includes 3 kinds of enclosures: standard for DIN-Rail devices, Media for LAN routers etc. and the Combi enclosure, a combination of both.



Expertise that lets you think big
Residential applications



1. Common lighting circuits protection
In newer installations, lighting circuits are always protected separately from socket outlet circuits. Therefore, it is almost impossible for a danger to occur in lighting circuits in the home sector today, as the permanently connected consumers (lights and lamps) only permit their load-dependent current. However, cable protection must be provided to prevent overloading of the cable by short-circuits.



2. Common socket outlet protection
MCBs provide the best protection in cases of overload and short-circuit. For sure, you can also disconnect your circuits with MCBs if you need to make maintenance work. There is a limit to the current carrying capacity for all cables! It's not important whether the short-circuit is caused by a defect common appliance or whether a nail pounded into the wall hits the cable. In addition, similar consequences can result when too many appliances are connected to a circuit at the same time (e.g. several fan heaters) to one and the same circuit via a multiple socket-outlet (overload protection).



3. Residual current protection in the common areas
The FH200 RCCB range up to 63 A offers the solution for the protection against insulation fault of any kind of common circuits like the staircase, outside and garage lights, porter's lodge, automated gate and all the common sockets.



4. People and circuit protection
RCBOs permit continuity of service disconnecting only the circuit having a overcurrent or earth leakage issue, keeping the rest of the house operative.



5. Gate management
Thanks to ATT GSM module, all housemasters can open building gate with their mobile by just dialing a number. ATT recognises authorized users avoiding the use of hundreds of expensive and unsafe gate remote controls.



8. Surge protection
Compact and easy to install, the DIN Rail OVR Type 2 range provides high overvoltage protection to your sensible equipment and to your home.



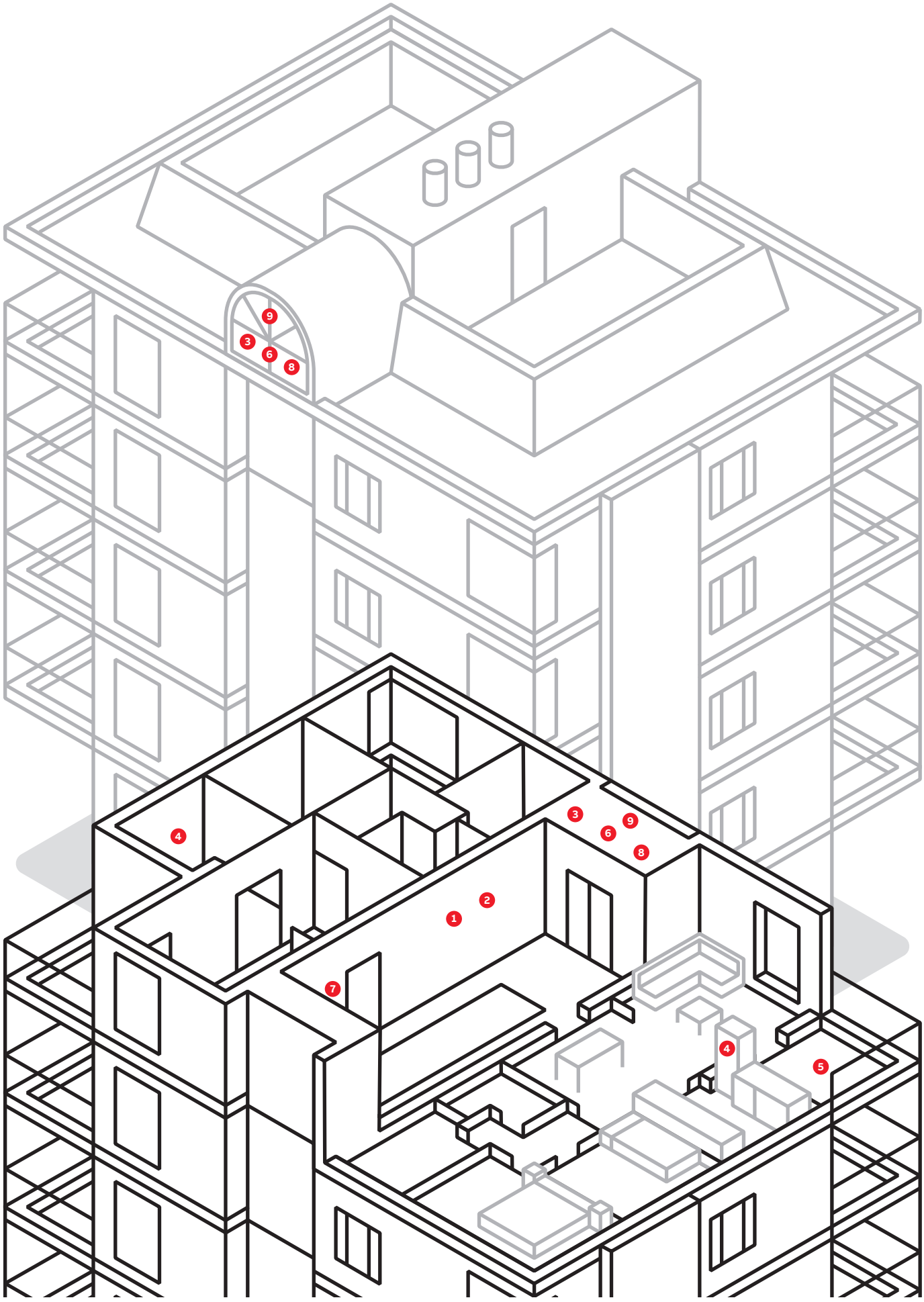
7. Staircase lighting
E232 staircase light switches allow to switch on staircase lights only when needed, as user pushes a button. This way users can avoid energy waste, while ensuring full light availability when walking on stairways. E232 can be forced permanently on for staircase cleaning and maintenance purposes.



8. Joint residential sourcing
Unlike applications where a separate billing meter is installed in every apartment or residence for individual billing, joint residential sourcing involves having one central 'billing' meter.
The housing association, condominium or equivalent then acts as a single electricity subscriber and redistributes its costs amongst its members according to their actual consumption measured by a meter in each apartment.



9. An attractive enclosure that can be discreetly integrated into your interior
The Unibox consumer units are distinguished by an advanced and elegant design. They integrate themselves easily in whichever decoration solution; for the door, it is possible to choose between the transparent smoked version and the opaque white version. Functionality of the Unibox Series and its safety of installation and safety of use guarantee high quality of construction characteristics.


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Greater comfort, full protection
Applications for detached houses



1. Protection of the entry phone line and other telecommunication systems
In this kind of application normally different voltage level and/or different frequencies are used. To ensure the correct working of these circuits, cable protection must be provided to prevent overloading of the cable. There is a limit to the current carrying capacity for all cables! ABB MCBs protect you and your installation in the best way – easy and safe installation is possible. Make your choice.



2. Protection of security systems, bell circuits or electrical shutters
To ensure the correct working of these auxiliary circuits with maybe different voltage-level cable protection must be provided to prevent overloading of the cable by short-circuits or even an overload e.g. due to obstruction of the shutter. Without suitable cable protection the cable installed in the wall behind the loads becomes charred and maybe needs to be replaced or even the devices get damaged.



3. Sauna and swimming pool residual current protection
To ensure continuity of service and avoid nuisance tripping due to the natural earth leakage currents that are common in a wet environment, it's a best practice to protect individually the sauna and the swimming pool circuits with a dedicated DSH201 RCBO for each line.



4. Mains disconnection
SHD200 switch disconnector is installed upstream whole electric distribution system ensuring and it is suitable for commanding loads.



5. Customize your energy consumption
Digital time switches allow operation of heating, lightening, irrigation system, etc. They enable to open and close circuits according to a daily, weekly or yearly program, controlling single load or group of loads even when they require different time controls with a common time reference.



6. External lighting only when needed
With twilight switch TL1 external lighting switches on automatically when getting dark, thanks to external light detection sensor. Threshold can be programmed on a wide lux range ensuring both optimal lighting and energy efficiency.



7. Safety of outdoor circuits
Care should always taken on outdoor lighting. Especially when close to pools or fountains, a safety extra low voltage transformer TS-C can supply continuously low voltage lighting devices preventing risks of indirect contacts.



8. Burner and venting control
ESB and EN contactors provide efficient load control, for single and three phase loads up to 63 A of rated current.
Thanks to their endurance and high switching capacity ESB and EN are ideal in automation of frequently operating loads.



9. Object metering
Heating and ventilation pumps are obvious candidates for object metering in the home, and these can be joined by appliances such as electronic equipment, washing machines, dishwashers as well as sauna. And don't forget outdoors. Garden terrace heaters space and lighting plus the pond pump are all significant 'energy thieves'. The actual consumption is easy to measure with EQ meters. EQ meters A-series measures in two directions, so it is suitable for a residential PV application.



10. One complete solution for your home
Electrical enclosures for the residential applications coordinate between all technical elements that make up the interior essential in today's homes. The AT & U compact distribution boards from ABB response this trend about an ever increasing offer of products for home installations. ABB offers with AT & U cabinets one complete solution for all electrical installation requirements in your home.

Notes

An offering designed to meet present and future needs

The measure of an offering's worth is its completeness and integration. ABB offers solutions that meet and anticipate all the needs of contemporary life: from video entry phones and video surveillance to home automation and charger systems for electric vehicles.

1. Home series
The ABB residential series are the best available on the wiring accessories market. The materials, shapes and colours of plates and controls can be matched, with umpteen combinations, adding value to environments based on your taste, fantasy and needs.

Aesthetics must not sacrifice safety and comfort. The series have a complete energy and alarm functions line, from control devices to plugs, from safety and comfort devices to alarm units, from protectors to detectors, from limit switches to special systems, from domotic bus solutions to installation components.

The series are all integrated with ABB products portfolio, ensuring modular architecture that is always expandable.

2. Entry phone/ Video entry phones
ABB systems offer solutions which enable you to implement entry phone and video entry phone systems for single homes and large residential complexes really easily.

Integrating any internal or external architectural style, these products offer users the most advanced functions and are available in analogical, digital and even wireless versions.

3. Home automation and security systems
ABB home automation systems turn a house plant into an intelligent system, adaptable to the wellness, safety, protection and saving needs of whoever lives in it.

ABB domotic line modularity can be adapted to any type of building, giving us full, integrated management of safety and comfort functions.

From anti-intrusion control to managing lighting, to operating loads for greater energy efficiency, ABB domotic systems on bus are easy to install, program and use, with decided modular features guaranteeing the plant can grow based on a customer's evolving needs.

4. Comfort control, security system and radio video surveillance
Available in wired or wireless versions, both analogical and fully digital, ABB solutions allow users to create an inviolable, customised safety barrier between the house and its outside area. Signalling effective danger or discomfort situations, they guarantee users full control over the perimeter.

Reliable and technologically advanced, the ABB burglar alarm and video entry phone lines are modular and integrated with a modern, valuable design meaning they can be used in any architectural context.



5. Components for solar PV plants
ABB has developed a complete range of photovoltaic application products. They satisfy any plant need, from photovoltaic fields to micro domestic installations. Switches, isolators, dischargers, trackers but also measuring and control parts, control panels, distribution units... everything needed to integrate, monitor and protect the energy generated by house panels, in a safe, protected way.



6. Charger systems for electric vehicles
Electric vehicles are the new mobility frontier.

E-mobility challenges are not just in the ability to generate energy but also in the possibility to integrate different sources, to accumulate excess production and dislocate safe, reliable charge points accessible for everyone, even in the home environment.

For really personal, sustainable mobility ABB offers a rich catalogue of electric vehicle charging products, from turnkey solutions to single components.



7. External lightning protection with the OPR range
The ABB OPR range makes the construction of a lightning protection system very easy to install. Designed to conduct the lightning current from the external rod to the earthing system, it will keep your home safe and protected against any damage. When you have external protection, you must add a surge protection device (OVR range) to protect your electrical installation and sensitive equipment.



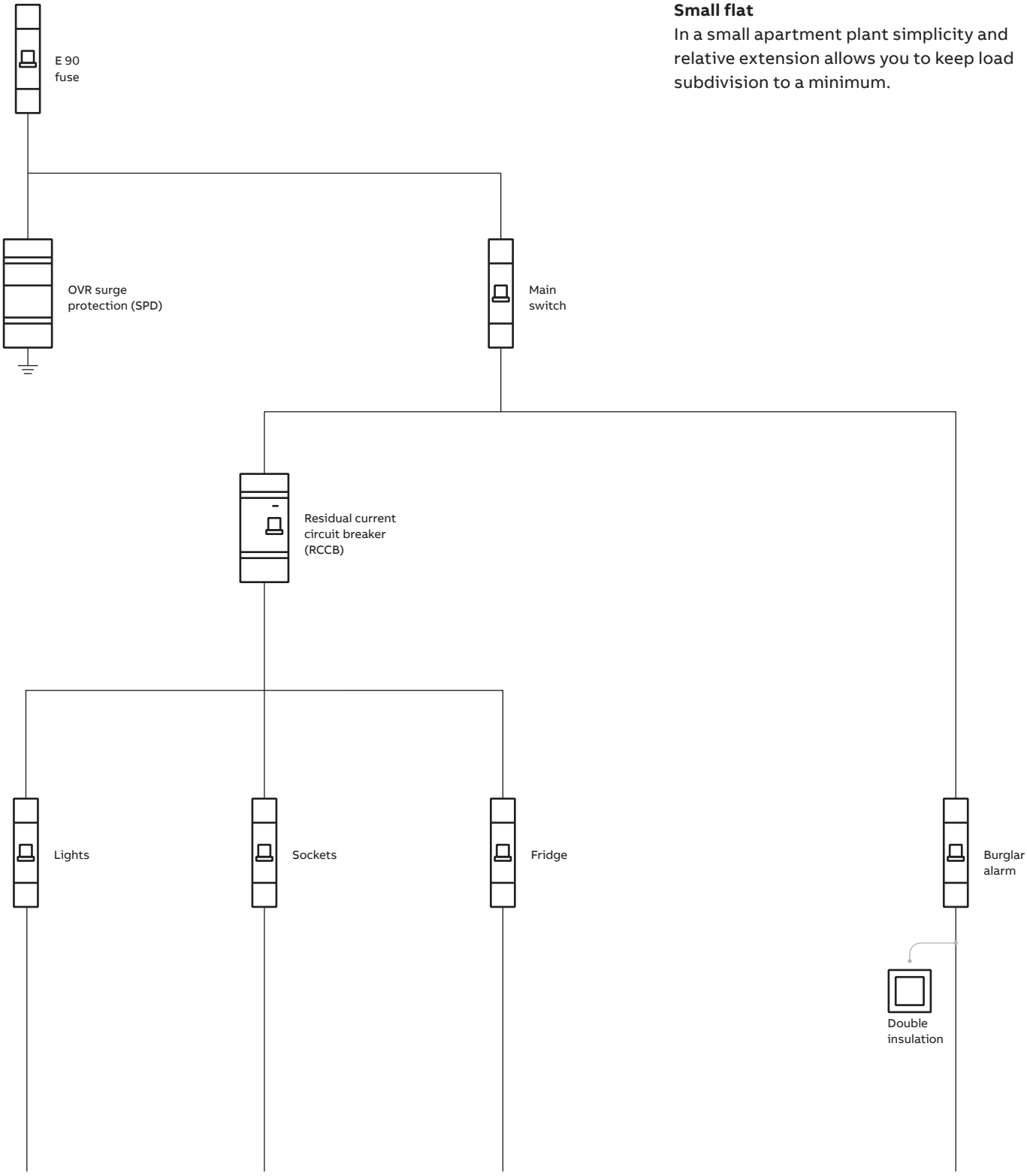
8. Switchboards protecting and isolating photovoltaic plants
ABB offers the best solutions to protect, isolate and cut off photovoltaic sources.

In particular, string combiners – consolidating DC energy produced by the different strings making them available for inverters – allow to protect against overcurrents, lightnings and surges.



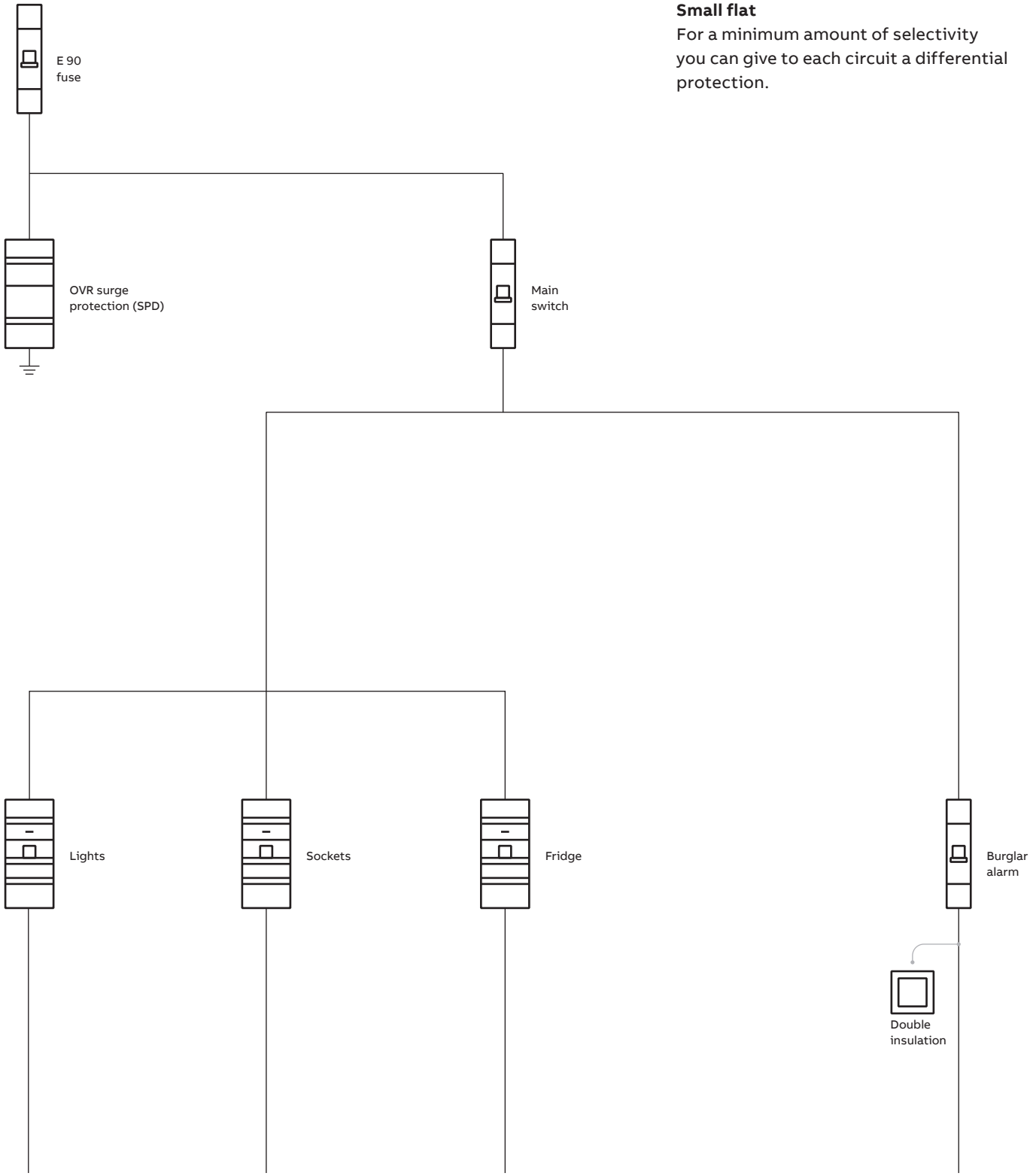
9. Selective device downstream from the meter
The S700 series products are selective main circuit breakers for DIN rail enabling you to protect electric installations from surges. They boast total selectivity towards MCBs downstream and considerable selectivity towards protection devices upstream. As they have been designed for the IV overvoltage category and integrate the isolation function they can be used in any distribution or control cabinet.

Efficiency, protection, comfort: measuring a system's value



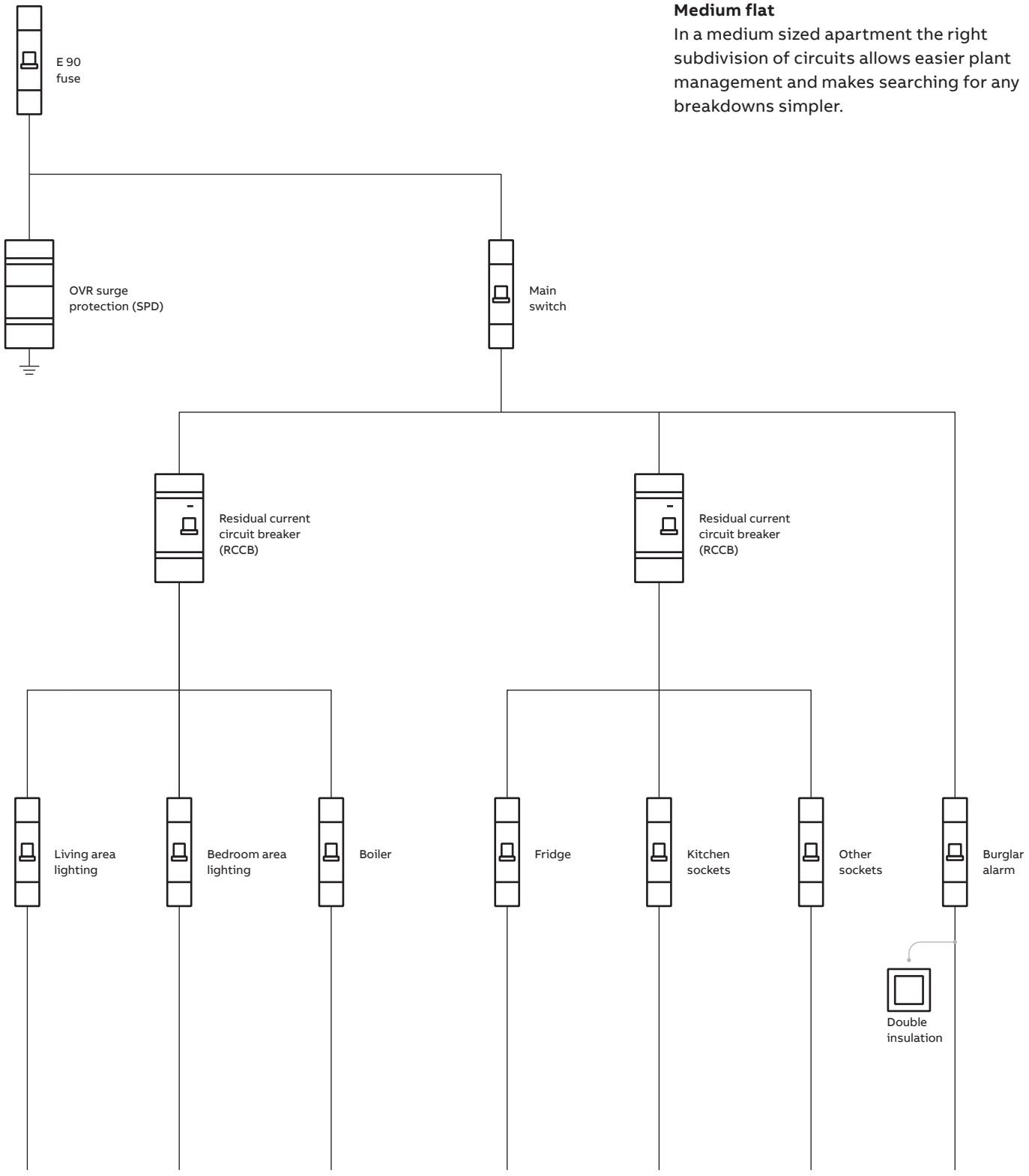
Small flat
In a small apartment plant simplicity and relative extension allows you to keep load subdivision to a minimum.

Small flat
For a minimum amount of selectivity you can give to each circuit a differential protection.

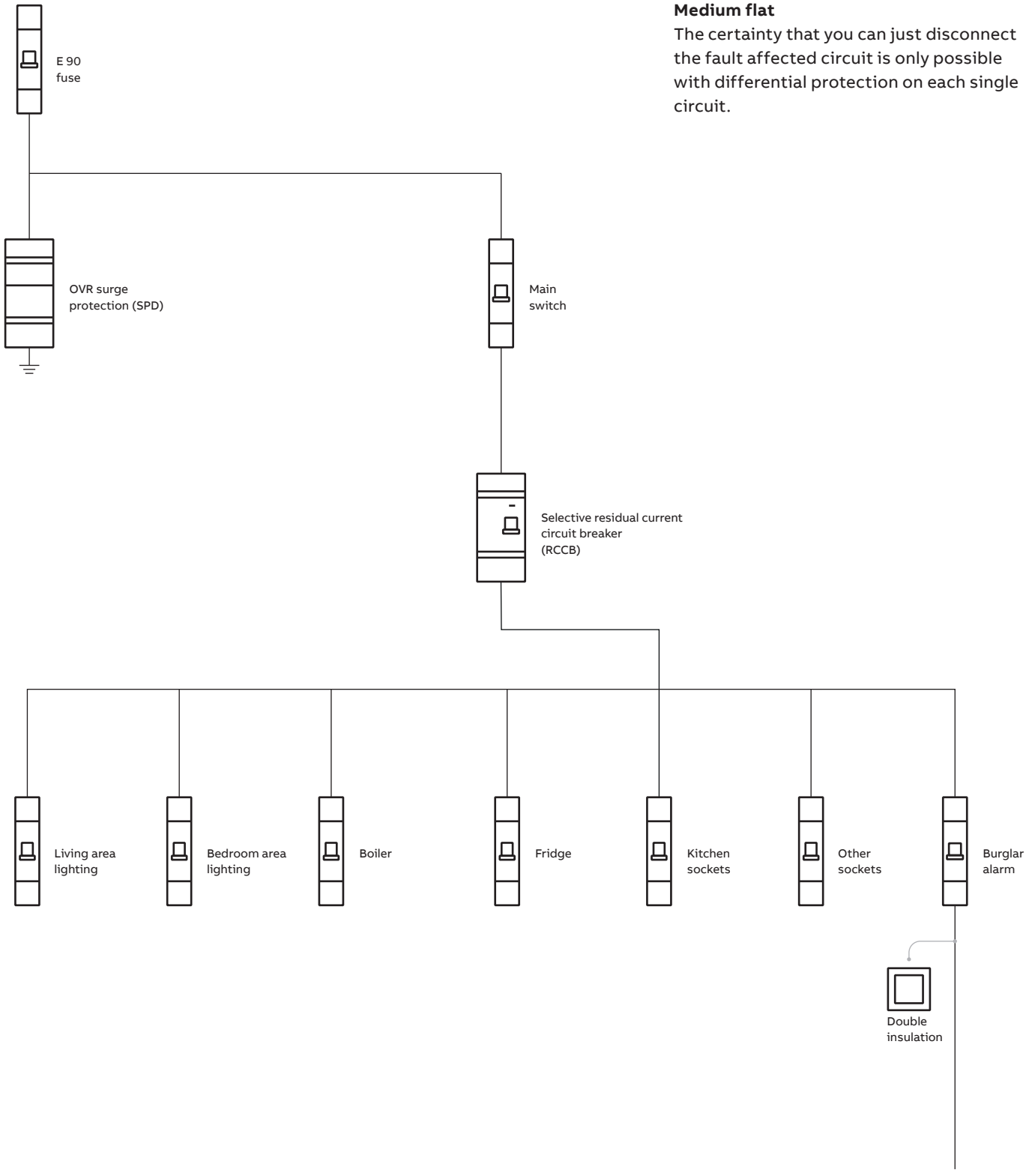


Efficiency, protection, comfort: measuring a system's value

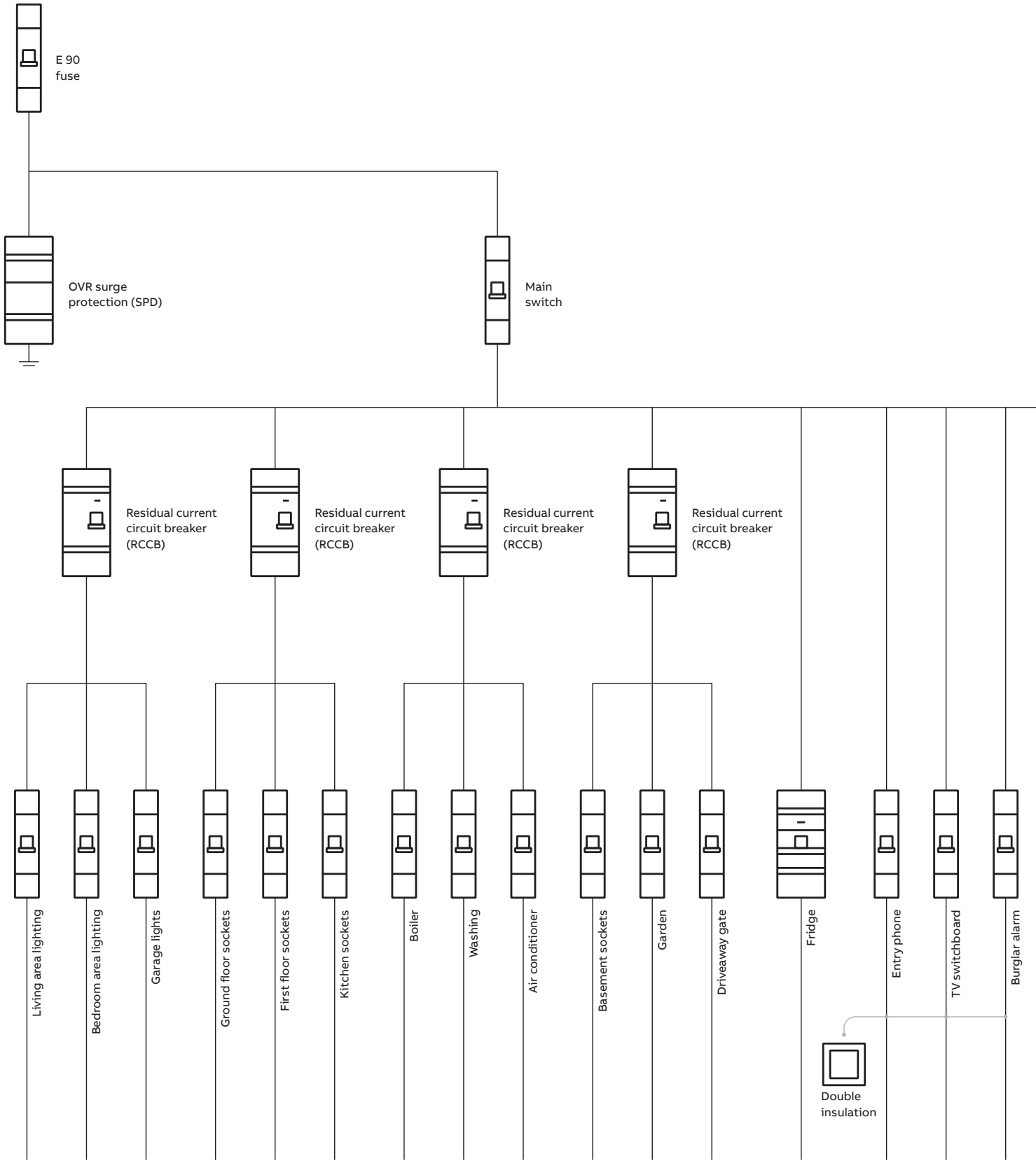
Medium flat
In a medium sized apartment the right subdivision of circuits allows easier plant management and makes searching for any breakdowns simpler.



Medium flat
The certainty that you can just disconnect the fault affected circuit is only possible with differential protection on each single circuit.



Efficiency, protection, comfort: measuring a system's value



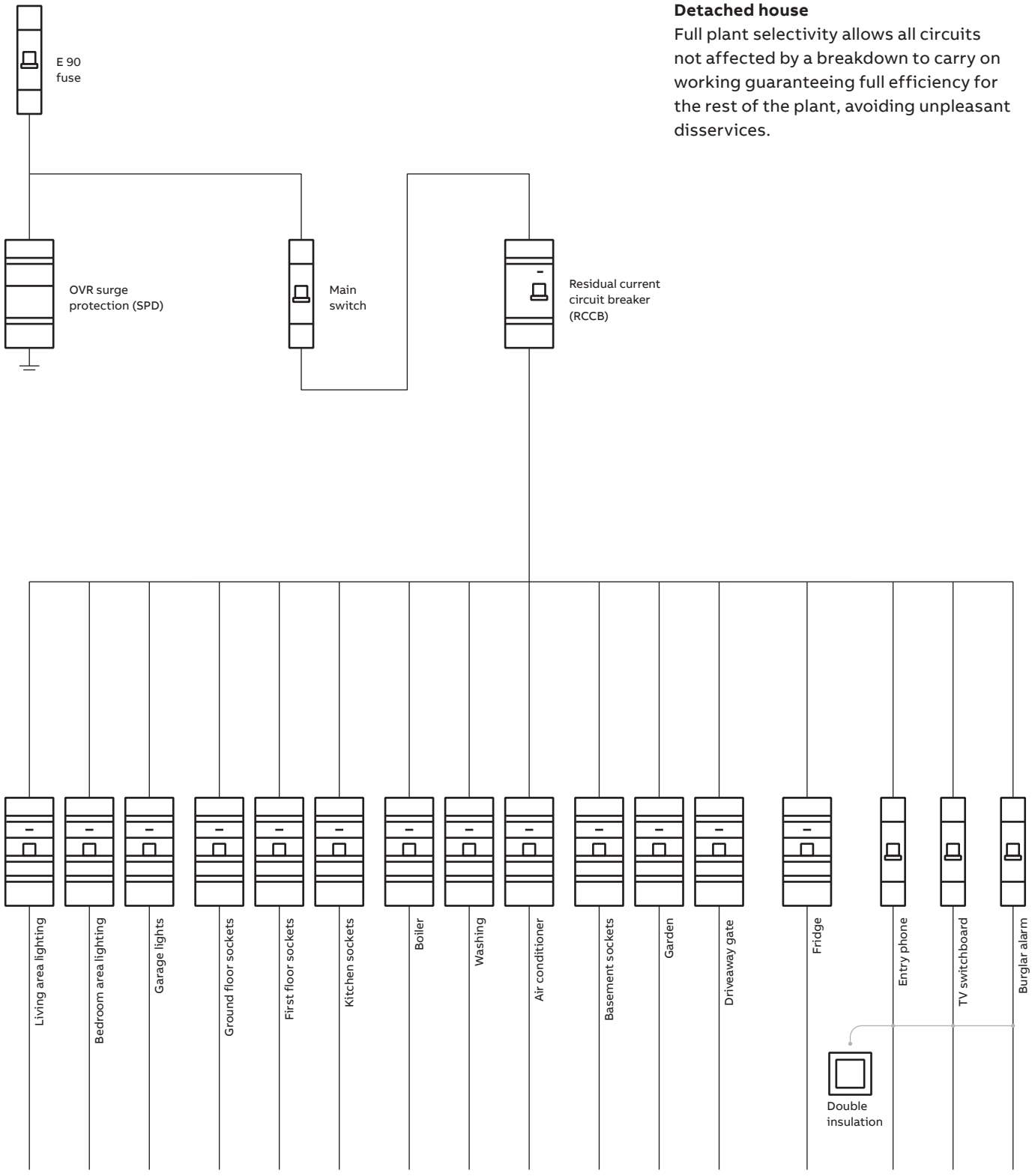
Detached house
In a detached house the right subdivision of circuits allows easier plant management and makes searching for any breakdowns simpler.



Residual current circuit breaker with over current protection (RCBO)

Fridge

Detached house
Full plant selectivity allows all circuits not affected by a breakdown to carry on working guaranteeing full efficiency for the rest of the plant, avoiding unpleasant disservices.



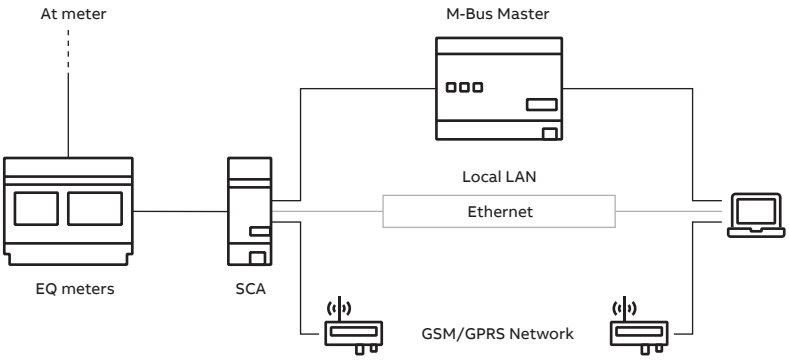
Application examples
ABB EQ meters A-series
Electronic energy meter

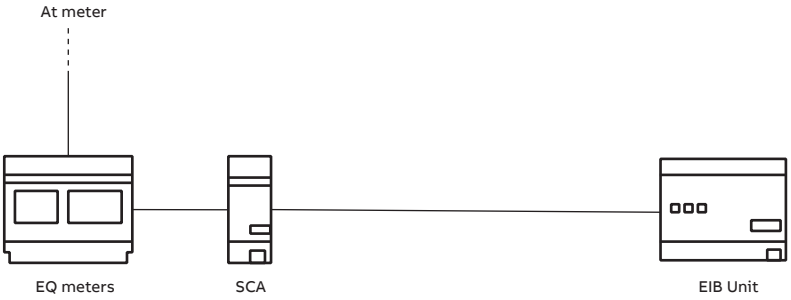
Operating principle
ABB EQ meters A-series are available for both single phase and three phase networks. They allow active energy or combined (active and reactive) energy to be measured. Energy meters A-series measures in two directions, both import and export of energy. The meters are prepared for external communication via their built-in communication interface or via a serial communication adapter (SCA).

Application environments
The EQ meters A-series meters offers an ideal solution in measuring applications for electrical energy produced in a photovoltaic installation.

Example of installation
ABB EQ meters A-series can be easily integrated into measured data collection systems via serial communication adapters. The devices are approved to the Measuring Instruments Directive (MID) European Directive 2014/32/UE.







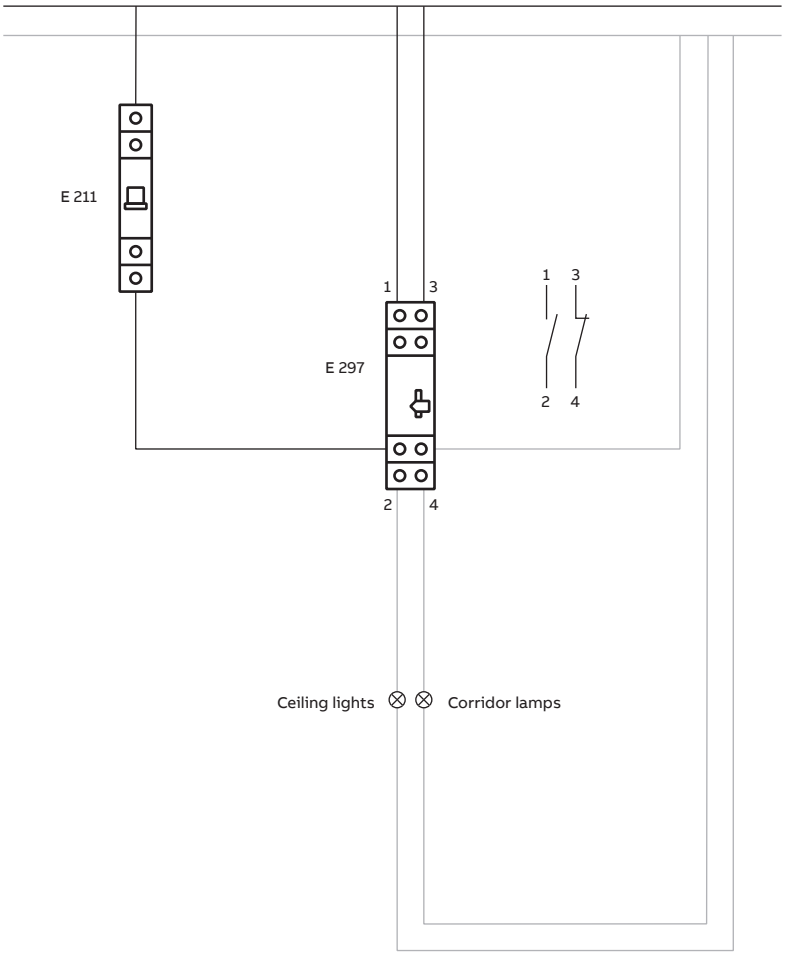
Application examples
E297 installation relays

Operating principle
The E297 installation relays are 16 A contactors specifically engineered for residential and commercial applications and are available in a wide range of contact layouts and coil voltages.

Application environments
The E297 installation relays are particularly indicated in residential and commercial buildings for lighting control.

Example of installation
The E297-16-11 installation relay can be installed with a NO and a NC contact inside the lighting system of the common areas of a building. The first control sent through a switch to the command circuit of the relay will turn off the ceiling lights and turn on the corridor lamps, while the second command returns to the previous state.





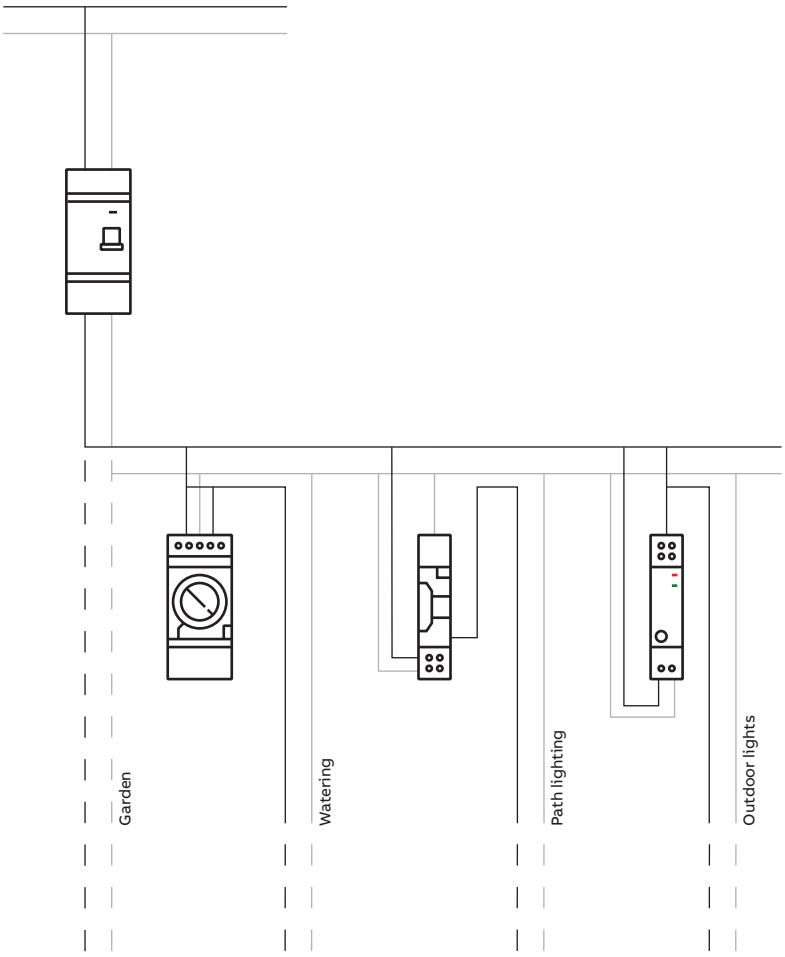
Application examples
AG analog time switches

Operating principle
The analog time switches control the circuit opening and closing according to a daily or weekly program or to manually set permanent ON/OFF operation.

Application environments
The AG time switches particularly deisigned to control l ighting systems of shops or commercial buildings, heating and ventilation systems as well as control of automatic irrigation systems of private or public gardens.

Example of installation
The AD1-R-15m-72 electromechanical time switch can be assembled inside the power supply circuit of the garden. In this case the device programming enables the daily activation of the irrigation system at a preset time.





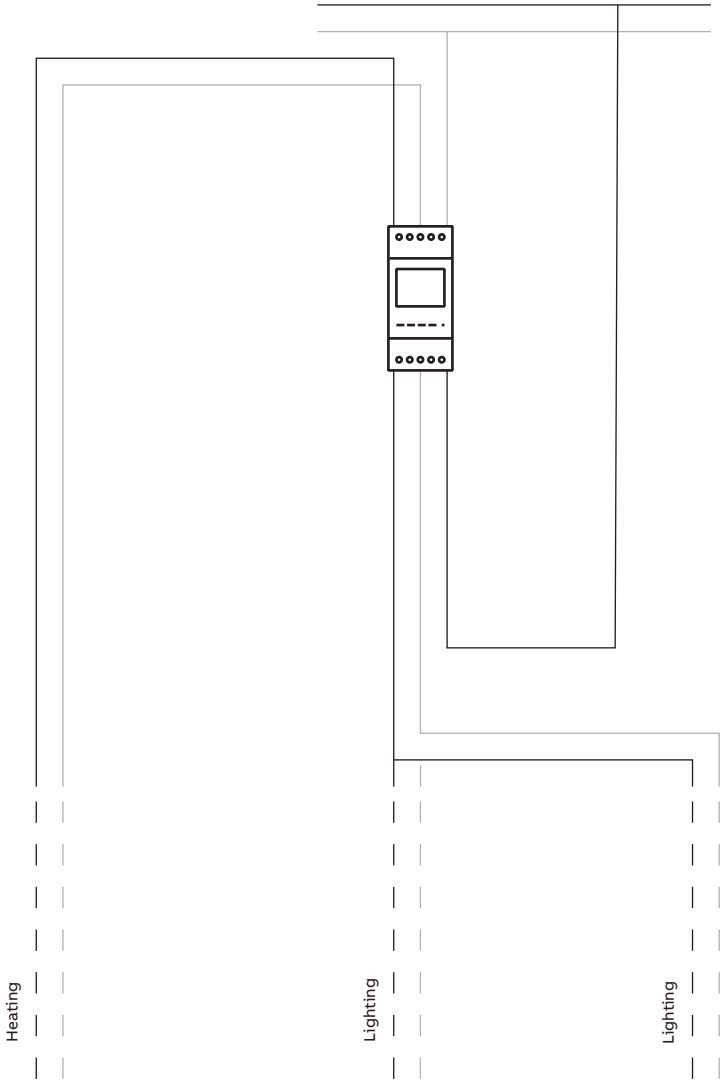
Application examples
DBT digital time switches

Operating principle
DBT digital time switches are ideal to automate installation functions such as are equipped with various functions such as impulse, cycle, random and holiday function.

Application environments
The digital time switches are particularly indicated in environments and situations requiring the management of multiple loads according to a time program flexible enough to include or exclude their application based on the day of the week (offices, schools, public areas, etc.).

Example of installation
In this example, the digital time switch allows the operation of heating as well as lighting systems of a small office; during weekend the device only controls the heating system (programmed on one of the two channels), while on the resto f the week the lighting system is also switched on (through a program on the second channel).





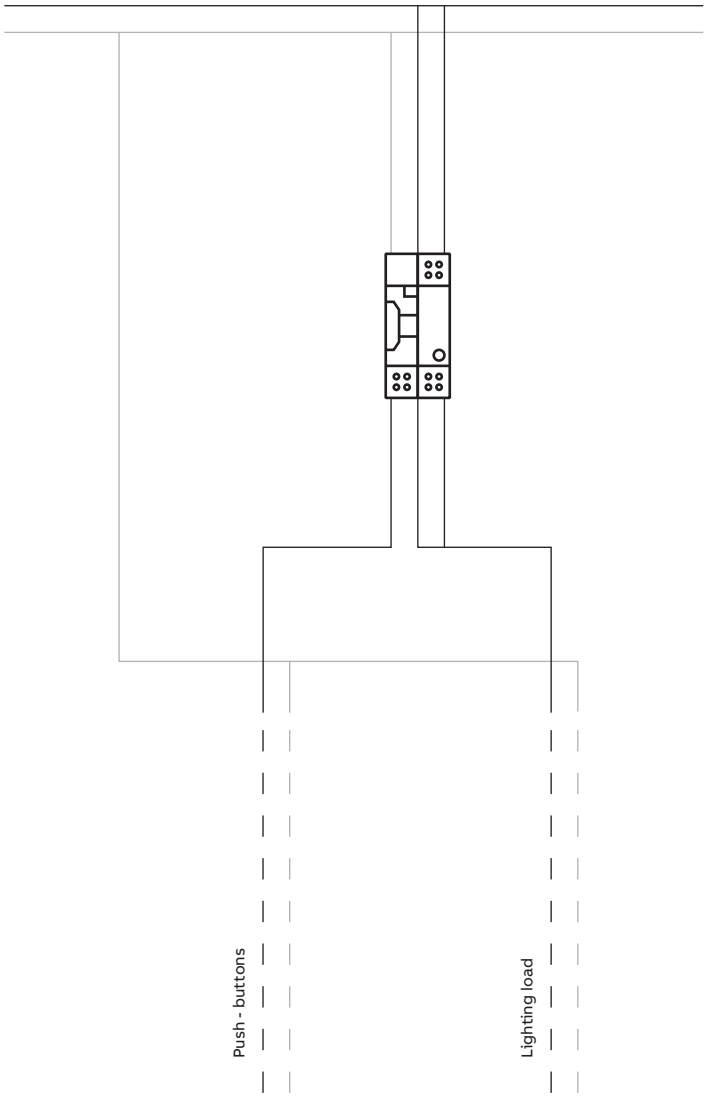
Application examples
E 232 staircase relays

Operating principle
Activated by a pulse command of a push-button, the E 232 staircase switch turns on the plant's light for a T1 time that can be protracted, with a 50% dimming of the light intensity, by means of the parallel wiring of a HLM half-light module.

Application environments
Installation of E 232 staircase switch, coupled with the HLM half-light module, can be ideal wherever timing of the lighting is requested (staircase and pathways of public places, cellars, garage, etc.).

Example of installation
One of possible applications of the E 232 staircase switch, coupled to a HLM half-light module, in the staircase lighting plant of a multistory building. Pushing the push-button, the timer of the E 232 switch turns on the lights for a settable T1 time. At the end of T1 time, the HLM half-light module dims the light by a 50% for a T2 time in the while is possible turn on again the full lighting.





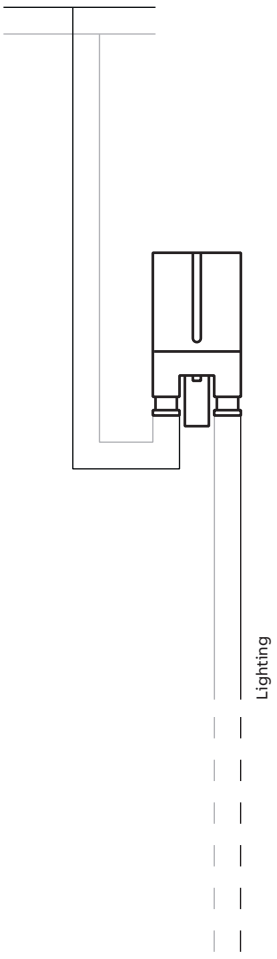
Application examples
TL Line twilight switches for pole mounting

Operating principle
The TL1 pole version is designed for installation on pole/wall and is equipped with an integrated photo-sensor preset at 10 Lux. TL1 Pole is the ideal solution to manage the external light systems such as the public ones, more precisely, in cases where there is a need of controlling the lighting of public or private roads, gardens, courtyards at the decline of solar radiation during twilight.

Application environments
TL1 pole twilight switches can be ideal to light command in private parking areas thanks to its capability of installation in pole, lamppost, etc.

Example of installation
One of the possible applications concern the installation of a pole mounting twilight switch in lighting plant. When daylight dims below a set level (e.g. during twilight) the switch turns on the lighting devices, assuring the requested lighting. At dawn, when the light raise above the set threshold, the relays of TL1 Pole returns in open position.





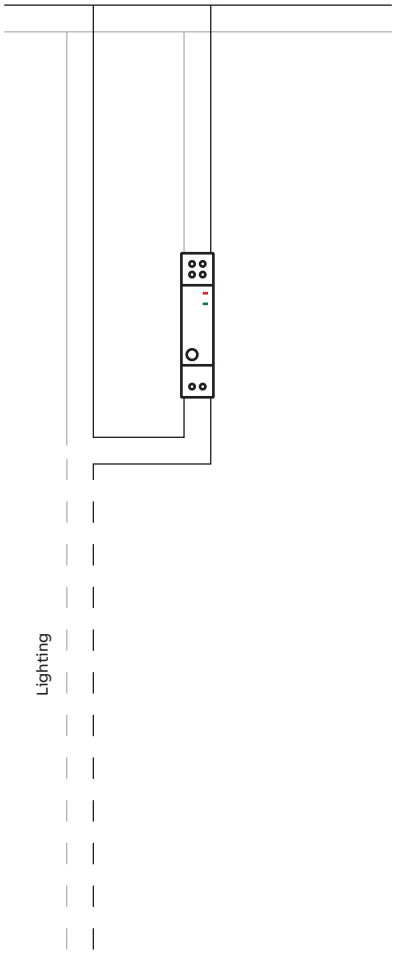
Application examples
TL Line twilight switches

Operating principle
Installation of a twilight switch in a system is particularly useful in places and situations where light sources or other environmental conditions may cause changes in the Lux level. It is used in combination with an external sensor to detect if the ambient light is higher or lower than the set level . A switching delay prevents them from operating unnecessarily when the light intensity suddenly changes (e.g. lightning, moving vehicles, etc.).

Application environments
The TWA-1 and TWA-2 twilight astronomical switches are particularly suitable for use in applications where the operation of a twilight switch with external sensor is potentially subject to alteration or damage from external agents (e.g. smog, overexposure to light, vandalism etc.).

Example of installation
One cause of reductions in the level of ambient light is atmospheric smog. Particle deposits on the external sensor of a traditional twilight switch can over time compromise its operation, preventing the activation of the lighting systems controlled. As illustrated in the diagrams, it is possible to counter this type of problem by installing a TWA twilight astronomical switch, which controls the lighting based on the ambient light level calculated from the preset longitude and latitude parameters.





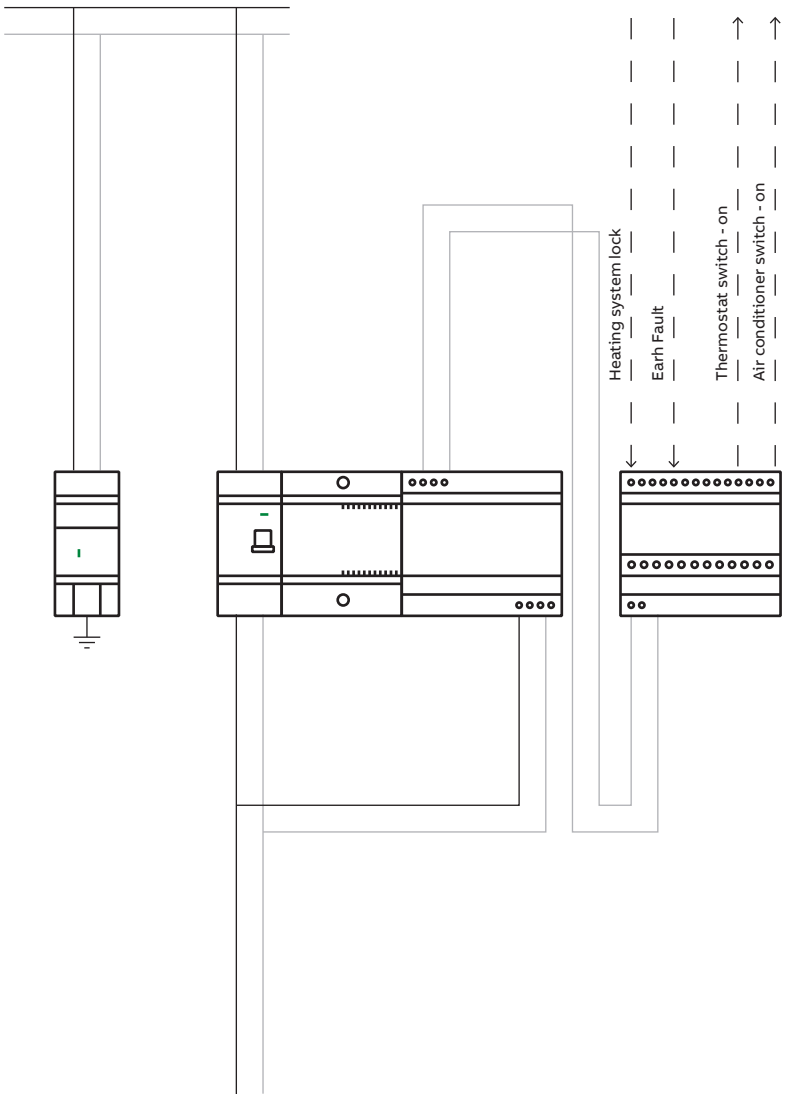
Application examples
ATT-22 GSM modules

Operating principle
ATT-22 module is a GSM terminal with 2 outputs and 2 inputs for transmitting commands and alarms via SMS message, free phone call ring, fax or e-mail. Configuration is accomplished by means of SMS messages, or using the ATT-Tool software with ATT-22 connected to a PC.

Application environments
The ATT-22 module is especially suited for residential and services-sector installations in which loads need to be remotely monitored or controlled. ATT-22E version is equipped with a pre-wired external antenna, indispensable when the module is installed in places that do not guarantee adequate GSM coverage.

Example of installation
The figures illustrate an example application in which ATT-22 module is installed in the control panel of a second home in the mountains. With a cell phone call ring to ATT-22, it is possible to switch on the boiler just before arriving at the house, or to keep it continually in operation. In the event of a problem with the boiler, ATT-22 sends a notification SMS.





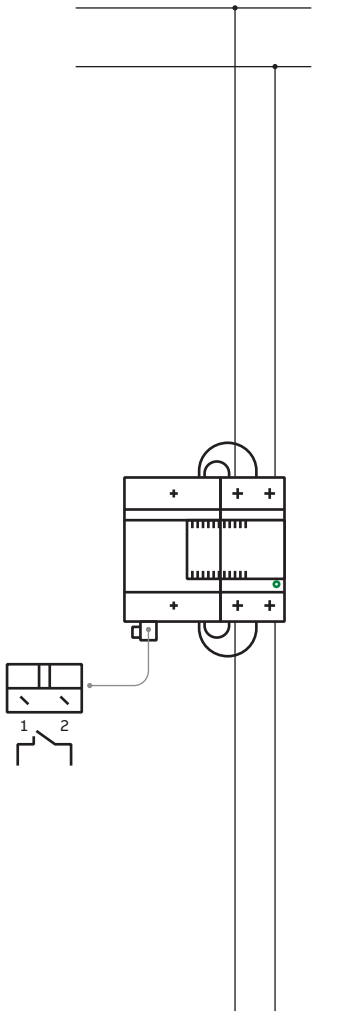
Application examples
F3C-AR230 C

Operating principle
The GreenLight F3C-AR230 C automatically recloses the associated residual current device (2 poles or 4 poles RCCBs up to 63 A – 30 mA or 100 mA, depending on F3C-AR230 C version), after first checking that there isn't an insulation fault on the circuit protected by the RCCB.

Application environments
The GreenLight F3C-AR230 C is suitable for installation in any TT and TN distribution system and it has been designed to always maintain continuity of service in case of nuisance trippings caused by storms or electrical disturbances, restoring current to all connected utilities after verifying the correct state of the system.

Example of installation
An ideal application of auto-reclosing device F3C-AR230 C is related to home distribution systems. This is particularly useful to preserve the critical loads - for example to avoid alarm system wrong intervention, irrigation stops or defrost of the freezer – during holidays or when the home is not manned, even for short periods.





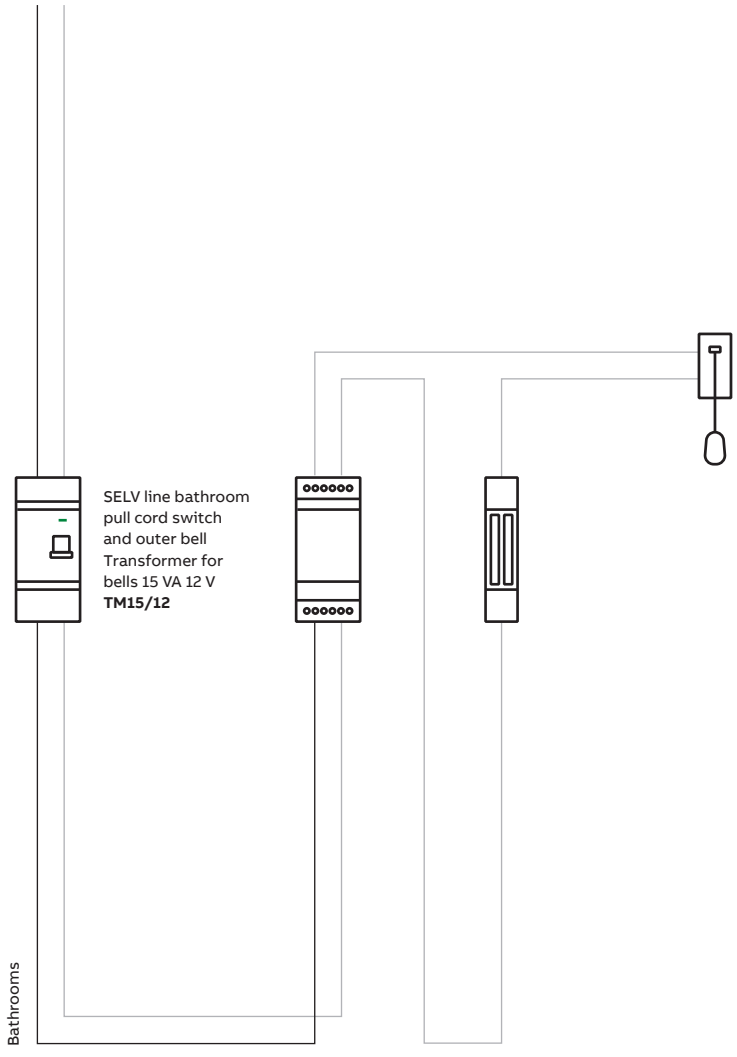
Connection to the load

Application examples
TM, SM

Operating principle
A residual current circuit breaker with Idn equal to 10 mA installed on the bathroom circuits ensures better protection against indirect contacts. The residual current circuit breaker may be installed directly on the control board.

Application environments and example of installation
The SELV circuit guarantees safe power supply where the risk of accident is higher, such as near the bathtub.





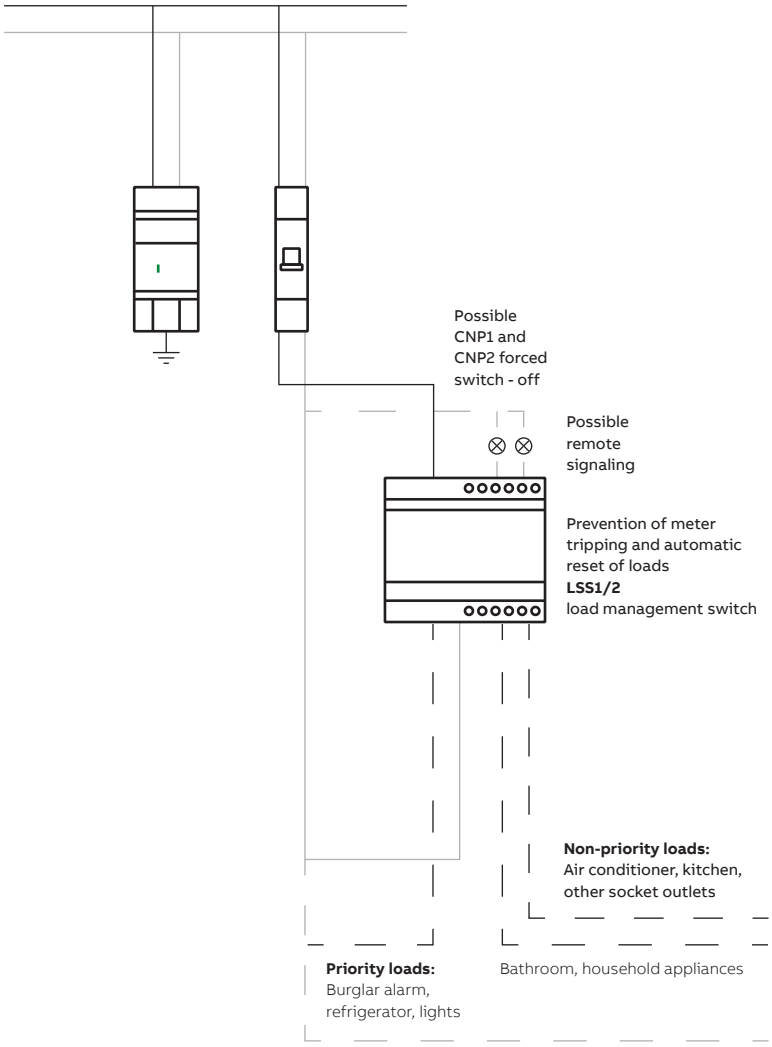
Application examples
Load management relay LCR

Operating principle
LCR load management relay prevents tripping of the main circuit-breaker by sequentially switching off one non-priorityload when the preset threshold is exceeded. At preset time intervals, the device automatically attempts to reconnect the previously disabled load.

Application environments
The installation of the LCR is suitable for any environment and situation where it is necessary to control electric energy consumption within consumption limits allowed in the system.

Example of installation
As shown in the diagrams, one of the possible applications is the installation of the LCR load management relay in a printing office system, where the conditioning switch-on causes the exceeding of the energy consumption threshold defined with the supplying company by contract. The LCR preserves printing machines operation by switching off one or two primary loads automatically (i.e. night conditioning and lighting), where ON red leds indicate temporary OFF. After a preset interval, the switch checks that current consumption values fall within the limits again trying to reset the previously disconnected loads.





Protection

Table of contents

038–039 **Continuous attention on protection, selectivity and savings**

040–079 **Miniature circuit-breakers SH 200**

080–087 **RCCB FH200**

088–097 **RCBO DSH201 and DS202C**

098–115 **OVR T2 range**

Continuous attention on protection, selectivity and savings ABB's mission for your home

Protecting the electrical system is an essential step to ensure safety and comfort to its users, while providing the correct economical and functional operation of the devices it supplies.



Protection aims at minimizing risks for people and devices due to abnormal conditions or faults that impair the electrical parameters of the installation and of the loads.

In this context, an adequate coordination between the various protection devices (normally located on the sections of the system or on specific components) and an appropriate degree of selectivity help to provide total safety of the installation.

For the system to operate properly, protection has to allow quick identification and disconnection of the area affected by the problem, without hasty, inappropriate or untimely actions that may compromise the power supply to the unaffected areas.

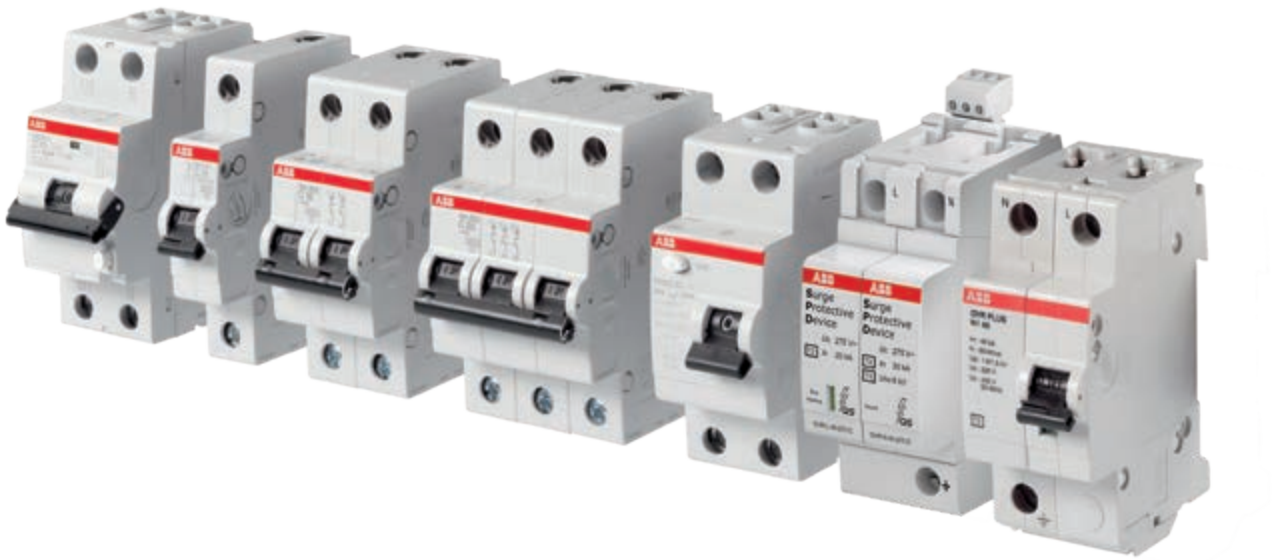
In case a protection device trips, the maintenance personnel should have clear and essential information rapidly available in order to restore the service as quickly as possible.

A protection system must also provide adequate flexibility and reserve mechanisms, in case of malfunctioning of the main protection unit.

For a good compromise between reliability, simplicity and convenience, a protection system must be able to identify how and where the fault occurred, differentiating between abnormal but tolerable situations and actual hazards. It is imperative to act as quickly as possible to minimize risks and damage (destruction, accelerated aging, etc.), safeguarding the continuity and stability of power supply.

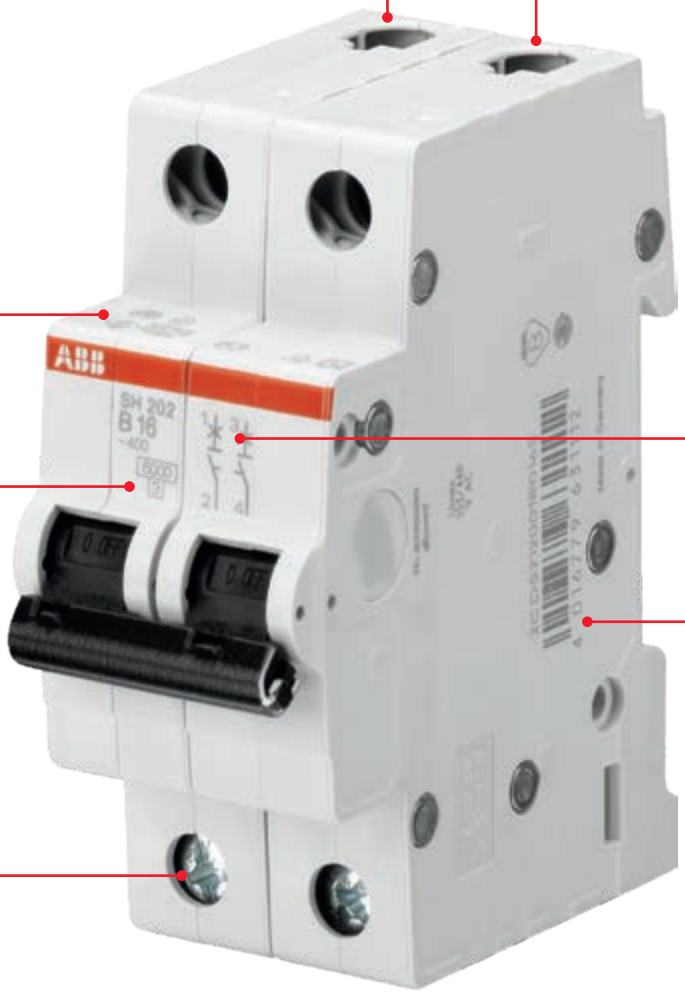
Along with the high quality and the easy installation the modular DIN rail products of the Compact Home range combine features that enable to reconcile two seemingly conflicting needs: accurate identification of the fault and effectiveness of action.

Although a marked selectivity of protective devices is rarely required by the applicable regulations and may seem unwarranted, designing a selective system means choosing a much more efficient, cost-effective solution, suited to the needs of the users and perfectly made, beyond the simple regulatory aspect.



Miniature circuitbreakers SH 200. The details make the difference

A range designed to ensure efficiency and protection





CPI
All Compact Home MCBs are equipped with a contact position indication (CPI) on the toggle. You can easily identify, if the MCB is in ON or OFF position – easy and safe maintenance work is possible.



Approvals printed on the dome
SH 200 MCBs comply with IEC/EN 60898 and carry all relevant approval marks for each market they are destined to. The certification marks are also printed printed on the dome of the MCB. Thus make it possible to see the markings also in the mounted position. For control and acceptance procedure – certification marks visible on fitted devices on the side of mounting.

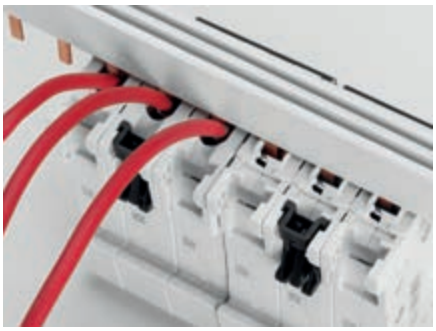


Housing material
By using the state-of-the-art housing material, ABB is taking care of the environment. With the latest generation of thermoplastics it's possible to recycle the MCBs – especially the thermoplastic housing-material can be re-used.
By using the latest generation of thermoplastics the material stability of all Compact Home MCBs is improved. Residential MCBs are free of halogens – no environmental pollution.



Laser printing
All printings of the Compact Home MCBs, like the approvals on the dome, the product identification, are printed by a laser. The laser printing ensures a friction, scratch and solvent resistant marking on the MCBs.

Easy identification of the products in case of maintenance or replacements due to safe laser printing.



Connection of SH and S
Compatibility with System pro M compact® is given in all kind of variations like insertion of 1 System pro M compact® MCB (e.g. K-characteristic) into an Installation with Compact Home components and Compact Home busbars. Also the combination of 1 Compact Home MCB with System pro M compact® components and System pro M compact® busbars is not a problem.



Terminals
The Compact Home MCBs are equipped with 25 mm cage terminals, a well proven and reliable technology.

The cross wiring can easily be done by inserting the Compact Home busbars and then the incoming wires into one of the MCB's terminals. The terminals accept Compact Home busbars and conductors up to 16 mm² together.

Technical features table for miniature circuitbreakers

SH 200 Series

Standards	
Poles	
Tripping characteristics	
Rated current I_n	A
Rated frequency f	Hz
Rated insulation voltage U_i acc. to IEC/EN 60664-1	V
Overvoltage category	
Pollution degree	
Data acc. to IEC/EN 60898-1	
Rated operational voltage U_n	V
Max. power frequency recovery voltage (U_{max})	V
Min. operating voltage	V
Rated short-circuit capacity I_{cn}	kA
Energy limiting class (B, C up to 40 A)	
Rated impulse withstand voltage $U_{imp.}$ (1.2/50 μs)	kV
Dielectric test voltage	kV
Reference temperature for tripping characteristics	°C
Electrical endurance	ops.
Mechanical Data	
Housing	
Toggle	
Contact position indication	
Protection degree acc. to EN 60529	
Mechanical endurance	ops.
Shock resistance acc. to IEC/EN 60068-2-27	
Vibration resistance acc. to IEC/EN 60068-2-6	
Environmental conditions (damp heat cyclic) acc. to IEC/EN 60068-2-30	°C/RH
Ambient temperature	°C
Storage temperature	°C
Installation	
Terminal	
Cross-section of conductors (top / bottom)	mm^2
Torque	Nm
Screwdriver	
Mounting	
Mounting position	
Supply	
Dimensions and weight	
Mounting dimensions acc. to DIN 43880	
Pole dimensions (H × D × W)	mm
Pole weight	g
Combination with aux. elements	
Accessories mountable	

* Also fulfilling the requirement acc. to the protection degree IPXXB

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SH 200 M 2CDC021003S0016	**SH 200** 2CSC400030F0027	**SH 200 L** 2CSC400030F0015	**SH 200 T** 2CSC400030F0002
			

	SH 200 M	SH 200	SH 200 L	SH 200 T
				IEC/EN 60898-1
				1P, 2P, 3P, 4P, 1P+N, 3P+N
				B, C, D
				0.5...63 A (C, D), 6...63 A(B)
				50 / 60 Hz
				250 V AC (phase to ground), 440 V AC (phase to phase)
				III
				2
				1P: 230/400 V AC; 1P+N: 230 V AC; 2 ... 4P: 400 V AC; 3P+N: 400 V AC
				1P: 253 V AC; 1P+N: 253 V AC; 2 ... 4P: 440 V AC; 3P+N: 440 V AC
				12 V AC
	10 kA	6 kA	4.5 kA	3 kA
				3
				4 kV (test voltage 6.2 kV at sea level, 5 kV at 2,000 m)
				2 kV (50 / 60 Hz, 1 min.)
				B, C, D: 30°C
				I_n < 32 A: 20,000 ops (AC), $I_n \geq$ 32 A: 10,000 ops. (AC); 1,000 ops. (DC); 1 cycle (2 s – ON, 13 s – OFF, $I_n \leq$ 32 A), 1 cycle (2 s – ON, 28 s – OFF, I_n > 32 A)
				Insulation group II, RAL 7035
				Insulation group II, black, sealable
				Marking on toggle (I ON / 0 OFF)
				IP20*, IP40 in enclosure with cover
				20,000 ops.
				25 g – 3 shocks – 11 ms
				5 g – 20 cycles at 5 ... 150 ... 5 Hz with load 0.8 I_n
				28 cycles with 55°C/90-96% and 25°C/95-100%
				-25 ... +55°C
				-40 ... +70°C
				Cage Terminal
				25 mm² / 25 mm²
				2.0 Nm
				No. 2 Pozidrive
				On DIN rail 35 mm acc. to EN 60715 by fast clip
				any
				optional
				Mounting dimension 1
				85 × 69 × 17.5 mm
				ca. 115 g
				No

Ordering data
MCB SH 200 T Series – B characteristic

The SH 200 miniature circuit breaker is perfectly suitable for protecting lighting and power socket circuits that can be frequently found in residential areas. ABB used its years of experience with miniature circuit breaker to create this product by combining the optimum features for residential use alone.

The Compact Home range is versatile to provide the customer with the perfect solution for residential over current protection. It is available in tripping characteristics B and C type; with breaking capacities between 3 and 6 kA. As usual for ABB miniature circuit breaker, SH 200 is available from one to four poles and additional in one & three pole plus Neutral. The rated currents are limited to 6 A up to 40 A as it is common in residential applications.



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SH201T-B
2CSC400030F0002



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SH201T-B...NA
2CSC400030F0004



—
SH202T-B
2CSC400030F0005

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
1	6	1	631921	SH201T-B6	2CDS231001R0065		0.125	10
	10	1	631952	SH201T-B10	2CDS231001R0105		0.125	10
	13	1	631976	SH201T-B13	2CDS231001R0135		0.125	10
	16	1	631990	SH201T-B16	2CDS231001R0165		0.125	10
	20	1	632010	SH201T-B20	2CDS231001R0205		0.125	10
	25	1	632034	SH201T-B25	2CDS231001R0255		0.125	10
	32	1	632058	SH201T-B32	2CDS231001R0325		0.125	10
	40	1	632072	SH201T-B40	2CDS231001R0405		0.125	10
	50	1	943116	SH201T-B50	2CDS231001R0505		0.125	10
	63	1	943147	SH201T-B63	2CDS231001R0635		0.125	10
1+N	6	2	632096	SH201T-B6NA	2CDS231103R0065		0.25	5
	10	2	632126	SH201T-B10NA	2CDS231103R0105		0.25	5
	13	2	632140	SH201T-B13NA	2CDS231103R0135		0.25	5
	16	2	632164	SH201T-B16NA	2CDS231103R0165		0.25	5
	20	2	632188	SH201T-B20NA	2CDS231103R0205		0.25	5
	25	2	632201	SH201T-B25NA	2CDS231103R0255		0.25	5
	32	2	632225	SH201T-B32NA	2CDS231103R0325		0.25	5
	40	2	632249	SH201T-B40NA	2CDS231103R0405		0.25	5
	50	2	943321	SH201T-B50NA	2CDS231103R0505		0.25	5
	63	2	943352	SH201T-B63NA	2CDS231103R0635		0.25	5
2	6	2	632263	SH202T-B6	2CDS232001R0065		0.25	5
	10	2	632294	SH202T-B10	2CDS232001R0105		0.25	5
	13	2	632317	SH202T-B13	2CDS232001R0135		0.25	5
	16	2	632331	SH202T-B16	2CDS232001R0165		0.25	5
	20	2	632355	SH202T-B20	2CDS232001R0205		0.25	5
	25	2	632379	SH202T-B25	2CDS232001R0255		0.25	5
	32	2	632393	SH202T-B32	2CDS232001R0325		0.25	5
	40	2	632416	SH202T-B40	2CDS232001R0405		0.25	5
	50	2	943536	SH202T-B50	2CDS232001R0505		0.25	5
	63	2	943567	SH202T-B63	2CDS232001R0635		0.25	5



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SH203T-B
2CSC400030F0006



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SH203T-B...NA
2CSC400030F0007



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SH204T-B
2CSC400030F0008

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
3	6	3	632430	SH203T-B6	2CDS233001R0065		0.375	1
	10	3	632461	SH203T-B10	2CDS233001R0105		0.375	1
	13	3	632485	SH203T-B13	2CDS233001R0135		0.375	1
	16	3	632508	SH203T-B16	2CDS233001R0165		0.375	1
	20	3	632522	SH203T-B20	2CDS233001R0205		0.375	1
	25	3	632546	SH203T-B25	2CDS233001R0255		0.375	1
	32	3	632560	SH203T-B32	2CDS233001R0325		0.375	1
	40	3	632584	SH203T-B40	2CDS233001R0405		0.375	1
	50	3	943741	SH203T-B50	2CDS233001R0505		0.375	1
	63	3	943772	SH203T-B63	2CDS233001R0635		0.375	1
3+N	6	4	632607	SH203T-B6NA	2CDS233103R0065		0.5	1
	10	4	632638	SH203T-B10NA	2CDS233103R0105		0.5	1
	13	4	632652	SH203T-B13NA	2CDS233103R0135		0.5	1
	16	4	632676	SH203T-B16NA	2CDS233103R0165		0.5	1
	20	4	632690	SH203T-B20NA	2CDS233103R0205		0.5	1
	25	4	632713	SH203T-B25NA	2CDS233103R0255		0.5	1
	32	4	632737	SH203T-B32NA	2CDS233103R0325		0.5	1
	40	4	632751	SH203T-B40NA	2CDS233103R0405		0.5	1
	50		943956	SH203T-B50NA	2CDS233103R0505		0.5	1
	63		943987	SH203T-B63NA	2CDS233103R0635		0.5	1
4	6	4	632775	SH204T-B6	2CDS234001R0065		0.5	1
	10	4	632805	SH204T-B10	2CDS234001R0105		0.5	1
	13	4	632829	SH204T-B13	2CDS234001R0135		0.5	1
	16	4	632843	SH204T-B16	2CDS234001R0165		0.5	1
	20	4	632867	SH204T-B20	2CDS234001R0205		0.5	1
	25	4	632881	SH204T-B25	2CDS234001R0255		0.5	1
	32	4	632904	SH204T-B32	2CDS234001R0325		0.5	1
	40	4	944168	SH204T-B50	2CDS234001R0505		0.5	1
	50	4	944199	SH204T-B63	2CDS234001R0635		0.5	1
	63	4	632928	SH204T-B40	2CDS234001R0405		0.5	1

Ordering data
MCB SH 200 T Series – C characteristic



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SH201T-C
2CSC400030F0009



—
SH201T-C...NA
2CSC400030F0010

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
1	0.5	1	699242	SH201T-C0,5	2CDS231001R0984		0.125	10
	1	1	699259	SH201T-C1	2CDS231001R0014		0.125	10
	1.6	1	699266	SH201T-C1,6	2CDS231001R0974		0.125	10
	2	1	699273	SH201T-C2	2CDS231001R0024		0.125	10
	3	1	699280	SH201T-C3	2CDS231001R0034		0.125	10
	4	1	699297	SH201T-C4	2CDS231001R0044		0.125	10
	6	1	631914	SH201T-C6	2CDS231001R0064		0.125	10
	8	1	631938	SH201T-C8	2CDS231001R0084		0.125	10
	10	1	631945	SH201T-C10	2CDS231001R0104		0.125	10
	13	1	631969	SH201T-C13	2CDS231001R0134		0.125	10
	16	1	631983	SH201T-C16	2CDS231001R0164		0.125	10
	20	1	632003	SH201T-C20	2CDS231001R0204		0.125	10
	25	1	632027	SH201T-C25	2CDS231001R0254		0.125	10
	32	1	632041	SH201T-C32	2CDS231001R0324		0.125	10
	40	1	632065	SH201T-C40	2CDS231001R0404		0.125	10
	50	1	943109	SH201T-C50	2CDS231001R0504		0.125	10
	63	1	943130	SH201T-C63	2CDS231001R0634		0.125	10
1+N	0.5	2	700344	SH201T-C0,5NA	2CDS231103R0984		0.25	5
	1	2	700351	SH201T-C1NA	2CDS231103R0014		0.25	5
	1.6	2	700368	SH201T-C1,6NA	2CDS231103R0974		0.25	5
	2	2	700375	H201T-C2NA	2CDS231103R0024		0.25	5
	3	2	700382	H201T-C3NA	2CDS231103R0034		0.25	5
	4	2	700399	H201T-C4NA	2CDS231103R0044		0.25	5
	6	2	632089	SH201T-C6NA	2CDS231103R0064		0.25	5
	8	2	632102	SH201T-C8NA	2CDS231103R0084		0.25	5
	10	2	632119	SH201T-C10NA	2CDS231103R0104		0.25	5
	13	2	632133	SH201T-C13NA	2CDS231103R0134		0.25	5
	16	2	632157	SH201T-C16NA	2CDS231103R0164		0.25	5
	20	2	632171	SH201T-C20NA	2CDS231103R0204		0.25	5
	25	2	632195	SH201T-C25NA	2CDS231103R0254		0.25	5
	32	2	632218	SH201T-C32NA	2CDS231103R0324		0.25	5
	40	2	632232	SH201T-C40NA	2CDS231103R0404		0.25	5
	50	2	943314	SH201T-C50NA	2CDS231103R0504		0.25	5
	63	2	943345	SH201T-C63NA	2CDS231103R0634		0.25	5



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SH202T-C
2CSC400030F0011



—
SH203T-C
2CSC400030F0012

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
2	0.5	2	700283	SH202T-C0,5	2CDS232001R0984		0.25	5
	1	2	700290	SH202T-C1	2CDS232001R0014		0.25	5
	1.6	2	700306	SH202T-C1,6	2CDS232001R0974		0.25	5
	2	2	700313	SH202T-C2	2CDS232001R0024		0.25	5
	3	2	700320	SH202T-C3	2CDS232001R0034		0.25	5
	4	2	700337	SH202T-C4	2CDS232001R0044		0.25	5
	6	2	632256	SH202T-C6	2CDS232001R0064		0.25	5
	8	2	632270	SH202T-C8	2CDS232001R0084		0.25	5
	10	2	632287	SH202T-C10	2CDS232001R0104		0.25	5
	13	2	632300	SH202T-C13	2CDS232001R0134		0.25	5
	16	2	632324	SH202T-C16	2CDS232001R0164		0.25	5
	20	2	632348	SH202T-C20	2CDS232001R0204		0.25	5
	25	2	632362	SH202T-C25	2CDS232001R0254		0.25	5
	32	2	632386	SH202T-C32	2CDS232001R0324		0.25	5
	40	2	632409	SH202T-C40	2CDS232001R0404		0.25	5
	50	2	943765	SH202T-C50	2CDS232001R0504		0.25	5
	63	2	943550	SH202T-C63	2CDS232001R0634		0.25	5
3	0.5	3	701556	SH203T-C0,5	2CDS233001R0984		0.375	1
	1	3	701563	SH203T-C1	2CDS233001R0014		0.375	1
	1.6	3	701570	SH203T-C1,6	2CDS233001R0974		0.375	1
	2	3	701587	SH203T-C2	2CDS233001R0024		0.375	1
	3	3	701594	SH203T-C3	2CDS233001R0034		0.375	1
	4	3	701600	SH203T-C4	2CDS233001R0044		0.375	1
	6	3	632423	SH203T-C6	2CDS233001R0064		0.375	1
	8	3	632447	SH203T-C8	2CDS233001R0084		0.375	1
	10	3	632454	SH203T-C10	2CDS233001R0104		0.375	1
	13	3	632478	SH203T-C13	2CDS233001R0134		0.375	1
	16	3	632492	SH203T-C16	2CDS233001R0164		0.375	1
	20	3	632515	SH203T-C20	2CDS233001R0204		0.375	1
	25	3	632539	SH203T-C25	2CDS233001R0254		0.375	1
	32	3	632553	SH203T-C32	2CDS233001R0324		0.375	1
	40	3	632577	SH203T-C40	2CDS233001R0404		0.375	1
	50	3	943734	SH203T-C50	2CDS233001R0504		0.375	1
	63	3	943765	SH203T-C63	2CDS233001R0634		0.375	1

Ordering data
MCB SH 200 T Series – C characteristic



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SH203T-C...NA
2CSC400030F0007



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SH204T-C
2CSC400030F0008

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
3+N	0.5	4	702652	SH203T-C0,5NA	2CDS233103R0984		0.5	1
	1	4	702669	SH203T-C1NA	2CDS233103R0014		0.5	1
	1.6	4	702676	SH203T-C1,6NA	2CDS233103R0974		0.5	1
	2	4	702683	SH203T-C2NA	2CDS233103R0024		0.5	1
	3	4	702690	SH203T-C3NA	2CDS233103R0034		0.5	1
	4	4	702706	SH203T-C4NA	2CDS233103R0044		0.5	1
	6	4	632591	SH203T-C6NA	2CDS233103R0064		0.5	1
	8	4	632614	SH203T-C8NA	2CDS233103R0084		0.5	1
	10	4	632621	SH203T-C10NA	2CDS233103R0104		0.5	1
	13	4	632645	SH203T-C13NA	2CDS233103R0134		0.5	1
	16	4	632669	SH203T-C16NA	2CDS233103R0164		0.5	1
	20	4	632683	SH203T-C20NA	2CDS233103R0204		0.5	1
	25	4	632706	SH203T-C25NA	2CDS233103R0254		0.5	1
	32	4	632720	SH203T-C32NA	2CDS233103R0324		0.5	1
	40	4	632744	SH203T-C40NA	2CDS233103R0404		0.5	1
	50	4	943949	SH203T-C50NA	2CDS233103R0504		0.5	1
	63	4	943970	SH203T-C63NA	2CDS233103R0634		0.5	1
4	0.5	4	702591	SH204T-C0,5A	2CDS234001R0984		0.5	1
	1	4	702607	SH204T-C1	2CDS234001R0014		0.5	1
	1.6	4	702614	SH204T-C1,6	2CDS234001R0974		0.5	1
	2	4	702621	SH204T-C2	2CDS234001R0024		0.5	1
	3	4	702638	SH204T-C3	2CDS234001R0034		0.5	1
	4	4	702645	SH204T-C4	2CDS234001R0044		0.5	1
	6	4	632768	SH204T-C6	2CDS234001R0064		0.5	1
	8	4	632782	SH204T-C8	2CDS234001R0084		0.5	1
	10	4	632799	SH204T-C10	2CDS234001R0104		0.5	1
	13	4	632812	SH204T-C13	2CDS234001R0134		0.5	1
	16	4	632836	SH204T-C16	2CDS234001R0164		0.5	1
	20	4	632850	SH204T-C20	2CDS234001R0204		0.5	1
	25	4	632874	SH204T-C25	2CDS234001R0254		0.5	1
	32	4	632898	SH204T-C32	2CDS234001R0324		0.5	1
	40	4	632911	SH204T-C40	2CDS234001R0404		0.5	1
	50	4	944151	SH204T-C50	2CDS234001R0504		0.5	1
	63	4	944182	SH204T-C63	2CDS234001R0634		0.5	1

Notes

Ordering data
MCB SH 200 L Series – B characteristic



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SH201L-B
2CSC400030F0015



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SH201L-B...NA
2CSC400030F0016



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SH202L-B
2CSC400030F0017

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
1	6	1	632942	SH201L-B6	2CDS241001R0065		0.125	10
	10	1	632973	SH201L-B10	2CDS241001R0105		0.125	10
	13	1	632997	SH201L-B13	2CDS241001R0135		0.125	10
	16	1	633017	SH201L-B16	2CDS241001R0165		0.125	10
	20	1	633031	SH201L-B20	2CDS241001R0205		0.125	10
	25	1	633055	SH201L-B25	2CDS241001R0255		0.125	10
	32	1	633079	SH201L-B32	2CDS241001R0325		0.125	10
	40	1	633093	SH201L-B40	2CDS241001R0405		0.125	10
	50	1	944373	SH201L-B50	2CDS241001R0505		0.125	10
	63	1	944403	SH201L-B63	2CDS241001R0635		0.125	10
1+N	6	2	633116	SH201L-B6NA	2CDS241103R0065		0.25	5
	10	2	633147	SH201L-B10NA	2CDS241103R0105		0.25	5
	13	2	633161	SH201L-B13NA	2CDS241103R0135		0.25	5
	16	2	633185	SH201L-B16NA	2CDS241103R0165		0.25	5
	20	2	633208	SH201L-B20NA	2CDS241103R0205		0.25	5
	25	2	633222	SH201L-B25NA	2CDS241103R0255		0.25	5
	32	2	633246	SH201L-B32NA	2CDS241103R0325		0.25	5
	40	2	633260	SH201L-B40NA	2CDS241103R0405		0.25	5
	50	2	944588	SH201L-B50NA	2CDS241103R0505		0.25	5
	63	2	944618	SH201L-B63NA	2CDS241103R0635		0.25	5
2	6	2	633284	SH202L-B6	2CDS242001R0065		0.25	5
	10	2	633314	SH202L-B10	2CDS242001R0105		0.25	5
	13	2	633338	SH202L-B13	2CDS242001R0135		0.25	5
	16	2	633352	SH202L-B16	2CDS242001R0165		0.25	5
	20	2	633376	SH202L-B20	2CDS242001R0205		0.25	5
	25	2	633390	SH202L-B25	2CDS242001R0255		0.25	5
	32	2	633413	SH202L-B32	2CDS242001R0325		0.25	5
	40	2	633437	SH202L-B40	2CDS242001R0405		0.25	5
	50	2	944793	SH202L-B50	2CDS242001R0505		0.25	5
	63	2	944823	SH202L-B63	2CDS242001R0635		0.25	5



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SH203L-B
2CSC400030F0018



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SH203L-B...NA
2CSC400030F0019



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SH204L-B
2CSC400030F0020

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
3	6	3	633451	SH203L-B6	2CDS243001R0065		0.375	1
	10	3	633482	SH203L-B10	2CDS243001R0105		0.375	1
	13	3	633505	SH203L-B13	2CDS243001R0135		0.375	1
	16	3	633529	SH203L-B16	2CDS243001R0165		0.375	1
	20	3	633543	SH203L-B20	2CDS243001R0205		0.375	1
	25	3	633567	SH203L-B25	2CDS243001R0255		0.375	1
	32	3	633581	SH203L-B32	2CDS243001R0325		0.375	1
	40	3	633604	SH203L-B40	2CDS243001R0405		0.375	1
	50	3	945004	SH203L-B50	2CDS243001R0505		0.375	1
	63	3	945035	SH203L-B63	2CDS243001R0635		0.375	1
3+N	6	4	633628	SH203L-B6NA	2CDS243103R0065		0.5	1
	10	4	633659	SH203L-B10NA	2CDS243103R0105		0.5	1
	13	4	633673	SH203L-B13NA	2CDS243103R0135		0.5	1
	16	4	633697	SH203L-B16NA	2CDS243103R0165		0.5	1
	20	4	633710	SH203L-B20NA	2CDS243103R0205		0.5	1
	25	4	633734	SH203L-B25NA	2CDS243103R0255		0.5	1
	32	4	633758	SH203L-B32NA	2CDS243103R0325		0.5	1
	40	4	633772	SH203L-B40NA	2CDS243103R0405		0.5	1
	50	4	945219	SH203L-B50NA	2CDS243103R0505		0.5	1
	63	4	945240	SH203L-B63NA	2CDS243103R0635		0.5	1
4	6	4	633796	SH204L-B6	2CDS244001R0065		0.5	1
	10	4	633826	SH204L-B10	2CDS244001R0105		0.5	1
	13	4	633840	SH204L-B13	2CDS244001R0135		0.5	1
	16	4	633864	SH204L-B16	2CDS244001R0165		0.5	1
	20	4	633888	SH204L-B20	2CDS244001R0205		0.5	1
	25	4	633901	SH204L-B25	2CDS244001R0255		0.5	1
	32	4	633925	SH204L-B32	2CDS244001R0325		0.5	1
	40	4	633949	SH204L-B40	2CDS244001R0405		0.5	1
	50	4	945424	SH204L-B50	2CDS244001R0505		0.5	1
	63	4	945455	SH204L-B63	2CDS244001R0635		0.5	1

Ordering data
MCB SH 200 L Series – C characteristic



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SH201L-C
2CSC400030F0021



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SH201L-C...NA
2CSC400030F0022

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
1	0.5	1	699181	SH201L-C0,5	2CDS241001R0984		0.125	10
	1	1	699198	SH201L-C1	2CDS241001R0014		0.125	10
	1.6	1	699204	SH201L-C1,6	2CDS241001R0974		0.125	10
	2	1	699211	SH201L-C2	2CDS241001R0024		0.125	10
	3	1	699228	SH201L-C3	2CDS241001R0034		0.125	10
	4	1	699235	SH201L-C4	2CDS241001R0044		0.125	10
	6	1	632935	SH201L-C6	2CDS241001R0064		0.125	10
	8	1	632959	SH201L-C8	2CDS241001R0084		0.125	10
	10	1	632966	SH201L-C10	2CDS241001R0104		0.125	10
	13	1	632980	SH201L-C13	2CDS241001R0134		0.125	10
	16	1	633000	SH201L-C16	2CDS241001R0164		0.125	10
	20	1	633024	SH201L-C20	2CDS241001R0204		0.125	10
	25	1	633048	SH201L-C25	2CDS241001R0254		0.125	10
	32	1	633062	SH201L-C32	2CDS241001R0324		0.125	10
	40	1	633086	SH201L-C40	2CDS241001R0404		0.125	10
	50	1	944366	SH201L-C50	2CDS241001R0504		0.125	10
	63	1	944397	SH201L-C63	2CDS241001R0634		0.125	10
1+N	0.5	2	700221	SH201L-C0,5NA	2CDS241103R0984		0.25	5
	1	2	700238	SH201L-C1NA	2CDS241103R0014		0.25	5
	1.6	2	700245	SH201L-C1,6NA	2CDS241103R0974		0.25	5
	2	2	700252	SH201L-C2NA	2CDS241103R0024		0.25	5
	3	2	700269	SH201L-C3NA	2CDS241103R0034		0.25	5
	4	2	700276	SH201L-C4NA	2CDS241103R0044		0.25	5
	6	2	633109	SH201L-C6NA	2CDS241103R0064		0.25	5
	8	2	633123	SH201L-C8NA	2CDS241103R0084		0.25	5
	10	2	633130	SH201L-C10NA	2CDS241103R0104		0.25	5
	13	2	633154	SH201L-C13NA	2CDS241103R0134		0.25	5
	16	2	633178	SH201L-C16NA	2CDS241103R0164		0.25	5
	20	2	633192	SH201L-C20NA	2CDS241103R0204		0.25	5
	25	2	633215	SH201L-C25NA	2CDS241103R0254		0.25	5
	32	2	633239	SH201L-C32NA	2CDS241103R0324		0.25	5
	40	2	633253	SH201L-C40NA	2CDS241103R0404		0.25	5
	50	2	944571	SH201L-C50NA	2CDS241103R0504		0.25	5
	63	2	943345|	SH201L-C63NA	2CDS241103R0634		0.25	5



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SH202L-C
2CSC400030F0023



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SH203L-C
2CSC400030F0024

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
2	0.5	2	700160	SH202L-C0,5	2CDS242001R0984		0.25	5
	1	2	700177	SH202L-C1	2CDS242001R0014		0.25	5
	1.6	2	700184	SH202L-C1,6	2CDS242001R0974		0.25	5
	2	2	700191	SH202L-C2	2CDS242001R0024		0.25	5
	3	2	700207	SH202L-C3	2CDS242001R0034		0.25	5
	4	2	700214	SH202L-C4	2CDS242001R0044		0.25	5
	6	2	633277	SH202L-C6	2CDS242001R0064		0.25	5
	8	2	633291	SH202L-C8	2CDS242001R0084		0.25	5
	10	2	633307	SH202L-C10	2CDS242001R0104		0.25	5
	13	2	633321	SH202L-C13	2CDS242001R0134		0.25	5
	16	2	633345	SH202L-C16	2CDS242001R0164		0.25	5
	20	2	633369	SH202L-C20	2CDS242001R0204		0.25	5
	25	2	633383	SH202L-C25	2CDS242001R0254		0.25	5
	32	2	633406	SH202L-C32	2CDS242001R0324		0.25	5
	40	2	633420	SH202L-C40	2CDS242001R0404		0.25	5
	50	2	944786	SH202L-C50	2CDS242001R0504		0.25	5
	63	2	944816	SH202L-C63	2CDS242001R0634		0.25	5
3	0.5	3	701495	SH203L-C0,5	2CDS243001R0984		0.375	1
	1	3	701501	SH203L-C1	2CDS243001R0014		0.375	1
	1.6	3	701518	SH203L-C1,6	2CDS243001R0974		0.375	1
	2	3	701525	SH203L-C2	2CDS243001R0024		0.375	1
	3	3	701532	SH203L-C3	2CDS243001R0034		0.375	1
	4	3	701549	SH203L-C4	2CDS243001R0044		0.375	1
	6	3	633444	SH203L-C6	2CDS243001R0064		0.375	1
	8	3	633468	SH203L-C8	2CDS243001R0084		0.375	1
	10	3	633475	SH203L-C10	2CDS243001R0104		0.375	1
	13	3	633499	SH203L-C13	2CDS243001R0134		0.375	1
	16	3	633512	SH203L-C16	2CDS243001R0164		0.375	1
	20	3	633536	SH203L-C20	2CDS243001R0204		0.375	1
	25	3	633550	SH203L-C25	2CDS243001R0254		0.375	1
	32	3	633574	SH203L-C32	2CDS243001R0324		0.375	1
	40	3	633598	SH203L-C40	2CDS243001R0404		0.375	1
	50	3	944991	SH203L-C50	2CDS243001R0504		0.375	1
	63	3	945028	SH203L-C63	2CDS243001R0634		0.375	1

Ordering data
MCB SH 200 L Series – C characteristic



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SH203L-C...NA
2CSC400030F0025



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SH204L-C
2CSC400030F0026

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
3+N	0.5	4	702539	SH203L-C0,5NA	2CDS243103R0984		0.5	1
	1	4	702546	SH203L-C1NA	2CDS243103R0014		0.5	1
	1.6	4	702553	SH203L-C1,6NA	2CDS243103R09744		0.5	1
	2	4	702560	SH203L-C2NA	2CDS243103R0024		0.5	1
	3	4	702577	SH203L-C3NA	2CDS243103R0034		0.5	1
	4	4	702584	SH203L-C4NA	2CDS243103R0044		0.5	1
	6	4	633611	SH203L-C6NA	2CDS243103R0064		0.5	1
	8	4	633635	SH203L-C8NA	2CDS243103R0084		0.5	1
	10	4	633642	SH203L-C10NA	2CDS243103R0104		0.5	1
	13	4	633666	SH203L-C13NA	2CDS243103R0134		0.5	1
	16	4	633680	SH203L-C16NA	2CDS243103R0164		0.5	1
	20	4	633703	SH203L-C20NA	2CDS243103R0204		0.5	1
	25	4	633727	SH203L-C25NA	2CDS243103R0254		0.5	1
	32	4	633741	SH203L-C32NA	2CDS243103R0324		0.5	1
	40	4	633765	SH203L-C40NA	2CDS243103R0404		0.5	1
	50	4	945202	SH203L-C50NA	2CDS243103R0504		0.5	1
	63	4	945233	SH203L-C63NA	2CDS243103R0634		0.5	1
4	0.5	4	702478	SH204L-C0,5A	2CDS244001R0984		0.5	1
	1	4	702485	SH204L-C1	2CDS244001R0014|		0.5	1
	1.6	4	702492	SH204L-C1,6A	2CDS244001R0974		0.5	1
	2	4	702508	SH204L-C2	2CDS244001R0024		0.5	1
	3	4	702515	SH204L-C3	2CDS244001R0034		0.5	1
	4	4	702522	SH204L-C4	2CDS244001R0044		0.5	1
	6	4	633789	SH204L-C6	2CDS244001R0064		0.5	1
	8	4	633802	SH204L-C8	2CDS244001R0084		0.5	1
	10	4	633819	SH204L-C10	2CDS244001R0104		0.5	1
	13	4	633833	SH204L-C13	2CDS244001R0134		0.5	1
	16	4	633857	SH204L-C16	2CDS244001R0164		0.5	1
	20	4	633871	SH204L-C20	2CDS244001R0204		0.5	1
	25	4	633895	SH204L-C25	2CDS244001R0254		0.5	1
	32	4	633918	SH204L-C32	2CDS244001R0324		0.5	1
	40	4	633932	SH204L-C40	2CDS244001R0404		0.5	1
	50	4	945417	SH204L-C50	2CDS244001R0504		0.5	1
	63	4	945448	SH204L-C63	2CDS244001R0634		0.5	1

Notes

Ordering data
MCB SH 200 Series – B characteristic



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SH201-B
2CSC400030F0027



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SH201-B...NA
2CSC400030F0028



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SH202-B
2CSC400030F0029

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
1	6	1	630580	SH201-B6	2CDS211001R0065		0.125	10
	10	1	630610	SH201-B10	2CDS211001R0105		0.125	10
	13	1	630634	SH201-B13	2CDS211001R0135		0.125	10
	16	1	630658	SH201-B16	2CDS211001R0165		0.125	10
	20	1	630672	SH201-B20	2CDS211001R0205		0.125	10
	25	1	630696	SH201-B25	2CDS211001R0255		0.125	10
	32	1	630719	SH201-B32	2CDS211001R0325		0.125	10
	40	1	630733	SH201-B40	2CDS211001R0405		0.125	10
	50	1	698979	SH201-B50	2CDS211001R0505		0.125	10
	63	1	698986	SH201-B63	2CDS211001R0635		0.125	10
1+N	6	2	630818	SH201-B6NA	2CDS211103R0065		0.25	5
	10	2	630849	SH201-B10NA	2CDS211103R0105		0.25	5
	13	2	630863	SH201-B13NA	2CDS211103R0135		0.25	5
	16	2	630887	SH201-B16NA	2CDS211103R0165		0.25	5
	20	2	630900	SH201-B20NA	2CDS211103R0205		0.25	5
	25	2	630924	SH201-B25NA	2CDS211103R0255		0.25	5
	32	2	630948	SH201-B32NA	2CDS211103R0325		0.25	5
	40	2	630962	SH201-B40NA	2CDS211103R0405		0.25	5
	50	2	699761	SH201-B50NA	2CDS211103R0505		0.25	5
	63	2	699778	SH201-B63NA	2CDS211103R0635		0.25	5
2	6	2	631044	SH202-B6	2CDS212001R0065		0.25	5
	10	2	631075	SH202-B10	2CDS212001R0105		0.25	5
	13	2	631099	SH202-B13	2CDS212001R0135		0.25	5
	16	2	631112	SH202-B16	2CDS212001R0165		0.25	5
	20	2	631136	SH202-B20	2CDS212001R0205		0.25	5
	25	2	631150	SH202-B25	2CDS212001R0255		0.25	5
	32	2	631174	SH202-B32	2CDS212001R0325		0.25	5
	40	2	631198	SH202-B40	2CDS212001R0405		0.25	5
	50	2	699747	SH202-B50	2CDS212001R0505		0.25	5
	63	2	699754	SH202-B63	2CDS212001R0635		0.25	5



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SH203-B
2CSC400030F0030



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SH203-B...NA
2CSC400030F0031



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SH204-B
2CSC400030F0032

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
3	6	3	631273	SH203-B6	2CDS213001R0065		0.375	1
	10	3	631303	SH203-B10	2CDS213001R0105		0.375	1
	13	3	631327	SH203-B13	2CDS213001R0135		0.375	1
	16	3	631341	SH203-B16	2CDS213001R0165		0.375	1
	20	3	631365	SH203-B20	2CDS213001R0205		0.375	1
	25	3	631389	SH203-B25	2CDS213001R0255		0.375	1
	32	3	631402	SH203-B32	2CDS213001R0325		0.375	1
	40	3	631426	SH203-B40	2CDS213001R0405		0.375	1
	50	3	701280	SH203-B50	2CDS213001R0505		0.375	1
	63	3	701297	SH203-B63	2CDS213001R0635		0.375	1
3+N	6	4	631501	SH203-B6NA	2CDS213103R0065		0.5	1
	10	4	631532	SH203-B10NA	2CDS213103R0105		0.5	1
	13	4	631556	SH203-B13NA	2CDS213103R0135		0.5	1
	16	4	631570	SH203-B16NA	2CDS213103R0165		0.5	1
	20	4	631594	SH203-B20NA	2CDS213103R0205		0.5	1
	25	4	631617	SH203-B25NA	2CDS213103R0255		0.5	1
	32	4	631631	SH203-B32NA	2CDS213103R0325		0.5	1
	40	4	631655	SH203-B40NA	2CDS213103R0405		0.5	1
	50	4	702072	SH203-B50NA	2CDS213103R0505		0.5	1
	63	4	702089	SH203-B63NA	2CDS213103R0635		0.5	1
4	6	4	631730	SH204-B6	2CDS214001R0065		0.5	1
	10	4	631761	SH204-B10	2CDS214001R0105		0.5	1
	13	4	631785	SH204-B13	2CDS214001R0135		0.5	1
	16	4	631808	SH204-B16	2CDS214001R0165		0.5	1
	20	4	631822	SH204-B20	2CDS214001R0205		0.5	1
	25	4	631846	SH204-B25	2CDS214001R0255		0.5	1
	32	4	631860	SH204-B32	2CDS214001R0325		0.5	1
	40	4	631884	SH204-B40	2CDS214001R0405		0.5	1
	50	4	702058	SH204-B50	2CDS214001R0505		0.5	1
	63	4	702065	SH204-B63	2CDS214001R0635		0.5	1

Ordering data
MCB SH 200 Series – C characteristic



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SH201-C
2CSC400030F0033

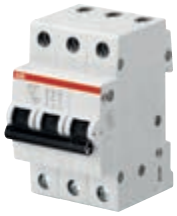


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SH201-C...NA
2CSC400030F0034

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
1	0.5	1	630757	SH201-C0,5	2CDS211001R0984		0.125	10
	1	1	630535	SH201-C1	2CDS211001R0014		0.125	10
	1.6	1	630740	SH201-C1,6	2CDS211001R0974		0.125	10
	2	1	630542	SH201-C2	2CDS211001R0024		0.125	10
	3	1	630559	SH201-C3	2CDS211001R0034		0.125	10
	4	1	630566	SH201-C4	2CDS211001R0044		0.125	10
	6	1	630573	SH201-C6	2CDS211001R0064		0.125	10
	8	1	630597	SH201-C8	2CDS211001R0084		0.125	10
	10	1	630603	SH201-C10	2CDS211001R0104		0.125	10
	13	1	630627	SH201-C13	2CDS211001R0134		0.125	10
	16	1	630641	SH201-C16	2CDS211001R0164		0.125	10
	20	1	630665	SH201-C20	2CDS211001R0204		0.125	10
	25	1	630689	SH201-C25	2CDS211001R0254		0.125	10
	32	1	630702	SH201-C32	2CDS211001R0324		0.125	10
	40	1	630726	SH201-C40	2CDS211001R0404		0.125	10
	50	1	698993	SH201-C50	2CDS211001R0504		0.125	10
	63	1	699006	SH201-C63	2CDS211001R0634		0.125	10
1+N	0.5	2	630986	SH201-C0,5NA	2CDS211103R0984		0.25	5
	1	2	630764	SH201-C1NA	2CDS211103R0014		0.25	5
	1.6	2	630979	SH201-C1,6NA	2CDS211103R0974		0.25	5
	2	2	630771	SH201-C2NA	2CDS211103R0024		0.25	5
	3	2	630788	SH201-C3NA	2CDS211103R0034		0.25	5
	4	2	630795	SH201-C4NA	2CDS211103R0044		0.25	5
	6	2	630801	SH201-C6NA	2CDS211103R0064		0.25	5
	8	2	630825	SH201-C8NA	2CDS211103R0084		0.25	5
	10	2	630832	SH201-C10NA	2CDS211103R0104		0.25	5
	13	2	630856	SH201-C13NA	2CDS211103R0134		0.25	5
	16	2	630870	SH201-C16NA	2CDS211103R0164		0.25	5
	20	2	630894	SH201-C20NA	2CDS211103R0204		0.25	5
	25	2	630917	SH201-C25NA	2CDS211103R0254		0.25	5
	32	2	630931	SH201-C32NA	2CDS211103R0324		0.25	5
	40	2	630955	SH201-C40NA	2CDS211103R0404		0.25	5
	50	2	699808	SH201-C50NA	2CDS211103R0504		0.25	5
	63	2	699815	SH201-C63NA	2CDS211103R0634		0.25	5



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SH202-C
2CSC400030F0035



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SH203-C
2CSC400030F0036

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
2	0.5	2	631211	SH202-C0,5	2CDS212001R0984		0.25	5
	1	2	630993	SH202-C1	2CDS212001R0014		0.25	5
	1.6	2	631204	SH202-C1,6	2CDS212001R0974		0.25	5
	2	2	631006	SH202-C2	2CDS212001R0024		0.25	5
	3	2	631013	SH202-C3	2CDS212001R0034		0.25	5
	4	2	631020	SH202-C4	2CDS212001R0044		0.25	5
	6	2	631037	SH202-C6	2CDS212001R0064		0.25	5
	8	2	631051	SH202-C8	2CDS212001R0084		0.25	5
	10	2	631068	SH202-C10	2CDS212001R0104		0.25	5
	13	2	631082	SH202-C13	2CDS212001R0134		0.25	5
	16	2	631105	SH202-C16	2CDS212001R0164		0.25	5
	20	2	631129	SH202-C20	2CDS212001R0204		0.25	5
	25	2	631143	SH202-C25	2CDS212001R0254		0.25	5
	32	2	631167	SH202-C32	2CDS212001R0324		0.25	5
	40	2	631181	SH202-C40	2CDS212001R0404		0.25	5
	50	2	699785	SH202-C50	2CDS212001R0504		0.25	5
	63	2	699792	SH202-C63	2CDS212001R0634		0.25	5
3	0.5	3	631440	SH203-C0,5	2CDS213001R0984		0.375	1
	1	3	631228	SH203-C1	2CDS213001R0014		0.375	1
	1.6	3	631433	SH203-C1,6	2CDS213001R0974		0.375	1
	2	3	631235	SH203-C2	2CDS213001R0024		0.375	1
	3	3	631242	SH203-C3	2CDS213001R0034		0.375	1
	4	3	631259	SH203-C4	2CDS213001R0044		0.375	1
	6	3	631266	SH203-C6	2CDS213001R0064		0.375	1
	8	3	631280	SH203-C8	2CDS213001R0084		0.375	1
	10	3	631297	SH203-C10	2CDS213001R0104		0.375	1
	13	3	631310	SH203-C13	2CDS213001R0134		0.375	1
	16	3	631334	SH203-C16	2CDS213001R0164		0.375	1
	20	3	631358	SH203-C20	2CDS213001R0204		0.375	1
	25	3	631372	SH203-C25	2CDS213001R0254		0.375	1
	32	3	631396	SH203-C32	2CDS213001R0324		0.375	1
	40	3	631419	SH203-C40	2CDS213001R0404		0.375	1
	50	3	701303	SH203-C50	2CDS213001R0504		0.375	1
	63	3	701310	SH203-C63	2CDS213001R0634		0.375	1

Ordering data
MCB SH 200 Series – C characteristic



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SH203-C...NA
2CSC400030F0037



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SH204-C
2CSC400030F0038

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
3+N	0.5	4	631679	SH203-C0,5NA	2CDS213103R0984		0.5	1
	1	4	631457	SH203-C1NA	2CDS213103R0014		0.5	1
	1.6	4	631662	SH203-C1,6NA	2CDS213103R0974		0.5	1
	2	4	631464	SH203-C2NA	2CDS213103R0024		0.5	1
	3	4	631471	SH203-C3NA	2CDS213103R0034		0.5	1
	4	4	631488	SH203-C4NA	2CDS213103R0044		0.5	1
	6	4	631495	SH203-C6NA	2CDS213103R0064		0.5	1
	8	4	631518	SH203-C8NA	2CDS213103R0084		0.5	1
	10	4	631525	SH203-C10NA	2CDS213103R0104		0.5	1
	13	4	631549	SH203-C13NA	2CDS213103R0134		0.5	1
	16	4	631563	SH203-C16NA	2CDS213103R0164		0.5	1
	20	4	631587	SH203-C20NA	2CDS213103R0204		0.5	1
	25	4	631600	SH203-C25NA	2CDS213103R0254		0.5	1
	32	4	631624	SH203-C32NA	2CDS213103R0324		0.5	1
	40	4	631648	SH203-C40NA	2CDS213103R0404		0.5	1
	50	4	702119	SH203-C50NA	2CDS213103R0504		0.5	1
	63	4	702126	SH203-C63NA	2CDS213103R0634		0.5	1
4	0.5	4	631907	SH204-C0,5	2CDS214001R0984		0.5	1
	1	4	631686	SH204-C1	2CDS214001R0974		0.5	1
	1.6	4	631891	SH204-C1,6	2CDS214001R0974		0.5	1
	2	4	631693	SH204-C2	2CDS214001R0024		0.5	1
	3	4	631709	SH204-C3	2CDS214001R0034		0.5	1
	4	4	631716	SH204-C4	2CDS214001R0044		0.5	1
	6	4	631723	SH204-C6	2CDS214001R0064		0.5	1
	8	4	631747	SH204-C8	2CDS214001R0084		0.5	1
	10	4	631754	SH204-C10	2CDS214001R0104		0.5	1
	13	4	631778	SH204-C13	2CDS214001R0134		0.5	1
	16	4	631792	SH204-C16	2CDS214001R0164		0.5	1
	20	4	631815	SH204-C20	2CDS214001R0204		0.5	1
	25	4	631839	SH204-C25	2CDS214001R0254		0.5	1
	32	4	631853	SH204-C32	2CDS214001R0324		0.5	1
	40	4	631877	SH204-C40	2CDS214001R0404		0.5	1
	50	4	702096	SH204-C50	2CDS214001R0504		0.5	1
	63	4	702102	SH204-C63	2CDS214001R0634		0.5	1

Notes

Ordering data
MCB SH 200 Series – D characteristic



—
product name
order code



—
product name
order code

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
1	0.5	1	699013	SH201-D0,5	2CDS211001R0981		0.125	10
	1	1	699020	SH201-D1	2CDS211001R0011		0.125	10
	1.6	1	699037	SH201-D1,6	2CDS211001R0971		0.125	10
	2	1	699044	SH201-D2	2CDS211001R0021		0.125	10
	3	1	699051	SH201-D3	2CDS211001R0031		0.125	10
	4	1	699068	SH201-D4	2CDS211001R0041		0.125	10
	6	1	699075	SH201-D6	2CDS211001R0061		0.125	10
	8	1	699082	SH201-D8	2CDS211001R0081		0.125	10
	10	1	699099	SH201-D10	2CDS211001R0101		0.125	10
	13	1	699105	SH201-D13	2CDS211001R0131		0.125	10
	16	1	699112	SH201-D16	2CDS211001R0161		0.125	10
	20	1	699129	SH201-D20	2CDS211001R0201		0.125	10
	25	1	699136	SH201-D25	2CDS211001R0251		0.125	10
	32	1	699143	SH201-D32	2CDS211001R0321		0.125	10
	40	1	699150	SH201-D40	2CDS211001R0401		0.125	10
	50	1	699167	SH201-D50	2CDS211001R0501		0.125	10
	63	1	699174	SH201-D63	2CDS211001R0631		0.125	10
1+N	0.5	2	699990	SH201-D0,5NA	2CDS211103R0981		0.250	5
	1	2	700009	SH201-D1NA	2CDS211103R0011		0.250	5
	1.6	2	700016	SH201-D1,6NA	2CDS211103R0971		0.250	5
	2	2	700023	SH201-D2NA	2CDS211103R0021		0.250	5
	3	2	700030	SH201-D3NA	2CDS211103R0031		0.250	5
	4	2	700047	SH201-D4NA	2CDS211103R0041		0.250	5
	6	2	700054	SH201-D6NA	2CDS211103R0061		0.250	5
	8	2	700061	SH201-D8NA	2CDS211103R0081		0.250	5
	10	2	700078	SH201-D10NA	2CDS211103R0101		0.250	5
	13	2	700085	SH201-D13NA	2CDS211103R0131		0.250	5
	16	2	700092	SH201-D16NA	2CDS211103R0161		0.250	5
	20	2	700108	SH201-D20NA	2CDS211103R0201		0.250	5
	25	2	700115	SH201-D25NA	2CDS211103R0251		0.250	5
	32	2	700122	SH201-D32NA	2CDS211103R0321		0.250	5
	40	2	700139	SH201-D40NA	2CDS211103R0401		0.250	5
	50	2	700146	SH201-D50NA	2CDS211103R0501		0.250	5
	63	2	700153	SH201-D63NA	2CDS211103R0631		0.250	5



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product name
order code



—
product name
order code

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
2	0.5	2	699822	SH202-D0,5	2CDS212001R0981		0.250	5
	1	2	699839	SH202-D1	2CDS212001R0011		0.250	5
	1.6	2	699846	SH202-D1,6	2CDS212001R0971		0.250	5
	2	2	699853	SH202-D2	2CDS212001R0021		0.250	5
	3	2	699860	SH202-D3	2CDS212001R0031		0.250	5
	4	2	699877	SH202-D4	2CDS212001R0041		0.250	5
	6	2	699884	SH202-D6	2CDS212001R0061		0.250	5
	8	2	699891	SH202-D8	2CDS212001R0081		0.250	5
	10	2	699907	SH202-D10	2CDS212001R0101		0.250	5
	13	2	699914	SH202-D13	2CDS212001R0131		0.250	5
	16	2	699921	SH202-D16	2CDS212001R0161		0.250	5
	20	2	699938	SH202-D20	2CDS212001R0201		0.250	5
	25	2	699945	SH202-D25	2CDS212001R0251		0.250	5
	32	2	699952	SH202-D32	2CDS212001R0321		0.250	5
	40	2	699969	SH202-D40	2CDS212001R0401		0.250	5
	50	2	699976	SH202-D50	2CDS212001R0501		0.250	5
	63	2	699983	SH202-D63	2CDS212001R0631		0.250	5
3	0.5	3	701327	SH203-D0,5	2CDS213001R0981		0.375	1
	1	3	701334	SH203-D1	2CDS213001R0011		0.375	1
	1.6	3	701341	SH203-D1,6	2CDS213001R0971		0.375	1
	2	3	701358	SH203-D2	2CDS213001R0021		0.375	1
	3	3	701365	SH203-D3	2CDS213001R0031		0.375	1
	4	3	701372	SH203-D4	2CDS213001R0041		0.375	1
	6	3	701389	SH203-D6	2CDS213001R0061		0.375	1
	8	3	701396	SH203-D8	2CDS213001R0081		0.375	1
	10	3	701402	SH203-D10	2CDS213001R0101		0.375	1
	13	3	701419	SH203-D13	2CDS213001R0131		0.375	1
	16	3	701426	SH203-D16	2CDS213001R0161		0.375	1
	20	3	701433	SH203-D20	2CDS213001R0201		0.375	1
	25	3	701440	SH203-D25	2CDS213001R0251		0.375	1
	32	3	701457	SH203-D32	2CDS213001R0321		0.375	1
	40	3	701464	SH203-D40	2CDS213001R0401		0.375	1
	50	3	701471	SH203-D50	2CDS213001R0501		0.375	1
	63	3	701488	SH203-D63	2CDS213001R0631		0.375	1

Ordering data
MCB SH 200 Series – D characteristic



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product name
order code



—
product name
order code

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
3+N	0.5	4	702300	SH203-D0,5NA	2CDS213103R0981		0.5	1
	1	4	702317	SH203-D1NA	2CDS213103R0011		0.5	1
	1.6	4	702324	SH203-D1,6NA	2CDS213103R0971		0.5	1
	2	4	702331	SH203-D2NA	2CDS213103R0021		0.5	1
	3	4	702348	SH203-D3NA	2CDS213103R0031		0.5	1
	4	4	702355	SH203-D4NA	2CDS213103R0041		0.5	1
	6	4	702362	SH203-D6NA	2CDS213103R0061		0.5	1
	8	4	702379	SH203-D8NA	2CDS213103R0081		0.5	1
	10	4	702386	SH203-D10NA	2CDS213103R0101		0.5	1
	13	4	702393	SH203-D13NA	2CDS213103R0131		0.5	1
	16	4	702409	SH203-D16NA	2CDS213103R0161		0.5	1
	20	4	702416	SH203-D20NA	2CDS213103R0201		0.5	1
	25	4	702423	SH203-D25NA	2CDS213103R0251		0.5	1
	32	4	702430	SH203-D32NA	2CDS213103R0321		0.5	1
	40	4	702447	SH203-D40NA	2CDS213103R0401		0.5	1
	50	4	702454	SH203-D50NA	2CDS213103R0501		0.5	1
	63	4	702461	SH203-D63NA	2CDS213103R0631		0.5	1
4	0.5	4	702133	SH204-D0,5	2CDS214001R0981		0.5	1
	1	4	702140	SH204-D1	2CDS214001R0011		0.5	1
	1.6	4	702157	SH204-D1,6	2CDS214001R0971		0.5	1
	2	4	702164	SH204-D2	2CDS214001R0021		0.5	1
	3	4	702171	SH204-D3	2CDS214001R0031		0.5	1
	4	4	702188	SH204-D4	2CDS214001R0041		0.5	1
	6	4	702195	SH204-D6	2CDS214001R0061		0.5	1
	8	4	702201	SH204-D8	2CDS214001R0081		0.5	1
	10	4	702218	SH204-D10	2CDS214001R0101		0.5	1
	13	4	702225	SH204-D13	2CDS214001R0131		0.5	1
	16	4	702232	SH204-D16	2CDS214001R0161		0.5	1
	20	4	702249	SH204-D20	2CDS214001R0201		0.5	1
	25	4	702256	SH204-D25	2CDS214001R0251		0.5	1
	32	4	702263	SH204-D32	2CDS214001R0321		0.5	1
	40	4	702270	SH204-D40	2CDS214001R0401		0.5	1
	50	4	702287	SH204-D50	2CDS214001R0501		0.5	1
	63	4	702294	SH204-D63	2CDS214001R0631		0.5	1

Notes

Ordering data
MCB SH 200 M Series – C characteristic



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product name
order code



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product name
order code

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
1	0.5	1	699402	SH201M-C0,5	2CDS271011R0984		0.125	10
	1	1	942287	SH201M-C1	2CDS271011R0014		0.125	10
	1.6	1	699426	SH201M-C1,6	2CDS271011R0974		0.125	10
	2	1	699433	SH201M-C2	2CDS271011R0024		0.125	10
	3	1	699440	SH201M-C3	2CDS271011R0034		0.125	10
	4	1	699457	SH201M-C4	2CDS271011R0044		0.125	10
	6	1	699464	SH201M-C6	2CDS271011R0064		0.125	10
	8	1	699471	SH201M-C8	2CDS271011R0084		0.125	10
	10	1	699488	SH201M-C10	2CDS271011R0104		0.125	10
	13	1	699495	SH201M-C13	2CDS271011R0134		0.125	10
	16	1	699501	SH201M-C16	2CDS271011R0164		0.125	10
	20	1	699518	SH201M-C20	2CDS271011R0204		0.125	10
	25	1	699525	SH201M-C25	2CDS271011R0254		0.125	10
	32	1	699532	SH201M-C32	2CDS271011R0324		0.125	10
	40	1	699549	SH201M-C40	2CDS271011R0404		0.125	10
	50	1	699556	SH201M-C50	2CDS271011R0504		0.125	10
	63	1	699563	SH201M-C63	2CDS271011R0634		0.125	10
1+N	0.5	2	700771	SH201M-C0,5NA	2CDS271113R0984		0.250	5
	1	2	700788	SH201M-C1NA	2CDS271113R0014		0.250	5
	1.6	2	700795	SH201M-C1,6NA	2CDS271113R0974		0.250	5
	2	2	700801	SH201M-C2NA	2CDS271113R0024		0.250	5
	3	2	700818	SH201M-C3NA	2CDS271113R0034		0.250	5
	4	2	700825	SH201M-C4NA	2CDS271113R0044		0.250	5
	6	2	700832	SH201M-C6NA	2CDS271113R0064		0.250	5
	8	2	700849	SH201M-C8NA	2CDS271113R0084		0.250	5
	10	2	700856	SH201M-C10NA	2CDS271113R0104		0.250	5
	13	2	700863	SH201M-C13NA	2CDS271113R0134		0.250	5
	16	2	700870	SH201M-C16NA	2CDS271113R0164		0.250	5
	20	2	700887	SH201M-C20NA	2CDS271113R0204		0.250	5
	25	2	700894	SH201M-C25NA	2CDS271113R0254		0.250	5
	32	2	700900	SH201M-C32NA	2CDS271113R0324		0.250	5
	40	2	700917	SH201M-C40NA	2CDS271113R0404		0.250	5
	50	2	700924	SH201M-C50NA	2CDS271113R0504		0.250	5
	63	2	700931	SH201M-C63NA	2CDS271113R0634		0.250	5



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product name
order code

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
2	0.5	2	700603	SH202M-C0,5	2CDS272011R0984		0.250	5
	1	2	942294	SH202M-C1	2CDS272011R0014		0.250	5
	1.6	2	700627	SH202M-C1,6	2CDS272011R0974		0.250	5
	2	2	700634	SH202M-C2	2CDS272011R0024		0.250	5
	3	2	700641	SH202M-C3	2CDS272011R0034		0.250	5
	4	2	700658	SH202M-C4	2CDS272011R0044		0.250	5
	6	2	700665	SH202M-C6	2CDS272011R0064		0.250	5
	8	2	700672	SH202M-C8	2CDS272011R0084		0.250	5
	10	2	700689	SH202M-C10	2CDS272011R0104		0.250	5
	13	2	700696	SH202M-C13	2CDS272011R0134		0.250	5
	16	2	700702	SH202M-C16	2CDS272011R0164		0.250	5
	20	2	700719	SH202M-C20	2CDS272011R0204		0.250	5
	25	2	700726	SH202M-C25	2CDS272011R0254		0.250	5
	32	2	700733	SH202M-C32	2CDS272011R0324		0.250	5
	40	2	700740	SH202M-C40	2CDS272011R0404		0.250	5
	50	2	700757	SH202M-C50	2CDS272011R0504		0.250	5
	63	2	700764	SH202M-C63	2CDS272011R0634		0.250	5



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product name
order code

3	0.5	3	701716	SH203M-C0,5	2CDS273011R0984		0.375	1
	1	3	942300	SH203M-C1	2CDS273011R0014		0.375	1
	1.6	3	701730	SH203M-C1,6	2CDS273011R0974		0.375	1
	2	3	701747	SH203M-C2	2CDS273011R0024		0.375	1
	3	3	701754	SH203M-C3	2CDS273011R0034		0.375	1
	4	3	701761	SH203M-C4	2CDS273011R0044		0.375	1
	6	3	701778	SH203M-C6	2CDS273011R0064		0.375	1
	8	3	701785	SH203M-C8	2CDS273011R0084		0.375	1
	10	3	701792	SH203M-C10	2CDS273011R0104		0.375	1
	13	3	701808	SH203M-C13	2CDS273011R0134		0.375	1
	16	3	701815	SH203M-C16	2CDS273011R0164		0.375	1
	20	3	701822	SH203M-C20	2CDS273011R0204		0.375	1
	25	3	701839	SH203M-C25	2CDS273011R0254		0.375	1
	32	3	701846	SH203M-C32	2CDS273011R0324		0.375	1
	40	3	701853	SH203M-C40	2CDS273011R0404		0.375	1
	50	3	701860	SH203M-C50	2CDS273011R0504		0.375	1
	63	3	701877	SH203M-C63	2CDS273011R0634		0.375	1

Ordering data
MCB SH 200 M Series – C characteristic



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product name
order code



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product name
order code

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
3+N	0.5	4	703086	SH203M-C0,5NA	2CDS273113R0984		0.5	1
	1	4	703093	SH203M-C1NA	2CDS273113R0014		0.5	1
	1.6	4	703109	SH203M-C1,6NA	2CDS273113R0974		0.5	1
	2	4	703116	SH203M-C2NA	2CDS273113R0024		0.5	1
	3	4	703123	SH203M-C3NA	2CDS273113R0034		0.5	1
	4	4	703130	SH203M-C4NA	2CDS273113R0044		0.5	1
	6	4	703147	SH203M-C6NA	2CDS273113R0064		0.5	1
	8	4	703154	SH203M-C8NA	2CDS273113R0084		0.5	1
	10	4	703161	SH203M-C10NA	2CDS273113R0104		0.5	1
	13	4	703178	SH203M-C13NA	2CDS273113R0134		0.5	1
	16	4	703185	SH203M-C16NA	2CDS273113R0164		0.5	1
	20	4	703192	SH203M-C20NA	2CDS273113R0204		0.5	1
	25	4	703208	SH203M-C25NA	2CDS273113R0254		0.5	1
	32	4	703215	SH203M-C32NA	2CDS273113R0324		0.5	1
	40	4	703222	SH203M-C40NA	2CDS273113R0404		0.5	1
	50	4	703239	SH203M-C50NA	2CDS273113R0504		0.5	1
	63	4	703246	SH203M-C63NA	2CDS273113R0634		0.5	1
4	0.5	4	702911	SH204M-C0,5	2CDS274011R0984		0.5	1
	1	4	942317	SH204M-C1	2CDS274011R0014		0.5	1
	1.6	4	702935	SH204M-C1,6	2CDS274011R0974		0.5	1
	2	4	702942	SH204M-C2	2CDS274011R0024		0.5	1
	3	4	702959	SH204M-C3	2CDS274011R0034		0.5	1
	4	4	702966	SH204M-C4	2CDS274011R0044		0.5	1
	6	4	702973	SH204M-C6	2CDS274011R0064		0.5	1
	8	4	702980	SH204M-C8	2CDS274011R0084		0.5	1
	10	4	702997	SH204M-C10	2CDS274011R0104		0.5	1
	13	4	703000	SH204M-C13	2CDS274011R0134		0.5	1
	16	4	703017	SH204M-C16	2CDS274011R0164		0.5	1
	20	4	703024	SH204M-C20	2CDS274011R0204		0.5	1
	25	4	703031	SH204M-C25	2CDS274011R0254		0.5	1
	32	4	703048	SH204M-C32	2CDS274011R0324		0.5	1
	40	4	703055	SH204M-C40	2CDS274011R0404		0.5	1
	50	4	703062	SH204M-C50	2CDS274011R0504		0.5	1
	63	4	703079	SH204M-C63	2CDS274011R0634		0.5	1

Notes

Ordering data
MCB SH 200 M Series – D characteristic



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product name
order code



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product name
order code

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
1	0.5	1	699570	SH201M-D0,5	2CDS271011R0981		0.125	10
	1	1	942324	SH201M-D1	2CDS271011R0011		0.125	10
	1.6	1	699594	SH201M-D1,6	2CDS271011R0971		0.125	10
	2	1	699600	SH201M-D2	2CDS271011R0021		0.125	10
	3	1	699617	SH201M-D3	2CDS271011R0031		0.125	10
	4	1	699624	SH201M-D4	2CDS271011R0041		0.125	10
	6	1	699631	SH201M-D6	2CDS271011R0061		0.125	10
	8	1	699648	SH201M-D8	2CDS271011R0081		0.125	10
	10	1	699655	SH201M-D10	2CDS271011R0101		0.125	10
	13	1	699662	SH201M-D13	2CDS271011R0131		0.125	10
	16	1	699679	SH201M-D16	2CDS271011R0161		0.125	10
	20	1	699686	SH201M-D20	2CDS271011R0201		0.125	10
	25	1	699693	SH201M-D25	2CDS271011R0251		0.125	10
	32	1	699709	SH201M-D32	2CDS271011R0321		0.125	10
	40	1	699716	SH201M-D40	2CDS271011R0401		0.125	10
	50	1	699723	SH201M-D50	2CDS271011R0501		0.125	10
	63	1	699730	SH201M-D63	2CDS271011R0631		0.125	10
1+N	0.5	2	701112	SH201M-D0,5NA	2CDS271113R0981		0.250	5
	1	2	701129	SH201M-D1NA	2CDS271113R0011		0.250	5
	1.6	2	701136	SH201M-D1,6NA	2CDS271113R0971		0.250	5
	2	2	701143	SH201M-D2NA	2CDS271113R0021		0.250	5
	3	2	701150	SH201M-D3NA	2CDS271113R0031		0.250	5
	4	2	701167	SH201M-D4NA	2CDS271113R0041		0.250	5
	6	2	701174	SH201M-D6NA	2CDS271113R0061		0.250	5
	8	2	701181	SH201M-D8NA	2CDS271113R0081		0.250	5
	10	2	701198	SH201M-D10NA	2CDS271113R0101		0.250	5
	13	2	701204	SH201M-D13NA	2CDS271113R0131		0.250	5
	16	2	701211	SH201M-D16NA	2CDS271113R0161		0.250	5
	20	2	701228	SH201M-D20NA	2CDS271113R0201		0.250	5
	25	2	701235	SH201M-D25NA	2CDS271113R0251		0.250	5
	32	2	701242	SH201M-D32NA	2CDS271113R0321		0.250	5
	40	2	701259	SH201M-D40NA	2CDS271113R0401		0.250	5
	50	2	701266	SH201M-D50NA	2CDS271113R0501		0.250	5
	63	2	701273	SH201M-D63NA	2CDS271113R0631		0.250	5



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product name
order code

N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
2	0.5	2	700948	SH202M-D0,5	2CDS272011R0981		0.250	5
	1	2	942331	SH202M-D1	2CDS272011R0011		0.250	5
	1.6	2	700962	SH202M-D1,6	2CDS272011R0971		0.250	5
	2	2	700979	SH202M-D2	2CDS272011R0021		0.250	5
	3	2	700986	SH202M-D3	2CDS272011R0031		0.250	5
	4	2	700993	SH202M-D4	2CDS272011R0041		0.250	5
	6	2	701006	SH202M-D6	2CDS272011R0061		0.250	5
	8	2	701013	SH202M-D8	2CDS272011R0081		0.250	5
	10	2	701020	SH202M-D10	2CDS272011R0101		0.250	5
	13	2	701037	SH202M-D13	2CDS272011R0131		0.250	5
	16	2	701044	SH202M-D16	2CDS272011R0161		0.250	5
	20	2	701051	SH202M-D20	2CDS272011R0201		0.250	5
	25	2	701068	SH202M-D25	2CDS272011R0251		0.250	5
	32	2	701075	SH202M-D32	2CDS272011R0321		0.250	5
	40	2	701082	SH202M-D40	2CDS272011R0401		0.250	5
	50	2	701099	SH202M-D50	2CDS272011R0501		0.250	5
	63	2	701105	SH202M-D63	2CDS272011R0631		0.250	5



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product name
order code

3	0.5	3	701884	SH203M-D0,5	2CDS273011R0981		0.375	1
	1	3	942348	SH203M-D1	2CDS273011R0011		0.375	1
	1.6	3	701907	SH203M-D1,6	2CDS273011R0971		0.375	1
	2	3	701914	SH203M-D2	2CDS273011R0021		0.375	1
	3	3	701921	SH203M-D3	2CDS273011R0031		0.375	1
	4	3	701938	SH203M-D4	2CDS273011R0041		0.375	1
	6	3	701945	SH203M-D6	2CDS273011R0061		0.375	1
	8	3	701952	SH203M-D8	2CDS273011R0081		0.375	1
	10	3	701969	SH203M-D10	2CDS273011R0101		0.375	1
	13	3	701976	SH203M-D13	2CDS273011R0131		0.375	1
	16	3	701983	SH203M-D16	2CDS273011R0161		0.375	1
	20	3	701990	SH203M-D20	2CDS273011R0201		0.375	1
	25	3	702003	SH203M-D25	2CDS273011R0251		0.375	1
	32	3	702010	SH203M-D32	2CDS273011R0321		0.375	1
	40	3	702027	SH203M-D40	2CDS273011R0401		0.375	1
	50	3	702034	SH203M-D50	2CDS273011R0501		0.375	1
	63	3	702041	SH203M-D63	2CDS273011R0631		0.375	1

Ordering data
MCB SH 200 M Series – D characteristic



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product name
order code



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product name
order code

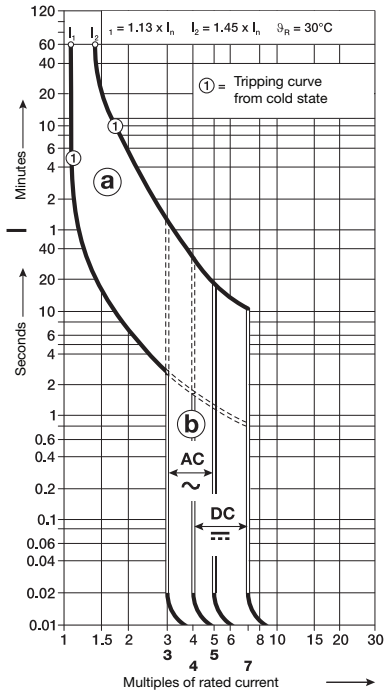
N. of poles	Rated current	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
3+N	0.5	4	703420	SH203M-D0,5NA	2CDS273113R0981		0.5	1
	1	4	703437	SH203M-D1NA	2CDS273113R0011		0.5	1
	1.6	4	703444	SH203M-D1,6NA	2CDS273113R0971		0.5	1
	2	4	703451	SH203M-D2NA	2CDS273113R0021		0.5	1
	3	4	703468	SH203M-D3NA	2CDS273113R0031		0.5	1
	4	4	703475	SH203M-D4NA	2CDS273113R0041		0.5	1
	6	4	703482	SH203M-D6NA	2CDS273113R0061		0.5	1
	8	4	703499	SH203M-D8NA	2CDS273113R0081		0.5	1
	10	4	703505	SH203M-D10NA	2CDS273113R0101		0.5	1
	13	4	703512	SH203M-D13NA	2CDS273113R0131		0.5	1
	16	4	703529	SH203M-D16NA	2CDS273113R0161		0.5	1
	20	4	703536	SH203M-D20NA	2CDS273113R0201		0.5	1
	25	4	703543	SH203M-D25NA	2CDS273113R0251		0.5	1
	32	4	703550	SH203M-D32NA	2CDS273113R0321		0.5	1
	40	4	703567	SH203M-D40NA	2CDS273113R0401		0.5	1
	50	4	703574	SH203M-D50NA	2CDS273113R0501		0.5	1
	63	4	703581	SH203M-D63NA	2CDS273113R0631		0.5	1
4	0.5	4	703253	SH204M-D0,5	2CDS274011R0981		0.5	1
	1	4	942355	SH204M-D1	2CDS274011R0011		0.5	1
	1.6	4	703277	SH204M-D1,6	2CDS274011R0971		0.5	1
	2	4	703284	SH204M-D2	2CDS274011R0021		0.5	1
	3	4	703291	SH204M-D3	2CDS274011R0031		0.5	1
	4	4	703307	SH204M-D4	2CDS274011R0041		0.5	1
	6	4	703314	SH204M-D6	2CDS274011R0061		0.5	1
	8	4	703321	SH204M-D8	2CDS274011R0081		0.5	1
	10	4	703338	SH204M-D10	2CDS274011R0101		0.5	1
	13	4	703345	SH204M-D13	2CDS274011R0131		0.5	1
	16	4	703352	SH204M-D16	2CDS274011R0161		0.5	1
	20	4	703369	SH204M-D20	2CDS274011R0201		0.5	1
	25	4	703376	SH204M-D25	2CDS274011R0251		0.5	1
	32	4	703383	SH204M-D32	2CDS274011R0321		0.5	1
	40	4	703390	SH204M-D40	2CDS274011R0401		0.5	1
	50	4	703406	SH204M-D50	2CDS274011R0501		0.5	1
	63	4	703413	SH204M-D63	2CDS274011R0631		0.5	1

Notes

Technical details

Tripping diagrams

B characteristic

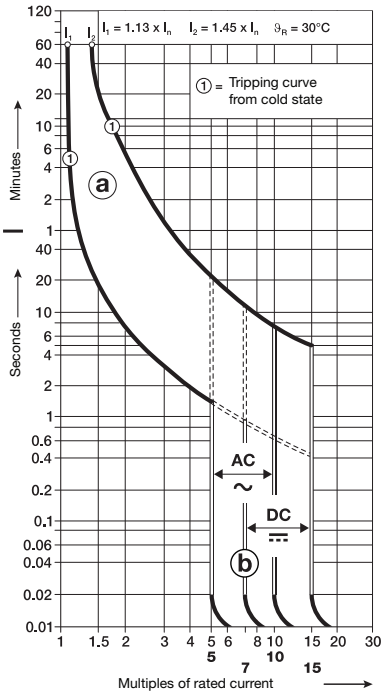


acc. to IEC/EN 60898-1

I_n = 6 ... 63 A

SH 200 T / SH 200 L / SH 200 M

C characteristic

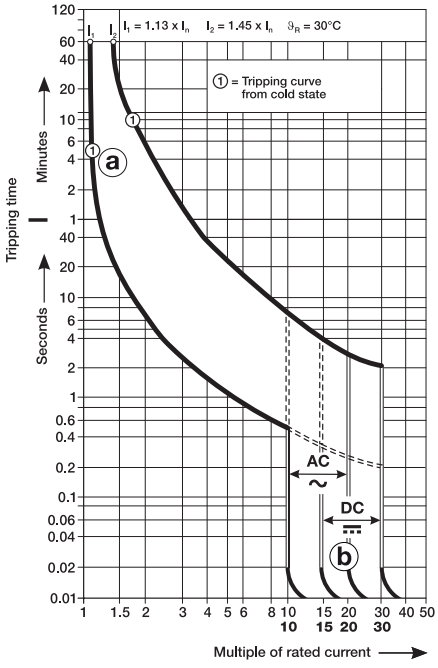


acc. to IEC/EN 60898-1

I_n = 0.5 ... 63 A

SH 200 T / SH 200 L / SH 200 M

D characteristic



acc. to IEC/EN 60898-1

I_n = 0.5 ... 63 A

SH 200 / SH 200 M

Internal resistances and power losses of the Miniature Circuit Breakers

Rated current	Range SH 200 T B, C		Range SH 200 L B, C		Range SH 200 B, C		Range SH 200 D		Range SH 200 M C		Range SH 200 M D	
A	m Ω	W	m Ω	W	m Ω	W	m Ω	W	m Ω	W	m Ω	W
0.5	5500	1.4	5500	1.4	5500	1.4	4300	1.1	5500	1.4	4300	1.1
1	1140	1.4	1140	1.4	1140	1.4	1250	1.25	1140	1.4	1250	1.25
1.6	630	1.6	630	1.6	630	1.6	600	1.5	630	1.6	600	1.5
2	460	1.8	460	1.8	460	1.8	410	1.65	460	1.8	410	1.65
3	150	1.3	150	1.3	150	1.3	430	1.2	150	1.3	430	1.2
4	110	1.8	110	1.8	110	1.8	105	1.7	110	1.8	105	1.7
6	55	2.0	55	2.0	55	2.0	52	1.9	55	2.0	52	1.9
8	15	1.0	15	1.0	15	1.0	24	1.5	15	1.0	24	1.5
10	13.3	1.3	13.3	1.3	13.3	1.3	16	1.6	13.3	1.3	16	1.6
13	13.3	2.3	13.3	2.3	13.3	2.3	14	2.2	13.3	2.3	14	2.2
16	7.0	1.8	7.0	1.8	7.0	1.8	8.5	2.5	7.0	1.8	8.5	2.5
20	6.25	2.5	6.25	2.5	6.25	2.5	8.1	2.3	6.25	2.5	8.1	2.3
25	5.0	3.2	5.0	3.2	5.0	3.2	4.3	3.1	5.0	3.2	4.3	3.1
32	3.6	3.7	3.6	3.7	3.6	3.7	3.5	3.6	3.6	3.7	3.5	3.6
40	3.0	4.8	3.0	4.8	3.0	4.8	2.2	4.2	3.0	4.8	2.2	4.2
50	1.3	3.25	1.3	3.25	1.3	3.25	1.25	2.9	1.3	3.25	1.25	2.9
63	1.2	4.8	1.2	4.8	1.2	4.8	1.25	2.9	1.2	4.8	1.25	2.9

Internal resistances per pole in m Ω
Power losses per pole in W
Internal resistances are subject to application-specific and environment-specific conditions and are therefore to be considered as typical values.

Tripping characteristics

acc. to			Thermal release currents		Tripping time	Electromagnetic release currents		Tripping time
	Tripping characterisitic	and rated current	conventional non-tripping current	conventional tripping current		hold current surges	trip at least at	
IEC/EN 60898-1	B	6 to 63 A	$1.13 \cdot I_n$	$1.45 \cdot I_n$	> 1 h < 1 h	$3 \cdot I_n$	 $5 \cdot I_n$	> 0.1 s < 0.1 s
	C	0.5 to 63 A	$1.13 \cdot I_n$	$1.45 \cdot I_n$	> 1 h < 1 h	$5 \cdot I_n$	 $10 \cdot I_n$	> 0.1 s < 0.1 s
	D	0.5 to 63 A	$1.13 \cdot I_n$	$1.45 \cdot I_n$	> 1 h < 1 h	$10 \cdot I_n$	 $20 \cdot I_n$	> 0.1 s < 0.1 s

(1) Influence of ambient temperature see below.
(2) Electromagnetic tripping valid for AC 50 ... 60 Hz.
(3) From warm operating condition (immediately after I_t>1h).

Influence of ambient temperature

The thermal releases are calibrated to a nominal reference temperature of 30°C for B and C characteristic.

In the case of ambient temperatures deviating from these values the trip values:
- are reduced in case of higher temperatures;
- are increased in case of lower temperatures.

The electromagnetic tripping is independent of the ambient temperature.

Technical details

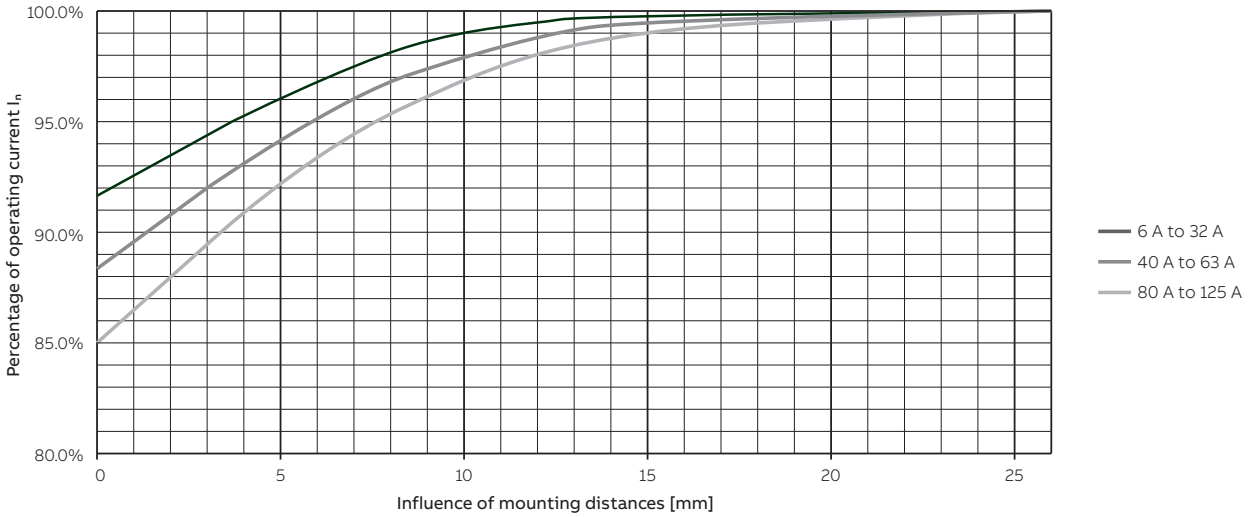
Current-carrying capacity of the MCBs as a function of the ambient temperature

—
Max. operating current depending on the ambient temperature of a circuit-breaker in load circuit of characteristics type B and C.

B, C,D									Ambient temperature T (°C)	
In (A)	**-30**	**-20**	**-10**	**0**	**10**	**20**	**30**	**40**	**50**	**60**
0.5	0.59	0.58	0.56	0.55	0.53	0.52	0.50	0.49	0.47	0.46
1.0	1.18	1.15	1.12	1.09	1.16	1.03	1.00	0.97	0.94	0.91
1.6	1.89	1.84	1.79	1.74	1.70	1.65	1.60	1.55	1.50	1.46
2.0	2.36	2.30	2.24	2.18	2.12	2.06	2.00	1.94	1.88	1.82
3.0	3.54	3.45	3.36	3.27	3.18	3.09	3.00	2.91	2.82	2.73
4.0	4.72	4.60	4.48	4.36	4.24	4.12	4.00	3.88	3.76	3.64
6.0	7.7	7.5	7.2	6.9	6.6	6.3	6.0	5.7	5.3	4.9
8.0	10.3	10.0	9.6	9.2	8.8	8.4	8.0	7.5	7.1	6.5
10.0	12.9	12.5	12.0	11.5	11.1	10.5	10.0	9.4	8.8	8.2
13.0	16.8	16.2	15.6	15.0	14.4	13.7	13.0	12.3	11.5	10.6
16.0	20.7	20.0	19.2	18.5	17.7	16.9	16.0	15.1	14.1	13.1
20.0	25.8	24.9	24.0	23.1	22.1	21.1	20.0	18.9	17.6	16.3
25.0	32.3	31.2	30.0	28.9	27.6	26.4	25.0	23.6	22.0	20.4
32.0	41.3	39.9	38.5	37.0	35.4	33.7	32.0	30.2	28.2	26.1
40.0	51.6	49.9	48.1	46.2	44.2	42.2	40.0	37.7	35.3	32.7
50.0	59.0	57.5	56.0	54.5	53.0	51.5	50.0	48.5	47.0	45.5
63.0	74.3	72.5	70.6	68.7	66.8	64.9	63.0	61.1	59.2	57.3

Influence of mounting distances between the devices

Multiply the rated current referring to your max. occurrent temperature with the factor of “influence of mounting distances”.
Example: 2 x S802B-B125 at T = 40 °C with distance I_n = 120.4 A x 92.1 % = 110.9 A



Further influencing factors, which can lead to a reduction of the maximum operating current, are:

- Shortening the cable lenght compared to IEC 60947-1/2
- Reducing the cable cross section compared to IEC 60947-1/2
- Accumulation of cables

Characteristic	from diagram	Calculation	Example
Rated current and characteristics of MCB		I_n / B, C, D	16 A – B
Continuous load		ϑ_R	40°C
Number of MCB´s / Mounting distance		N / X	8 pieces / 0 and 8 mm
			In=16A
			incl. derating due to temp. 40°C: In=15.1A
Continuous load > 1 h		$I = I_n \cdot K_\vartheta$	16 · 0.77 = 12.23 A
Continuous load, N MCB, Distance 0	1	$I = K_\vartheta \cdot K_N$	15.1A*0.77=11.6A
Continuous load, N MCB, Distance X	2	$I = K_\vartheta \cdot K_X$	15.1A*0.98=14.8A

Max. Back-up protection

SH 200 T / SH 200 L / SH 200	B/C Rated current	Max. Back-up protection fuse	Max. Back-up protection Main Circuit Breaker S 700
	0.5 ... 2	not required	not required
	3 ... 4	20 A	20 A
	6/8	63 A	100 A
	10 ... 32	100 A	100 A
	40 ... 63	125 A	100 A

Maximum permissible earth-fault loop impedance Z_s

Impedance Z_s at U_0 = 230 V AC1 to ensure compliance with the operation conditions in accordance to IEC 60 364-4-41.

Operating time < 0.4 s; at 400 V AC < 0.2 s and at > 400 V AC < 0.1 s.

The instantaneous tripping of the MCB ensures an operating time of ≤ 0.1 s (TN system).

Determined according to DIN VDE 0100-520, supplement 2, 2002-11 (source impedance = 300 Ω, c = 0.95 and conductor temperature 70°C = factor 0.8). The internal resistance of the MCB is already included.

—
SH 200, SH 200 L, SH 200 T, SH 200 M

Rated current I_n A	B max. Z_s Ω	C max. Z_s Ω	D max. Z_s Ω
0.5	–	46	13.0
1	–	23	16.5
1.6	–	14.4	10.3
2	–	11.5	8.2
3	–	7.7	5.5
4	–	5.8	4.1
6	7.7	3.8	2.7
8	–	2.8	2.1
10	4.6	2.2	1.6
13	3.5	1.7	1.2
16	2.9	1.4	1.0
20	2.3	1.2	0.8
25	1.8	0.9	0.7
32	1.4	0.7	0.5
40	1.1	0.6	0.4
50	0.9	0.5	0.3
63	0.7	0.4	0.3

(1) U_0 = rated voltage against earthed conductor;
for U_0 = 240 V~ is $Z_s \cdot 1.04$; for U_0 = 127 V~ is $Z_s \cdot 0.55$

Take into account the voltage drop:
e.g. in the case of a 1.5 mm² conductor, protected by a B 16 circuit breaker, the maximum cable length is 82 m.

If the voltage is below 3%, this would result in a maximum cable length (2 wire) of 17 m.

For more details on this topic, get your own copy of the technical information leaflet “Maximum cable lengths”.

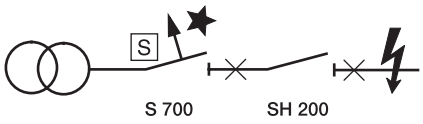
Maximum cable length in case of different voltages and cross sections on request.

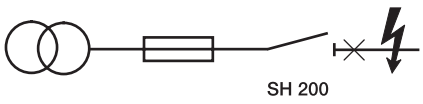
Technical details

Short circuit selectivity

—
In the case of a short circuit, selectivity exists up to the values indicated.

MCBs **short circuit discrimination in kA**



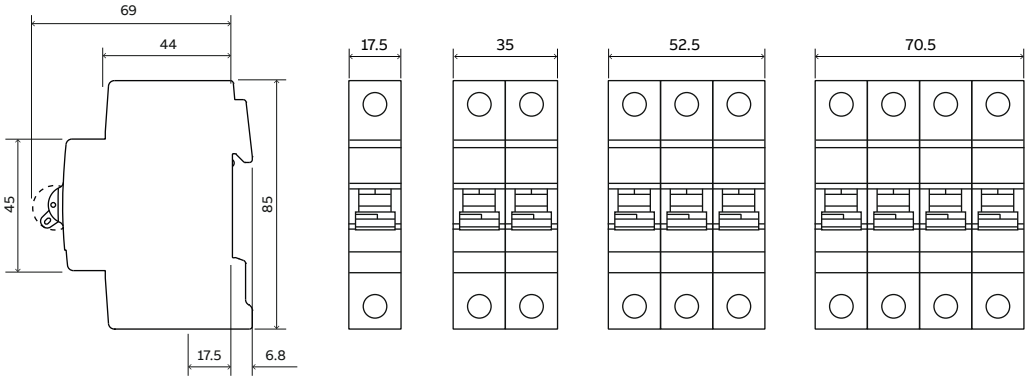


		to main circuit breaker S 700									to fuse gL/gG (IEC 60 269-1)									
series	**I_n(A)**	**16**	**20**	**25**	**35**	**40**	**50**	**63**	**80**	**100**	**16**	**20**	**25**	**35**	**50**	**63**	**80**	**100**	**125**	**160**
	0.5 ... 5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	0.2	0.4	0.6	1.5	2.5	2.8	3	3	3	3
	6	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	0.2	0.4	0.6	1.5	2.5	2.8	3	3	3	3
	8	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		0.3	0.6	1.4	2.4	2.6	3	3	3	3
	10	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5			0.5	1.2	2.1	2.5	2.8	3	3	3
	13	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5			0.4	1.0	1.8	2.4	2.8	3	3	3
	16	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				0.8	1.6	2.3	2.8	3	3	3
	20		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5					1.5	2.1	2.5	2.5	3	3
	25			4.5	4.5	4.5	4.5	4.5	4.5	4.5					1.0	2.0	2.5	2.5	3	3
	32		**		4.5	4.5	4.5	4.5	4.5	4.5			no selectivity			1.9	2.5	2.5	3	3
	40					4.5	4.5	4.5	4.5	4.5						1.5	2	2	2	2
SH 200 T – B, C	50/63								4.5	4.5							2	2	2	2
	0.5 ... 5	6	6	6	6	6	6	6	6	6	0.2	0.4	0.7	1.8	3	5	4.5	4.5	4.5	4.5
	6	6	6	6	6	6	6	6	6	6	0.2	0.4	0.7	1.8	3	5	4.5	4.5	4.5	4.5
	8	6	6	6	6	6	6	6	6	6	0.2	0.3	0.6	0.6	2.5	4	4.5	4.5	4.5	4.5
	10	6	6	6	6	6	6	6	6	6		0.3	0.6	1.4	2.3	3	4	4.5	4.5	4.5
	13	6	6	6	6	6	6	6	6	6			0.5	1.3	2	3	4	4.5	4.5	4.5
	16	6	6	6	6	6	6	6	6	6				1	1.8	2.5	3.5	4.5	4.5	4.5
	20		6	6	6	6	6	6	6	6					1.6	2.2	3	4	4.5	4.5
	25			6	6	6	6	6	6	6					1.5	2.2	3	4	4.5	4.5
	32		**		6	6	6	6	6	6			no selectivity			2	2.8	3.5	4.5	4.5
	40					6	6	6	6	6						2	2.5	3	4.5	4.5
SH 200 L – B, C	50/63								6	6							4.5	4.5	4.5	4.5
	0.5 ... 5	10	10	10	10	10	10	10	8	8	0.2	0.5	0.8	2	3.3	5.5	6	6	6	6
	6	10	10	10	10	10	10	10	8	8	0.2	0.5	0.8	2	3.3	5.5	6	6	6	6
	8	10	10	10	10	10	10	10	8	8	0.2	0.4	0.7	1.7	2.8	4.5	6	6	6	6
	10	10	10	10	10	10	10	10	8	8	0.2	0.4	0.7	1.5	2.5	3.5	5	6	6	6
	16	10	10	10	10	10	10	10	8	8			0.7	1.5	2.5	3.5	5	6	6	6
	20		10	10	10	10	10	10	8	8				1.3	2	2.9	4.1	6	6	6
	25			10	10	10	15	10	8	8					1.8	2.6	3.5	5	6	6
	32		**		10	10	10	10	8	8			no selectivity		1.8	2.6	3.5	5	6	6
	40					10	10	10	8	8						2.2	3	4	6	6
SH 200 – B, C	50/63								8	8							6	6	6	6

** Limited or no selectivity at all possible in the overload range (thermal tripping)

Overall dimensions

SH200M, SH 200, SH 200 L, SH 200 T



RCCB FH200

The details make the difference

A range designed to ensure efficiency and protection





Two terminals are available, the front one for cables up to 25 mm², the back one for cables up to 10 mm² or for busbars.



FH200: a wide range of RCCBs with 2P and 4P configuration, rated currents from 25 to 63 A, available in AC and A type with rated sensitivity from 30 mA up to 300 mA.



Two terminal offer different connection solutions thanks to the possibility to connect two indipendent cables in the same device: the second terminal can be used for an auxiliary circuit or for the supply of devices with small section cables without connecting them together with the main circuit.



Safety ensured by the international marks: approvals' marking in a visible area, even if RCDs is installed and panel-door is closed.



High performances:

- rated breaking capacity and rated residual breaking capacity laser printed on the device: Im = I□m = 1000 A
- coordination with a 63 A rated current SCPD (short-circuit protective device) = 6000 A.



The FH202 can be coupled with the autoreclosing unit F2C-ARH in order to ensure continuity of service for the whole installation of your home avoiding lack of supply.

Technical features table for residual current circuit breakers (RCCBs)
FH200 Series

Standards			
Electrical features			
Type (wave form of the earth leakage sensed)			
Poles			
Rated current I_n			A
Rated sensitivity $I_{\Delta n}$			mA
Rated voltage U_e			V
Insulation voltage U_i			V
Max. operating voltage of circuit test			V
Min. operating voltage of circuit test			V
Rated frequency			Hz
Rated conditional short-circuit current $I_{nc}=I_{\Delta c}$			kA
Rated residual breaking capacity $I_{\Delta m}=I_m$			kA
Rated impulse withstand voltage (1.2/50) U_{imp}			kV
Dielectric test voltage at ind. freq. for 1 min.			kV
Surge current resistance (wave 8/20)			A
Mechanical features			
Toggle			
Contact position indicator (CPI)			
Electrical life			
Mechanical life			
Protection degree		housing	
		terminals	
Tropicalization acc. to IEC/EN 60068-2		humid heat	°C/RH
		constant climatic conditions	°C/RH
		variable climatic conditions	°C/RH
Ambient temperature (with daily average ≤ +35°C)			°C
Storage temperature			°C
Installation			
Terminal type			
Terminal size top/bottom for cable			mm^2
Terminal size top/bottom for busbar			mm^2
Tightening torque			N*m
Tool			
Mounting			
Connection			
Dimensions and weight			
Dimensions (H × D × W)		2P	mm
		4P	mm
Weight		2P	g
		4P	g
Combination with auxiliary elements			
Combinable with:	F2C-ARH autoreclosing unit		

—
FH200
2CSC400030F0039



—
F200
2CSC400030F0044



	FH200	**F200**
		IEC/EN 61008
AC	A	A S
2P, 4P		2P, 4P
25, 40, 63		40, 63
30, 100, 300	30	300
230/400 – 240/415		230/400 – 240/415
500		500
254		254
110		110
50		50 ... 60
6 (with a SCPD-fuse gG 63A)		10 (with a SCPD-fuse gG 100A)
1		1
4		4
2.5		2.5
250		5000
BLACK sealable in ON-OFF position		BLUE sealable in ON-OFF position
not available		yes
10.000		10.000
20.000		20.000
IP4X		IP4X
IP2X		IP2X
28 cycles with 55/95 ... 100		28 cycles with 55/95 ... 100
23/83 – 40/93 – 55/20		23/83 – 40/93 – 55/20
25/95 – 40/95		25/95 – 40/95
-5 ... +40		-25 ... +55
-40 ... +70		-40 ... +70
failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected)		failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected)
25/25		25/25
10/10		10/10
2.8		2.8
Nr. 2 Pozidriv		Nr. 2 Pozidriv
on DIN rail EN 60715 (35 mm) by means of fast clip device		on DIN rail EN 60715 (35 mm) by means of fast clip device
from top and bottom		from top and bottom
85 × 69 × 35		85 × 69 × 35
85 × 69 × 70		85 × 69 × 70
200		200
350		350
yes (the 2 poles version 30mA and 100mA)		no

Ordering data
FH200 – AC type

Function: protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct (with $I_{\Delta n}$=30 mA) contacts.

Standard: IEC/ EN 61008
Marking: according to EN 61008



FH202 AC
2CSC400030F0039



FH204 AC
2CSC400030F0041

N. of poles	Rated residual current	Rated current	N° module	Bbn 8012542	Order details			Weight 1 piece	Pack unit
	IΔn mA	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
2	30	25	2	891802	FH202 AC-25/0.03	2CSF202002R1250		0.225	1/6
		40	2	891901	FH202 AC-40/0.03	2CSF202002R1400		0.225	1/6
		63	2	892007	FH202 AC-63/0.03	2CSF202002R1630		0.225	1/6
	300	25	2	893004	FH202 AC-25/0.3	2CSF202003R3250		0.225	1/6
		40	2	893103	FH202 AC-40/0.3	2CSF202003R3400		0.225	1/6
		63	2	893202	FH202 AC-63/0.3	2CSF202003R3630		0.225	1/6
4	30	25	4	892106	FH204 AC-25/0.03	2CSF204002R1250		0.375	1/3
		40	4	892205	FH204 AC-40/0.03	2CSF204002R1400		0.375	1/3
		63	4	892304	FH204 AC-63/0.03	2CSF204002R1630		0.375	1/3
	300	25	4	893301	FH204 AC-25/0.3	2CSF204003R3250		0.375	1/3
		40	4	893400	FH204 AC-40/0.3	2CSF204003R3400		0.375	1/3
		63	4	893509	FH204 AC-63/0.3	2CSF204003R3630		0.375	1/3

Ordering data
FH200 – AC type (for overseas markets)

Function: protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct (with $I_{\Delta n}$=30 mA) contacts.

Standard: IEC/ EN 61008
Marking: according to IEC 61008



FH202 AC
2CSC400030F0039



FH204 AC
2CSC400030F0041

N. of poles	Rated residual current	Rated current	N° module	Bbn 8012542	Order details			Weight 1 piece	Pack unit
	IΔn mA	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
2	30	25	2	894209	FH202 AC-25/0.03	2CSF202006R1250		0.225	1/6
		40	2	894308	FH202 AC-40/0.03	2CSF202006R1400		0.225	1/6
		63	2	894407	FH202 AC-63/0.03	2CSF202006R1630		0.225	1/6
	100	25	2	894506	FH202 AC-25/0.1	2CSF202006R2250		0.225	1/6
		40	2	894605	FH202 AC-40/0.1	2CSF202006R2400		0.225	1/6
		63	2	894704	FH202 AC-63/0.1	2CSF202006R2630		0.225	1/6
	300	25	2	894803	FH202 AC-25/0.3	2CSF202006R3250		0.225	1/6
		40	2	894902	FH202 AC-40/0.3	2CSF202006R3400		0.225	1/6
		63	2	895008	FH202 AC-63/0.3	2CSF202006R3630		0.225	1/6
4	30	25	4	895107	FH204 AC-25/0.03	2CSF204006R1250		0.375	1/3
		40	4	895206	FH204 AC-40/0.03	2CSF204006R1400		0.375	1/3
		63	4	895305	FH204 AC-63/0.03	2CSF204006R1630		0.375	1/3
	100	25	4	895404	FH204 AC-25/0.1	2CSF204006R2250		0.375	1/3
		40	4	895503	FH204 AC-40/0.1	2CSF204006R2400		0.375	1/3
		63	4	895602	FH204 AC-63/0.1	2CSF204006R2630		0.375	1/3
	300	25	4	895701	FH204 AC-25/0.3	2CSF204006R3250		0.375	1/3
		40	4	895800	FH204 AC-40/0.3	2CSF204006R3400		0.375	1/3
		63	4	895909	FH204 AC-63/0.3	2CSF204006R3630		0.375	1/3

Ordering data
FH200 A type – F200 A S type



—
FH202 A
2CSC400030F0042



—
FH204 A
2CSC400030F0043

FH200 A type

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct (with $I_{\Delta n}$ = 30 mA) contacts.

Standard: IEC/ EN 61008
Marking: according to EN 61008

N. of poles	Rated residual current	Rated current	N° module	Bbn 8012542	Order details			Weight 1 piece	Pack unit
	IΔn mA	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
2	30	25	2	892403	FH202 A-25/0.03	2CSF202102R1250		0.225	1/6
		40	2	892502	FH202 A-40/0.03	2CSF202102R1400		0.225	1/6
		63	2	892601	FH202 A-63/0.03	2CSF202102R1630		0.225	1/6
4	30	25	4	892700	FH204 A-25/0.03	2CSF204102R1250		0.375	1/3
		40	4	892809	FH204 A-40/0.03	2CSF204102R1400		0.375	1/3
		63	4	892908	FH204 A-63/0.03	2CSF204102R1630		0.375	1/3



—
F202 A S
2CSC400030F0044



—
F204 A S
2CSC400030F0045

F200 A S type

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents with an intentional tripping delay, which permits to realize the selectivity with downstream instantaneous devices; protection against indirect contacts.

Standard: IEC/EN 61008
Marking: according to EN 61008

N. of poles	Rated residual current	Rated current	N° module	Bbn 8012542	Order details			Weight 1 piece	Pack unit
	IΔn mA	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
2	300	40	2	784302	F202 A S-40/0.3	2CSF202201R3400		0.225	1/6
		63	2	784401	F202 A S-63/0.3	2CSF202201R3630		0.225	1/6
4	300	40	4	784708	F204 A S-40/0.3	2CSF204201R3400		0.375	1/3
		63	4	784807	F204 A S-63/0.3	2CSF204201R3630		0.375	1/3

Technical details

Coordination tables

—
FH202

	Single-phases 230-240 V circuit		
	25 A	**40 A**	**63 A**
SH201 T – SH201 T NA – SH202 T	3	3	3
SH201 L – SH201 L NA – SH202 L	4.5	4.5	4.5
SH201 – SH201 NA – SH202	6	6	6

—
FH204

	Three-phases circuits with neutral (y/Δ) 230-240 V/400-415 V		
	25 A	**40 A**	**63 A**
SH201 T(1) – SH201 T NA(1) – SH202 T(1)	3	3	3
SH201 L(1) – SH201 L NA(1) – SH202 L(1)	4.5	4.5	4.5
SH201(1) – SH201 NA(1) – SH202(1)	6	6	6

(1) The switches are considered between phase and neutral (230/240V)

—
FH204

	Three-phases circuits with neutral (y/Δ) 230-240 V/400-415 V		
	25 A	**40 A**	**63 A**
SH203 T – SH203 T NA – SH204 T	3	3	3
SH203 L – SH203 L NA – SH204 L	4.5	4.5	4.5
SH203 – SH203 NA – SH204	6	6	6

Power loss

Rated current In [A]	Power loss W [W] 2P	4P
25	1.0	1.3
40	2.4	3.2
63	3.2	4.4

RCBO DSH201

Compact solutions for a complete protection in residential applications

Easy to install
Supply possible either from top or bottom side with 25 mm² cage terminals with fail safe feature to avoid improper installation

Test pushbutton
Test pushbutton to verify the correct functioning of the device

Laser printed information
Information on the device are laser printed to ensure readability over time

Earth fault indicator
Blue flag on the toggle to identify earth fault trips.
I 0N – 0 0FF indication molded on the toggle.

Anti counterfeiting
DSH201 is equipped with a tag RFid in order to authenticate the product

Dedicated space for label
Dedicated space to insert labels in order to clearly identify the protected lines



RCBOs DSH201

Better Look & Feel with ABB's Compact Home range



25 mm² cage terminals with fail safe feature to avoid improper installation. Supply possible either from top or bottom side, with cables and busbars (from PSH series).

Stable fixing on DIN rail, easy and fast mounting and dismounting operations thanks to the standard mounting clip.



Main technical information and product code are laser printed on the front side, visible also when the device is installed.

Range of temperatures from -25 °C

(as indicated by the snowflake)

up to +55 °C.



Product Made in Italy, with the indication molded on the side.

RFid tag on the product side containing a unique serial number assigned to ABB according to the standard ISO/IEC FCD 15693-3 in order to authenticate the product. Tightening torque and stripping length of the cable molded directly on the product side.



Additional information are laser printed on the lateral side of the device, including also the wiring diagram and the EAN code.



Any earth fault can be immediately identified through the blue indicator, that signals the differential tripping and which cannot be activated in case of manual operation on the toggle. Easy troubleshooting and reduced downtime for maintenance operations.

RCBOs DSH201

Technical features



DSH201

				DSH201
	Standards			IEC/EN 61009-1; IEC/EN 61009-2-1
Electrical features	Type (wave form of the earth leakage sensed)			AC, A
	Number of poles			1P + N
	Rated current In		A	6 ≤ In ≤ 40
	Rated sensitivity IΔn		A	0.03
	Rated voltage Ue		V	230
	Insulation voltage Ui		V	500 V AC
	Overvoltage category			III
	Pollution degree			2
	Operating voltage of circuit test Ut		V	170 - 254
	Rated frequency		Hz	50
	Rated breaking capacity acc. to IEC/EN 61009-1	Icn	A	6000
	Rated breaking capacity acc. to IEC/EN 60947-2 (only referring to short circuit test)	ultimate Icu	kA	10
		service Ics	kA	6
	Rated residual breaking capacity IΔm according to EN/IEC 61009-1		A	3000
	Rated impulse withstand voltage (1.2/50) U_{imp}		kV	4 kV
	Dielectric test voltage at ind. freq. for 1 min.		kV	2.5 kV (50 / 60Hz, 1 min.)
	Thermomagnetic release characteristic	B: 3 In ≤ In ≤ 5 In		■
		C: 5 In ≤ In ≤ 10 In		■
	Energy limiting class acc. to EN 61009-1			3
Mechanical features	Housing			Insulation group I - II, RAL 7035
	Toggle			Insulation group II, Black RAL 9005, sealable in ON-OFF positions
	Earth fault trip indication			Blue flag on toggle
	Electrical life		operations	10000
	Mechanical life		operations	20000
	Protection degree acc. to EN 60529	housing		IP4X
		terminals		IP2X
	Shock resistance acc. to IEC/EN 60068-2-27			25 g - 2 shocks - 13 ms
	Vibration resistance acc. to IEC/EN 60068-2-6			0.1 mm or 1 g - 20 cycles at 5…150…5 Hz
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		°C/RH	28 cycles with 55 °C/90-96% and 25 °C/95-100%
	Reference temperature for setting of thermal element		°C	30
	Ambient temperature (with daily average ≤ +35 °C)		°C	-25…+55
	Storage temperature		°C	-40…+70
Installation	Terminal type	top / bottom		cage terminal with integrated failsafe
	Terminal size for cables	top / bottom	mm2	25/25
	Tightening torque	top / bottom	Nm	2
	Stripping length of the cable		mm	12.5
	Mounting			on DIN rail EN 60715 (35 mm) by means of mounting clip
	Mounting position			Any
	Supply from			Top/Bottom terminals
Dimensions and weight	Dimensions (H x D x W)		mm	85 x 69 x 35
	Weight		g	182

RCBOs DSH201
Ordering codes


DSH201

DSH201 6000 **AC** w **type and A** y **type, C and B characteristic**
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating (only for A type) earth fault currents; protection against indirect contact and additional protection against direct contact

($I_{\Delta n}$=30 mA).

Application: residential
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 6000 A

N. poles	Type	Rated residual current IDn mA	Tripping char.	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	AC	30	B	6	344018	DSH201 B6 AC30	2CSR255070R1065		0.182	1
				10	354215	DSH201 B10 AC30	2CSR255070R1105		0.182	1
				16	343912	DSH201 B16 AC30	2CSR255070R1165		0.182	1
				20	354116	DSH201 B20 AC30	2CSR255070R1205		0.182	1
				25	343813	DSH201 B25 AC30	2CSR255070R1255		0.182	1
				32	354017	DSH201 B32 AC30	2CSR255070R1325		0.182	1
				40	343714	DSH201 B40 AC30	2CSR255070R1405		0.182	1
			C	6	353911	DSH201 C6 AC30	2CSR255070R1064		0.182	1
				10	343615	DSH201 C10 AC30	2CSR255070R1104		0.182	1
				13	244035	DSH201 C13 AC30	2CSR255070R1134		0.182	1
				16	353812	DSH201 C16 AC30	2CSR255070R1164		0.182	1
				20	343516	DSH201 C20 AC30	2CSR255070R1204		0.182	1
				25	353713	DSH201 C25 AC30	2CSR255070R1254		0.182	1
				32	343417	DSH201 C32 AC30	2CSR255070R1324		0.182	1
				40	353614	DSH201 C40 AC30	2CSR255070R1404		0.182	1
1+N	A	30	B	6	237532	DSH201 B6 A30	2CSR255170R1065		0.182	1
				10	237433	DSH201 B10 A30	2CSR255170R1105		0.182	1
				16	237334	DSH201 B16 A30	2CSR255170R1165		0.182	1
				20	237235	DSH201 B20 A30	2CSR255170R1205		0.182	1
				25	237236	DSH201 B25 A30	2CSR255170R1255		0.182	1
				32	237037	DSH201 B32 A30	2CSR255170R1325		0.182	1
				40	236931	DSH201 B40 A30	2CSR255170R1405		0.182	1
			C	6	269236	DSH201 C6 AC30	2CSR255170R1064		0.182	1
				10	236832	DSH201 C10 AC30	2CSR255170R1104		0.182	1
				13	236733	DSH201 C13 AC30	2CSR255170R1134		0.182	1
				16	236634	DSH201 C16 AC30	2CSR255170R1164		0.182	1
				20	236535	DSH201 C20 AC30	2CSR255170R1204		0.182	1
				25	236436	DSH201 C25 AC30	2CSR255170R1254		0.182	1
				32	236337	DSH201 C32 AC30	2CSR255170R1324		0.182	1
				40	236238	DSH201 C40 AC30	2CSR255170R1404		0.182	1

Connection with busbars
Cage terminals are designed for installation with PSH busbars.

Details of the most common 12-pins versions.

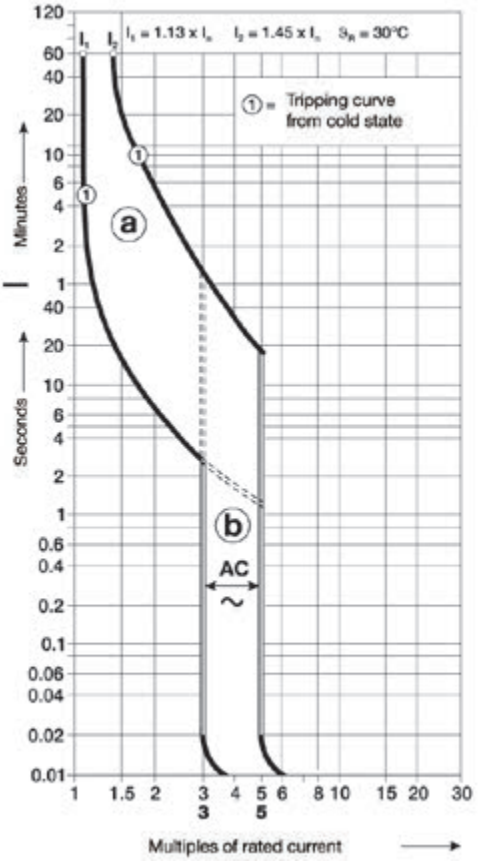
No. of pins	Phases	mm2	Cu-No. Kg	Bbn 4016779 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece Kg	Pack unit pc.
12	2	10	0.07	651882	PSH 2/12 1)	2CDL120001R1012		0.08	50

1) inclusive of end caps

RCBO DSH201

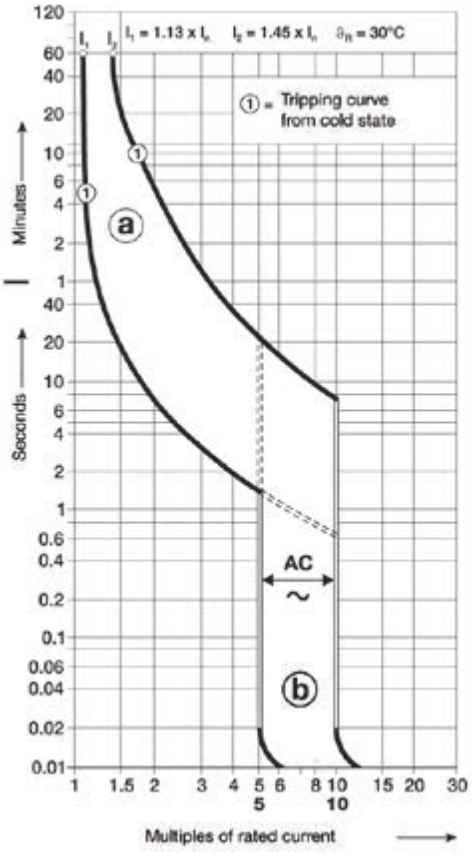
Technical data

Tripping characteristics B
IEC/EN 61009-1



a: thermal trip
b: electromagnetic trip

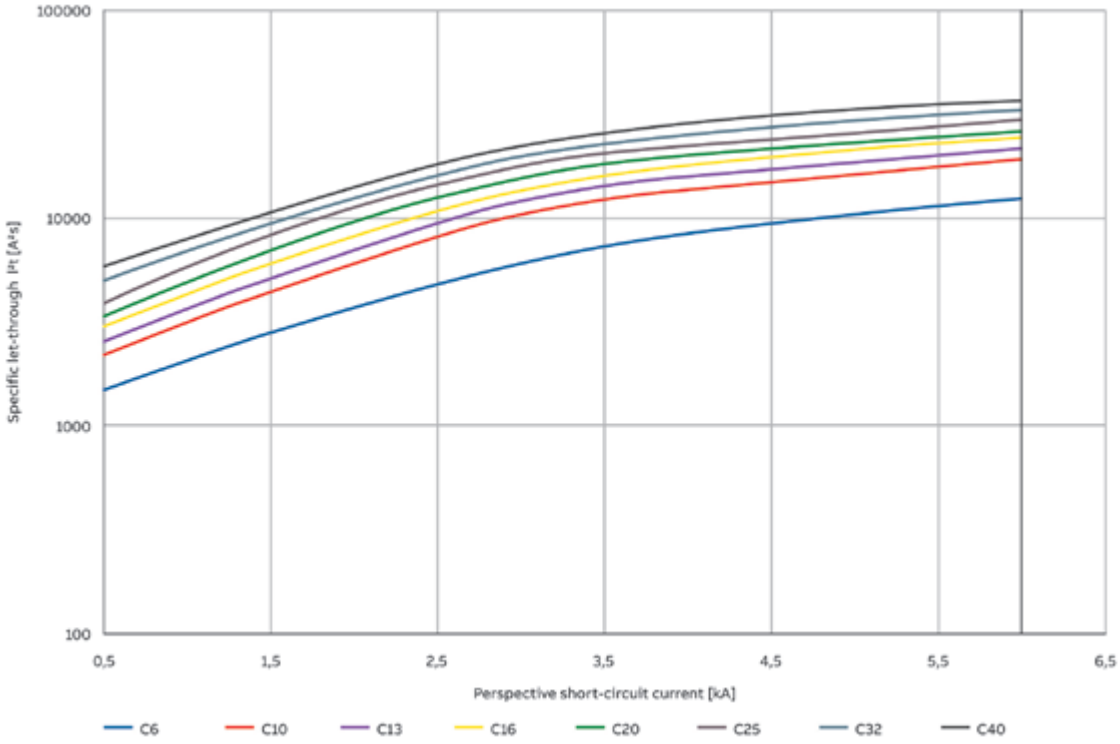
Tripping characteristics C
IEC/EN 61009-1



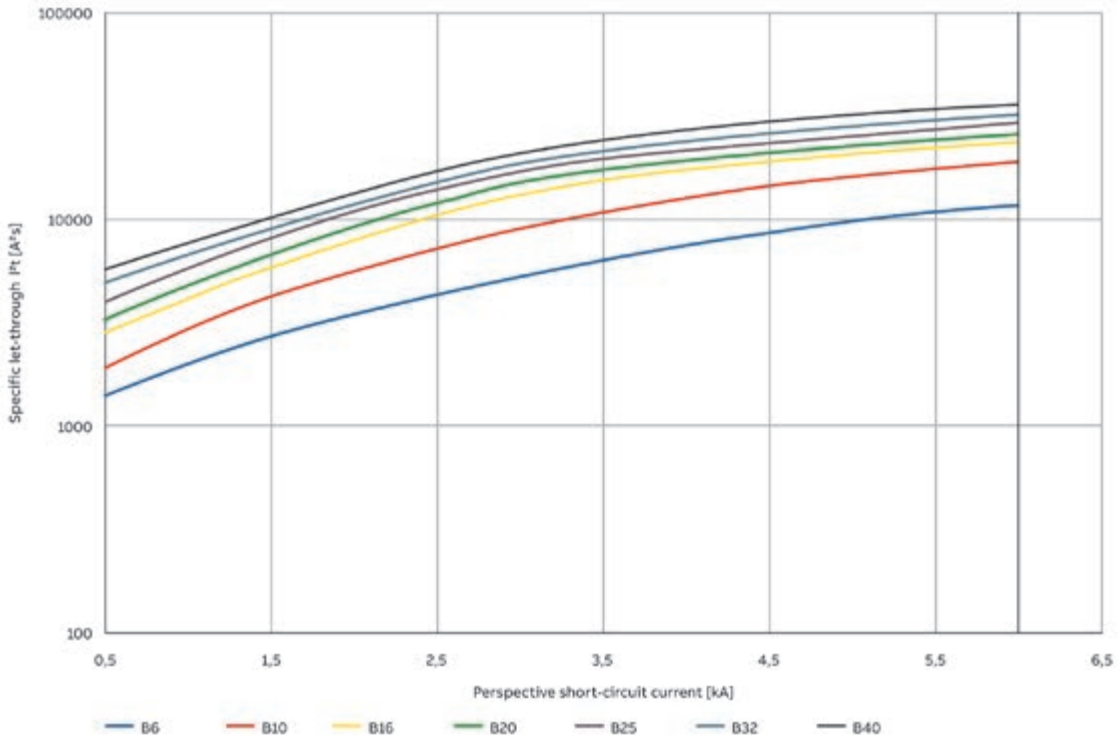
a: thermal trip
b: electromagnetic trip

RCBO DSH201
Technical data

Specific let-through energy I2t DSH201 - Characteristic C



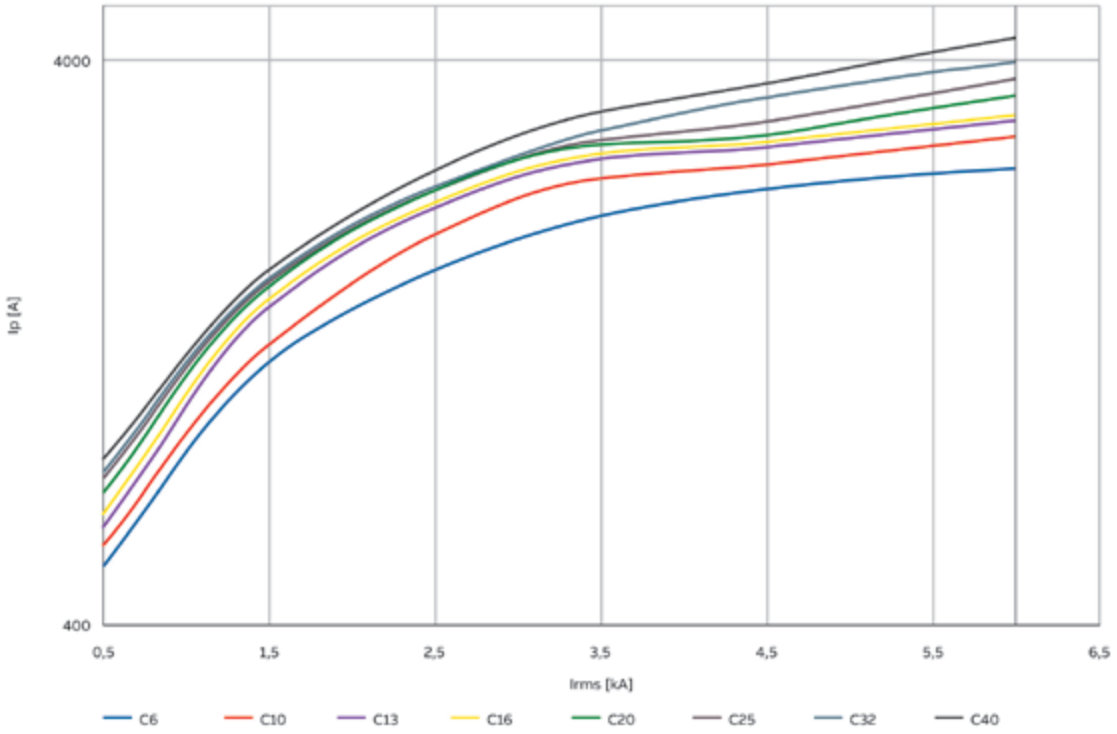
Specific let-through energy I2t DSH201 - Characteristic B



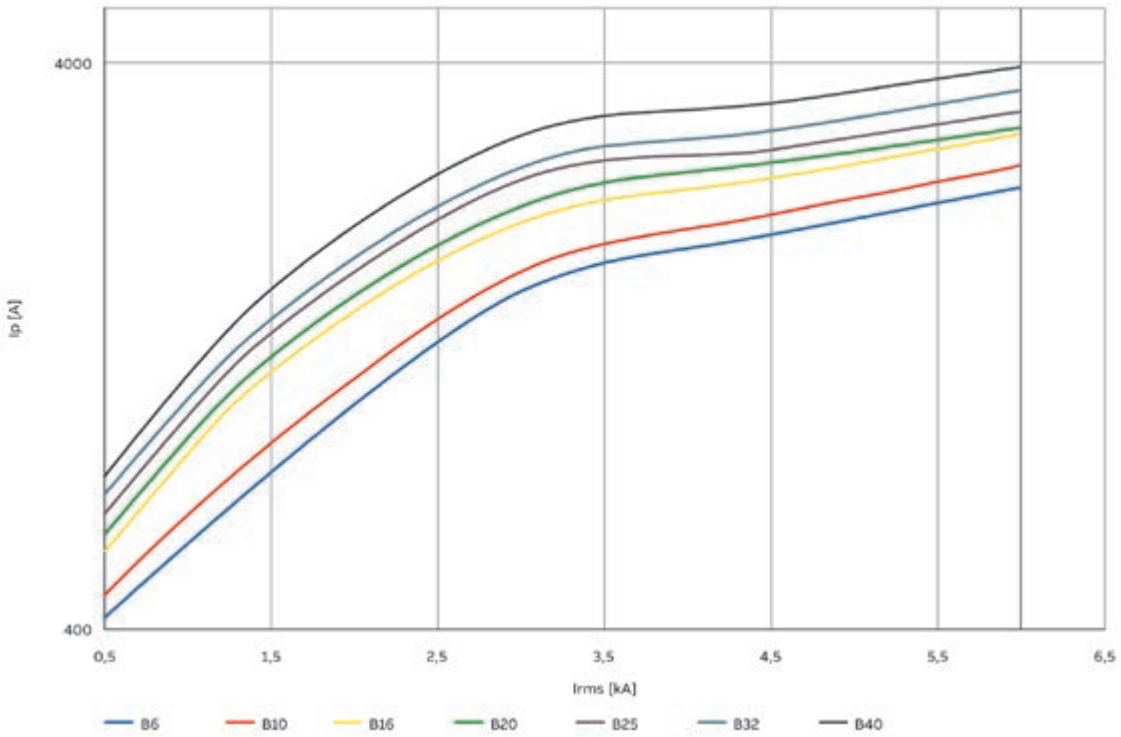
RCBO DSH201

Technical data

Ipeak DSH201 - Characteristic C



Ipeak DSH201 - Characteristic B



RCBO DSH201
Technical data

Performance in altitude

Elevation [m]	2000	3000	4000	5000	6000
Rated Current [A]	1 x In	0.96 x In	0.94 x In	0.92 x In	0.90 x In
Rated Voltage [V]	1 x Un	0.877 x Un	0.775 x Un	0.676 x Un	0.588 x Un

Derating in temperature
Max operating current depending on the ambient temperature (daily average ≤ +35 °C) of characteristics type B and C.

In (A)	Temperature (°C)									
	-25	-20	-10	0	10	20	30	40	50	55
6	8.8	8.4	7.7	7.3	7.0	6.4	6.0	5.5	5.3	5.1
10	13.5	13.0	12.1	11.5	11.0	10.6	10.0	9.4	9.0	8.8
13	16.0	15.6	14.9	14.5	14.0	13.4	13.0	12.4	11.7	11.4
16	19.0	18.6	18.1	17.5	17.0	16.4	16.0	15.3	14.8	14.5
20	24.0	23.5	22.7	22.0	21.4	20.7	20.0	19.1	18.5	18.3
25	27.9	27.5	27.1	26.6	26.0	25.3	25.0	24.3	23.6	23.4
32	36.8	36.2	35.4	34.8	34.0	32.9	32.0	31.3	30.5	30.0
40	44.8	44.6	44.0	43.4	42.1	41.0	40.0	39.0	38.1	37.9

Influence of adjacent devices

Number of devices	1	3	5	7	9
Correction factor	1	0.9	0.85	0.81	0.8

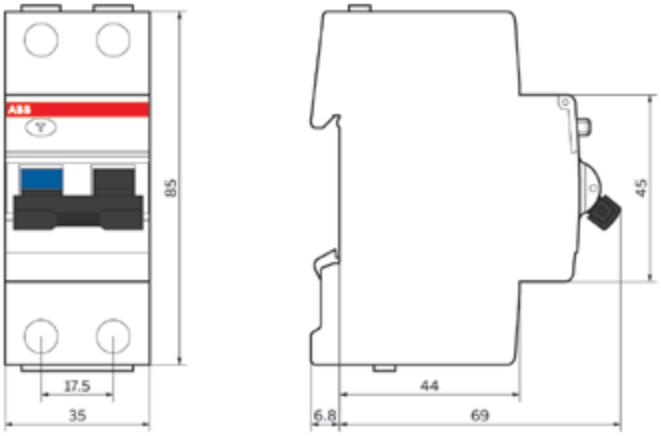
Voltage Drop, power loss, internal resistance, own consumption

In (A)	Voltage drop (mV)	Power loss (W)	Int. res. (mΩ)
6	400	2.4	67
10	180	1.8	18
13	200	2.5	15
16	205	3.3	13
20	180	3.6	9
25	220	5.5	9
32	200	6.4	6
40	125	5.0	3

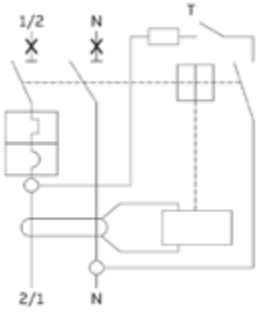
RCBO DSH201

Dimensions and connections

Overall dimensions DSH201
All measurements in mm

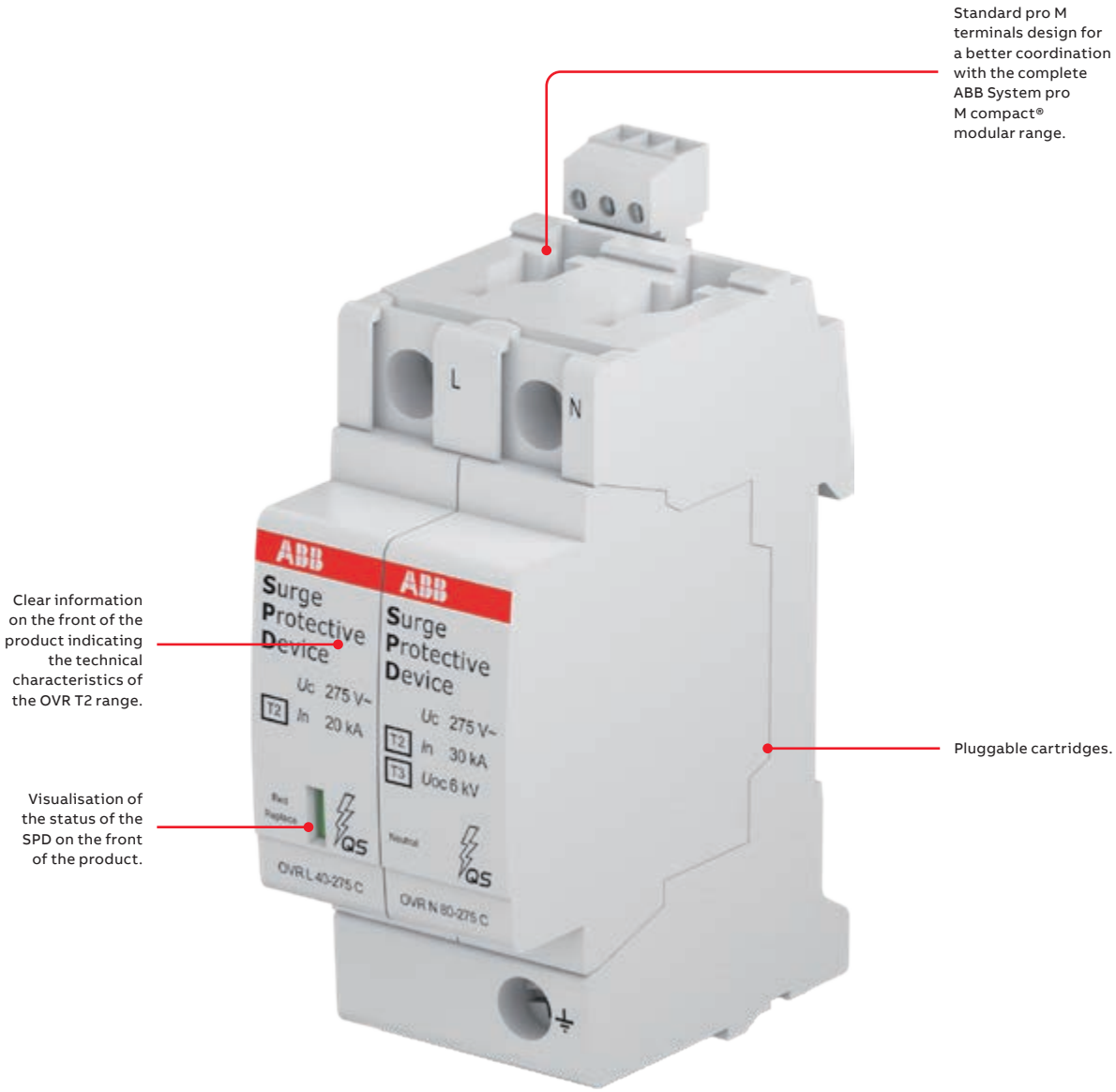


Main connection



Notes

OVR T1-T2, T2, T2-T3 range.
The details make the difference
A complete range for your surge protection





The bidirectional cylindrical terminal block of the OVR T2 range allows a complete coordination with the ABB range with considerable time savings in wiring operations. All the devices allow connection through busbars, both from above and from below.



The pluggable feature of ABB surge arresters facilitates maintenance. Should one or more worn cartridges need to be replaced, the electrical circuit does not have to be isolated nor do the wires have to be removed.



The end-of-service-life indicator of the surge protective device signals the status of the device. A mechanical indicator turns from green to red when the SPD reaches the end of its service life.

Technical features table surge arresters
OVR Series

—
OVR T1-T2 xx 12.5-275s P S
2CSC400030F0069



			OVR T1-T2 xx 12.5-275s P QS
Technology			MOVs
Electrical features			
Standard			EN 61643-11, IEC 61643-11
Type / test class			T1-T2 / I-II
Poles			-/1N/3L/3N/4L
Types of networks			TNC-TNS-TT
Type of current		V	AC
Nominal voltage Un (L-N/L-L)		V	230/400
Max. cont. operating voltage Uc		V	275
Impulse current Iimp (10/350) per pole		kA	12.5
Maximum discharge current Imax (8/20) per pole		kA	80
Nominal discharge current In (8/20) per pole		kA	20
Voltage protection level Up (L-N / N-PE / L-PE)		kV	< 1.5
Follow current interrupting rating Ifi		kA	na
TOV (Temporary overvoltage) withstand Ut (L-N: 5s./N-PE: 200ms)		V	337
Short-circuit withstand capability		kA	100
	gG -gL fuse	A	≤ 160
Disconnector	curve C circuit breaker	A	≤ 125
Pluggable cartridge			Yes
Integrated thermal disconnector			Yes
State indicator			Yes
TS auxiliary contact			Optional
Mechanical features			
Stocking temperature		°C	-40 to +80
Operating temperature			-40 to +80
Degree of protection			IP 20
Fire resistance according to UL 94			V0
Installation			
Wire range (L, N)			
solid wire		mm²	2.5 ... 35
stranded wire		mm²	2.5 ... 25
Stripping length (L, N)		mm	12.5
Tightening torque (L, N)		Nm	2.8
Technical features of the integrated auxiliary contact (TS)			
Electrical features			
Contact complement			1 N0-1NC
Min. load			12 VDC-10 mA
Max. load			250 VAC-1A
Installation			
Connection cross-section		mm²	1.5

—
OVR T2-T3 xx 20-275 P QS
2CSC400030F0070



—
OVR T2 xx 40-275 P QS
2CSC400030F0071



	OVR T2-T3 xx 20-275 P QS	**OVR T2 xx 40-275 P QS**
	MOVs	MOVs
	EN 61643-11, IEC 61643-11	EN 61643-11, IEC 61643-11
	T2-T3 / II-III	T2 / II
	-/1N/3L/3N/4L	-/1N/3L/3N/4L
	TNC-TNS-TT	TNC-TNS-TT
	AC	AC
	230/400	230/400
	275	275
	-	-
	20	40
	5	20
	na	na
	337	337
	100	100
	≤ 125	≤ 125
	≤ 125	≤ 125
	Yes	Yes
	Yes	Yes
	Yes	Yes
	Optional	Optional
	-40 to +80	-40 to +80
	-40 to +80	-40 to +80
	IP 20	IP 20
	V0	V0
	2.5 ... 25	2.5 ... 25
	2.5 ... 16	2.5 ... 16
	12.5	12.5
	2.8	2.8
	1 NO – 1 NC	1 NO – 1 NC
	12 VDC – 10mA	12 VDC – 10mA
	250 VAC – 1A	250 VAC – 1A
	1.5	1.5

Ordering data
OVR Series
Type 1-2, Type 2 and Type 2-3

Surge Protective Devices, Type 1-2, Type 2, Type 2-3, to protect sensible equipment and the installation from indirect surges.

N. of poles	Nominal voltage / Service voltage Un	Impulse current Iimp	Maximal discharge current (8/20) Imax	N° module	EAN	Type code	Order code	Weight 1 piece	Pack unit
	V	kA	kA	17,5m				kg	
1	230	12.5	80	1	3 660 308 52488 1	OVR T1-T2 12.5-275s P TS QS	2CTB815710R0000	0,150	1
1	230	2	20	1	3 660 308 519 566	OVR T2-T3 20-275 P QS	2CTB803871R2400	0,120	1
1	230	2	40	1	3 660 308 519 580	OVR T2 40-275 P QS	2CTB803871R2300	0,120	1
N	230	2	80	1	3 660 308 519 641	OVR T2-T3 N 80-275 P QS	2CTB803973R1900	0,120	1
N	230	2	50	1	3 660 308 525 024	OVR T1-T2 N 50-275s P QS	2CTB815710R2400	0,165	1
1+N	230	2	20	2	3 660 308 519 689	OVR T2-T3 1N 20-275 P QS	2CTB803972R1200	0,240	1
1+N	230	2	40	2	3 660 308 519 696	OVR T2 1N 40-275 P QS	2CTB803972R1100	0,240	1
3	230	2	20	3	3 660 308 519 818	OVR T2-T3 3L 20-275 P QS	2CTB803873R3400	0,360	1
3	230	2	40	3	3 660 308 519 825	OVR T2 3L 40-275 P QS	2CTB803873R2400	0,360	1
3	230	12.5	80	3	3 660 308 52498 0	OVR T1-T2 3L 12.5-275s P QS	2CTB815710R1800	0,450	1
3+N	230	2	20	4	3 660 308 519 924	OVR T2-T3 3N 20-275 P QS	2CTB803973R1200	0,480	1
3+N	230	2	40	4	3 660 308 519 931	OVR T2 3N 40-275 P QS	2CTB803973R1100	0,480	1
3+N	230	12.5	80	4	3 660 308 52499 7	OVR T1-T2 3N 12.5-275s P QS	2CTB815710R1900	0,600	1
4	230	2	40	4	3 660 308 520 548	OVR T2 4L 40-275 P QS	2CTB803873R5600	0,480	1
4	230	12.5	80	4	3 660 308 52501 7	OVR T1-T2 4L 12.5-275s P QS	2CTB815710R2300	0,600	1



—
OVR T2-T3 3L 20-275 P QS
2CSC400030F0070



—
OVR T2-T3 3L 20-275 P QS
2CSC400030F0071



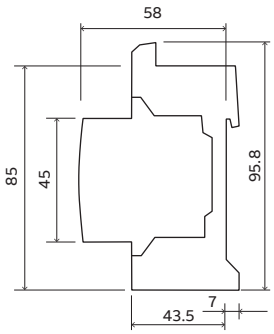
—
OVR T2 3N 40-275 P QS
2CSC400030F0076



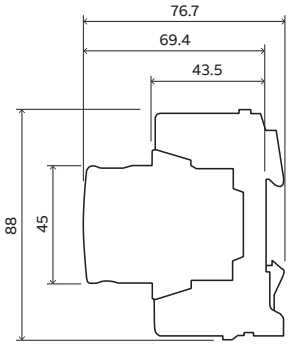
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OVR T2 4L 40-275 P QS
2CSC400030F0077

Overall dimensions

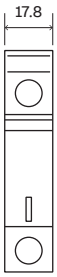
OVR T2, T2-T3 with TS



OVR T1-T2

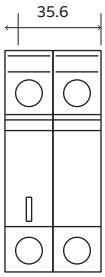


1 - pole



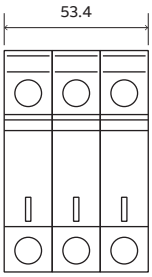
OVR T1-T2 12.5 QS
OVR T2-T3 20 QS
OVR T2 40 QS

2 - poles (1P + N)



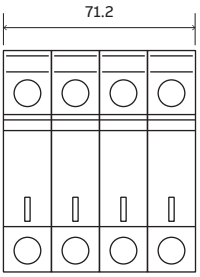
OVR T2-T3 1N 20 QS
OVR T2 1N 40 QS

3 - poles



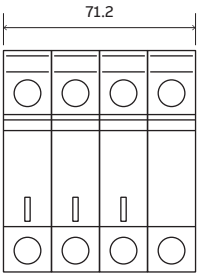
OVR T1-T2 3L 12.5 QS
OVR T2-T3 3L 20 QS
OVR T2 3L 40 QS

4- poles (4P + 0)



OVR T1-T2 4L 12.5 QS
OVR T2 4L 40 QS

3 - poles (3P + N)



OVR T1-T2 3N 12.5 QS
OVR T2-T3 3N 20 QS
OVR T2 3N 40 QS

Ordering data
E 90 fuseholders for 10.3x38 mm fuses

E 90 and E 90h fuseholders are suitable for protection against overloads and short circuits. Available in a single module (1P or 1P + N) version and in a three-module (3P + N) version, they are designed for use with gG and aM cylindrical fuse links. The body is made from self-extinguishing material resistant to high temperatures, while the contact clips are in silver-plated copper.

E 90h fuseholders can be sealed or padlocked to assure operator safety during maintenance. Versions with blown fuse indicator allow to check whether the fuse is still working correctly or not.



E 91/32
2CSC400030F0057



E 91HN/32
2CSC400030F0058



E 93HN/32
2CSC400030F0059

N. of poles	Rated current	N° module	Bbn 8012542		Order details		Weight 1 piece	Pack unit
	In A	[17.5 mm]	EAN	Type code	Order code	Price	kg	
1	32	1	009238	E 91/32	2CSM200923R1801		0.061	6
1+N	32	1	009139	E 91HN/32	2CSM200913R1801		0.070	6
3+N	32	3	047438	E 93HN/32	2CSM204743R1801		0.192	2

Ordering data
TM fail safe bell transformers

These transformers, with safety extremely-low voltage secondary (SELV), are suitable for loads that require a discontinuous supply, in particular doorbells and chimes. Fail safe operation and excellent safety are assured thanks to the perfect isolation and separation between the primary and secondary circuits. In addition, the energy-saving TM-ES version allows reducing power losses by 50%.



—
TM15/12
2CSC400030F0060



—
TM40/12
2CSC400595F0201

Max. rated power (disc.)	Second voltage rating	Bbn 8012542		Order details		Weight 1 piece	Pack unit
VA	V AC	EAN	Type code	Order code	Price	kg	
10	4-8-12	287155	TM10/12	2CSM228715R0802		0.30	6
10	12-24	287254	TM10/24	2CSM228725R0802		0.30	6
15	4-8-12	287353	TM15/12	2CSM228735R0802		0.30	6
15	12-24	287452	TM15/24	2CSM228745R0802		0.30	6
15	4-8-12	285854	TM15/12 ES	2CSM228585R0802		0.30	1
30	4-8-12	287551	TM30/12	2CSM228755R0802		0.45	4
30	12-24	287650	TM30/24	2CSM228765R0802		0.45	4
40	4-8-12	287759	TM40/12	2CSM228775R0802		0.45	4
40	12-24	287858	TM40/24	2CSM228785R0802		0.45	4

Ordering data

TS non-inherently short-circuit proof bell transformers

These transformers, with safety extremely-low voltage secondary (SELV), are suitable for driving loads that call for a discontinuous supply, and in particular doorbells and chimes. In addition to perfect isolation and separation between the primary and secondary circuits, the TS transformers have a thermal protection device integrated into the secondary circuit that makes them resistant to short circuit currents (non-inherently short-circuit proof).
The TS range is extended with the energy-saving TS-ES series, which allows reducing power losses by 50%, and the TS8/SW series, that is equipped with a switch for controlling loads connected to the secondary circuit.



—
TS8/8
2CSC400030F0061



—
TS8/12 SW
2CSC400030F0062



—
TS24/8-12-24
2CSC400030F0063

Maxim. rated power (disc.)	Second. voltage rating	Switch 0-1	Bbn 8012542		Order details	Price	Weight 1 piece	Pack unit
VA	V c.a.		EAN	Type code	Order code		kg	
8	8		285953	TS8/8 ES	2CSM228595R0812		0.35	1
8	8		286653	TS8/8	2CSM228665R0812		0.35	6
8	12		286851	TS8/12	2CSM228685R0812		0.35	6
8	24		286752	TS8/24	2CSM228675R0812		0.35	6
8	8	■	368304	TS8/8 SW	2CSM081302R0811		0.35	6
8	12	■	368403	TS8/12 SW	2CSM081402R0811		0.35	6
8	4-6-8	■	368601	TS8/4-6-8 SW	2CSM081012R0811		0.35	6
8	4-8-12	■	368700	TS8/4-8-12 SW	2CSM081022R0811		0.35	6
16	8-12		286059	TS16/8-12 ES	2CSM228605R0812		0.35	1
16	8		286455	TS16/8	2CSM228645R0812		0.35	6
16	12		286356	TS16/12	2CSM228635R0812		0.35	6
16	24		286158	TS16/24	2CSM228615R0812		0.35	6
16	4-6-8		286554	TS16/4-6-8	2CSM228655R0812		0.35	6
16	4-8-12		286257	TS16/4-8-12	2CSM228625R0812		0.35	6
24	4-8-12		287056	TS24/4-8-12	2CSM228705R0812		0.45	4
24	8-12-24		286950	TS24/8-12-24	2CSM228695R0812		0.45	4

Ordering data
TS-C safety isolating transformers for general use

These transformers are non-inherently short-circuit proof. In fact, they are equipped with a thermal protective device which automatically restores the power when the transformer is sufficiently cooled down. So even during an overload or a short-circuit they maintain their temperature below the specified limits and continue functioning after the fault's removal.

They are ideal for supplying permanent power to meters, auxiliary electronic devices (e.g. measurement, video-entry phone systems, BUS communication) and circuits with safety extremely-low voltage (SELV) for bathrooms and showers, lighting, fountains, electro-medical devices and such alike. These devices take up very little space, from 2-module size for the 10 VA version up to 6-module size for the 100 VA version.



TS 25 C



TS 100 C

Rated power (cont.)	Second. rated voltage	Bbn 8012542		Order details	Price	Weight 1 piece	Pack unit
VA	V	EAN	Type code	Order code		kg	
10	12 - 24	285557	TS 10/12-24 C	2CSM228555R0812		0.35	1
16	12 - 24	285656	TS 16/12-24 C	2CSM228565R0812		0.45	1
25	12 - 24	928508	TS 25/12-24 C	2CSM251043R0811		0.92	1
40	12 - 24	928607	TS 40/12-24 C	2CSM401043R0811		1.1	1
63	12 - 24	928706	TS 63/12-24 C	2CSM631043R0811		1.15	1
100	12 - 24	285755	TS 100/12-24 C	2CSM228575R0812		1.45	1

Ordering data
Bells and buzzers

Bell transformers (TM and TS) are suitable for loads that require discontinuous supply at extremely safety low voltage and are therefore mainly used in residential application in combination with bells and buzzers for public and tertiary acoustic signaling. The ABB range of bells and buzzers includes modular versions for discontinuous use (RI, BR) and modular transformers that combine in a unique solution both the signaling and transformer functionalities (TSM, TSR). Bell transformers guarantee a high level of safety thanks to perfect isolation and separation between primary and secondary circuits. In addition, the TS transformers adopt a thermal protection device integrated into the secondary that makes them resistant to short circuit currents (non-inherently short-circuit proof).



BR230

RI electro-mechanical modular bells

Rated voltage	Use	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
V AC		EAN	Type code	Order code		kg	pc.
12	Discontinuous	258810	RI12	2CSM232345R0821		0.081	10
230	Discontinuous	258919	RI230	2CSM232335R0821		0.083	10

BR electro-mechanical modular buzzers

Rated voltage	Use	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
V AC		EAN	Type code	Order code		kg	pc.
12	Discontinuous	273813	BR12	2CSM236545R0821		0.075	10
230	Discontinuous	258711	BR230	2CSM232355R0821		0.077	10



TSM

TSM modular electronic bell /(two-tones) + transformer included

Rated voltage	Use	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
V AC		EAN	Type code	Order code		kg	pc.
230	Discontinuous	007005	TSM	2CSM100000R0841		0.300	6

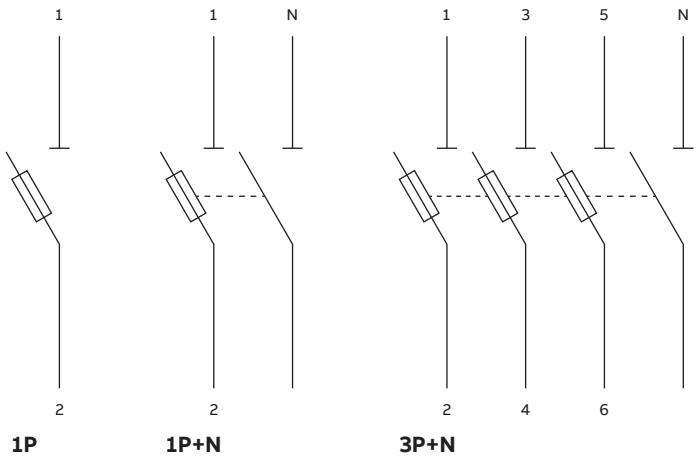
TSR bell + buzzer + transformer included

Rated voltage	Use	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
V AC		EAN	Type code	Order code		kg	pc.
230	Discontinuous	369608	TSR	2CSM100000R0831		0.300	1

Technical details

E 90

			E 90/32	E 90hN/32
Fuse	mm			10 × 38
Current type				AC / DC
Rated frequency	Hz			50/60
Rated current	A			32
Max power dissipation	W		3	3.2
Tightening torque	Nm		PZ2 2-2.5	PZ2 0.8-1.2
Terminal cross section	mm²		25	16
Protection degree				IP20
Can be padlocked (open)				n
Can be sealed (closed)				n
IEC 60947-3				
Rated operating voltage	V	400	690	-
Utilization category		AC-22B	AC-20B / DC-20B	-
IEC 60269-2				
Rated operating voltage	V			400
IMQ			x	x
NF			x	
CCC - China			x	x
RINA			x	x
LLOYD			x	x
BV			x	x
EAC			x	x
GOST - Ukraine			x	x
cURus			x	x



—
Electrical symbols

Technical Data
Modular transformers



TM 15/12

TM		
Primary rated voltage Un	[V]	230 a.c.
Secondary rated voltage Un	[V]	4, 8, 12, 24
Tolerance on secondary voltage (with load)	[%]	+/- 15% (according to standards)
Rated frequency	[Hz]	50/60
Rated power (discontinuous use)	[VA]	10, 15, 30, 40
Power loss (off load)	[W]	<2.5 (TM4, TM8), <3 (TM30, TM40), <1.25 (TM15 ES)
Modules	[No.]	2 (TM10, TM15), 3 (TM30, TM40)
Cable section	[mm²-AWG]	2.5 - 14
Tightening torque	[Nm]	0.5
Protection degree		IP 20
Standards		IEC/EN 61558-2-8
Approvals		IMQ



TS24/8-12-24

TS		
Primary rated voltage Un	[V]	230 a.c.
Secondary rated voltage Un	[V]	4, 8, 12, 24
Tolerance on secondary voltage (with load)	[%]	+/- 15% (according to standards)
Rated frequency	[Hz]	50/60
Rated power (discontinuous use)	[VA]	8, 16, 24
Power loss (off load)	[W]	<2.5 (TS8, TS16), <3 (TS24), <0.8 (TS8/8 ES), <1.2 (TS16/8-12 ES)
Modules	[No.]	2 (TS8, TS16), 3 (TS24)
Cable section	[mm²-AWG]	2.5 - 14
Tightening torque	[Nm]	0.5
Protection degree		IP 20
Standards		IEC/EN 61558-2-8
Approvals		VDE

Technical Data
Modular transformers, bells and buzzers



TS100/12-24 C



RI230



TSR bell + buzzer + transformer included

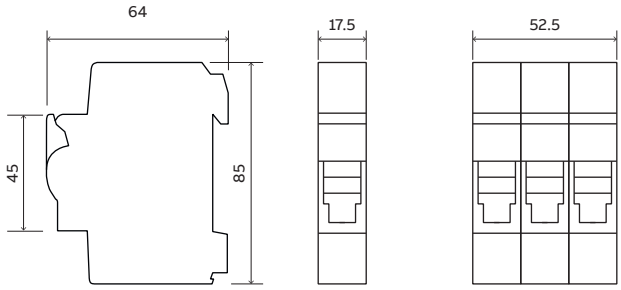
TS-C							
		TS 10 C	TS 16 C	TS 25 C	TS 40 C	TS 63 C	TS 100 C
Primary rated voltage Un	[V]	230 a.c.	230 a.c.	230 a.c.	230 a.c.	230 a.c.	230 a.c.
Secondary rated voltage Un	[V]	12 - 24 V a.c.	12 - 24 V a.c.	12 - 24 V a.c.	12 - 24 V a.c.	12 - 24 V a.c.	12 - 24 V a.c.
Tolerance on secondary voltage (with load)	[%]	< +/- 5% (according to standards)					
Tolerance on secondary voltage (full load)	[%]	<100% rated secondary voltage (according to standards)					
Rated frequency	[Hz]	50/60	50/60	50/60	50/60	50/60	50/60
Rated power (continuous use)	[VA]	10	16	25	40	63	100
Maximum output current (at 24 V)	[A]	0.42	0.67	1.04	1.67	2.63	4.17
Power loss (off load)	[W]	< 2.5	< 3	< 4	< 4.5	< 4.5	< 1
Power loss (full load)	[W]	< 5	< 5	< 5	< 10	< 15	< 20
Modules	[No.]	2	3	4	4	5	6
Cable section	[mm²-AWG]	2.5					
Tightening torque	[Nm]	0.5					
Protection degree		IP 20					
Standards		IEC/EN 61558-2-6					
Approvals							
Temperature class resistance		B (corresponding to maximum 120°C)					

RI, BR, TSM, TSR				
		RI12, BR12	**RI230, BR230**	**TSM, TSR**
Rated voltage Un	[Vac]	12	230	230
Rated frequency	[Hz]	50/60		
Power consumption	[VA]	4		
Sound level	Bell [dB] Buzzer [dB] Three-tones [dB]	80 (1) 70 (1)	80 (1) 70 (1)	80 (2) 70 (2) 84 (2)
Max. permanent working time		max. 15 sec., after a rest time of 60 sec.		TSM: 1 min TSR: 5 min
Type of sound signal		D		
Duration of operation		discontinuous		
Max. cable cross-section	[mm²]	4		
Mounting position		vertical only		vertical only
Protection degree		IP20		IP20-IP40
Modules (18 mm)	[No.]	1		2
Standard		EN62080		EN62080

(1) at 0.6 meters distance
(2) at 1 meter distance

Overall dimensions

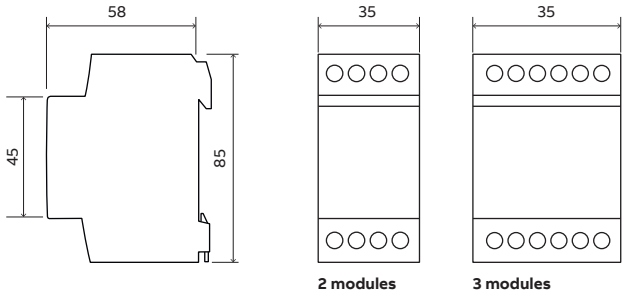
E 90 fuse disconnectors and E 90h fuse holders



1 module
1P, 1P+N (E 91h)

3 modules
3P+N (E 93h)

TM/TS bell transformers



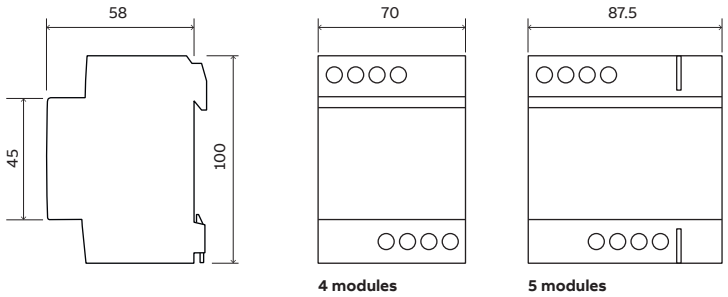
TM10...TM15

2 modules

TM30

3 modules

TS-C safety isolating transformers for general use



TS25, TS40

4 modules

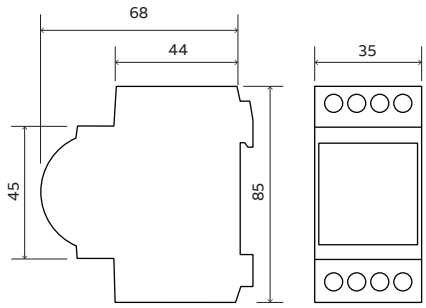
TS63

5 modules

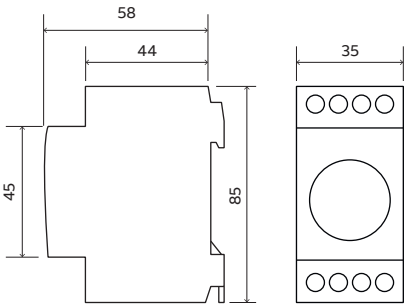
Overall dimensions

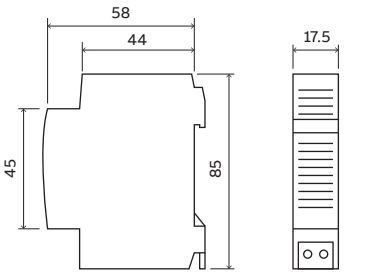
Bells and buzzers

TSR



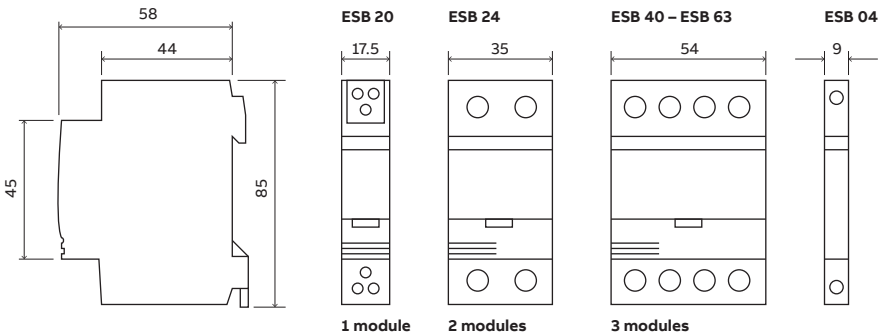
TSM





1 module

ESB/EN contactors



Ordering data

			Busbars PSH
Suitable for			MCB: SH200 RCD: FH200 RCBO: DSH201 LBS: SHD200
Electrical data	Standards		IEC/EN 61439-1
	Approvals		–
	Rated votage	V	440
	Rated frequency	Hz	50
	Current carrying capacity / phase (35C ambient temperature)	A	63
	Short-circuit withstand capacity		Icc = 10 kA protected by SH200 MCB's
Mechanical data	Housing		light grey, RAL 7035
	Environment conditions		EC/EN 60068
	Overvoltage category		III
	Pollution degree		2
Installation	Cross-section busbar		10 mm²
	Mounting position		Top/bottom
	Supply		Feed on terminal of the device: 16 mm² flexible in MCB terminal 25 mm² rigid in MCB terminal
Accessories	Shock-protection caps		BSK, SZ-BSK
	Feed-in terminals		PSH-END PSH-END 1
	End caps		PSH-END 1.1



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PSH3/12
2CSC400030F0068

Phase sequence	End cap	Bbn 4016779	Order details		Pack unit
		EAN	Type code	Order code	Price
Busbar					
L1-L1-...	PSH-END 1.1	142693	PSH 1/12	2CDL111001R1012	10
L1-L1-...	PSH-END 1.1	142709	PSH 1/60	2CDL111001R1060	10
L1-L2-L1-...	incl.	142716	PSH 2/12	2CDL121001R1012	5
L1-L2-L1-...	PSH-END	142723	PSH 2/58	2CDL121001R1058	5
L1-L2-L3-L1-...	incl.	142730	PSH 3/12	2CDL131001R1012	5
L1-L2-L3-L1-...	PSH-END	142747	PSH 3/60	2CDL131001R1060	5
L1-L2-L3-N-L1-...	incl.	142754	PSH 4/12	2CDL141001R1012	5
L1-L2-L3-N-L1-...	PSH-END 1	142778	PSH 4/60	2CDL141001R1060	5
L1-N-L2-N-L3-N-...	PSH-END 1	142761	PSH 4/58N	2CDL141001R1058	5
Feeder terminals					
-	-	123418	AST 25/30 QI	2CDL200003R2530	10
End cap					
-	-	142662	PSH-END	2CDL101011R0011	10
-	-	142648	PSH-END	2CDL101001R0001	10
-	-	142655	PSH-END	2CDL101001R0002	10

Notes

Command and signaling

Table of contents

118–119	**Simplicity of control makes life easier**
	Ordering data
120–121	**E 210 switches**
122	**E 210 pushbuttons with and without LEDs**
123	**E 210 indicator Lights with LEDs**
124–127	**SHD 200 Switch Disconnector**
128–131	**E 250 latching relays**
132–133	**E 260 electronic latching relays**
134–136	**E 297 installation relays**
137	**RI/BR bells and buzzers**
138–139	**ESB installation contactors**
140–141	**EN series contactors**
142	**EH04... auxiliary contact block**
143–145	**Overall dimensions**

Simplicity of control makes life easier
Command and signaling devices

Using modular DIN-rail mounted devices such as on-off switches, pushbuttons, indicator lights, disconnectors, relays, contactors, bells and buzzers makes it possible to switch and control electric loads from a central location. Thanks to signalling, operating states can be recognized easily and user always has the complete control of the situation.
The range is completed by a complete range of accessories and auxiliary elements such as auxiliary contact blocks, sealing cover and distance pieces.





ABB offers a complete range of modular DIN-rail mounted devices that makes it possible to switch and control electric loads from a central location. Thanks to the new narrow width of only 9 mm (0.5 modular width) place is saved in the distribution board. Integration of modular installation devices in the distribution boards affords the additional advantage of intelligible signalling of electric loads operating states. Easy operation or interpretation of devices is ensured by the clearly recognizable switching position (toggle lever) and/or a status display by means of an LED light. Depending on the system requirements, further signalling or control functionality for reliable operation can be used in the subdistribution board in the form of pushbuttons or indicator lights. Switch are available for different functions: on-off, change over, group control.

Commands can be coupled with electro-magnetic and electronic latching relays which allow contact switching for each impulse sent using single or parallel pushbutton. Ideal for load controlling from different positions, they are available in various versions according to pick-up voltage, contact position, installation options. They also allow manual operation on the product and contact position indicator (visual on the product).

Also important in command portfolio of product is the range of bells and buzzers, which includes modular versions for discontinuous use RI and BR, suitable for acoustic signalling in residential and commercial sectors.

Finally ESB and EN series of contactors, suitable for loads to be automatically controller through high number of operations. Contactors are used mainly in buildings for switching and controlling lighting, heating, ventilation and pumps. The ESB 24, 40, 63 contactors are used for the control of loads up to 24, 40, 63 A. Due to their DC solenoid actuator, the ESB 24 can be connected to AC or DC voltages. The EN contactors have a built-in toggle switch to select between three function modes: Off position, automatic run (normal contactor function), manual override with a return to Auto the next time the coil is energized.

Ordering data
E 210 switches

These devices are specifically made for commanding loads and signalling electrical conditions in any low-voltage switchboard.

They are available in half module or 1 module, depending on the contact-layout. The devices with indicator lights are equipped with a LED, which grants an optimal illumination with very low consumption.

The functions of these devices are particularly switching, pushing and signalling electrical conditions in any installations (low-voltage area).

General new features:
- Space-saving through 9 mm modules
- All terminals equipped with Pozidrive 1 screws
- Safe connection due to cage-clamp
- LED with bright colours and available in three different voltage ranges
- Different lens and button colours
- Compliance to international standards

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E211
2CSC400030F0101



E 211-... ON-OFF switches
For example, such devices are used to switch indicators or other electrical components (like fan's, air-conditions, e.g.). The new On-Off switches distinguish themselves through simple handling, easy mounting and optimal functionality.
- Rated current = 16 A

Cont.	Rated voltage	Power loss	Width	N° module	Bbn 7612270	Order details			Weight 1 piece	Pack unit
	V AC	W	mm	[17.5 mm]	EAN	Type code	Order code	Price	kg	
1 NO	250	0.32	9	0.5	938575	E211-16-10	2CCA703000R0001		0.035	10
2 NO	230/400	0.82	9	0.5	938582	E211-16-20	2CCA703005R0001		0.045	10

—
E211X
2CSC400030F0102



E 211X-... ON-OFF switches with yellow LED for contact indication
- Rated current = 16 A
- LED voltage 115-250 V AC
- LED colour yellow

Cont.	Rated voltage	Power loss	Width	N° module	Bbn 7612270	Order details			Weight 1 piece	Pack unit
	V AC	W	mm	[17.5 mm]	EAN	Type code	Order code	Price	kg	
1 NO	250	0.50	9	0.5	938872	E211X-16-10	2CCA703100R0001		0.040	10
2 NO	230/400	1.00	18	0.5	938889	E211X-16-20	2CCA703110R0001		0.050	10

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E214-16-101
2CSC400030F0103



—
E214-16-202
2CSC400030F0104



E 214-... Group switches (I-0-II, manual-OFF-automatic)
The new Group switches can be used to control the main installation of an emergency supply. Such devices distinguish themselves through simple handling, easy mounting and optimal functionality.
- Rated current = 16 A

Cont.	Rated voltage	Power loss	Width	N° module	Bbn 7612270	Order details			Weight 1 piece	Pack unit
	V AC	W	mm	[17.5 mm]	EAN	Type code	Order code	Price	kg	
1 CO	250	0.32	9	0.5	938735	E214-16-101	2CCA703025R0001		0.032	10
2 CO	250	0.82	18	1.0	938742	E214-16-202	2CCA703030R0001		0.064	10

Technical details		
Switching capacity		according to EN 60669-1
Isolating properties		according to EN 60669-2-4; IEC/EN 60947-3
Utilization category		AC-22 A; DC-22 A acc. IEC/EN60947-3
Short-circuit withstand capacity	[kA]	3
Rated voltage Un	[V]	250/400 in accordance with EN 240 in accordance UL 508
Lowest operat. voltage		24 V; 25 mA
Rated current In	[A]	16, 25, 32
LED current	[mA]	5
Rated frequency	[Hz]	50/60
Modules	[No]	0.5 or 1
Sealable		in ON and OFF position
Climatic resistance		according to IEC 60068-2-2 (Dry heat) IEC 60068-2-30 (Damp heat) IEC 60068-2-1 (Cold)
Ambient temperature	[°C/°F]	-25°C/-13°F to +55°C/+131°F
Storage temperature	[°C]	-40°C to +70°C
Connection capacity	[mm²]	rom 1 × 1 mm² to 1 × 6 mm² or 2 × 2.5 mm² massive; lexible up 1 × 0.75 mm² to 2 × 1.5 mm² with connector leve or pin-endconnector
Tightening torque	[Nm]	1.2 – 1.5
Positive opening		according to EN 60204-1
Standards		DIN EN 60669-1 *VDE 0632-1 DIN EN 60669-2-4 *VDE 0632-2-4 UL 508
Approvals		VDE, UL, GOST, CCC

Ordering data
E 210 pushbuttons with and without LEDs

The new products are available in 9 mm widths (= 0.5 modules).

The devices can be used in distribution boards and are all distinguished by their simple handling, ease of mounting and optimal functionality. The pushbuttons are used for remote control in all kinds of electrical installation (e.g. public, industrial). The range offers three different voltages.

(Ranges: 12-48 V AC/DC; 115-250 V AC and 110-220 V DC).

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E215
2CSC400030F0105



E 215-... Pushbuttons
- Rated current = 16 A
- Contacts: 1NO+1NC
- Rated voltage: 250 V AC

Power loss	LED colour	Width	N° module	Bbn 7612270	Order details			Weight 1 piece	Pack unit
W		mm	[17.5 mm]	EAN	Type code	Order code	Price	kg	
0.50	grey	9	0.5	938810	E215-16-11B	2CCA703150R0001		0.042	10
0.50	red	9	0.5	938827	E215-16-11C	2CCA703151R0001		0.042	10
0.50	green	9	0.5	938834	E215-16-11D	2CCA703152R0001		0.042	10

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E217
2CSC400030F0106



E 217-... Luminous Pushbuttons (3 different LED colours)
- Rated current = 16 A
- Contacts: 1NO
- Rated voltage: 250 V AC
- LED Voltage range = 115-250 V AC

Power loss	LED colour	Width	N° module	Bbn 7612270	Order details			Weight 1 piece	Pack unit
W		mm	[17.5 mm]	EAN	Type code	Order code	Price	kg	
1.10	white	9	0.5	938988	E217-16-10B	2CCA703160R0001		0.050	10
1.10	red	9	0.5	938995	E217-16-10C	2CCA703161R0001		0.050	10
1.10	green	9	0.5	939008	E217-16-10D	2CCA703162R0001		0.050	10

Ordering data
E 210 indicator Lights with LEDs

The new products are available in 9 mm width (= 0.5 modules) and can be used for indicating any operational condition such as signalling loss of a phase.

The range offers three different voltages.

(Ranges: 12-48 V AC/DC; 115-250 V AC and 110-220 V DC).

—
E219
2CSC400030F0107



E 219
- Rated current = 16 A
- LED Voltage range = 115-250 V AC

Power loss	LED colour	Width	N° module	Bbn 7612270	Order details			Weight 1 piece	Pack unit
W		mm	[17.5 mm]	EAN	Type code	Order code	Price	kg	
0.47	white	9	0.5	939282	E219-B	2CCA703400R0001		0.040	10
0.47	red	9	0.5	939299	E219-C	2CCA703401R0001		0.040	10
0.47	green	9	0.5	939305	E219-D	2CCA703402R0001		0.040	10
0.47	yellow	9	0.5	939312	E219-E	2CCA703403R0001		0.040	10
0.47	blue	9	0.5	939329	E219-G	2CCA703404R0001		0.040	10

Pushbuttons and Indicator lights		
Rated Voltage U_n	[V]	250/400
Lowest operat. voltage		24 V; 25 mA
Rated current I_n	[A]	16
LED current	[mA]	5
Rated frequency	[Hz]	50/60
Modules	[No]	0.5
Tightening torque	[Nm]	1.2 – 1.5
Standards		EN 60669-1; EN 62094-1; UL 508
Approvals		Pushbuttons: VDE, UL, GOST, CCC Indicator lights: VDE, UL, GOST[1]

[1] CCC approval for these Indicator lights not required

Command and signaling
SHD 200 switch disconnector



SHD 201

Technical data

Electrical data	
Standards	IEC/EN 60947-3
Poles	1P, 2P, 3P, 4P
Rated current I_e	16 A, 25 A, 32 A, 40 A, 50 A, 63 A
Utilization category	AC-22A, DC-21A
Rated voltage U_e	1P: 240 V AC, 60 V DC 2P: 415 V AC, 125 V DC 3…4P: 415 V AC
Insulation voltage U_i	440 V AC
Max. power frequency recovery voltage U_{max}	1P: 252 V AC, 63 V DC 2P: 436 V AC, 131 V DC 3…4P: 436 V AC
Min. operating voltage $U_{Bmin.}$	12 V AC
Rated frequency f	50/60 Hz, DC
Suitable for isolation	Yes
Rated conditional short-circuit current	10 kA in series with NH 00 ≤ 63 A gG
Overvoltage category	III
Pollution degree	3
Rated impulse withstand voltage $U_{imp.}$ (1.2/50 µs)	4 kV (test voltage 6.2 kV at sea level; 5 kV at 2,000 m)
Dielectric test voltage	2 kV (50/60 Hz, 1 min.)
Mechanical data	
Housing	Insulation group II, RAL 7035
Toggle	Insulation group II, red, sealable
Contact position indication	Marking on toggle, I ON / 0 OFF
Protection degree acc. to EN 60529	IP20 / IP40 in enclosure with cover
Electrical endurance	I_e < 32 A: 20,000 ops. (AC), 1,500 ops. (DC) I_e ≥ 32 A: 10,000 ops. (AC), 1,500 ops. (DC)
Mechanical endurance	20,000 ops.
Shock resistance acc. to IEC/EN 60068-2-27	25g, 2 shocks, 13 ms
Vibration resistance acc. to IEC/EN 60068-2-6	5g, 20 cycles at 5…150…5 Hz with load 0.8 I_n
Environmental conditions (damp heat cyclic) acc. to IEC/EN 60068-2-30	28 cycles with 55 °C/90-96% and 25 °C/95-100% [°C/RH]
Ambient temperature	-25 … +55 °C
Storage temperature	-40 … +70 °C
Installation	
Terminal	Cage terminal
Safety wire guard	No
Two terminal openings for conductor and busbar	No
Cross-section of conductors	25 mm²
Torque	2.0 Nm
Screwdriver	No. 2 Pozidriv
Mounting	On DIN rail 35 mm acc. to EN 60715 by fast clip
Mounting position	Optional
Removal without disassembling of the busbar	No
Supply	Optional

Dimensions and weight	
Mounting dimensions acc. to DIN 43880	Mounting dimension 1
Pole dimensions (H x D x W)	85 x 69 x 17.5 mm
Pole weight	Approx. 75 g
Combination with auxiliary elements	
Auxiliary contact	No
Signal/auxiliary contact	No
Shunt trip	No
Undervoltage release	No
Motor operating device	No
Padlock	Yes
Approvals	
	CE and RoHS conform **Approvals: VDE/CCC/EAC/KEMA**

Command and signaling
SHD 200 switch disconnector


SHD 201


SHD 202


SHD 203


SHD 204

SHD 200
Switch disconnector acc. to IEC/EN 60947-3 for panel installation onto DIN rail (35 mm)

Mounting depth: 69 mm

Mounting width: per pole = 17.5 mm = 1 module

Colour: grey, RAL 7035

Colour of switch lever: red RAL 3000

Special features
- Isolating characteristics acc. to IEC/EN 60947-3
- Protection degree IP20 = finger safe
- 25 mm² cage terminal
- Consistent design to all other System pro M DIN rail products
- Cross wiring with MCBs or RCDs using busbars PS
- Durable device identification due to laser labeling
- Captive screws
- Locking device as accessory for unauthorized ON/OFF switching
- Approved acc. to IEC/EN 60947-3 for international use

Ordering details

Rated current: 16 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	240	904308	SHD201/16	2CDD271111R0016		0.075	10
2	415	904360	SHD202/16	2CDD272111R0016		0.150	5
3	415	904421	SHD203/16	2CDD273111R0016		0.225	1
4	415	904483	SHD204/16	2CDD274111R0016		0.300	1

Rated current: 25 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	240	904315	SHD201/25	2CDD271111R0025		0.075	10
2	415	904377	SHD202/25	2CDD272111R0025		0.150	5
3	415	904438	SHD203/25	2CDD273111R0025		0.225	1
4	415	904490	SHD204/25	2CDD274111R0025		0.300	1

Rated current: 32 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	240	904322	SHD201/32	2CDD271111R0032		0.075	10
2	415	904384	SHD202/32	2CDD272111R0032		0.150	5
3	415	904445	SHD203/32	2CDD273111R0032		0.225	1
4	415	904506	SHD204/32	2CDD274111R0032		0.300	1



SHD 201

Ordering details

Rated current: 40 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	240	904339	SHD201/40	2CDD271111R0040		0.075	10
2	415	904391	SHD202/40	2CDD272111R0040		0.150	5
3	415	904452	SHD203/40	2CDD273111R0040		0.225	1
4	415	904513	SHD204/40	2CDD274111R0040		0.300	1



SHD 202

Rated current: 50 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	240	904346	SHD201/50	2CDD271111R0050		0.075	10
2	415	904407	SHD202/50	2CDD272111R0050		0.150	5
3	415	904469	SHD203/50	2CDD273111R0050		0.225	1
4	415	904520	SHD204/50	2CDD274111R0050		0.300	1



SHD 203

Rated current: 63 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	240	904353	SHD201/63	2CDD271111R0063		0.075	10
2	415	904414	SHD202/63	2CDD272111R0063		0.150	5
3	415	904476	SHD203/63	2CDD273111R0063		0.225	1
4	415	904537	SHD204/63	2CDD274111R0063		0.300	1



SHD 204

Ordering data
E 290 latching relays

This 18 mm wide DIN rail mounted device is designed for direct installation in main distribution or sub-distribution systems (mounted on 35 mm DIN mounting rails). The devices are activated by means of control pulses and guarantee energy-optimized lighting control. As a rule, installations with latching relays are used where the lighting control system can be operated from at least three points in different locations. Those latching relays are designed for a rated current of 16 A or 32 A.

Standard number of contacts:

1 NO contact, 2 NO contacts or 1 NO contact + 1 NC contact. The number of switching contacts can be increased by a maximum of two main contacts using a snap-on main module (E292-..-..). As a result, up to four lighting sets can be switched by a single device.

A signaling and/or indicating facility can be created using the additional snap-on auxiliary contact module (E299-11).

The various standard AC/DC coil voltages complete the comprehensive and interesting product range. The additional devices can be snapped onto the latching relay on the left or right side.

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E290



Rated current = 16 A Contact config.	Power loss	Width	Coil control voltage	Bbn 7612270		Order details	Weight	Pack unit
	[W]	[mm]	[VAC/VDC]	EAN	Type code	Order code	kg	
1 NO	0.32	18	230VAC/110VDC	939602	E290-16-10/230	2TAZ312000R2011	0.114	10
	0.64	18	230VAC/110VDC	939725	E290-16-20/230	2TAZ312000R2012	0.122	10

			E290 Latching relays
General			
Overall depth		68 mm	
Overall width		1 module (18 mm)	
Colour		grey, RAL 7035	
		IEC 60068-2-2 (dry heat)	
		IEC 60068-2-30 (humid heat)	
Climate resistance in accordance with		IEC 60068-2-1 (low temperatures)	
Ambient temperature		-25°C to +55°C Storage	
Temperature		-40°C to +70°C Contact	
System		Double interruption	
Tightening torque		1.2 - 1.5 Nm	
Weight		0.122 kg	
Standards		EN 60669-1; EN 60669-2-2	
Approval		VDE; EAC	
Power circuit			
	E290-16-.../...	16 A	----
Rated current In	E290-32-.../...	----	32 A
Rated voltage Un		250 VAC	250 VAC
Frequency		50 Hz	50 Hz
Short circuit withstand capacity Inc		3 kA	3 kA
Back-up fuses (gL)		max. 16 A	max. 32 A
Latching relay contact configurations for 16 A and 32 A		1NO; 2NO; 1NO + 1NC	
Additional Power contacts 16A (attachable) (not for 32 A version)		1CO; 2NO; 1NO + 1NC	
Max. DC current per contact with 24 VDC		5 A	8 A
Min. switching load		24 V; 10 mA*	
Bounce time		< 3 ms	
Power loss in W per contact		0.32 W	1.2 W
Rated impulse withstand voltage U_{imp}		4 kV	
Max. lamp load			
Glow lamps (20 W - 200 W)		3000 W	4000 W
Fluorescent lamps, uncorrected power factor (cos. 0.5)		1800 W	2200 W
	serial	3000 W	4000 W
	parallel	2500 W	3200 W
	single	1800 W	2200 W
Fluorescent lamps, corrected power factor (cos. 0.9)	double	2500 W	3200 W
(see also lamp load table)			

	E290 Latching relays
Lifetime (switching cycles)	
Electrical (AC1 rated current load)	150,000
Mechanical	250,000
Connector cross-sections	
Connecting terminals	solid from 1 × 1 mm² to 1 × 10 mm² or 2 × 2.5 mm² flexible from 1 × 0.75 mm² to 1 × 6 mm² (Cu) with end ferrule or pin cable lug
Control circuit	
Rated control voltages Un	AC: 8 V; 12 V; 24 V; 48 V; 115 V; 230 V DC: – ; – ; 12 V; 24 V; 60 V; 110 V
AC/DC ratio 1)	1: 0.5 (not available for 8 VAC and 12 VAC coils)
Operation limits	+/- 10% = 0.9 - 1.1 × Un
Minimum command duration	50 ms
Max. switching operations	15 × per min. at In 16 A; 8 × per min. at In 32 A
Switching noise	60 dB (A) (distance 1 m)
Max. number of illuminated buttons (0.6 mA)	(see table on page 3/6)
Max. glow lamp current parallel to the 230 V control buttons	5 mA

Switching components for E290	
E292-16... Contact Module (attachable only to 16 A In version)	
Rated current In per E292 contact	16 A
Rated voltage Un	250 VAC
Frequency	50 Hz
Max. no. attachable 2) (additional main contacts)	1 unit (attachable on the right side of the main module)
Contact configurations	1CO; 2NO; 1NO+1NC
Max. DC current per contact with 24 VDC	8 A
Min. switching load	24 V;10 mA
E299-11/-20 Auxiliary Contacts	
Max. no. attachable 2) (signaling or control contacts)	1 unit (attachable on the right side of the main module)
Number of contacts	1 NO + 1 NC; 2NO
Max. current per contact with AC	5.0 A
Max. current per contact with 24 VDC	5.0 A

Control components for E290	
E294 Central On-Off Control Module (different control voltage potential)	
Max. no. attachable 2)	1 unit (attachable on the left side of the main module)
Rated current In max.	1 A Rated
voltage Un	250 VAC
E295-PS Permanent Signal Module	
Max. no. attachable 2)	1 unit (attachable on the left side of the main module)
Rated current In max.	1 A Rated
voltage Un	250 VAC
E295-GM Group Module	
Use of group switching modules	1 unit per defined group
Rated current In max.	1 A Rated
voltage Un	250 VAC
E296-CP Compensator	
Compensation when using illuminated buttons	Wiring parallel to the main module
Compensation	2.2 F
Rated voltage Un	250 VAC

Ordering data
E 260 electronic latching relays

Thanks to the quite switching operation, the devices do not need to be heavily noise-insulated but can be installed easily and without hesitation. Particularly suitable for households, hotels,workplaces or areas where people want to be undisturbed and sub-distribution system are nearby.
The basic version is designed for the most common voltages and has up to two switching contacts. In addition, there is a device with a central command on-off built in.



E260

The E260 series is designed for direct installation in sub-distribution systems. Due to the quite switching operation, the devices do not need to be heavily noise-insulated but can be installed easily and without hesitation.Particularly suitable for households, hotels, workplaces or areas where people want to be undisturbed and sub-distribution system are nearby.The basic version is designed for the most common voltages and has up to two switching contacts. In addition, there is a device with a central command on-off built in.The E260 series has the capability to switch LED loads of up to 200W. Each unit can be used with a universal input voltage anywhere from 8 up to 240V AC/DC, which is unique and enable a flexible use in any application. A wide range of state-of-the-art product features combined in only few stock selling units allows the customer to use them in various applications like fan, lighting and AC systems - Especially in residential and commercial sectors.

Rated current = 16 A

Contact config.	Power loss	Width [mm]	Coil control voltage	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	[W]		VAC/VDC	EAN	Type code	Order code		kg	pc.
Electronic latching relay									
1NO	1.2	18	8 ... 240	514808	**E260-16-10**	2CCG000981R0001		0,066	1
2NO	2.4	18	8 ... 240	514716	**E260-16-20**	2CCG000972R0001		0,081	1
Electronic latching relay with central ON-OFF control									
1NO	1.2	18	8 ... 240	514723	**E260C-16-10**	2CCG000973R0001		0,064	1
2NO	2.4	18	8 ... 240	514730	**E260C-16-20**	2CCG000974R0001		0,079	1
Electronic latching relay with adjustable central ON-OFF control									
1NO	1.2	18	8 ... 240	514747	**E260CA-16-10**	2CCG000975R0001		0,068	1
2NO	2.4	18	8 ... 240	514754	**E260CA-16-20**	2CCG000976R0001		0,081	1
1NO+1NC	1.2	18	8 ... 240	514761	**E260CA-16-11**	2CCG000977R0001		0,081	1
4NO	4.8	36	8 ... 240	514778	**E260CA-16-40**	2CCG000978R0001		0,155	1



E260

E260 Electronic latching relay

Technical features				
	E260-16-10	E260C-16-10	E260CA-16-10	E260CA-16-40
	E260-16-20	E260C-16-20	E260CA-16-20	
			E260CA-16-11	
	E260-16-..	**E260C-16-..**	**E260CA-16-..**	**E260CA-16-40**
Contacts // Power circuit // Main Circuit				
Rated current In	16 A			
Rated voltage Un	250 VAC			
Frequency	50-60 Hz			
Supply voltage	8 … 240V AC/DC			
Contact configuration	1NO; 2NO	1NO; 2NO	1NO; 2NO; 1NO + 1NC	4NO
Potential free contacts	yes			
Breaking capacity	4000 VA			
Electronics // Control circuit				
Relay type	bistable relay			
Universal control voltage	8 .. 240 V UC			
Control voltage AC	8 .. 240 VAC			
Control voltage DC	8 .. 240 VDC			
Max. input power during switching for universal voltage	2 VA / 0.8 W	2 VA / 0.8 W	2.6 VA / 1.1 W	2.5 VA / 0.8 W
Min. control impuls lenght	200 ms			
Recovery time	max. 300 ms		max. 200 ms	
Integrated Glow lamp	yes	-	yes	-
Glow lamp current at the control input 230 V	6 mA	-	15 mA	-
Max. input power during switching at the control input 230 V	5.5 VA / 0.8 W	-	0.6 VA / 0.26 W	-
Lamp load / lamp types				
Incandescent and halogen lamps (230V)	4000 W, Ipeak < 70A for 10ms			
LED lamps	200 W (230 V), 100 W (110 V), Ipeak < 70A for 10ms			
Compact Lamps with Integrated ECG	500 VA, Ipeak < 70A for 10ms			
Halogen lamps	1000 VA, Ipeak < 70A for 10ms			
Mechanical data				
Endurance (switching cycles)	Electrical endurance: 50.000 (16A/250V, AC1, 85°C) Mechanical endurance: 5x106			
Life at rated load, cos(phi)=1	>5x104			
Conductor cross-section (solid)	load: 1x4 mm2, control: 1x2.5 mm2			
Two conductor of same cross-section (solid)	load: 2x2.5 mm2, control: 2x1.5 mm2			
Tightening torque	load: 0.5 Nm, control: 0.4 Nm			
Stripping lenght	load: 6.5 mm, control: 6 mm			
Screwdriver	PH1			
Mounting	Mounting rail according to EN 60715-35x7.5			
Mounting position	any			
General data				
Overall width	1 module (18 mm)	1 module (18 mm)	1 module (18 mm)	2 module (36 mm)
Color	light grey, RAL 7035			
Central ON/OFF	-	yes	yes	yes
Group Control	-	-	-	yes
Contact position indication with LED	-	-	yes	yes
Switching Noise (distance 1 m)	55dB	55dB	55dB	57dB
Ambient temperature (operation)	–20 … +55 °C			
Storage temperature	–30 … +70 °C			
Protection degree	IP20			
Polution degree	2			
Overvoltage category	III			
Standards	IEC 60669-1; IEC 60669-2-1			
Approvals	VDE			
Width	18 mm			35 mm
Depth	64 mm			65 mm
Height	90 mm			

Ordering data
E 297 installation relays

E 259 Installation relays are 16 A contactors specifically engineered for residential and commercial applications. Their high performance in the control of lamps makes them ideal for lighting circuit applications.

The front control lever indicates the position of the contacts and allows the relay to be commanded, for example for local testing of the circuit.

In installations that require several E 259 relays side by side, it is advisable to use E 259 DIS half-module width spacer elements every second relay for heat dissipation.

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E297



Rated current = 16 A Contact config.	Power loss	Width	Coil control voltage	Bbn 7612270	Type code	Order code	Weight	Pack unit
	[W]	[mm]	[VAC/VDC]	EAN			kg	
1 NO	0.50	18	230VAC	940042	E297-16-10/230	2TAZ311000R2011	0.113	10
2 NO	1.00	18	230VAC	940172	E297-16-20/230	2TAZ311000R2012	0.121	10
1 NO+1NC	0.50	18	230VAC	940110	E297-16-11/230	2TAZ311000R2013	0.121	10

		E297 Installation Relays
Application categories		
	AC-1 (based on EN 60947)	16 A
	AC-5b (based on EN 60947)	5 A
	AC-7a (based on EN 61095)	16 A
Switching capacity in accordance with	AC-7c (based on EN 61095)	5 A
Connector cross-sections		
		solid from 1 × 1 mm² to 1 × 10 mm² or 2 × 2.5 mm²
		flexible from 1 × 0.75 mm² up to 1 × 6 mm² (Cu) with end
Main connecting terminals		ferrule or pin cable lug
Control circuit		
		8 VAC; 12 VAC; 24 VAC/24 VDC; 48 VAC/48 VDC;
Coil rated voltages Un AC/DC		115 VAC/110 VDC; 230 VAC
AC/DC ratio 3)		1 : 1
Operation limits		+/- 10 % = 0.9 - 1.1 × Un
Switching noise		60 dB (A) (distance 1 m)
Max. switching operations		15 × per min. at In 16 A
Coil power loss		
	AC	DC
Pick up	< 2.8 VA	< 2.0 W
Holding	< 2.6 VA	< 1.8 W

		E297 Installation Relays
General		
Overall depth		68 mm
Overall width		1 module (18 mm)
Colour		grey, RAL 7035
		IEC 60068-2-2 (dry heat)
		IEC 60068-2-30 (humid heat)
Climate resistance in accordance with		IEC 60068-2-1 (low temperatures)
Ambient temperature		-25°C to +55°C
Storage temperature		-40°C to +70°C
Tightening torque		1.2 - 1.5 Nm
Weight		0.122 kg
Standards		EN 60669-1; EN 60669-2-2
Approval		VDE; EAC
Power circuit		
Rated current In		16 A Rated
Voltage Un		250 VAC
Frequency		50-60 Hz
Short circuit withstand capacity Inc		3 kA
Back-up fuses (gL)		max. 16 A Installation
Relay contact configurations		1NO; 2NO; 1NO + 1NC
Additional Power contacts 16A (attachable)		1CO; 2NO; 1NO + 1NC
Max. DC current per contact with 24 VDC		8 A
Min. switching load		24 V; 10 mA*
Bounce time		< 3 ms Power
Loss in W per contact		0.50 W Rated
Impulse withstand voltage U_{imp}		4 kV
Max. lamp load		
Glow lamps (20 W - 200 W)		3000 W
Fluorescent lamps, uncorrected power factor (cos. 0.5)		1800 W
	serial	3000 W
	parallel	2500 W
	single	1800 W
Fluorescent lamps, corrected power factor (cos. 0.9)	double	2500 W
(see also lamp load table)		
Lifetime (switching cycles)		
Electrical (AC1 rated current load)		150,000
Mechanical		250,000

	Switching components for E297
E298 Contact Module	
Max. no. attachable 2) (additional main contacts)	1 unit (attachable on the right side of the main module) Rated
Current In per E298 contact	16 A
Rated voltage Un	250 VAC
Frequency	50 Hz
Number of contacts	1CO; 2NO; 1NO+1NC
Max. DC current per contact with 24 VDC	5 A
Min. switching load	24 V; 10 mA
E299-11 Auxiliary Contacts	
Max. no. attachable 2) (signaling or control contacts)	1 unit (attachable on the right side of the main module)
Number of contacts	1 NO+1 NC
Max. current per contact with AC	5.0 A
Max. current per contact with 24 VDC	5.0 A

Ordering data
RI/BR bells and buzzers

The range of bells and buzzers includes modular versions for discontinuous use RI12, RI230, BR12 and BR230 are suitable for acoustic signalling in residential and commercial sectors to fulfill functionalities such as alarms notification, supervision and intentive use in schools, factories, etc. Both bells and buzzers are available with rated voltage of 12 VAC and 230 VAC and rated frequency of 50/60Hz.



RI230

RI electro-mechanical modular bells

Rated voltage	Use	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
V AC		EAN	Type code	Order code		kg	pc.
12	Discontinuous	258810	RI12	2CSM232345R0821		0.081	10
230	Discontinuous	258919	RI230	2CSM232335R0821		0.083	10

BR electro-mechanical modular buzzers

Rated voltage	Use	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
V AC		EAN	Type code	Order code		kg	pc.
12	Discontinuous	273813	BR12	2CSM236545R0821		0.075	10
230	Discontinuous	258711	BR230	2CSM232355R0821		0.077	10



BR230

RI, BR, TSM, TSR

		RI12, BR12	RI230, BR230
Rated voltage Un	[Vac]	12	230
Rated frequency	[Hz]	50/60	
Power consumption	[VA]	4	
Sound level	Bell [dB] Buzzer [dB] Three-tones [dB]	80 (1) 70 (1)	80 (1) 70 (1)
Max. permanent working time		max. 15 sec., after a rest time of 60 sec.	
Type of sound signal		D	
Duration of operation		discontinuous	
Max. cable cross-section	[mm²]	4	
Mounting position		vertical only	
Protection degree		IP20	
Modules (18 mm)	[No.]	1	
Standard		EN62080	

(1) at 0.6 meters distance

(2) at 1 meter distance

Ordering data
ESB installation contactors

Application: the ESB contactors are used mainly in buildings for switching and controlling lighting, heating, ventilation and pumps. They are part of the complete range of Din rail products and can be integrated easily in dedicated panels.

ESB20 are AC coil operated. The ESB 24, 40, 63 contactors are used for the control of loads up to 24, 40, 63 A.

Due to their DC solenoid actuator, the ESB 24 can be connected to AC or DC voltages. This provides the following benefits: Hum-free operating system, no vibration, silent in operation, low power consumption, integrated high overvoltage protection 5 kV. You can choose between a various N.O. and N.C. contacts combination. Main accessories for ESB 24, 40, 63: auxiliary contact blocks EH04.

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ESB 20-20
2CSC400030F0118



—
ESB 24-40
2CSC400030F0119



—
ESB 63-40
2CSC400030F0120



Main poles	Control coil voltage		N° module	Bbn 3471520		Order details		Weight 1 piece	Pack unit
	50 Hz	60 Hz	[17.5 mm]	EAN	Type code	Order code	Price	kg	
ESB 20									
2 NO	230 V	264 V	1	263263	ESB 20-20	GHE 321 1102 R0006		0.140	10
2 NC	230 V	264 V	1	263867	ESB 20-02	GHE 321 1202 R0006		0.140	10
1 NO+1 NC	230 V	264 V	1	263560	ESB 20-11	GHE 321 1302 R0006		0.140	10

Main poles	Control coil voltage		N° module	Bbn 4013614		Order details		Weight 1 piece	Pack unit
	40 ... 450 Hz	DC	[17.5 mm]	EAN	Type code	Order code	Price	kg	
ESB 24									
2 NO	230 ... 240 V	230 ... 240 V	2	146756	ESB 24-20	GHE 329 1402 R0006		0.280	5
4 NO	230 ... 240 V	230 ... 240 V	2	084454	ESB 24-40	GHE 329 1102 R0006		0.280	5
4 NC	230 ... 240 V	230 ... 240 V	2	084546	ESB 24-04	GHE 329 1202 R0006		0.280	5
ESB 40									
4 NO	230 ... 240 V	230 ... 240 V	3	084867	ESB 40-40	GHE 349 1102 R0006		0.400	3
ESB 63									
4 NO	230 ... 240 V	230 ... 240 V	3	084973	ESB 63-40	GHE 369 1102 R0006		0.420	3

		ESB20 (AC operated)	ESB24 (AC/DC operated)	ESB40 (AC/DC operated)	ESB63 (AC/DC operated)
Technical details					
Main Pole – Utilization Characteristics according to IEC					
Rated operational voltage U_e max.	V	250			400
Rated frequency limits	Hz	50/60			40 ... 450
Utilization category AC-1 / AC-7a					
for air temperature close to contactor < 55°C (NO)	A	20	24	40	63
Max. rated operational current Ie AC-1 / AC-7a (NC)	A	20	24	30	30
Rated operational power AC-1					
230 V – 1 phase	kW	4	5.3	8.8	13.8
400 V – 3 phases	kW	-	16	26	41
Utilization category AC-3 / AC-7b for air temperature close to contactor < 55°C Max. rated operational current Ie AC-3/AC-7b					
230 V – 1 phase	A	9	9	22	30
400 V – 3 phases	A	-	9	22	30
Rated operational power AC-3					
230 V – 1 phase	kW	1.1	2.2	5.5	8
400 V – 3 phases	kW	-	4	11	15
Rated making capacity AC-3					$10 \times I_e$ / AC-3
Rated breaking capacity AC-3					$8 \times I_e$ / AC-3
Short-circuit protection for contactors gG type fuse	A	20	35	63	80
Rated short-time withstand current I_{cw} at 40°C ambient temp., in free air, from a cold state 10 s	A		72	176	240
Heat dissipation per pole Ie / AC-1/AC-7a	W	1	1.5	3	6
Max. electrical switching frequency					
- for AC-1 / AC-7a	cycles/h				300
- for AC-3 / AC-7b	cycles/h				600
Electrical durability					
- for AC-1 / AC-7a	cycles	150000	150000	150000	150000
- for AC-3 / AC-7b	cycles	150000	500000	170000	240000
Mechanical durability					
- millions of operating cycles					1.000.000
Magnet System Characteristics					
Coil operating limits acc. to IEC 60947-4-1					0.85 ... 1.1 × U_c (at θ m 55°C)
Drop-out voltage in % of U_c		approx. 20 ... 75 %			approx. 20 ... 70 %
Frequency range	Hz	50/60			40 ... 450
Coil consumption					
Average pull-in value	VA / W	8 / 5	4 / 4	5 / 5	65 / 65
Average holding value	VA / W	3.2 / 1.2	4 / 4	5 / 5	4.2 / 4.2
Connecting Characteristics					
Connecting capacity (min. ... max.) Main pole terminals					
Rigid 1 × mm²		1.5 ... 10	-	1.5 ... 25	-
2 × mm²		1.5 ... 4	-	1.5 ... 10	-
Degree of protection acc. to IEC 60947-1 / EN 60947-1 and IEC 60529 / EN 60529 Protection against direct contact in acc. with EN 50274					
All terminals		IP20	-	IP20	-

Ordering data
EN series contactors

Application: the EN contactors are used mainly in buildings for switching and controlling lighting, heating, ventilation and pumps. They are part of the complete range of Din rail products and can be integrated easily in dedicated panels.

Description: EN contactors have a built-in toggle switch to select between three function modes: Off position, automatic run (normal contactor function), manual override with a return to Auto the next time the coil is energized.

This offers many advantages as: You can make functionnal test before installation start-up. It can be used for maintenance operation, to change lamps and test it. It provides higher safety and drop out as you can switch the application manually.

The toggle switch is also used for household application like water heating where double tariff of kWh is used.

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EN 20-20
2CSC400030F0121



—
EN 24-40
2CSC400030F0122



—
EN 40-40
2CSC400030F0123



Main poles	Control coil voltage		N° module	Bbn 3471520	Order details		Weight 1 piece	Pack unit
	50 Hz	60 Hz	[17.5 mm]	EAN	Type code	Order code	Price	kg	
EN 20									
2 NO	230 V	264 V	1	265069	EN 20-20	GHE 322 1101 R0006		0.140	10

Main poles	Control coil voltage		N° module	Bbn 4013614	Order details		Weight 1 piece	Pack unit
	40 ... 450 Hz	DC	[17.5 mm]	EAN	Type code	Order code	Price	kg	
EN 24									
4 NO	230 ... 240 V	230 ... 240 V	2	133688	EN 24-40	GHE 326 1101 R0006		0.240	5
3 NO	230 ... 240 V	230 ... 240 V	2	134319	EN 24-30	GHE 326 1501 R0006		0.230	5
EN 40									
2 NO	230 ... 240 V	230 ... 240 V	3	129582	EN 40-20	GHE 342 1401 R0006		0.400	3
3 NO	230 ... 240 V	230...240 V	3	212338	EN 40-30	GHE 342 1501 R0006		0.400	3
4 NO	230 ... 240 V	230 ... 240 V	3	133701	EN 40-40	GHE 342 1101 R0006		0.410	3

		EN20 (AC operated)	EN24 (AC/DC operated)	EN40 (AC/DC operated)
Technical details				
Main Pole – Utilization Characteristics according to IEC				
Rated operational voltage U_e max.	V	250		400
Rated frequency limits	Hz	50/60		40 ... 450
Utilization category AC-1 / AC-7a				
for air temperature close to contactor < 55°C (NO)	A	20	24	40
Max. rated operational current Ie AC-1 / AC-7a (NC)	A	20	24	30
Rated operational power AC-1				
230 V – 1 phase	kW	4	5.3	8.8
400 V – 3 phases	kW	-	16	26
Utilization category AC-3 / AC-7b for air temperature close to contactor < 55°C Max. rated operational current Ie AC-3/AC-7b				
230 V – 1 phase	A	9	9	22
400 V – 3 phases	A	-	9	22
Rated operational power AC-3				
230 V – 1 phase	kW	1.1	2.2	5.5
400 V – 3 phases	kW	-	4	11
Rated making capacity AC-3				$10 \times I_e$ / AC-3
Rated breaking capacity AC-3				$8 \times I_e$ / AC-3
Short-circuit protection for contactors gG type fuse	A	20	35	63
Rated short-time withstand current I_{cw} at 40°C ambient temp., in free air, from a cold state 10 s	A		72	176
Heat dissipation per pole Ie / AC-1/AC-7a	W	1	1.5	3
Max. electrical switching frequency				
- for AC-1 / AC-7a	cycles/h			300
- for AC-3 / AC-7b	cycles/h			600
Electrical durability				
- for AC-1 / AC-7a	cycles	150000	150000	150000
- for AC-3 / AC-7b	cycles	150000	500000	170000
Mechanical durability				
- millions of operating cycles				1.000.000

Ordering data
EH04... auxiliary contact block

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EH 04
2CSC400030F0124

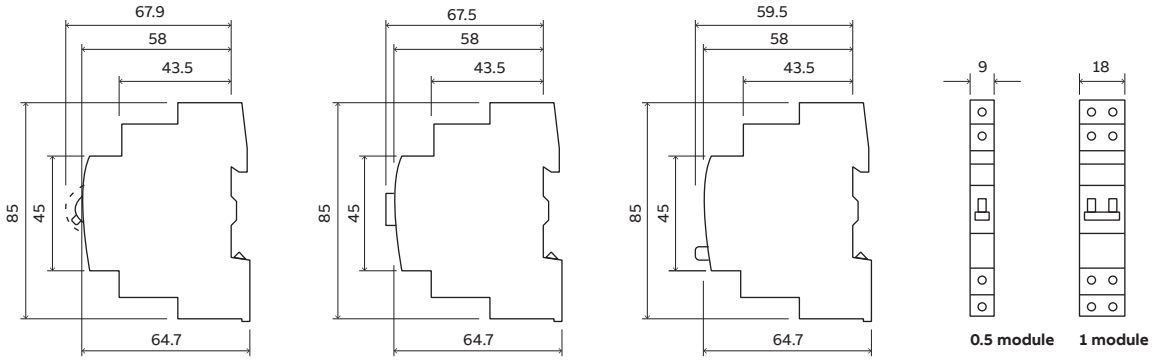


Contactor Type	Contact blocks		N° module [17.5 mm]	Bbn 3471520 EAN	Type code	Order details Order code	Price	Weight 1 piece kg	Pack unit
ESB/EN 24, 40, 63	2	-	0.5	084768	EH 04-20	GHE 340 1321 R0001		0.004	10
	1	1	0.5	084768	EH 04-11	GHE 340 1321 R0002		0.004	10

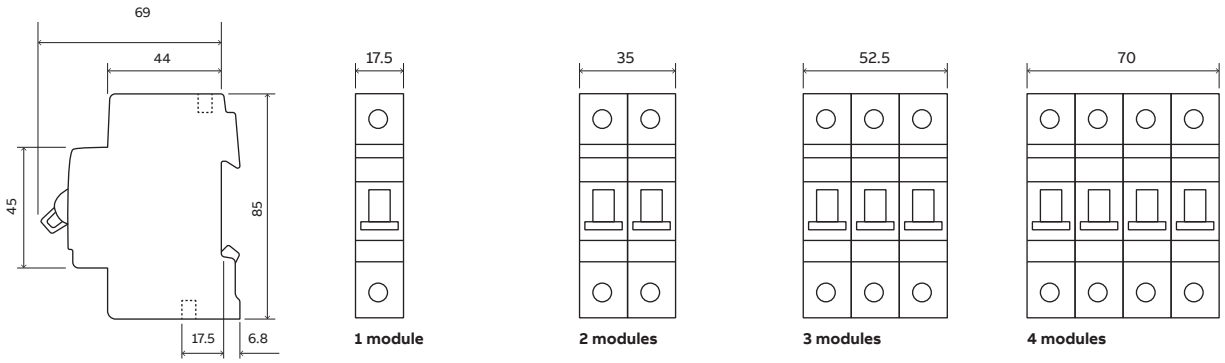
		ESB20 (AC operated)	ESB24 (AC/DC operated)	ESB40 (AC/DC operated)	ESB63 (AC/DC operated)
Technical details					
Rated operational voltage U_e max.	V	-			500
Conventional free air thermal current I_{th} θ < 40°C	A	-			6
Rated frequency limits	Hz	-			50/60
Rated operational current I_e / AC-15 acc. to IEC 60947-5-1					
240 V 50/60 Hz	A	-			4
415 V 50/60 Hz	A	-			3
500 V 50/60 Hz	A	-			2
Making capacity acc. to IEC 60947-5-1		-			11 × I_e AC-15
Breaking capacity acc. to IEC 60947-5-1		-			11 × I_e AC-15
Short-circuit protection gl type fuse	A	-			10
Minimum switching capacity with failure rate acc. to IEC 60947-5-4	V/mA	-			17 / 5
Heat dissipation per pole at 6 A	W	-			0.1

Overall dimensions

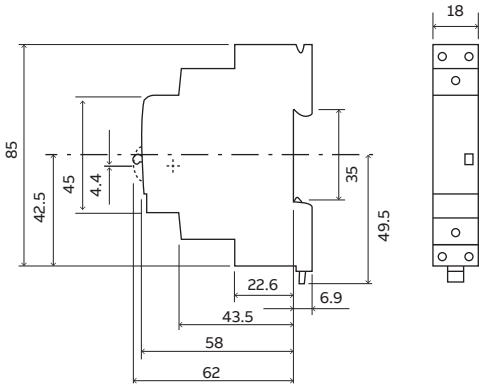
E 210 – Switches, pushbuttons and indicator lights



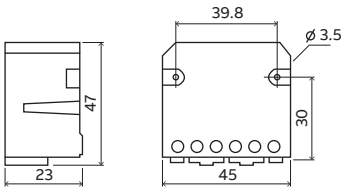
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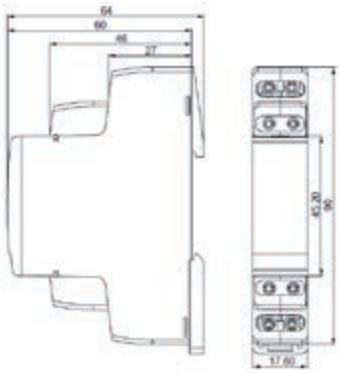
E 290



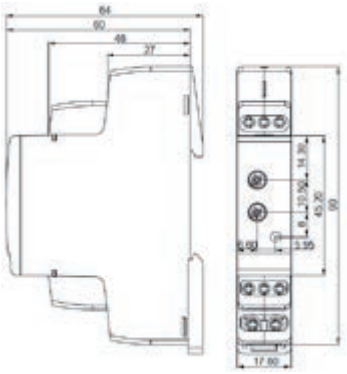
FLR



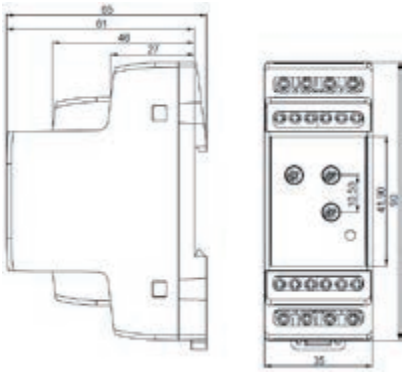
E260 & E260 C



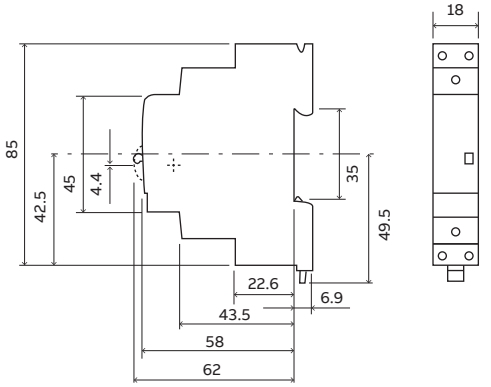
E260 CA 18mm



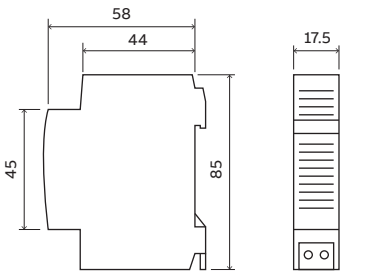
E260 CA 35mm



E 297

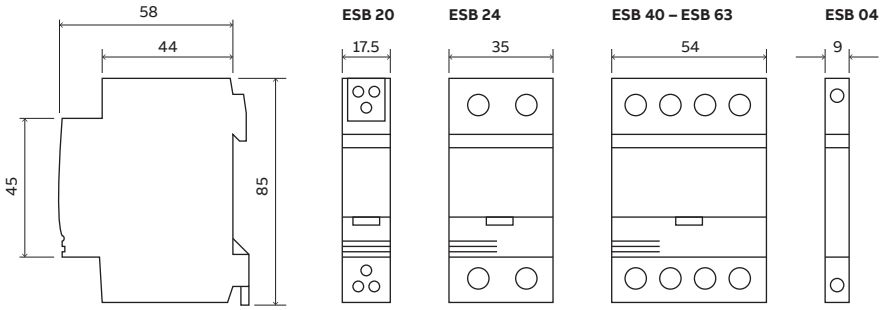


Bell and Buzzer



1 module

ESB/EN contactors



1 module **2 modules** **3 modules**

Comfort

Table of contents

148–151	**Introduction**
	Ordering data
152	**F2C-ARH and F2C-ARH-T**
155	**E 450**
156	**LCR**
157	**Socket outlets**
158	**Overall dimensions**

Comfortable living, easy to manage
ABB solutions for home comfort

The basic idea behind a modern electrical installation is to adapt the system to the users' needs and not vice versa, providing simple operation, safety and energy efficiency. ABB's products have all the necessary features to control homes through a flexible networking of solutions that make life easy.





Electronic components have always been used to improve performance, increase comfort and save energy.

Even in domestic installations, loads must be protected and monitored to guarantee their correct behaviour in critical conditions. This is a fundamental aspect for the comfort of users. ABB's portfolio provides efficient products to improve comfort at home.

The F2C-ARH-T autoreclosing unit for domestic and similar application periodically performs the auto test and reclosure of the associated residual current device (2-pole RCCBs up to 63 A – 30 mA / 100 mA), only after having checked that there are no effective faults in the system protected by the RCCB.

Modular devices in the load management devices category react automatically to variations of parameters and other events in the system to allow optimization. The priority switch is used in wiring systems where existing lead cross sections or the size of the power supply service box.

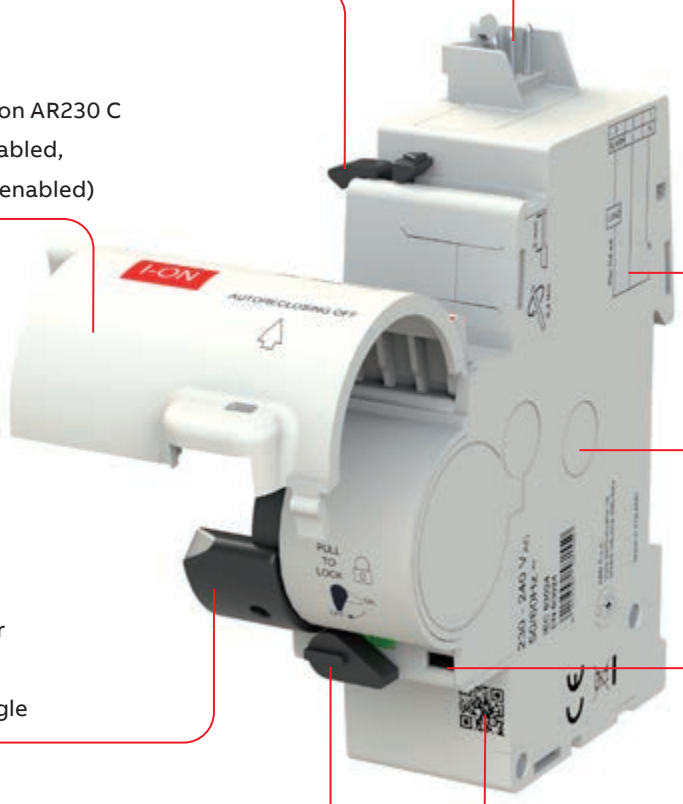
The E 450 priority switches in particular disconnects the long-term load as long as the short-term consumer is switched on.

Installed downstream of the main circuit-breaker, LSS1/2 load shedding switch compares the actual power consumption of the system to a preset maximum permitted value, and prevents tripping of the main circuit-breaker by sequentially switching off a maximum of two non-prioritary loads (NPL1 and NPL2) when the preset threshold is exceeded. A green LED indicates the presence of the supply voltage, and two red LEDs indicate the load OFF conditions. At preset time intervals, the device automatically attempts to reconnect the previously disabled loads.

E 235 mains disconnection relays – Bioswitch – constant exposure of electrical interference fields originating from live conductors – as is the case e.g. in bedrooms – which may impair the well-being of people.

LEE 230 extractable power failure signalling lamp is an automatic electronic lamp that can be installed in any modular socket or wiring accessory socket conforming to the German VDE Schuko standard, to the Italian standard P11 10A, or to the 10/16 A Italian dual standard. The device functions both as a power failure signalling lamp and as a lighting device, to be used for example during maintenance activities or when seeking faults in the panel.

F3C-AR230 C, F3C-AR230 C H*
The details make the difference
Characteristics and assets of an efficient and reliable product



Hook for fixation to main protection device

Plug-in terminal on top side for the Power Supply and the Alarm contact

Flap to enable/diable autoreclosing funtion on AR230 C (Up = autoreclosing diabled, Down = autoreclosing enabled)

Clear terminal marking ensure readability over time and prevent misuses

Easy coupling with S2C and F2C accessories on right hand side (valid for F3C-AR230 C only)

Frontal LED to clearly identify the device status

Connection to adapter link for the main protection device toggle

Locking

QR code to quickly access product main details and relevant documentation

* Coming soon



Compactness
Motor operator and autoreclosing units can enhance space saving in switchboards and consumer units: MOD and AR are in just one module, AR230 C in one and half modules.



Connectivity
The ranges can be fully integrated into the InSite energy management system either via Modbus or via Wi-Fi, thanks to the compact communication modules* that can be mounted on the Motor Operating Devices and Auto-Reclosing units.

* Coming soon



Expandability
Enhanced compatibility with main protection devices and with the wide portfolio of System pro M compact® accessories, as well as the extended voltage rages in two versions (24-48 V AC/DC and 230-240 V AC), allow more flexibility when installing.



Laser printing
Information like wiring diagram and EAN code are laser printed on the side of the device. This allows higher resistance to friction, scratch, and solvent,ensuring easier installation and stock management.



Improved performances
AR230 C checks system insulation up to 24hrs after RCCB trips, to exclude any permanent fault before allowing the RCCB to reclose and therefore granting, whenever possible, power supply continuity.

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Ordering data
F3C-AR230 C, F3C-AR230 C H*



F3C-AR230 C

F3C-AR, F3C-AR230 C, (F3C-AR230 C H*)

Description	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Autoreclosing unit with system check, 110-240 V AC, for RCCB 2P 30mA	539759	F3C-AR230 C 2/30	2CSF201998R0035		0.130	1
Autoreclosing unit with system check, 110-240 V AC, for RCCB 2P 300mA	539858	F3C-AR230 C 2/300	2CSF202998R0035		0.130	1
Autoreclosing unit with system check, 110-240 V AC, for RCCB 4P 30mA	539957	F3C-AR230 C 4/30	2CSF203998R0035		0.130	1
Autoreclosing unit with system check, 110-240 V AC, for RCCB 4P 300mA	540052	F3C-AR230 C 4/300	2CSF204998R0035		0.130	1
Autoreclosing unit with system check, 230-240 V AC, for FH200 2P 30mA	795650	F3C-AR230 C H 2/30	2CSF205998R0035		0.130	1
Autoreclosing unit with system check, 230-240 V AC, for FH200 2P 300mA	795759	F3C-AR230 C H 2/300	2CSF206998R0035		0.130	1
Autoreclosing unit with system check, 230-240 V AC, for FH200 4P 30mA	795858	F3C-AR230 C H 4/30	2CSF207998R0035		0.130	1
Autoreclosing unit with system check, 230-240 V AC, for FH200 4P 300mA	795957	F3C-AR230 C H 4/300	2CSF208998R0035		0.130	1

* Coming soon

F3C-AR230 C Series
Technical features


F3C-AR23

	F3C-AR230 C 2/30	F3C-AR230 C 2/300	F3C-AR230 C 4/30	F3C-AR230 C 4/300
Suitable for:		RCCBs F200 (up to 100A), F200 B type (up to 63A) and VY (A, S, B type)		
	2P, 230 V, 30 mA	2P, 230 V, 300 mA	4P, 400 V, 30 mA	4P, 400 V, 300 mA
Number of modules		1,5		
Operating voltage		230-240 V AC (-15% +10%)		
Automatic reclosure after untimely tripping		Yes (up to 24 hours after the fault) System check: 1st time: ≈ 3 seconds 2nd time: ≈ 2 minutes 3rd time: ≈ 5 minutes 4th time to 48th time: ≈ 30 minutes		
Rd0 (rated non operating resistance between live parts and earth)	8 kΩ	800Ω	8 kΩ	800Ω
Rd (rated operating resistance between live parts and earth)	22 kΩ	8 kΩ	22 kΩ	8 kΩ
Earthing system		TT-TN		
Standard:		IEC63024 EN 63024		
Earth leakage check		Yes		
Max number of consecutive automatic reclosure attempts		48		
Reset time for counter of automatic reclosing attempts		45s		
Power consumption during operation		<26 VA		
Power consumption at rest		<1,5 VA		
Closing time		<1 s		
Opening time		<1 s		
Protection degree acc. to EN 60529		IP40 (housing)/IP20 (terminals)		
Operating temperature		-25 ...+60 °C		
Storage temperature		-40 ...+70 °C		
Overvoltage category		III		
Pollution degree acc. to EN 60664		2		
Shock resistance acc. to IEC/EN 60068-2-27		25g, 2shocks, 13ms		
Vibration resistance acc. to IEC/EN 60068-2-6		1g - 20 cycle at 5... 150 ...5 Hz		
Environmental conditions (damp heat) acc. to IEC/ EN 60068-2-30		28 cycles with 55°C/90-96% and 25°C/95-100%		
Terminal type		plug-in		
Cross-section of conductors		0,2...2,5 mm^2		
Tightening torque		0,4 Nm		
Stripping length of the cable		5 mm		
Locked state		Terminal 3		

F3C-AR230 C H* Series
Technical features



F3C-AR230 C H

	F3C-AR230 C H 2/30	F3C-AR230 C H 2/300	F3C-AR230 C H 4/30	F3C-AR230 C H 4/300
Suitable for:		RCCBs FH200		
	2P, 230 V, 30 mA	2P, 230 V, 300 mA	4P, 400 V, 30 mA	4P, 400 V, 300 mA
Number of modules		1,5		
Operating voltage		230-240 V AC (-15% +10%)		
Automatic reclosure after untimely tripping		Yes (up to 24 hours after the fault) System check: 1st time: ≈ 3 seconds 2nd time: ≈ 2 minutes 3rd time: ≈ 5 minutes 4th time to 48th time: ≈ 30 minutes		
Rd0 (rated non operating resistance between live parts and earth)	8 kΩ	800Ω	8 kΩ	800Ω
Rd (rated operating resistance between live parts and earth)	22 kΩ	8 kΩ	22 kΩ	8 kΩ
Earthing system		TT-TN		
Standard:		IEC63024 EN 63024		
Earth leakage check		Yes		
Max number of consecutive automatic reclosure attempts		48		
Reset time for counter of automatic reclosing attempts		45s		
Power consumption during operation		<26 VA		
Power consumption at rest		<1,5 VA		
Closing time		<1 s		
Opening time		<1 s		
Protection degree acc. to EN 60529		IP40 (housing)/IP20 (terminals)		
Operating temperature		-5 ...+40 °C		
Storage temperature		-40 ...+70 °C		
Overvoltage category		III		
Pollution degree acc. to EN 60664		2		
Shock resistance acc. to IEC/EN 60068-2-27		25g, 2shocks, 13ms		
Vibration resistance acc. to IEC/EN 60068-2-6		1g - 20 cycle at 5... 150 ...5 Hz		
Environmental conditions (damp heat) acc. to IEC/ EN 60068-2-30		28 cycles with 55°C/90-96% and 25°C/95-100%		
Terminal type		plug-in		
Cross-section of conductors		0,2...2,5 mm^2		
Tightening torque		0,4 Nm		
Stripping length of the cable		5 mm		
Locked state		Terminal 3		

* Coming soon

Ordering data
E 450 priority switches

—
E 451-5,7A
2CSC400030F0126



The priority switch is used in wiring systems where existing lead cross sections or the size of the power supply service box do not allow for simultaneous operation of two powerful loads (e.g. storage heating and flow-type heater).

The priority switch disconnects the long-term load (storage heating) for as long as the short-term consumer (flow-type heater) is switched on.

The coil of the priority switch is connected in series to the short-term load. When this load is switched on, the NC contact of the priority switch disconnects e.g. the heating system contactor.

Rated current range	Power loss	N° module	Bbn 4016779	Order details			Weight 1 piece	Pack unit
	W	[17.5 mm]	EAN	Type code	Order code	Price	kg	
6.7 ... 39 A	2.4	1	415903	E 451 – 5.7 A	2CDE160000R0901		0.1	10
6.7 ... 39 A	2.4	1	209502	E 452 – 5.7 A	2CDE160010R0901		0.1	10

		E 451-5.7	E 452-5.7
Technical details			
Operating coil			
Range of rated current	A		6.7 ... 39
equivalent to			1.5 ... 9 kW at 230 V, 4.6 ... 27 kW at 230/400 V
Threshold current	A		3.1 ... 5.3
OFF delay (max.)		0 main half waves	2 main half waves
Max. continuous current	A		43
Therm. continuous capacity at 40°C/104°F	W		5
Contact assembly			
Control contact			1 NC contact
Rated contact current at 250 V	A		1
Contact material			solid silver
Max. switching voltage	V		400
Max. switching capacity	VA		230
Max. switched current	A		1
Max. inrush current peak	A		5
Electr. service life			> 10□ operations
Mechanical service life			ca. 2 × 10□ operations
Max. electrical switching rate			ca. 1800 operations/hour
ON duration			100 %
Ambient temperature			– 20°C/– 4°F to +40°C/104°F
Response time			10 ... 20 ms
Release time		5 ... 20 ms	≥ 20 ms
Test voltage contact/coil			2.5 kV
Clearance and creepage distance			C/250 V AC according to IEC 669-1-23
Degree of protection			IP 40
Protection against electric shock			according to DIN VDE 0106 Part 100 (BGV A2)
Terminal contact	mm^2		series coil up to 16 mm^2, control contact up to 2.5 mm^2

Ordering data
LCR Load management relay

—
LCR
2CSM229901R1311



Installed downstream of the main circuit-breaker, it compares the actual power consumption of the system to a preset maximum permitted value. Additionally, the load management relay prevents tripping of the main circuit-breaker by sequentially switching off one non-priority load when the preset threshold is exceeded. One red LED and an integrated buzzer indicate the load OFF conditions.
At preset time intervals, the device automatically attempts to reconnect the previously disabled load.

Technical details		
Input		
Rated voltage Un	[Vac]	230 (-15%/+10%)
Rated frequency	[Hz]	50/60
Rated capacity In	[A]	32
Power consumption	[VA]	4
Display		
Type of display		backlit LCD
Resolution	[kW]	0.01
Display dimensions	[mm]	27 × 23
Non-priority load		
Regulating thresholds	[kW]	0.8..7
Resolution of threshold	[kW]	0.1
Delay of loads disconnection	[sec]	0..9999
Delay between one connection and the next one	[sec]	0..9999
Alarm notification		LED // buzzer
Relay output		
Rated current	[A]	16
Rated voltage	[Vac]	250
Climatic conditions		
Storage temperature		-10°C to +65°C
Operating temperature		-10°C to +45°C
Relative humidity		max. 90% (non-condensing)
Protection degree		
At terminals		IP20
On the front panel		IP51
Max cable cross-section		
rigid	[mm²]	4
flexible	[mm²]	6
Modules (18mm)	[No.]	2

Rated current	**Bbn 8012542**		**Order details**		**Weight 1 piece**	**Pack unit**
A	**EAN**	**Type code**	**Order code**	**Price**	**kg**	**pc.**
32	299011	LCR	2CSM229901R1311		0.135	1

Ordering data
Socket Outlets

—
M1175
2CSC400030F0132



—
M1173
2CSC400030F0133



—
M1174
2CSC400030F0134

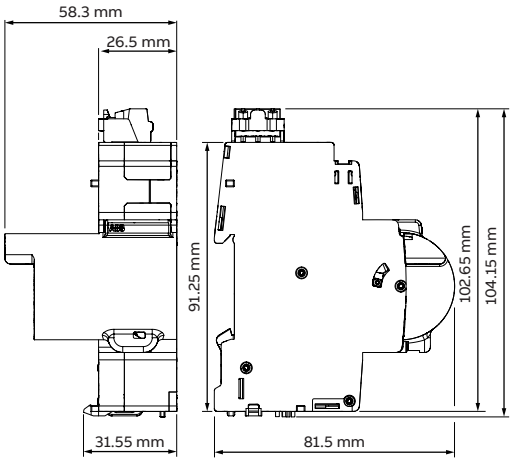


N° module	Bbn 8012542		Order details		Weight 1 piece	Pack unit
[17.5 mm]	**EAN**	**Type code**	**Order code**	**Price**	**kg**	
German Shuko standard modular sockets						
2.5	027850	M1175	2CSM210000R0721		0.120	4
Italian P30 standard modular sockets						
2.5	004103	M1173	2CSM110000R0701		0.120	4
French standard modular sockets						
2.5	006602	M1174	2CSM110000R0711		0.120	4

			M1175	M1174	M1173
Technical details					
Rated voltage U_n		[V]			250 AC
Rated current I_n		[A]			16 (M1170, M1173, M1174, M1175)
Rated frequency		[Hz]			50/60
Power loss		[W]			0.6
Modules		[No.]			2.5
Safety shutters					yes, on entire range
Terminal type					positive safety
Cable section (ø min./max.)		[mm²]			2.5 / 16
Tightening torque		[Nm]			1.2
	storage	[°C]			-40 ... +70
Temperature	operating	[°C]			-25 ... +35
Protection degree					IP20
Reference standards			DIN VDE 0620-1	NF C 61 303	CEI 23-50
Approvals			VDE, GOST	LCIE, CEBEC, GOST	IMQ, GOST

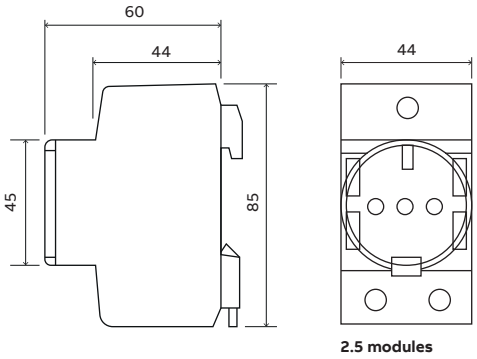
Overall Dimensions

F3C-AR230 C, F3C-AR230 C H*

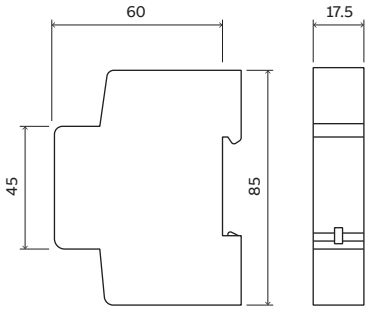


* Coming soon

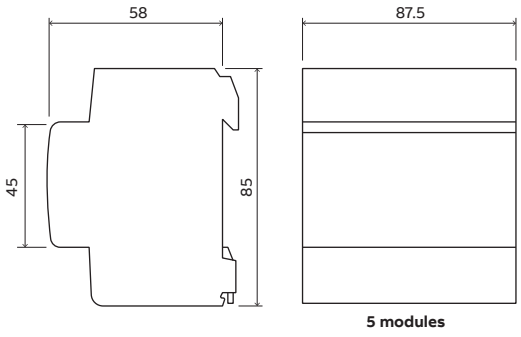
M1175, M1174, M1173 sockets



E 450



LCR



Notes

Energy efficiency

Table of contents

163–167	**Introduction**
168–170	**Technical features**
171	**Energy efficiency**
	Ordering data
172	**EQ meters B-series**
173–174	**EQ meters C-series**
175–179	**EQ meters A-series**
180–183	**InSite pro M compact® System**
185	**AG Timer electro-mechanical time switches**
186–187	**DBT Timer digital time switches**
188–189	**E 232 staircase lighting time-delay switches**
190	**T Line twilight switches**
191	**TL Line twilight switches**

192 **DWA twilight astronomical switches**

193 **E 233 electro-mechanical hour counters**

194 **VLMD, AMTD digital instruments with alarm relay**

195–197 **Overall dimensions**

Energy savings, safety gains
Keeping all the factors in view

ABB is the world-leading provider of smarter home, smarter building and intelligent community solutions. Its complete offering can help to achieve significant reduction of energy budget through an accurate monitoring and control of every parameter of the building: heating temperature, lighting, energy consumption of electric appliances can be adapted to actual needs, with a substantial saving potential without compromising comfort, safety or quality of life.



Commercial and residential buildings account for a big part of global end-user energy demand. ABB's solutions can help to achieve savings through an accurate monitoring and control of electric loads such HVAC systems, lighting installations and appliances.

The modular DIN rail electricity meters offer a wide range of programmable functions useful to measure electricity consumption and reduce energy costs. The line of DIN-mounted electricity meters and the wide range of communication adapters make sure to provide the perfect solution for every application.

Control loads operations in a system improves functionality and optimize power consumption. Programming the control of electric appliances according to the needs of each application obtains measurable advantages in terms of comfort and reduction of power wastage.

The range of ABB’s modular analog and digital time switches includes several functions that guarantee the opening and closing of electrical circuits according to a scheduled program. AG analog time switches are available in both daily and weekly versions, with 16 A contact which can be operated according to a timing program. Some versions are equipped with a built-in battery, generally charged by the network voltage, which enables them to maintain the timing function even in case of lengthy power supply failures.

DBT digital time switches ABB are equipped with a permanent EEPROM memory to ensure that the scheduled timing is followed and the date and hour settings are maintained even in case of power down. The range, used for both daily and weekly programming, includes single/double channel versions with a change-over contact and a switching capacity of 16 or 10 A. Some time switches can be combined with DT-DCF antenna for automatic synchronization with Frankfurt official time. New features include a holiday mode that allows forcing of the ON-OFF output for a certain period, a random mode used to simulate event presence, and a waiver mode to carry out waivers remotely or locally.





Rationalization of the light consumption is very important.

To command the lighting in stairs of buildings, ABB offers the time-delay switch E 232. The switch includes an electro-mechanical timer with a synchronous motor drive to ensure high operational safety in whatever mounting position. The time range is adjustable in increments of 15 seconds from 1 to seven minutes. Devices include an integrated warning feature (warning by blinking) according to DIN 18015-2 as well as a 60 minute long-time function.

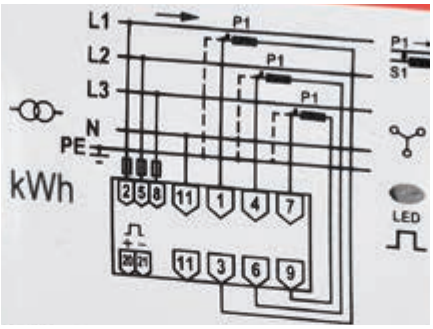
For lamps control, ABB's TW modular twilight switches allow to switch on and off lighting devices according to a scheduled level of ambient light. They are used in combination with a sensor to detect if the ambient light is higher or lower than the set level. TW2/10K, equipped with three different types of adjustment range (2:100, 2:1000, 2:10000), fits the daylight applications where Lux values are very high. This range addresses all applications, for example shop windows, parking areas and so on.

Hour counters – as E 233 series – offer a very important function for energy budget improvement. They are used to record operating times as well as to determine idle times and off times of electric loads in commercial or domestic installations, with an immediate feedback on energy consumption.

In terms of energy quality, modular digital instruments of VLMD and AMTD series measure voltage, current and frequency. The range is composed by a voltmeter for a.c./d.c. voltage monitoring, ammeter for a.c./d.c. currents, and frequency meter. Ammeters measure in indirect insertion thanks to measuring accessories, like current transformer for a.c. and shunt for d.c. The full scale is programmable by the user.

Electricity meters
The details make the difference





The DIN rail mounted electricity meters are available in single phase C11, B21 and A41 for direct connection and A42 for transformer connection.

For three phase direct connection there are the C13, B23 and A43, while B24 and A44 are for indirect connection.



There are five available functionalities for EQ meters with basic to advanced functionalities.

C-series are available with Steel Functionality that includes active energy of class 1, pulse or alarm output.

B-series are in Bronze, Silver and Silver categories. In addition to what is available in steel category, it is possible to import/export of energy in Bronze class and in Silver class it is also possible to have resettable register, optional class of 0.5S and fixed I/O's.

A-series are available in Gold and Platinum categories in addition to previous mentioned classes. Basic and advanced clock function, harmonics(THD) and configurable I/O's is available in these categories.



The EQ meters A-series and B-series offer flexible solutions for collecting data. This can be done via pulse output or serial communication interfaces such as M-bus, Modbus RTU and an Infrared port(IR). The meters can be integrated into InSite pro M compact® system , which can collect the data from meters and give a remote monitoring of system with the help of mentioned communication interfaces.



MID – Measuring Instrument Directive – means common testing rules based on IEC standards for all EU countries. You find a label certifying that the ABB electricity meter is tested and approved according to MID directive.

Technical features table for electricity meters

EQ meters





Technical features		
	A41	**A42**
Voltage/current inputs		
Nominal voltage	230 V AC	
Voltage range	57.7 - 288 V AC (-20% - +15%)	57.7 - 288 or 100 ... 288 V AC (-20% - +15%)
Power dissipation voltage circuits	1.5 VA (0.6 W) total at 230 V AC	
Power dissipation current circuits	0.006 VA (0.006 W) at I_{ref} and I_b	0.001 VA (0.001 W) at I_{re}f and I_n
Base current I_b	5 A	–
Rated current I_n	–	1 A
Reference current I_{ref}	5 A	1 A
Transitional current I_{tr}	0.5 A	0.05 A
Maximum current I_{max}	80 A	6 A
Minimum current I_{min}	0.25 A	0.02 A
Starting current I_{st}	< 20 mA	< 1 mA
Terminal wire area	1 - 25 mm^2	0.5 - 10 mm^2
Recommended tightening torque	2 Nm	1.2 Nm
Communication		
Terminal wire area	0.5 - 1 mm^2	0.5 - 1 mm^2
Recommended tightening torque	0.25 Nm	0.25 Nm
Transformer ratios		
Configurable current ratio (CT)	–	1/9 - 9999/1
Configurable voltage ratio (VT)	–	1/999 - 999999/1
Pulse indicator (LED)		
Pulse frequency	1000 imp/kWh	5000 imp/kWh
Pulse length	40 ms	40 ms
Frequency	50 or 60 Hz ± 5%	50 or 60 Hz ± 5 % (or 16.7 Hz optional)
Accuracy Class	B (Cl.1) and Reactive Cl. 2	B (Cl.1), C (Cl. 0,5 S) and Reactive Cl. 2
Active energy	1%	0.5%, 1%
Display of energy	Pixel oriented display (LCD)	Pixel oriented display (LCD)
Environmental		
Operating temperature	-40°C - +70°C	-40°C - +70°C
Storage temperature	-40°C - +85°C	-40°C - +85°C
Humidity	75% yearly average, 95% on 30 days/year	75% yearly average, 95% on 30 days/year
Resistance to fire and heat	Terminal 960°C, cover 650°C (IEC 60695-2-1)	Terminal 960°C, cover 650°C (IEC 60695-2-1)
Resistance to water and dust	IP20 on terminal block without protective enclosure and IP51 in protective enclosure, according to IEC 60529.	IP20 on terminal block without protective enclo protective enclosure, according to IEC 60529.
Mechanical environment	Class M2 in accordance with the Measuring Instrument Directive (MID). (2014/32/EU).	Class M2 in accordance with the Measuring Inst (MID). (2014/32/EU).
Electromagnetic environment	Class E2 in accordance with the Measuring Instrument Directive (MID), (2014/32/EU).	Class E2 in accordance with the Measuring Inst (MID), (2014/32/EU).





	A43	A44
	3x230/400 V AC	
	3x57.7/100 ... 288/500 V AC (-20% - +15%)	3x57.7/100 ... 288/500 or 3x100/173 ... 400/690 V AC (-20% - +15%)
	1.8 VA (0.8 W) total at 230 V AC	
	0.006 VA (0.006 W) per phase at I_{ref}	0.001 VA (0.001 W) at I_{ref} and I_n*
	5 A	–
	–	1 A
	5 A	1 A
	0.5 A	0.05 A
	80 A	6 A
	0.25 A	0.01 A
	< 20 mA	< 1 mA
	1 - 25 mm^2	0.5 - 10 mm^2
	2 Nm	1.2 Nm
	0.5 - 1 mm^2	0.5 - 1 mm^2
	0.25 Nm	0.25 Nm
	–	1/9 - 9999/1
	–	1/999 - 999999/1
	1000 imp/kWh	5000 imp/kWh
	50 or 60 Hz ± 5 %	
	A (Cl.2), B (Cl.1) and Reactive Cl. 2	B (Cl.1), C (Cl. 0,5 S) and Reactive Cl. 2
	1%	0.5%, 1%
	Pixel oriented display (LCD)	Pixel oriented display (LCD)
	-40°C - +70°C	-40°C - +70°C
	-40°C - +85°C	-40°C - +85°C
	75% yearly average, 95% on 30 days/year	75% yearly average, 95% on 30 days/year
	Terminal 960°C, cover 650°C (IEC 60695-2-1)	Terminal 960°C, cover 650°C (IEC 60695-2-1)
osure and IP51 in	IP20 on terminal block without protective enclosure and IP51 in protective enclosure, according to IEC 60529.	IP20 on terminal block without protective enclosure and IP51 in protective enclosure, according to IEC 60529.
trument Directive	Class M2 in accordance with the Measuring Instrument Directive (MID). (2014/32/EU).	Class M2 in accordance with the Measuring Instrument Directive (MID). (2014/32/EU).
rument Directive	Class E2 in accordance with the Measuring Instrument Directive (MID), (2014/32/EU).	Class E2 in accordance with the Measuring Instrument Directive (MID), (2014/32/EU).





Technical features		
	C11	**C13**
Outputs		
Type	Transistor	
Current	2 - 100 mA	
Voltage	5 - 40 V DC	
Pulse output frequency	100 or 1000 (imp/kWh)	
Pulse length	100 ms	
Terminal wire area	0.5 - 10 mm^2	0.5 - 6 mm^2
Recommended tightening torque	0.8 Nm	0.25 Nm
EMC compatibility		
Impulse voltage test	6 kV 1.2/50 µs (IEC 60060-1)	
Surge voltage test	4 kV 1.2/50 µs (IEC 61000-4-5)	
Fast transient burn test	4 kV (IEC 61000-4-4)	
Immunity to electromagnetic HF-fields	80 MHz - 2 GHz at 10 V/m (IEC 61000-4-3)	
Immunity to conducted disturbance	150 kHz - 80 MHz (IEC 61000-4-6)	
Immunity to disturbance with harmonics	2kHz - 150kHz	
Radio frequency emission	EN 55022, class B (CISPR22)	
Electrostatic discharge	15 kV (IEC 61000-4-2)	
Standards	IEC 62052-11, IEC 62053-21 class 1, GB/T 17215.211-2006, GB/T 17215.321-2008 class 1, GB 4208-2008, EN 50470-1, EN 50470-3 category B	
Mechanical		
Material	Glass reinforced polycarbonate	
Dimensions		
Width	17,5 mm	54 mm
Height	111 mm	122 mm
Depth	65 mm	65 mm
DIN modules	1	3

Energy efficiency
EQ meters B-series

B series



Technical features	B series	
Outputs		
Type	Transistor or MOSFET	
Current	2 - 100 mA	
Voltage	5 - 240 V AC/DC For meters with only 1 output 5 -40 VDC	
Pulse output frequency	Programmable 1 - 999999 imp/kWh	
Pulse length	Programmable 10 - 990 ms	
Terminal wire area	0.5 - 1 mm^2	
Recommended tightening torque	0.25 Nm	
Inputs		
Voltage	0 - 240 V AC/DC	
OFF	0 - 5 V AC/DC	
ON	57 - 240 V AC/24 - 240 V DC	
Min. pulse length	30 ms	
Terminal wire area	0.5 - 1 mm^2	
Recommended tightening torque	0.25 Nm	
EMC compatibility		
Impulse voltage test	6 kV 1.2/50 µs (IEC 60060-1)	
Surge voltage test	4 kV 1.2/50 µs (IEC 61000-4-5)	
Fast transient burn test	4 kV (IEC 61000-4-4)	
Immunity to electromagnetic HF-fields	80 MHz - 2 GHz (IEC 61000-4-6)	
Immunity to conducted disturbance	150 kHz - 80 MHz (IEC 61000-4-6)	
Immunity to disturbance with harmonics	2 kHz - 150 kHz	
Radio frequency emission	EN 55022, class B (CISPR22)	
Electrostatic discharge	15 kV (IEC 61000-4-2)	
Standards	IEC 62052-11, IEC 62053-21 class 1 & 2, IEC 62053-22 class 0,5 S, IEC 62053-23 class 2, IEC 62054-21, GB/T 17215.211-2006, GB/T 17215.312-2008 class 1 & 2, GB/T 17215.322-2008 class 0,5 S, GB 4208-2008, EN 50470-1, EN 50470-3 category A, B & C	
Mechanical		
Material	Polycarbonate in transparent front glass. Glass reinforced polycarbonate in bottom case and upper case. Polycarbonate in terminal cover.	
Dimensions	**B21**	**B23/B24**
Width	35 mm	70 mm
Height	97 mm	97 mm
Depth	65 mm	65 mm
DIN modules	2	4

Ordering data
EQ meters B-series

The B-series are in single phase and three phase metering with direct connection up to 65A and indirect connection up to 6A.

The B-series meters are mounted on a DIN rail and are suitable for installation in distribution boards. They are suitable in applications where there is a need for reliable energy measurements and where space is limited.

Main characteristics include:
- Single and three phase metering
- Active energy, accuracy class B (Cl. 1)
- • Direct metering up to 65A and indirect metering up to 6A
- • LCD display
- • Pulse output or alarm
- • 4 tarrifs
- • IEC and MID type approval

The information shown on the display can be changed in the settings of the meter using the push buttons.

The push button used for changing settings can be sealed. The EQ meters B-series includes up to 4 tariffs options which can be changed by inputs, communication. All EQ meters B-series are tested and approved according to different standards. These standards covers all technical aspects of the meter such as climate conditions, electro-magnetic compatibility (EMC), electrical requirements, mechanical requirements and the accuracy.

N° module	Bbn 7392696		Order details		Weight 1 piece	Pack unit
[17.5 mm]	EAN	Type code	Order code	Price	kg	
6	310246	OD4165	2CMA131024R1000		0.420	1
6	310253	OD4110	2CMA131025R1000		0.450	1

Energy efficiency
EQ meters C-series

The C-series are compact meters available both in single phase and three phase for direct connected applications up to 40 A. The small size and the DIN rail mounting makes it suitable for installation in distribution boards and small standard enclosures. The power consumption of the meter is very low, less than 0.3W and 0.6W at 230V AC.

Main characteristics include:
- Single and three phase metering
- Active energy, accuracy class B (Cl. 1)
- Direct metering up to 40 A
- LCD display
- Pulse output or alarm
- IEC and MID type approval

EQ meters C-series have an LCD with large digits showing energy register and instrumentation values. Due to the compact design of the meters,1 and 3 modules are available. The meters have a wide temperature range which makes it possible to install the meter in many locations, -25°C ... ±70°C (storage -25°C ... ±80°C).

Navigating the meter is easily done via the push-button below the display. The C-series meters support reading of instrument values. A number of electrical properties can be read:
- Power factor
- Active power
- Current
- Voltage

C-series meters have one output that could be used as pulse output or as an alarm output.
They are type approved according to IEC and MID. MID is the Measuring Instruments Directive 2014/32/EU from the European Commission.
The type approval is according to standards that covers all relevant technical aspects of the meter.
These include climate conditions, electromagnetic compatibility (EMC), electrical requirements, mechanical requirements and accuracy.
MID versions have initial verification according to annex F of the Measuring Instruments Directive.



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C11

Direct connected energy meter up to 40 A. IEC approval. Instrument values. Alarm function. Optional - Verified and approved according to MID.

Energy meters single phase electricity meter, 1 DIN, 40 A

Class B (Cl.1) with functionality level Steel. Active energy						
Description	**Bbn 7392696 EAN**	**Order details**		**Price 1 piece**	**Weight 1 piece kg**	**Pack unit pc.**
		Type code	**Order code**			
1 x 230 V AC, Pulse output 1000 imp/kWh	035712	C11 110 - 101*)	2CMA103571R1000		0.070	1
Class 1 with functionality level Steel. Active energy						
1 x 230 V AC, Pulse output 1000 imp/kWh	035729	C11 110 - 301	2CMA103572R1000		0.070	1



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C13

Direct connected energy meter. IEC approval. 3 elementmetering. Instrument values. Alarm function. Optional - Verified and approved according to MID.

Energy meters three phase electricity meter, 3 DIN, 40 A

For direct connection up to 40 A. Class B (Cl.1) with functionality level Steel. Active energy						
Description	**Bbn 7392696 EAN**	**Order details**		**Price 1 piece**	**Weight 1 piece kg**	**Pack unit pc.**
		Type code	**Order code**			
3 x 230/400 V AC, Pulse output 1000 imp/kWh	035743	C13 110 - 101*)	2CMA103574R1000		0.170	1
For direct connection up to 40 A. Class 1 with functionality level Steel. Active energy						
3 x 230/400 V AC, Pulse output 1000 imp/kWh	035750	C13 110 - 301	2CMA103575R1000		0.170	1

*) MID approval according to Module B and F

Ordering data
EQ meters A-series

A-series are advanced meters in single phase and three phase for active energy. They are designed for installation on a DIN rail in distribution boards and small enclosures. Key product features are internal clock for tariff handling and load profiles, configurable I/O and for direct metering up to 80A and indirect metering up to 6A.

Main specifications are:
- Single phase and three phase metering
- Active energy, accuracy class B (Cl. 1)
- Measure import/export energy
- Direct connection up tp 80A and indirect connection up to 6A
- Pixel-oriented display
- In-built M-bus or Modbus, pulse output and IR for SCA
- Internal clock for up to 4 tariffs and monthly values
- Memory back-up (EEprom)
- IEC and MID approval

The display is pixel-oriented and can show up to four quantities at the same time. Navigating the meter is easily done via the push-buttons which is protected against unauthorized use. The meters have up to 7 modules that saves space in the installation.

The operating temperature range is from -40°C to +70°C (storage +80°C).

A-series have 4 ways to communicate depending on the type:
- In-built M-bus or Modbus (RS485)
- IR interface for serial communcation (together with the serial communication adapter)
- Pulse output
- Front display

It is possible to choose information shown on the display and change the settings in the meter using the push buttons.

The push button used for changing settings can be sealed. The EQ meters A-series includes up to 4 tariffs options which can be changed by inputs, communication or internal clock.



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A41

Direct connected energy meter up to 80 A. Verified and approved according to MID. IEC approval.Instrument values. Alarm function. Communication - Infrared (M-Bus). Optional - Communication with M-Bus, RS-485 Modbus, RS-485 EQ bus.

Energy meters single phase electricity meter, 4 DIN with IR port, 80 A

Description	Bbn	Order details		Price	Weight	Pack
	7392696			1 piece	1 piece	unit
	EAN	Type code	Order code		kg	pc.
Class B (Cl. 1) with functionality level Steel. Active energy						
57.7...288 V AC, Pulse output	705547	A41 111 - 100	2CMA170554R1000		0.230	1
57.7...288 V AC, Pulse output, RS-485	705004	A41 112 - 100	2CMA170500R1000		0.230	1
57.7...288 V AC, Pulse output, M-Bus	002400	A41 113 - 100	2CMA100240R1000		0.230	1
Class 1 (Reactive Class 2) with functionality level Silver. Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.						
57.7...288 V AC, 2 output, 2 input, RS-485	705035	A41 312 - 100	2CMA170503R1000		0.230	1
57.7...288 V AC, 2 output, 2 input, M-Bus	705042	A41 313 - 100	2CMA170504R1000		0.230	1
Class B (Cl. 1) (Reactive Cl. 2) with functionality level Gold. Activeand reactive energy, import/export, tariffs 1-4, tariff controlled via inputs, communication or clock, previous values, max and min demand.						
57.7...288 V AC, 2 output, 2 input, RS-485	705059	A41 412 - 100	2CMA170505R1000		0.230	1



A42

Transformer CTVT connected energy meter up to 6 A. Verified and approved according to MID. IEC approval. Voltage V - 57...288 V AC. Instrument values. Alarm function. Communication - Infrared (M-Bus). Optional - Communication with M-Bus, RS-485 Modbus, RS-485 EQ bus.

Energy meters single phase electricity meter, 4 DIN with IR port, 80 A

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
Class B (Cl. 1) with functionality level Steel. Active energy						
57.7...288 V AC, Pulse output	705554	A42 111 - 100	2CMA170555R1000		0.200	1
57.7...288 V AC, Pulse output, RS-485	705103	A42 112 - 100	2CMA170510R1000		0.200	1
57.7...288 V AC, Pulse output, M-Buss	002424	A42 113 - 100	2CMA100242R1000		0.200	1
Class B (Cl. 1) (Reactive Cl. 2) with functionality level Silver. Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.						
57.7...288 V AC, 2 output, 2 input, RS-485	705127	A42 312 - 100	2CMA170512R1000		0.200	1
Class C (Cl. 0.5 S) (Reactive Cl. 2) with functionality level Platinum. Active and reactive energy, import/export, tariffs 1-4, tariff controlled via inputs, communication or clock, previous values, max and min demand, advanced load profiles, harmonics and THD. Versions for 16.7, 50 or 60 Hz						
57.7...288 V AC, configurable 4 I/O channels, RS-485	002387	A42 552 - 100	2CMA170505R1000		0.200	1
100...288 V AC, configurable 4 I/O channels, RS-485 16.7*), 50 or 60 Hz	705189	A42 552 - 120	2CMA100518R1000		0.200	1
100...288 V AC, configurable 4 I/Ochannels, M-Bus 16.7*), 50 or 60 Hz	705196	A42 553 - 120	2CMA100519R1000		0.200	1

*) The meters are not tested and approved for placement on rolling stock.



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A43

Direct connected energy meter up to 80 A. Verified and approved according to MID. IEC approval. 2- and 3-element metering. Instrument values. Alarm function. Communication - Infrared (M-Bus). Optional - Communication with M-Bus, RS-485 Modbus, RS-485 EQ bus.

Energy meters single phase electricity meter, 4 DIN with IR port, 80 A

Class B (Cl. 1) with functionality level Steel. Active energy						
Description	**Bbn**	**Order details**		**Price**	**Weight**	**Pack**
	7392696			**1 piece**	**1 piece**	**unit**
	EAN	**Type code**	**Order code**		**kg**	**pc.**
3 x 57.7/100...288/500 V AC, Pulse output	705202	A43 111 - 100	2CMA170520R1000		0.440	1
3 x 57.7/100...288/500 V AC, Pulse output, RS-485	002448	A43 112 - 100	2CMA100244R1000		0.440	1
3 x 57.7/100...288/500 V AC, Pulse output, M-Bus	002455	A43 113 - 100	2CMA100245R1000		0.440	1
Class B (Cl. 1) (Reactive Cl. 2) with functionality level Bronze. Active and reactive energy, import/export.						
3 x 57.7/100...288/500 V AC, Pulse output, RS-485	705226	A43 212 - 100	2CMA170522R1000		0.440	1
3 x 57.7/100...288/500 V AC, Pulse output, M-Bus	705233	A43 213 - 100	2CMA170523R1000		0.440	1
Class B (Cl. 1) (Reactive Cl. 2) with functionality level Silver. Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.						
3 x 57.7/100...288/500 V AC, 2 output, 2 input, RS-485	705257	A43 312 - 100	2CMA170525R1000		0.440	1
3 x 57.7/100...288/500 V AC, 2 output, 2 input, M-Bus	705264	A43 313 - 100	2CMA170526R1000		0.440	1
Class B (Cl. 1) (Reactive Cl. 2) with functionality level Platinum. Active and reactive energy, import/export, tariffs 1-4, tariff controlled via inputs, communication or clock, previous values, max and min demand, advanced load profiles, harmonics and THD.						
3 x 57.7/100...288/500 V AC, configurable 4 I/O channels, RS-485	705318	A43 512 - 100	2CMA170531R1000		0.440	1
3 x 57.7/100...288/500 V AC, Cconfigurable 4 I/O channels, M-Bus	705325	A43 513 - 100	2CMA170532R1000		0.440	1



A44

Transformer CTVT connected energy meter up to 6 A. Verified and approved according to MID. IEC approval. 2- and 3-element metering. Instrument values. Alarm function. Communication - Infrared (M-Bus). Optional - Communication with M-Bus, RS-485 Modbus, RS-485 EQ bus.

Energy meters three phase electricity meter, 7 DIN with IR port, 6 A

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
Class B (Cl. 1) with functionality level Steel. Active energy						
3 x 57.7/100...288/500 V AC, Pulse output	000130	A44 211 - 100	2CMA100013R1000		0.350	1
3 x 57.7/100...288/500 V AC, Pulse output, RS-485	705349	A44 212 - 100	2CMA170534R1000		0.350	1
3 x 57.7/100...288/500 V AC, Pulse output, RS-485	705356	A44 213 - 100	2CMA170535R1000		0.350	1
Class B (Cl. 1) (Reactive Cl. 2) with functionality level Bronze. Active and reactive energy, import/export.						
3 x 57.7/100...288/500 V AC, Pulse output	705363	A44 311 - 100	2CMA170536R1000		0.350	1
Class C (Cl. 0.5 S) (Reactive Cl. 2) with functionality level Silver. Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.						
3 x 57.7/100...288/500 V AC, Pulse output, RS-485	705370	A44 352 - 100	2CMA170537R1000		0.350	1
3 x 57.7/100...288/500 V AC, Pulse output, M-Bus	705387	A44 353 - 100	2CMA170538R1000		0.350	1
Class B (Cl. 1) (Reactive Cl. 2) with functionality level Silver. Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.						
3 x 57.7/100...288/500 V AC, 2 output, 2 input	705400	A44 452 - 100	2CMA170540R1000		0.350	1
Class C (Cl. 0.5 S) (Reactive Cl. 2) with functionality level Platinum. Active and reactive energy, import/export, tariffs 1-4, tariff controlled via inputs, communication or clock, previous values, max and min demand, advanced load profiles, harmonics and THD.						
3 x 57.7/100...288/500 V AC, configurable 4 I/O channels, RS-485	705455	A44 552 - 100	2CMA170545R1000		0.350	1
3 x 57.7/100...288/500 V AC, configurable 4 I/O channels, M-Bus	705462	A44 553 - 100	2CMA170546R1000		0.350	1
3 x 57.7/100...400/690 V AC, 1 input + 1 output, RS-485	705493	A44 552 - 110	2CMA170549R1000		0.350	1
3 x 57.7/100...400/690 V AC, 1 input + 1 output, M-Bus	705486	A44 553 - 110	2CMA170548R1000		0.350	1

Ordering data
InSite pro M compact® System

System pro M compact® InSite is a solution in range of connected devices to support energy and asset management in electrical distribution.

The solution delivers highest data security standards as well as continuous upgrades thanks to regular firmware updates.

SCU100 is a control unit, that has been specifically developed to allow users to better manage energy and assets in sub distribution boards. It can gather data up to 16 energy meters and in addition to 96 current sensors.

Remotely monitoring of the system is made possible by a digital communication that supports different protocols: Modbus RTU, TCP. Its built-in web server offers intuitive access to the measured data, the configuration settings and the system parameters, providing one unique interface for both operations and commissioning process. The two interfaces – LAN (TCP/IP or Modbus TCP) and RS485 (Modbus RTU) – guarantee straightforward integration into any IT infrastructure.

To enable monitoring and control of the complete energy distribution system, the range is completed with a flexible choice of input and output modules, which can be easily connected to ABB's System pro M compact® accessories of MCBs and RCDs, as well as other DIN-Rail products with digital inputs or outputs.

Available functionalities are in range of simple monitoring of the installation to advanced analysis of historical data, customized alarms and implementation of automated actions to reduce energy consumption, identify potential risks and ensure operational continuity.



Accessories
The Sub-distribution Control Unit needs a flat cable to gather information from current sensors and digital I/O modules. The flat cable should be a 4-pin cable, flexible in length. Devices can be placed at customizable distances required by the specific application.

Sub distribution control unit	Technical feature	Unit	Description
	Supply voltage	[VAC]	80-277 (L1-N, +5%)
	Frequency	[Hz]	50/60
	Power input (L1-N)	[W]	5...45 depending on number of sensors and I/O modules
	Power input , current trtransformer, secondary side	[VA]	Current circuit <2 (per phase)
	Voltage measurement range	[VAC]	80-277 (L1, L2, L3-N)
	Measurement range, current transformer, secondary side	[A]	nominal: 5 max: 6
	Hramonic component	[Hz]	up to 2000
	Data rate of Modbus RTU	[Baud]	RS485 2- wire, 2400...115200
	Refresh time		1sec / 30 sec (depending on type of data)
	Data storage and export		Integrated 1-year data storage Automatic CSV data export
	Communication		LAN: Modbus TCP/IP, SNMP v1, v2, encrypted v3 RS485: Modbus RTU
	Connected devices		Up to 96 sensors/digital channels Up to 16 meters
	LAN	[Mbit/s]	100
	Conductor cross-section	[mm^2]	0.5...2.5
	Mounting method		35mm DIN rail (DIN 5022)
	Degree of protection		IP20
	Dimensions	[mm]	161.5x87.0x64.9 (9WM)
	Oparting temperature	[°C]	-25... +60
	Stirage temperature	[°C]	-40... +85
	Standards		IEC61010-1

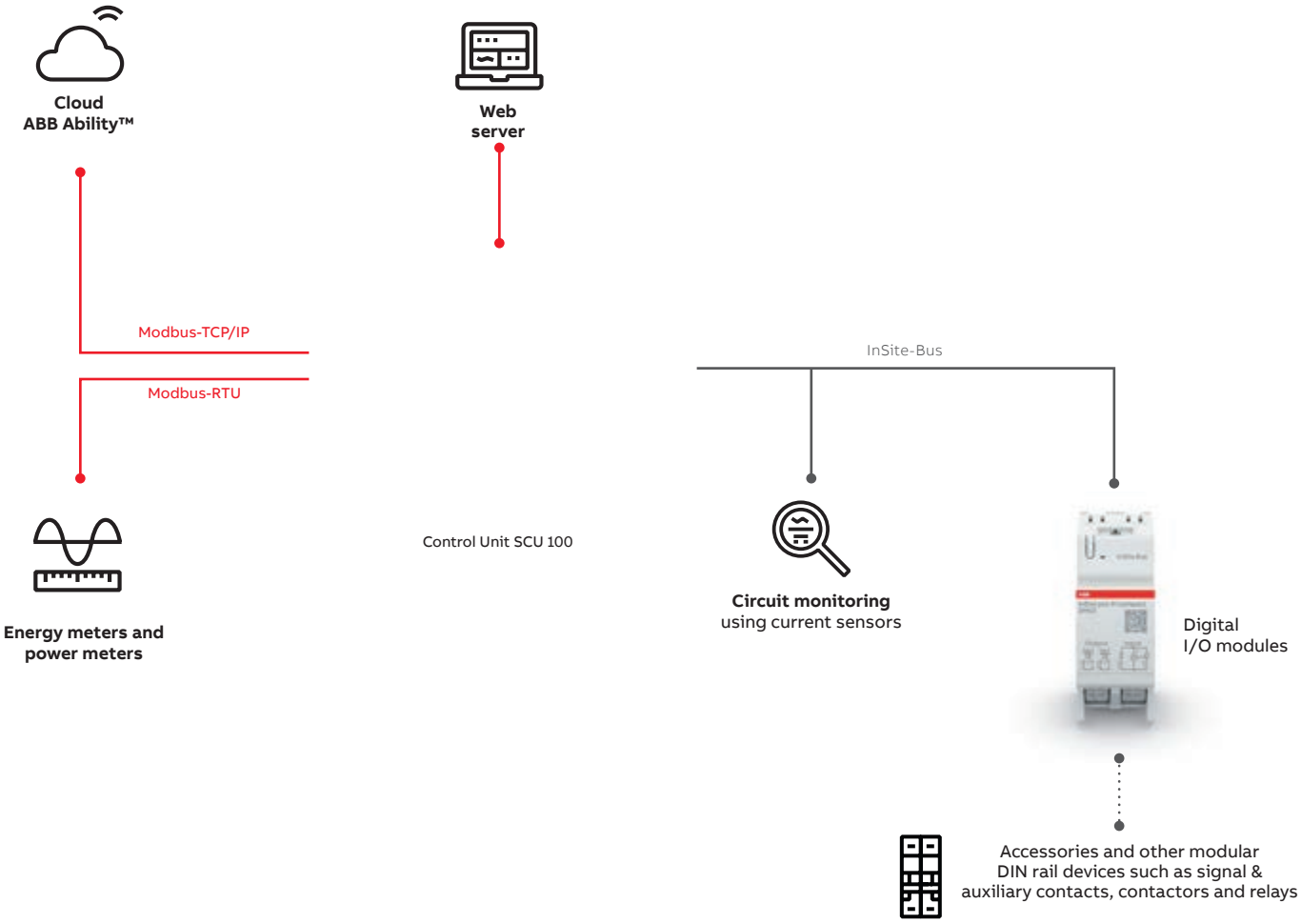
Main circuit accuracy		Description
Voltage		± 1%
Current		± 1%
Harmonic component (up to 2500Hz)		± 1%
Active power		± 2%
Apparent power		± 2%
Reactive power		± 2%
Power factor		± 2%



Input and Output modules	Technical feature	Unit	Input module DM11	Output module DM00	Input and Output module DM10
	Number of digital channels		4 Input	4 Output	2 Input + 2 Output
	Voltage (min - max)*		active input: 22-26 Vdc	relay output: 5Vdc-240Vac	active input: 22-26Vdc relay output: 5Vdc-240Vac
	Current (min - max)*		active input: 4mA	relay output: 5mA-2.5A Max 4,5A (<5sec)	active input: 4mA relay output: mA-2.5A Max 4,5A (<5sec)
	Pulse minimum duration**	[ms]	5	n/a	5
	Pulse frequency**	[Hz]	100	n/a	100
	Terminals cross section	[mm2]	2,5	2,5	2,5
	Mounting method		35 mm DIN rail (DIN 50022) or SMISSLINE TP plug base		
	Degree of protection		IP20	IP20	IP20
	Dimensions	[mm]	36x88x65	36x88x65	36x88x65
	Operating temperature	[°C]	-25...+60	-25...+60	-25...+60
	Storage temperature	[°C]	-40...+85	-40...+85	-40...+85
	Standards		IEC 61010	IEC 61010	IEC 61010

*relay output values reported are applicable to resistive load
**Applicable only to active inputs

Communication network



Ordering data
AG Timer electro-mechanical time switches

These analog timers are designed for installation on DIN-rail. They control circuit opening and closing according to the scheduled program. Available both on daily and weekly versions and equipped with a 16 A contact. They can be set on the scheduled program or on the permanent ON-OFF function. The AD1NO-R-15m, AD1CO-R-15m, AW1CO-R-120m, AD1CO-R-30m, AW1CO-R-210m versions are equipped with a built-in battery, charged by the network voltage, which allows the devices to maintain the set time also in case of long (up to 150 h) power supply failures. The products fit applications such as control of lighting systems of shops or commercial buildings, heating and ventilation systems as well as control of automatic irrigation systems of private or external gardens.



AD1NO-R-15m
2CSM222461R1000



AD1CO-15m
2CSM222421R1000

Technical features									
		AD1NO-15m	**AD1NO-R-15m**	**AD1CO-30m**	**AD1CO-R-30m**	**AW1CO-R-210m**	**AD1CO-15m**	**AD1CO-R-15m**	**AW1CO-R-120m**
Rated voltage	[V]	230 AC							
Contact type		1NO	1NO	1NO/NC					
Resistive load	[A]	16							
Inductive load	[A]	4							
Rated frequency	[Hz]	50/60							
Setting step (tappet)	[min]	15	15	30	30	210	15	15	120
Number of tappets		96	96	48	48	48	96	96	84
Running reserve	[h]	-	100	-	150	150	-	150	150
Power consumption	[W]	0.5							
Max. switching power	[VA]	4000							
Incandescent	[W]	2500	2500	3000					
Fluorescent	[VA]	1200	1200	1200					
Low voltage halogen	[VA]	2000	2000	2000					
Halogen (230 V ~)	[W]	2500	2500	3000					
Low consumption lamp (CFL)	[VA]	900	900	900					
LED	[VA]	100	100	200					
Protection degree		IP20							
Max. terminal cross-section	[mm^2]	4							
Tightening torque	[Nm]	0.3	0.3	0.5					
Terminals		with captive screws							
Installation type		on DIN rail							
Operating temperature	[°C]	-10...+45	-10...+45	-10...+50					
Storage temperature	[°C]	-20...+60	-20...+60	-20...+70					
Modules	[n°]	1	1	2	2	2	2.5	2.5	2.5
Reference standards		EN 60730-2-7							

Contacts	**Version**	**Bbn 8012542**	**Order details**		**Price 1**	**Weight 1 piece**	**Pack unit**
		EAN	**Type code**	**Order code**	**piece**	**kg**	**pc.**
1NO	Daily time switch without reserve	224716	AD1NO-15m	2CSM222471R1000		0.072	1
1NO	Daily time switch, running reserve	224617	AD1NO-R-15m	2CSM222461R1000		0.075	1
1NO/1NC	Daily time switch without reserve	224518	AD1CO-30m	2CSM222451R1000		0.105	1
1NO/1NC	Daily time switch, running reserve	224419	AD1CO-R-30m	2CSM222441R1000		0.109	1
1NO/1NC	Weekly time switch, running reserve	224310	AW1CO-R-210m	2CSM222431R1000		0.109	1
1NO/1NC	Daily time switch without reserve	224211	AD1CO-15m	2CSM222421R1000		0.112	1
1NO/1NC	Daily time switch, running reserve	081517	AD1CO-R-15m	2CSM208151R1000		0.116	1
1NO/1NC	Weekly time switch, running reserve	081418	AW1CO-R-120m	2CSM208141R1000		0.116	1

Notes

Ordering data
DBT Timer digital time switches

The unique design, with white back-light LCD display, and extreme ease of use with only four buttons, make DBT Timer ideal to automate the installation functions. The possibility to configure all digital devices via DBT Timer APP and Bluetooth connection makes the configuration and installation time even shorter. Add this paragraph as well in case you have enough space, otherwise skip the follow part: All functions and programs can be set on the device, and for the first time the device can also be programmed via app. This not only facilitates commissioning, but also ensures maximum flexibility. The range includes 1 and 2 channel versions, equipped with large capacity internal battery to maintain operation without power supply and permanent memory EEPROM, to avoid the risk of program loss and to maintain the date and time settings in the event of power failure, irrespective of its duration. The D Line is particularly useful in environments and situations where user management is required with a time schedule flexible enough to predict or exclude activities according to time and day of week or month.



DBT Timer

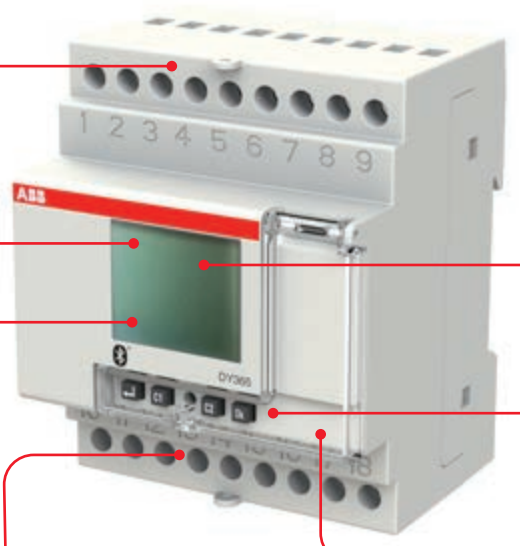
Technical features DBT Timer							
		DY365	**DW1**	**DW2**	**DWA1**	**DWA2**	**DWTL1**
Power supply	[V]	230 AC (-15 % ..+10 %)					
Rated pulsating voltage	[kV]	4					
Contact type		2NO/NC	1NO/NC	2NO/NC	1NO/NC	2NO/NC	1NO/NC
Channel extension		YES	NO	NO	NO	NO	NO
DY DCF77 antenna		YES	NO	NO	NO	NO	NO
DY GPS antenna		YES	NO	NO	NO	NO	NO
Resistive load	[A]	16					
Inductive load	[A]	10					
Rated frequency	[Hz]	50/60					
Minimum switching		1 min (1 s pulse program)					
Max number of events		900	120	120	120	120	120
Number of cahnnels		2	1	2	1	2	1
Operating accuracy	[sec/ 24h]	± 0,5					
Power consumption	[W]	2.6	2	2	2	2	2
Max. switching power	[VA]	4000					
Switching capacity							
Incandescent	[W]	2000					
Fluorescent	[VA]	600					
Low voltage halogen	[W]	2000					
Halogen	[W]	2000					
Low consumption lamp	[VA]	600					
LED	[W]	500					
Protection degree	[IP]	20					
Max terminal cross-section	[mm²]	2.5					
Tightening torque	[Nm]	0.5					
Installation type		DIN rail					
operating temperature	[°C]	-20...+50					
Storage temperature	[°C]	-25...+70					
Modules	[n°]	4	2	2	2	2	2
Reference standards		EN 60730-1; EN 60730-2-7; ETSI EN 301 489-1; ETSI EN 301 489-17; ETSI EN 300 328					

Communication bus for the connection of DY365 2CE and DY365 4CE channel extensions along with DY GPS and DY DCF77 antennas

Clear display of each contact status

Wide range of programs: standard, impulse, cycle, random and holiday

Terminals for wires 2.5 mm²



High contrast LCD monitor for excellent visibility in all conditions due to timed back-lighting

Permanent or temporary manual deviation, directly activated with a single touch

Sealable glass and keypad lock to prevent tampering by unauthorised personnel

Version	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Yearly time switch, 2 channels	212010	DY365	2CSM221201R1000		0.250	1
Weekly time switch, 1 channel	225317	DW1	2CSM222531R1000		0.129	1
Weekly time switch, 2 channels	225218	DW2	2CSM222521R1000		0.152	1
Weekly astronomical time switch, 1 channel	225119	DWA1	2CSM222511R1000		0.129	1
Weekly astronomical time switch, 2 channels	225010	DWA2	2CSM222501R1000		0.152	1
Weekly twilight time switch, 1 channel	224914	DWTL1	2CSM222491R1000		0.160	1

Selection table

Digital time switches	DY365	DWA1	DWA2	DW1	DW2	DWTL1
Weekly		▯	▯	▯	▯	▯
Yearly	▯					
Standard function	▯	▯	▯	▯	▯	▯
Astro function	▯	▯	▯			▯
Twilight sensor						▯
Numbers of channels	2	1	2	1	2	1
DY GPS/DY DCF77	▯					
Bluetooth	▯	▯	▯	▯	▯	▯
2 or 4 channel extension	▯					

Standard function includes: standard, impulse, random cycle and holiday programs.

Ordering data
E 232 staircase lighting time-delay switches

Staircase lighting time-delay switches are usually operated by pushbuttons, often fitted with a glow lamp. Switches are designed for a glow lamp current of up to 150 mA and thus perfectly suitable for installations in multi-storey buildings.

The E 232-230 staircase lighting time-delay switch includes an electro-mechanical timer with a synchronous motor drive to ensure high operational safety in whatever mounting position. The time range is adjustable in increments of 15 seconds from 1 to seven minutes. Resettable after 30 seconds.

E 232E–230N and E 232E-8/230N devices feature electronic time delays. A high switching capacity, 150 mA glow lamp current parallel to the pushbuttons, steplessly adjustable time range from 0.5 to 20 min, as well as low switching noise make these devices so special.

Devices of the E 232E-230 Multi 10 and E 232E-8/230 Multi 10 series are multi-functional products with 10 functions to choose from that can be adjusted from the front. Through an electronically controlled connection of the load at voltage zero, a very high switching capacity of 3,600 W (load of filament lamp) is reached.

The devices include an integrated warning feature (warning by blinking) according to DIN 18015-2 as well as a 60 minute long-time function.

The E 232E-8/230N and E 232E-8/230 Multi 10 staircase lighting time-delay switches offer an additional metallically separated control input for 8 ... 240 V AC/DC.

—
E232-230
2CSC400030F0149



—
E232E-8/230N
2CSC400030F0150



Time range	Power loss	N° module	Bbn 4016779		Order details		Weight 1 piece	Pack unit
	W	[17.5 mm]	EAN	Type code	Order code	Price	kg	
1...7 min.	1 V A	1	548243	E232 230	2CDE110000R0501		0.081	10
20 min	6 V A	1	654166	E232 E-230N	2CDE110003R0511		0.095	10
20 min	6 V A	1	654173	E232 E-8/230N	2CDE010003R0511		0.100	10
20 min	6 V A	1	654180	E232 E-230 Multi 10	2CDE110013R0511		0.100	10
20 min	6 V A	1	654197	E232 E-8/230 Multi 10	2CDE010013R0511		0.095	10

	E 232-230	E 232E-230N	E 232E-8/230N	E 232E-230 Multi 10	E 232E-8/230 Multi 10
Technical details					
Time range (stepless)	1 – 7 min. in 15 sec. increments				0.5 – 20 min. stepless
Control voltage 230 V AC	■	■	■	■	■
Universal voltage in addition	-	-	8 ... 240 V AC/DC	-	8 ... 240 V AC/DC
Glow lamp load	50 mA				150 mA
3/4 conductor operated	switches				automatically
Resettable	■	■	■	■	■
Steady-light switch	■	■	■	■	■
Advance warning acc. DIN 18015-2				■	■
Long-time range of 60 min.				■	■
Multi-functional device (10 functions)				■	■
	230 V AC				230 ... 240 V AC
Rated voltage	50Hz				50 / 60 Hz
Control voltage range	0.9 ... 1.1 Un				0.85 ... 1.1 Un
Power loss	1 VA				6 VA
Rated switching capacity					16 A, 230 V AC
Filament lamp load			2,300 W		3,600 W
Halogen lamp load			2,300 W		3,600 W
Fluorescent lamps series compensated / uncorrected			2,300 VA		3,600 VA[1]
Fluorescent lamps inductive or capacitive			2,300 VA		3,600 VA[1]
Fluorescent lamps shunt compensated	1,300 VA (70 µF)		400 VA (42 µF)		1,200 VA (120 µF)[1]
	9x7 W, 6x11 W		9x7 W, 7x11 W		34x7 W, 27x11 W
Electronic controlgear	5x15 W, 5x20 W		7x20 W, 7x23 W		24x15 W, 22x23 W
Inductive load (cos ϕ = 0.6/230 V AC)					2,300
Contact material					AgSnO2
Contact gap	≥ 3 mm				< 3 mm
Mech. serviceable life	> 10				> 10
Serviceable life at rated load, cos ϕ =1	> 10				> 2x10
Serviceable life at rated load, cos ϕ =0.6	> 10^4				> $4x10^4$
Terminal capacity	10.7 mm^2				13 mm^2
Max. conductor capacity	6 mm^2				4 mm^2
ON duration	Resettable after 30 sec.				100 %
Ambient temperature	-10°C to +50°C				– 25°C to + 50°C
Housing and insulation material					heat resistant, self-extinguishing thermoplast
Control current at 230 V AC	4.5 mA		26 mA		26 mA (min. 8 mA at 8 V AC)
Minimum command duration	10 ms		20 ms		20 ms / 50 ms for multi voltage input

[1] no disconnection advance warning possible for this application.

Control and automation
T Line twilight switches



TL1

T Line modular twilight switches

TL1 twilight switch allows to switch ON and switch OFF lighting devices according to a scheduled level of the ambient light. It is used in combination with an external sensor to detect if the ambient light is higher or lower than the set level . A switching delay prevents them from operating unnecessarily when the light intensity suddenly changes (e.g. lightning, moving vehicles, etc.). The TL1 twilight switch 1 channel is preset with a 10 LUX from factory and it is equipped with 2 signalling LEDs that indicate the setpoint value and display the status of the contact . The operating instructions are printed on the side of the product.

Brightness range	Bbn 8012542		Order details	Price 1	Weight 1 piece	Pack unit
lx	EAN	Type code	Order code	Piece	kg	pc.
2 : 200	299219	TL1	2CSM229921R1341		0.155	1



TLs

Accessories for T Line modular twilight switches

The external sensor TLs is supplied in the same package of the switch,TL1, but it’s also available separately as spare part. The upper part of the external case (with screw locking), made up of thermoplastic material, bears up against ultraviolet rays to guarantee an homogeneous diffusion of the daylight internally. The sensor is also equipped with a cable gland.

	Bbn 8012542		Order details	Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	Piece	kg	pc.
External sensor	299318	TLs	2CSM229931R1341		0.008	1

Control and automation
TL Line twilight switch



TL1 Pole

Technical features		
		TL1 POLE
Rated supply voltage	[V]	110 ÷ 230 AC
Contact type		1NO polarized
Incandescent lamps cosφ 1	[W]	1000
Fluorescent lamps cosφ 0.8	[W]	300
Fluorescent- duo/electronic lamps	[W]	300
LED lamps	[W]	100
Rated frequency	[Hz]	50/60
Switching delay ON	[s]	25+-10%
Switching delay OFF	[s]	35+-10%
Brightness range (with tolerance of +-20%)	[lx]	2...200
Protection degree twilight switch		IP54
Protection degree sensor		IP54
Operating temperature twilight switch	[°C]	-40...+70
Operating temperature sensor	[°C]	-40...+70
Storage temperature twilight switch	[°C]	-50...+80
Storage temperature sensor	[°C]	-50...+80
Power consumption	[W]	0.25 W cosφ 0.35 (idle) 0.8 W cosφ 0.4 (active)
Max terminal cross section	[mm²]	6
Terminals		loss-proof screw
Screw Type		PZ1
Tightening torque: terminals	[Nm]	1.2
screw sensor	[Nm]	1.2
Mounting		Pole/wall mounted
Switching status indication/ brightness range		red/green LEDs
Max wiring length		100
Modules		
Reference standards		EN 60669-1 EN 60662-2-1 EN60730-1

TL1 Pole mounting twilight switch

The TL1 Pole version is designed for installation on the pole/wall, with photocell inputs and integrated cabling including cable gland seals to ensure a high protection degree. Thanks also to the high quality, TL1 Pole provides excellent resistance to atmospheric agents and a long service life. TL1 Pole is also internally equipped with a preset sensor of 10 LUX. The sensor is extractable from the base and allows an easy and efficient maintenance without needing further wiring. TL1 Pole is the ideal solution to manage the external light systems such as the public ones, more precisely, in cases where there is a need of controlling the lighting of public or private roads, gardens, courtyards at the decline of solar radiation during twilight.

Brightness range	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
lx	EAN	Type code	Order code	piece	kg	pc.
2:200	299110	TL1 Pole	2CSM229911R1341		0.135	1

Ordering data
DWA twilight astronomical switches

The astronomical switch DWA1with 1automatically control lighting circuits depending on the time of sunrise and sunset, greatly increasing energy efficiency. The programming is in fact based on a mathematical algorithm able to calculate the time of the rising and setting of the sun in a certain location for each day of the year. Once powered the device, simply insert date, time, geographical coordinates and time zone so that it is ready to work. These settings can also be automatically defined using the DBT Timer APP.
The installation of astronomical digital time switches is particularly useful when using a twilight switch with external sensor is not recommended because it may be subject to malfunctions caused by air pollution, excessive brightness or vandalism. DWA1 is also indicated for the control of public lighting, shop windows of shops, neon signs, monuments, facades, illuminated fountains, ...

—
DWA-1
2CSC400030F0155



Contacts	N° module	Bbn 8012542		Order details		Weight 1 piece	Pack unit
	[17.5 mm]	EAN	Type code	Order code	Price	kg	
1 CO	2	043652	DWA-1	2CSM204365R1341		0.160	1

			DWA-1
Technical details			
Rated supply voltage		[V]	230 AC ± 15%
Contact type			1NO/NC
	resistive load	[A]	16
Switching capacity	inductive load cosϕ 0.6	[A]	10
	incandescent and halogen fluorescent	[W]	2300
	compensated (max. 45 °F)	[W]	400
	non-compensated, series compensated	[W]	1000
Max. number of lamps	compact fluorescent	[W]	500
Rated frequency		[Hz]	50/60
Time base			quartz
Minimum time between two steps		[min]	1
Program steps			56
Power reserve		[years]	5
Accuracy			± 1.5 sec / 24h
Astronomical time accuracy		[min]	± 10
Power consumption		[VA]	6
	flexible	[mm²]	1 to 6
Terminal size for cable	rigid	[mm²]	1.5 to 10
Terminals			loss-proof screw
Mounting			on DIN rail
Operating temperature		[°C]	-10 ... +55
Storage temperature		[°C]	-20 ... +60
Protection degree			IP20
Modules			2
Reference standards			EN 60730-1; EN 60730-2-7

Ordering data
E 233 electro-mechanical hour counters

Hour counters are used to record operating times as well as to determine idle times and off times of electrical loads in domestic installations. No reset functionality.

—
E233-230
2CSC400030F0156



Rated voltage	N° module	Bbn 4012233		Order details		Weight 1 piece	Pack unit
	[17.5 mm]	EAN	Type code	Order code	Price	kg	
AC 230 V/50 Hz	1	630004	E233-230	2CDE100000R1601		0.050	10

	AC equipment	DC equipment
Technical details		
Rated voltage	50 Hz: 24 V, 230 V 60 Hz: 24 V, 120 V, 240 V(1)	DC 12 V ... 48 V
Voltage tolerance	±15 %	±10 %
Power consumption	1.5 VA	ca. 20 mW (at 12 V DC)
Ambient temperature	–15°C/5°F ... +50°C/122°F	–10°C/14°F ... +50°C/122°F
Counting capacity	99.999 h	99.999 h
Precision class	0.01 h	0.1 h
Operation display	fast running	LED blinking
Protection against electric shock	according to DIN VDE 0106 Part 100 (BGV A2)	according to DIN VDE 0106 Part 100 (BGV A2)
Terminal size	up to 10 mm²	up to 10 mm²

(1) UL approval

Ordering data

VLMD, AMTD digital instruments with alarm relay

The range comprises one voltmeter and one ammeter that display and monitor a value, tripping a relay contact and signalling the alarm condition if it over- or undershoots a programmable threshold. The alarm threshold as either a minimum or a maximum limit, the peak maximum and minimum values measured are stored in the non volatile instrument memory.

The contact type is NO, so that the contact is open when the instrument is powered off, but it is possible to obtain positive safety operation via a software setting which determines whether the alarm condition is with an open or closed contact.The instrument with relay can be used as either a minum or maximum relay, but not for both functions simultaneously.

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VLMD-1-2
2CSC400030F0157



—
AMTD-1
2CSC400030F0158

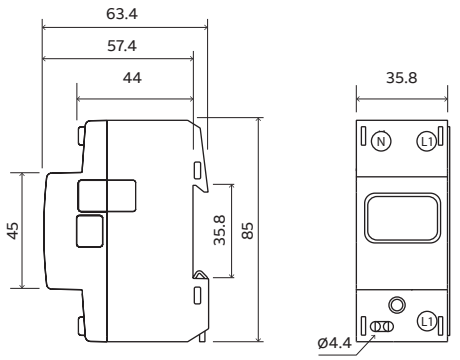


Version	N° module	Bbn 8012542		Order details		Weight 1 piece	Pack unit
	[17.5 mm]	EAN	Type code	Order code	Price	kg	
AC/DC digital voltmeter with alarm relay	3	746935	VLMD-1-2-R	2CSM274693R1011		0.300	1
AC digital ammeter with alarm relay	3	747734	AMTD-1-R	2CSM274773R1011		0.300	1

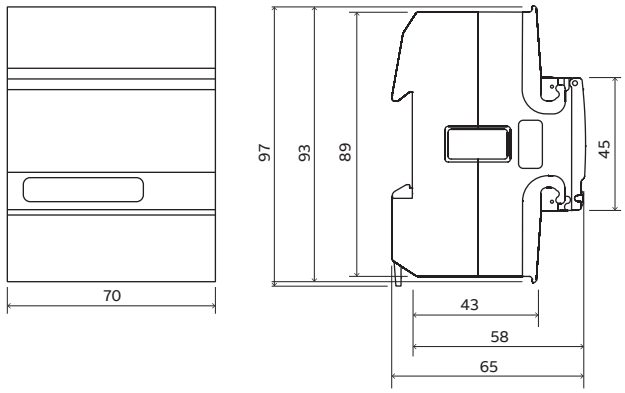
		VLMD, AMTD
Technical details		
Power supply	[V]	230 V AC
Rated frequency	[Hz]	50÷60
Ammeter full scale value	[A]	5, 20, 25, 40, 60, 100, 150, 200, 250, 400, 600
Voltmeter full scale value	[V]	300, 500
Frequency meter range	[Hz]	35 ... 400
Tripping delay	[s]	1, 5, 10, 20, 30
Hysteresis	[%]	5, 10, 20, 30 set threshold
Output pins		3-4
Output relay		NO
Rated voltage relay	[V]	230 V AC
Rated current relay	[A]	AC1 16, AC15 3
		NO relay closes in alarm status
Relay configuration		NC relay opens in alarm status, positive safety
Overload	[In/Vn]	1, 2
Accuracy class	[%]	±0.5 full scale ±1 digit at 25°C
Max. signal input value for ammeters		5 A AC
Display		3 digit LED display
Operating temperature	[°C]	-10 ... +55
Storage temperature	[°C]	-40 ... +70
Protection degree		IP20
Power consumption	[VA]	4
Modules		3
Overall dimensions front panel devices	[mm]	36 × 72 × 61.5 (51.5 depth inside the switchboard)

Overall dimensions

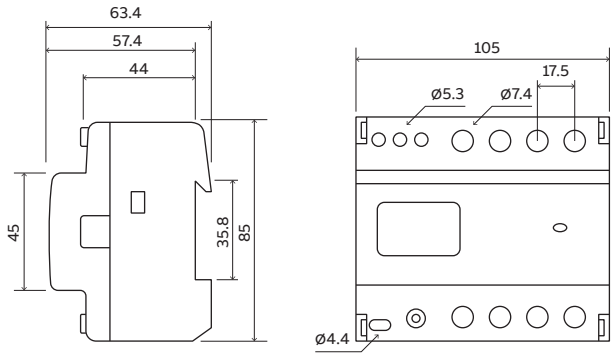
ODINsingle



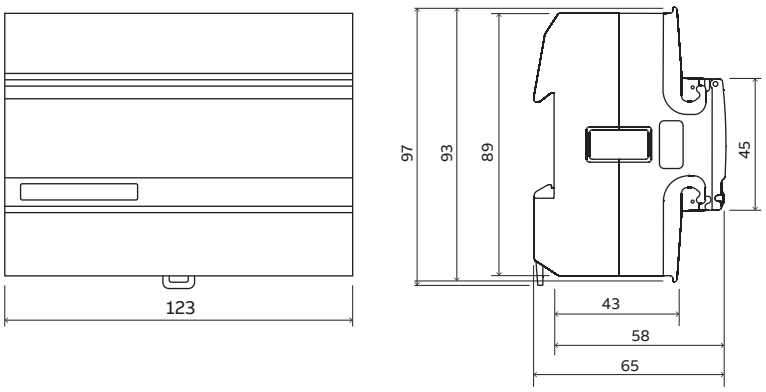
EQ meters A41



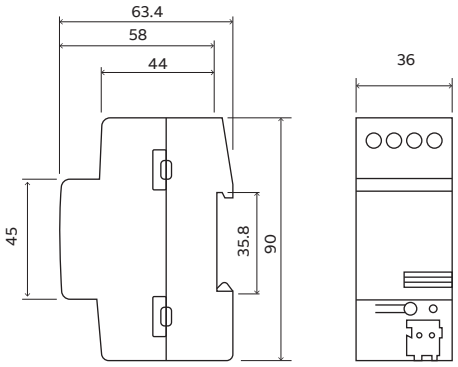
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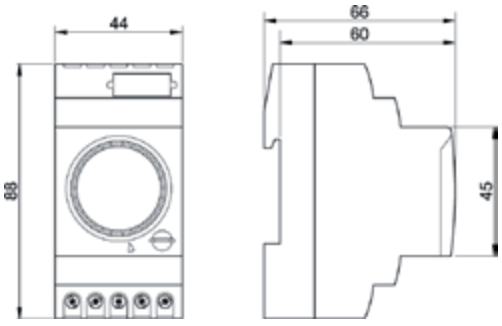
EQ meters A43



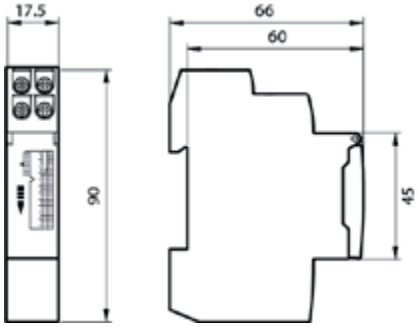
Communication adapters



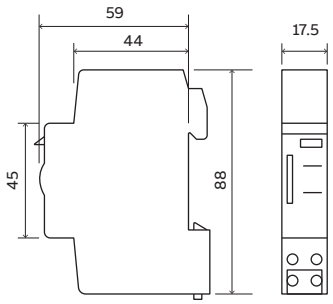
AD1NO-R-15m



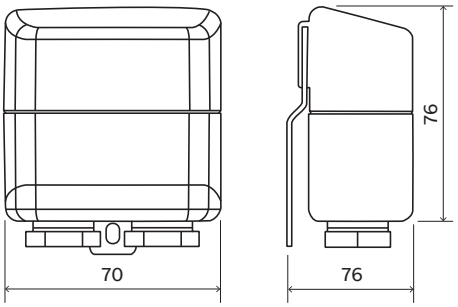
AD1CO-R-15m



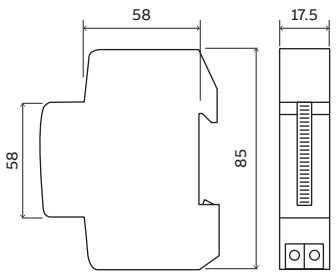
E 232



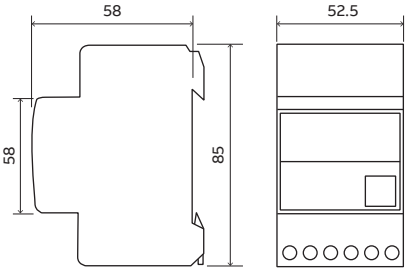
TLs



E 233



VLMD, AMTD



Electrical installation solutions for buildings
Consumer units

Table of contents

202–207 **MISTRAL41F**

208–209 **Flush-mounted – Brick wall**

210–211 **Flush-mounted – Hollow wall**

212–213 **Flush-mounted – Concrete wall**

214–215 **Accessories**

216–219 **P 40 and IP 55 panel fronts**

220–223 **UK600 Flush-mounting Series**

224–225 **Complete version with trim frame and door with N/PE quick-terminals**

226–227 **Complete version with trim frame and door with N/PE screw-terminals**

228–229 **Complete version with trim frame and door without terminals**

230–231 **Basic version UK600 without trim frame and door with N/PE quick-terminals**

232–233 **Basic version UK600 without trim frame and door with N/PE screw-terminals**

234–235 **N/PE quick-terminals**

236–237 **Screw terminals**

238 **Project options**

239–240 **Spare parts and accessories**

241 **Trim frame with door and design foils**

242–243 **Design frames and inserts**

244–245 **Media enclosure UK600 with and without trim frame and door**

246–247 **Combi enclosure UK600 with trim frame and door**

248–249 **Media enclosure - accessories**

250 **Media enclosure - doors**

252–255 **System Pro E comfort Mini EUROPA40**

256–261 **MISTRAL41W**

262–263 **Wall-mounted (650)**

264–265 **Wall-mounted (750)**

266–267 **Wall-mounted with terminals (650)**

268–269 **Accessories**

270–274 **MISTRAL65**

275–276 **Wall-mounted (650)**

277 **Wall-mounted (750)**

278–280 **Wall-mounted with terminals (650)**

281–282 **Accessories**

283–286 **Terminal blocks**

MISTRAL41F
Endless installation possibilities

Reliable technology combined with a modern decorative look in a compact, elegant design.



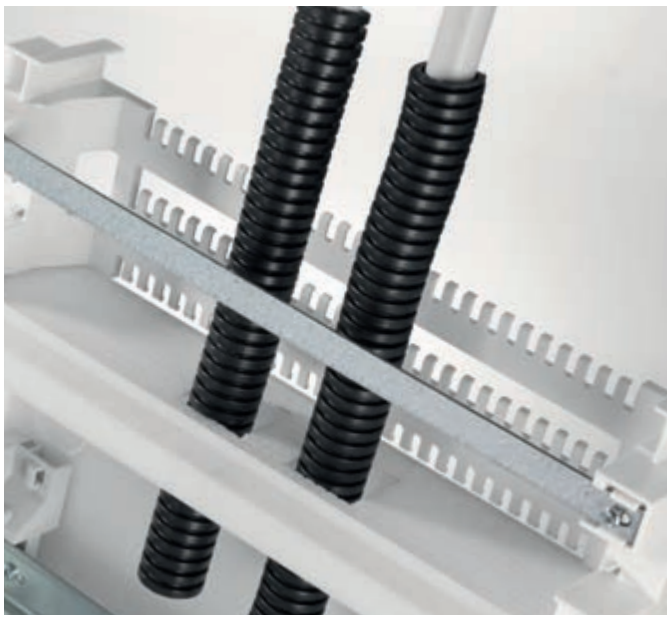
Endless installation possibilities

Horizontal coupling
The consumer units can be coupled side by side with the horizontal junction unit accessory, protecting the passage of cables between adjacent units.

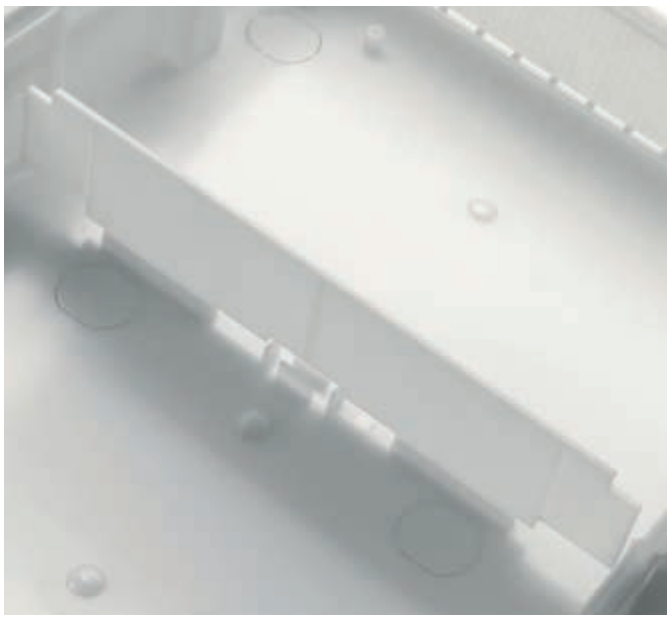


Mortar guard
All versions include a mortar guard that prevents mortar sprays inside the consumer unit.





Dual-function accessory
A single accessory performs a dual function. It can be used to fix pipes to the unit's housing or to vertically couple two consumer units.



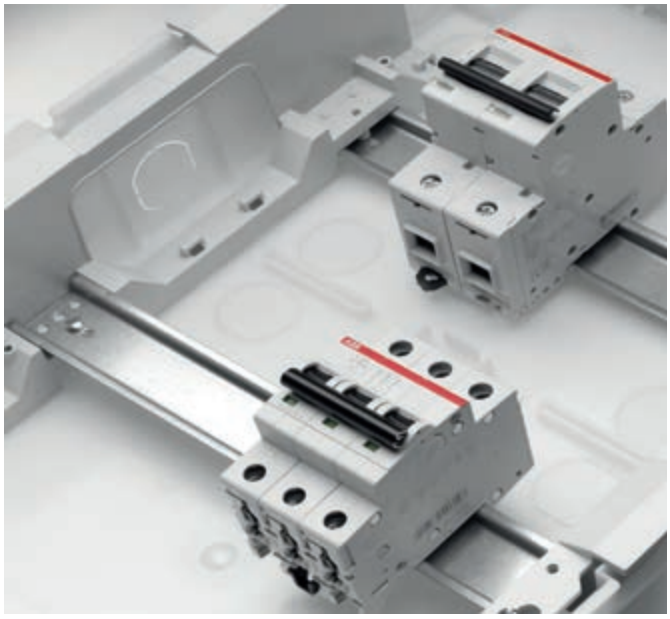
Internal partition
The horizontal partition allows the interior of the unit to be divided into two parts.

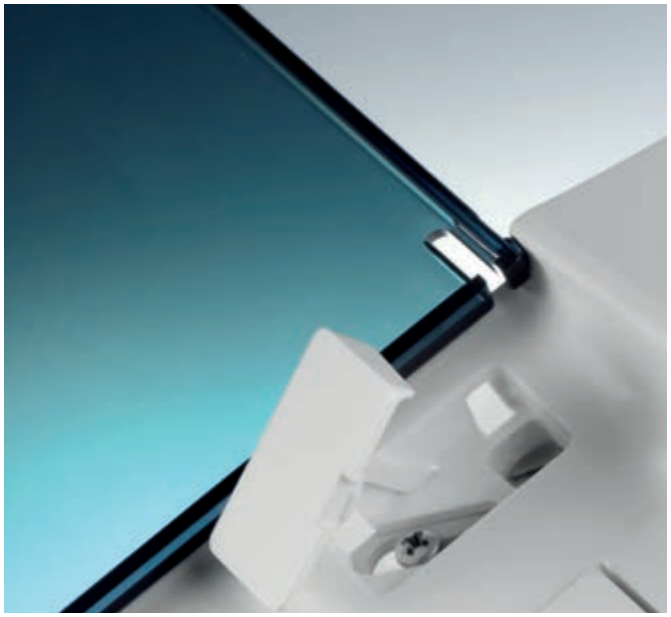
Endless installation possibilities

Flanges
The flange with multi pre-cuts is designed to be sheared only where necessary in order to ensure a more secure fastening. The removable flange with knockout holes ensure a reliable and safe placing of flexible pipes and other conduits, especially in plasterboard installation.

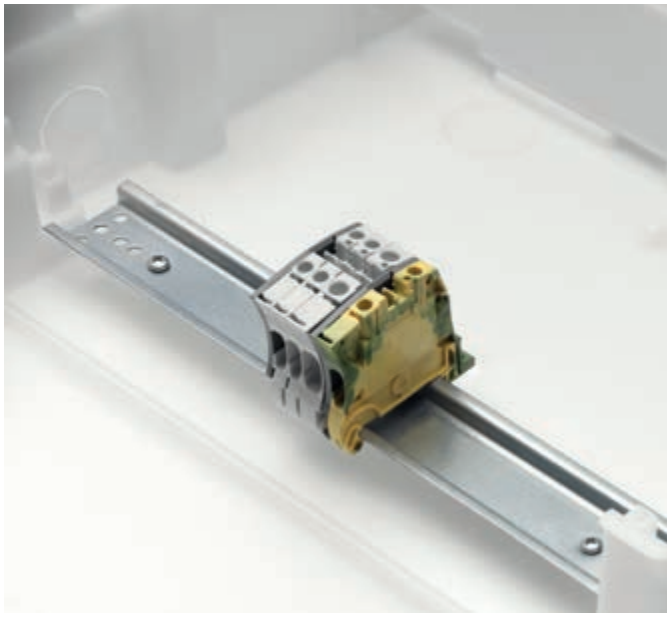


Two DIN rail positions
The extraxtable frame offers two DIN rail positions so devices of different depths, like S200 or S800 miniature circuit breakers, can be installed in perfect alignment.





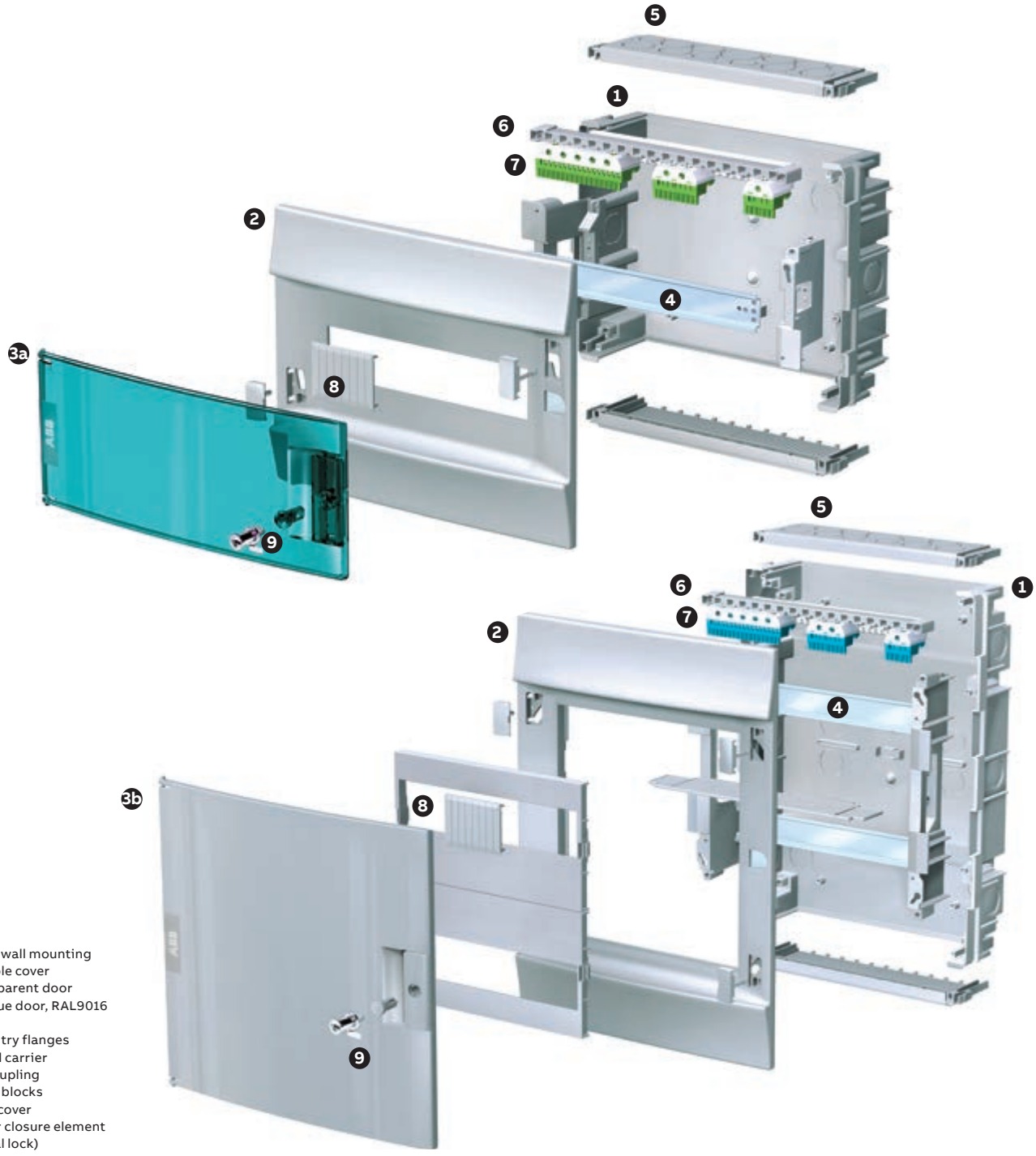
Captive screw covers
Screw covers are hooked to the front panel so they can be removed without the risk of losing them.



DIN rail terminals
It is possible to install an extra DIN rail at the bottom of the consumer unit.

A versatile range suitable for every application

The simple construction of the MISTRAL41F series makes the units fast and easy to assemble. What is more, the flexible design allows easy adaptation to various application requirements.



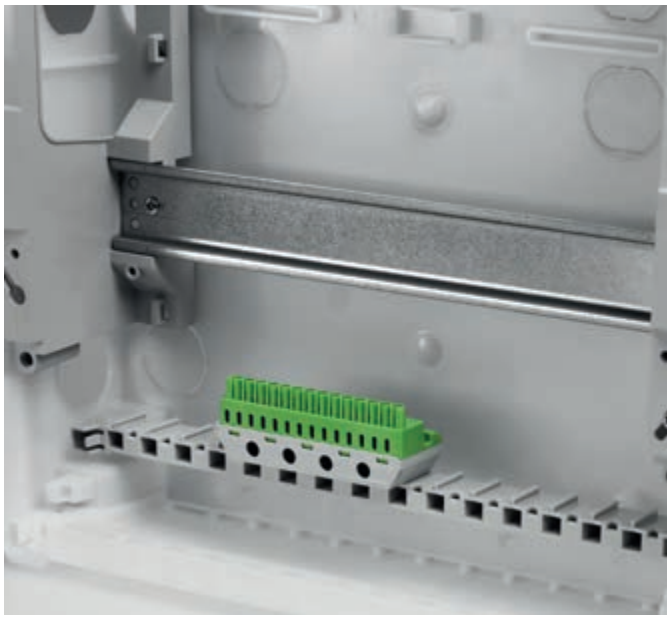
1. Base for wall mounting
2. Reversible cover
3. a) Transparent door
   b) Opaque door, RAL9016
4. DIN rail
5. Cable entry flanges
6. Terminal carrier
7. Quick coupling terminal blocks
8. Module cover
9. Finish or closure element (optional lock)

A versatile range suitable for every application

Horiziontal levelling
The external adjustments of the front cover assure a perfect horizontal levelling even if the consumer unit is slightly crooked.



New generations terminals
The MISTRAL41 range of consumer units is supplied with a wide, completely new ABB terminal block range. Three different versions offer screw and spring fast coupling for easy and effective cabling up to 63A or 100A.





Hollow wall mounting
For the hollow wall mounting our consumer units provide a special enclosure and hollow mounting screws.



A smarter space for your installation ideas

MISTRAL41F

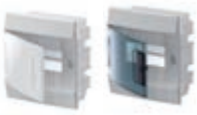
When it comes to flexibility, usability and design our Mistral41 consumer units can convince installers as well as end users in almost any kind of electrical distribution system in industrial, commercial or residential environments. A variety of innovative details make the MISTRAL41 series the perfect solution to realize all your installation ideas efficiently – now or in the future. Choose from a brick walll or hollow wall version to meet your individual needs. Learn more at **abb.com/lowvoltage**

Consumer units

MISTRAL41F – Order codes | Flush-mounted – Brick wall



4 modules



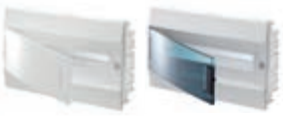
6 modules



8 modules



12 modules



18 modules



24 modules



36 modules

MISTRAL41F – Order codes 650

Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41 flush 650 - 1 Row						
Opaque door 4M	4	650	152 x 202 x 105	1SLM004100A1100	41A04X11	1/24
Transparent door 4M	4	650	152 x 202 x 105	1SLM004100A1200	41A04X12	1/24
Front transparent door 4M	4	650	152 x 202 x 25	1SLM004100A1600	41F04X12	1/24
Flush-mounting box 4M	4	650	129 x 182 x 80	1SLM004100A1700	41S04X1	1/24
Opaque door 6M	6	650	192 x 202 x 105	1SLM004100A1101	41A06X11	1/18
Transparent door 6M	6	650	192 x 202 x 105	1SLM004100A1201	41A06X12	1/18
Front transparent door 6M	6	650	192 x 202 x 25	1SLM004100A1601	41F06X12	1/18
Flush-mounting box 6M	6	650	149 x 182 x 80	1SLM004100A1701	41S06X1	1/18
Opaque door 8M	8	650	232 x 250 x 108	1SLM004100A1102	41A08X11	1/12
Transparent door 8M	8	650	232 x 250 x 108	1SLM004100A1202	41A08X12	1/12
Front opaque door 8M	8	650	232 x 250 x 28	1SLM004100A1502	41F08x11	1/12
Front transparent door 8M	8	650	232 x 250 x 28	1SLM004100A1602	41F08X12	1/12
Flush-mounting box 8M	8	650	206 x 230 x 80	1SLM004100A1702	41S08X1	1/12
Opaque door 12M	12	650	320 x 250 x 108	1SLM004100A1103	41A12X11	1/9
Transparent door 12M	12	650	320 x 250 x 108	1SLM004100A1203	41A12X12	1/9
Front opaque door 12M	12	650	320 x 250 x 28	1SLM004100A1503	41F12x11	1/9
Front transparent door 12M	12	650	320 x 250 x 28	1SLM004100A1603	41F12X12	1/9
Flush-mounting box 12M	12	650	294 x 230 x 80	1SLM004100A1703	41S12X1	1/9
Opaque door 18M	18	650	430 x 250 x 108	1SLM004100A1104	41A18X11	1/6
Transparent door 18M	18	650	430 x 250 x 108	1SLM004100A1204	41A18X12	1/6
Front transparent door 18M	18	650	430 x 250 x 28	1SLM004100A1604	41F18X12	1/6
Flush-mounting box 18M	18	650	404 x 230 x 80	1SLM004100A1704	41S18X1	1/6
Consumer units MISTRAL41 flush 650 - 2 Rows						
Opaque door 24M	24	650	320 x 435 x 108	1SLM004100A1105	41A12X21	1/5
Transparent door 24M	24	650	320 x 435 x 108	1SLM004100A1205	41A12X22	1/5
Front opaque door 24M	24	650	320 x 435 x 28	1SLM004100A1505	41F12x21	1/5
Front transparent door 24M	24	650	320 x 435 x 28	1SLM004100A1605	41F12X22	1/5
Flush-mounting box 24M	24	650	294 x 415 x 80	1SLM004100A1705	41S12X2	1/5
Opaque door 36M 2F	36	650	430 x 435 x 108	1SLM004100A1106	41A18X21	1/3
Transparent door 36M 2F	36	650	430 x 435 x 108	1SLM004100A1206	41A18X22	1/3



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36 modules



—
54 modules



—
48 modules



—
72 modules

MISTRAL41F – Order codes 650

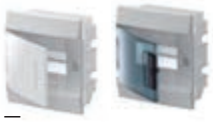
Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41 flush 650 - 3 Rows						
Opaque door 36M 3F	36	650	320 x 600 x 108	1SLM004100A1107	41A12X31	1/4
Transparent door 36M 3F	36	650	320 x 600 x 108	1SLM004100A1207	41A12X32	1/4
Front opaque door 36M 3F	36	650	320 x 600 x 28	1SLM004100A1507	41F12x31	1/4
Front transparent door 36M3F	36	650	320 x 600 x 28	1SLM004100A1607	41F12x32	1/4
Flush-mounting box 36M 3F	36	650	294 x 580 x 80	1SLM004100A1707	41S12x31	1/4
Opaque door 54M	54	650	430 x 600 x 128	1SLM004100A1109	41A18X31	1/1
Transparent door 54M	54	650	430 x 600 x 128	1SLM004100A1209	41A18X32	1/1
Consumer units MISTRAL41 flush 650 - 4 Rows						
Opaque door 48M	48	650	320 x 735 x 108	1SLM004100A1108	41A12X41	1/4
Transparent door 48M	48	650	320 x 735 x 108	1SLM004100A1208	41A12X42	1/4
Opaque door 72M	72	650	430 x 735 x 128	1SLM004100A1110	41A18X41	1/1
Transparent door 72M	72	650	430 x 735 x 128	1SLM004100A1210	41A18X42	1/1

Consumer units

MISTRAL41F – Order codes | Flush-mounted – Hollow wall



4 modules



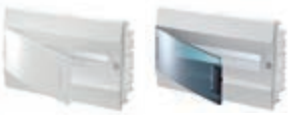
6 modules



8 modules



12 modules



18 modules



24 modules



36 modules

MISTRAL41F – Order codes 850

Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41 flush 850 - 1 Row						
Opaque door 4M	4	850	152 x 202 x 105	1SLM004100A1300	41C04X11	1/24
Transparent door 4M	4	850	152 x 202 x 105	1SLM004100A1400	41C04X12	1/24
Opaque door 6M	6	850	192 x 202 x 105	1SLM004100A1301	41C06X11	1/18
Transparent door 6M	6	850	192 x 202 x 105	1SLM004100A1401	41C06X12	1/18
Opaque door 8M	8	850	232 x 250 x 108	1SLM004100A1302	41C08X11	1/12
Transparent door 8M	8	850	232 x 250 x 108	1SLM004100A1402	41C08X12	1/12
Opaque door 12M	12	850	320 x 250 x 108	1SLM004100A1303	41C12X11	1/9
Transparent door 12M	12	850	320 x 250 x 108	1SLM004100A1403	41C12X12	1/9
Opaque door 18M	18	850	430 x 250 x 108	1SLM004100A1304	41C18X11	1/6
Transparent door 18M	18	850	430 x 250 x 108	1SLM004100A1404	41C18X12	1/6
Consumer units MISTRAL41flush 850 - 2 Rows						
Opaque door 24M	24	850	320 x 435 x 108	1SLM004100A1305	41C12X21	1/5
Transparent door 24M	24	850	320 x 435 x 108	1SLM004100A1405	41C12X22	1/5
Opaque door 36M 2F	36	850	430 x 435 x 108	1SLM004100A1306	41C18X21	1/3
Transparent door 36M 2F	36	850	430 x 435 x 108	1SLM004100A1406	41C18X22	1/3



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36 modules



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54 modules



—
48 modules



—
72 modules

MISTRAL41F – Order codes 850

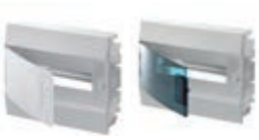
Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41 flush 850 - 3 Rows						
Opaque door 36M 3F	36	850	320 x 600 x 108	1SLM004100A1307	41C12X31	1/4
Transparent door 36M 3F	36	850	320 x 600 x 108	1SLM004100A1407	41C12X32	1/4
Opaque door 54M	54	850	430 x 600 x 128	1SLM004100A1309	41C18X31	1/1
Transparent door 54M	54	850	430 x 600 x 128	1SLM004100A1409	41C18X32	1/1
Consumer units MISTRAL41 flush 850 - 4 Rows						
Opaque door 48M	48	850	320 x 735 x 108	1SLM004100A1308	41C12X41	1/1
Transparent door 48M	48	850	320 x 735 x 108	1SLM004100A1408	41C12X42	1/1
Opaque door 72M	72	850	430 x 735 x 128	1SLM004100A1310	41C18X41	1/1
Transparent door 72M	72	850	430 x 735 x 128	1SLM004100A1410	41C18X42	1/1

Consumer units

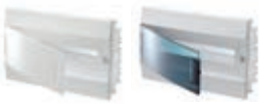
MISTRAL41F for concrete wall



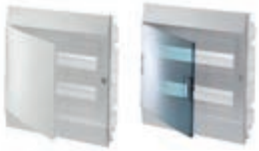
4 modules



12 modules



18 modules



24 modules



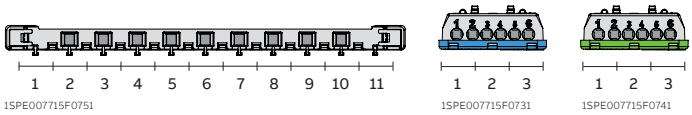
36 modules



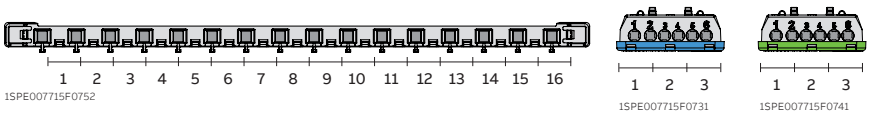
36 modules

MISTRAL41F – Order codes

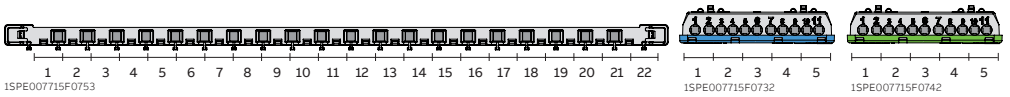
Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
MISTRAL41 flush						
Opaque door 8M 12SM	8	650	232 x 250 x 108	1SLM004102A1102	41A08X11A	1/12
Transparent door 8M 12SM	8	650	232 x 250 x 108	1SLM004101A1202	41A08X12A	1/12



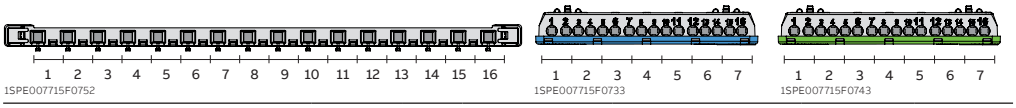
Opaque door 12M 12SM	12	650	320 x 250 x 108	1SLM004102A1103	41A12X11A	1/9
Transparent door 12M 12SM	12	650	320 x 250 x 108	1SLM004101A1203	41A12X12A	1/9



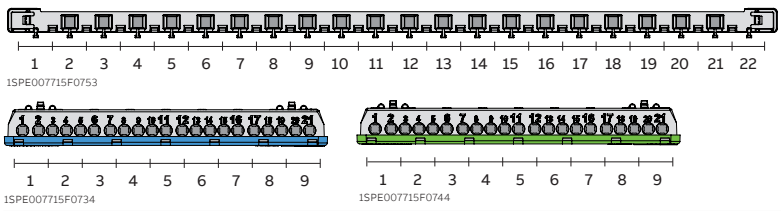
Opaque door 18M 22SM	18	650	430 x 250 x 108	1SLM004102A1104	41A18X11A	1/16
Transparent door 18M 22SM	18	650	430 x 250 x 108	1SLM004101A1204	41A18X12A	1/16



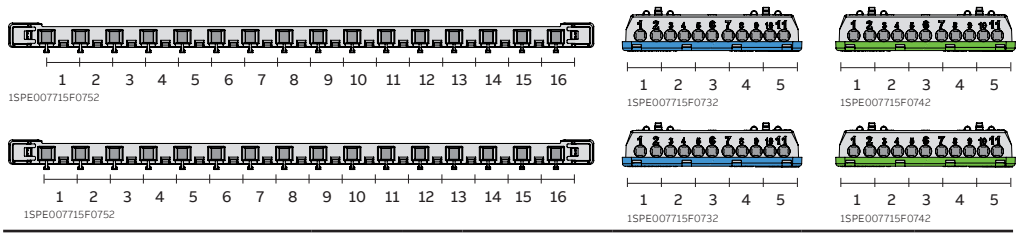
Opaque door 24M 32SM	24	650	320 x 435 x 108	1SLM004102A1105	41A12X21A	1/5
Transparent door 24M 32SM	24	650	320 x 435 x 108	1SLM004101A1205	41A12X22A	1/5



Opaque door 36M 2F 42SM	36	650	430 x 435 x 108	1SLM004102A1106	41A18X21A	1/3
Transparent door 36M 2F 42SM	36	650	430 x 435 x 108	1SLM004101A1206	41A18X22A	1/3



Opaque door 36M 3F 44SM	36	650	320 x 600 x 108	1SLM004102A1107	41A12X31A	1/4
Transparent door 36M 3F 44SM	36	650	320 x 600 x 108	1SLM004101A1207	41A12X32A	1/4





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54 modules



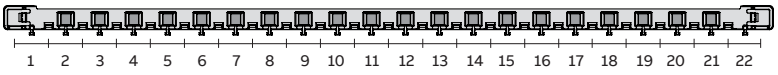
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48 modules

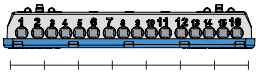


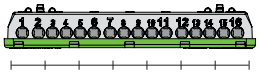
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72 modules

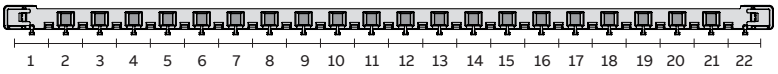
MISTRAL41F – Order codes

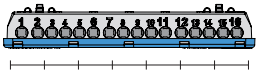
Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
MISTRAL41 flush						
Opaque door 54M 64SM	54	650	430 x 600 x 128	1SLM004102A1109	41A18X31A	1/1
Transparent door 54M 64SM	54	650	430 x 600 x 128	1SLM004101A1209	41A18X32A	1/1

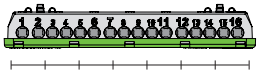




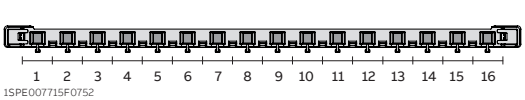


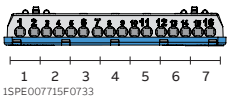


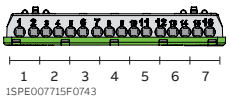


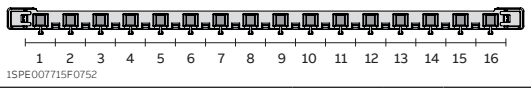


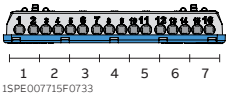
Opaque door 48M 64SM	48	650	320 x 735 x 108	1SLM004102A1108	41A12X41A	1/1
Transparent door 48M 64SM	48	650	320 x 735 x 108	1SLM004101A1208	41A12X42A	1/1

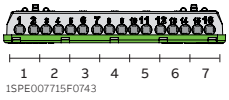




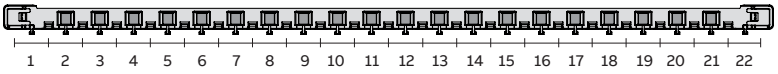


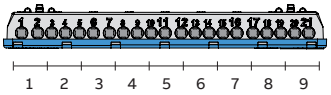


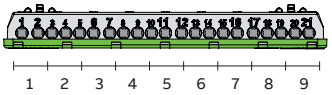


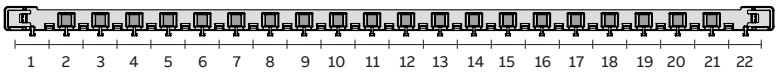


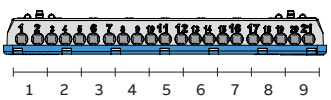
Opaque door 72M 84SM	72	650	430 x 735 x 128	1SLM004102A1110	41A18X41A	1/1
Transparent door 72M 84SM	72	650	430 x 735 x 128	1SLM004101A1210	41A18X42A	1/1

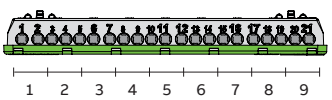












Consumer units

MISTRAL41F – accessories





MISTRAL41F – Accessories doors

Description	N° of modules [18 mm]	Order code	Type number	Packaging
Opaque door				
Opaque door 4M MISTRAL41F	4	1SLM004100A1900	41Z83	1/20
Opaque door 6M MISTRAL41F	6	1SLM004100A1916	41Z84	1/20
Opaque door 8M MISTRAL41F	8	1SLM004100A1902	41Z85	1/10
Opaque door 12M MISTRAL41F	12	1SLM004100A1904	41Z86	1/20
Opaque door 18M MISTRAL41F	18	1SLM004100A1906	41Z87	1/20
Opaque door 24M / 48M MISTRAL41F	24	1SLM004100A1908	41Z88	1/15
Opaque door 36M 3F MISTRAL41F	36	1SLM004100A1910	41Z89	1/10
Opaque door 36M 2F / 72M MISTRAL41F	36	1SLM004100A1912	41Z90	1/10
Opaque door 54M MISTRAL41F	54	1SLM004100A1914	41Z91	1/5
Transparent door				
Transparent door 4M MISTRAL41F	4	1SLM004100A1901	41Z92	1/20
Transparent door 6M MISTRAL41F	6	1SLM004100A1917	41Z93	1/20
Transparent door 8M MISTRAL41F	8	1SLM004100A1903	41Z94	1/10
Transparent door 12M MISTRAL41F	12	1SLM004100A1905	41Z95	1/20
Transparent door 18M MISTRAL41F	18	1SLM004100A1907	41Z96	1/20
Transparent door 24M / 48M MISTRAL41F	24	1SLM004100A1909	41Z97	1/15
Transparent door 36M 3F MISTRAL41F	36	1SLM004100A1911	41Z98	1/10
Transparent door 36M 2F / 72M MISTRAL41F	36	1SLM004100A1913	41Z99	1/10
Transparent door 54M MISTRAL41F	54	1SLM004100A1915	41Z100	1/5



41Z01, 41Z02



41Z03, 41Z04

41Z05



41Z06



41Z07, 41Z08, 41Z09, 41Z10

41Z11



41Z12



41Z13

MISTRAL41F – Other accessories

Description	N° of modules [18 mm]	Order code	Type number	Packaging
Other accessories				
Horizontal partition 12M MISTRAL41F	12	1SLM004100A1920	41Z01	1/100
Horizontal partition 18M MISTRAL41F	18	1SLM004100A1921	41Z02	1/100
Vertical coupling / tubes holder 12M	12	1SLM004100A1922	41Z03	1/20
Vertical coupling / tubes holder 18M	18	1SLM004100A1923	41Z04	1/15
Module cover 12M RAL9016	12	1SPE007715F5650	41Z05	5/180
Lock with key MISTRAL41 F		1SLM004100A1931	41Z06	20/300
Central blind panel 12M MISTRAL41F	12	1SLM004100A1945	41Z07	1/20
Blind panel 12M MISTRAL41F	12	1SLM004100A1946	41Z08	1/20
Central blind panel 18M MISTRAL41F	18	1SLM004100A1947	41Z09	1/30
Blind panel 18M MISTRAL41F	18	1SLM004100A1948	41Z10	1/30
Horizontal junction unit		1SLM004100A1949	41Z11	1/50
Wires holder comb	12	1SLM004100A1942	41Z12	1/30
Spirit level		1SLM004100A1943	41Z13	1/30

Consumer units
IP 40 and IP 55 panel fronts





IP 40 panel fronts

Technical characteristics
- protection degree **IP 40**
- in **thermoplastic**, self-extinguishing and resistant to abnormal heat and fire up to 650 °C (glow wire flammability index) in compliance with IEC 60695-2-11 Standard
- available in **RAL 7035 grey**
- installation temperature from -25 °C to +60 °C
- resistant to heat: ball thermopressure up to +85 °C in compliance with EN 60695-10-2 Standard
- fronts are supplied with:
  - module covers
  - instruction sheet

IP 55 panel fronts

Technical characteristics
- protection degree **IP 55**
- available with transparent, smoky horizontally hinged door in the version with lock and lead-sealable spring
- door designed to take a lock with coded key code 12 865
- available in **RAL 7035 grey**
- in **thermoplastic**, self-extinguishing and resistant to abnormal heat and fire up to 650 °C (glow wire flammability index) in compliance with IEC 60695-2-11 Standard
- installation temperature from -25 °C to +60 °C
- resistant to heat: ball thermopressure up to +85 °C in compliance with EN 60695-10-2 Standard
- shock resistance 6 Joules
- fronts are supplied with:
  - module covers
  - instruction sheet



Consumer units

IP 40 and IP 55 panel fronts



FLCO9069

IP 40 panel fronts – 2 modules

RAL 7035 grey

Dimensions W × H × D [mm]	Order code	Box/pack No items
81x90x50	12 362	10/40



FLCO9070

IP 40 panel fronts – 3 modules

RAL 7035 grey

Dimensions W × H × D [mm]	Order code	Box/pack No items
99x90x50	12 363	10/40



FLCO9071

IP 40 panel fronts – 4 modules

RAL 7035 grey

Dimensions W × H × D [mm]	Order code	Box/pack No items
117x90x50	12 364	6/24



FLCO9085

IP 55 panel fronts – 4 modules

RAL 7035 grey

Spring closing

Dimensions W × H × D [mm]	Order code	Box/pack No items
125x180x80	12 658	1/10



FLCO9086

IP 55 panel fronts – 6 modules

RAL 7035 grey

Spring closing

Dimensions W × H × D [mm]	Order code	Box/pack No items
160x180x80	12 659	1/10



FLCO9087

IP 55 panel fronts – 10 modules

RAL 7035 grey

Spring closing

Dimensions W × H × D [mm]	Order code	Box/pack No items
230x180x80	12 660	1/7

Consumer units

Accessories for IP 55 panel fronts



FLCO9228

Module covers

No modules	Colour	Order code	Box/pack No items
1	RAL 7035 grey	12 861	50/1500
4	RAL 7035 grey	12 863	25/300



FLCO9243

Lock with key

Description	Order code	Box/pack No items
Coded type	12 865	10/300



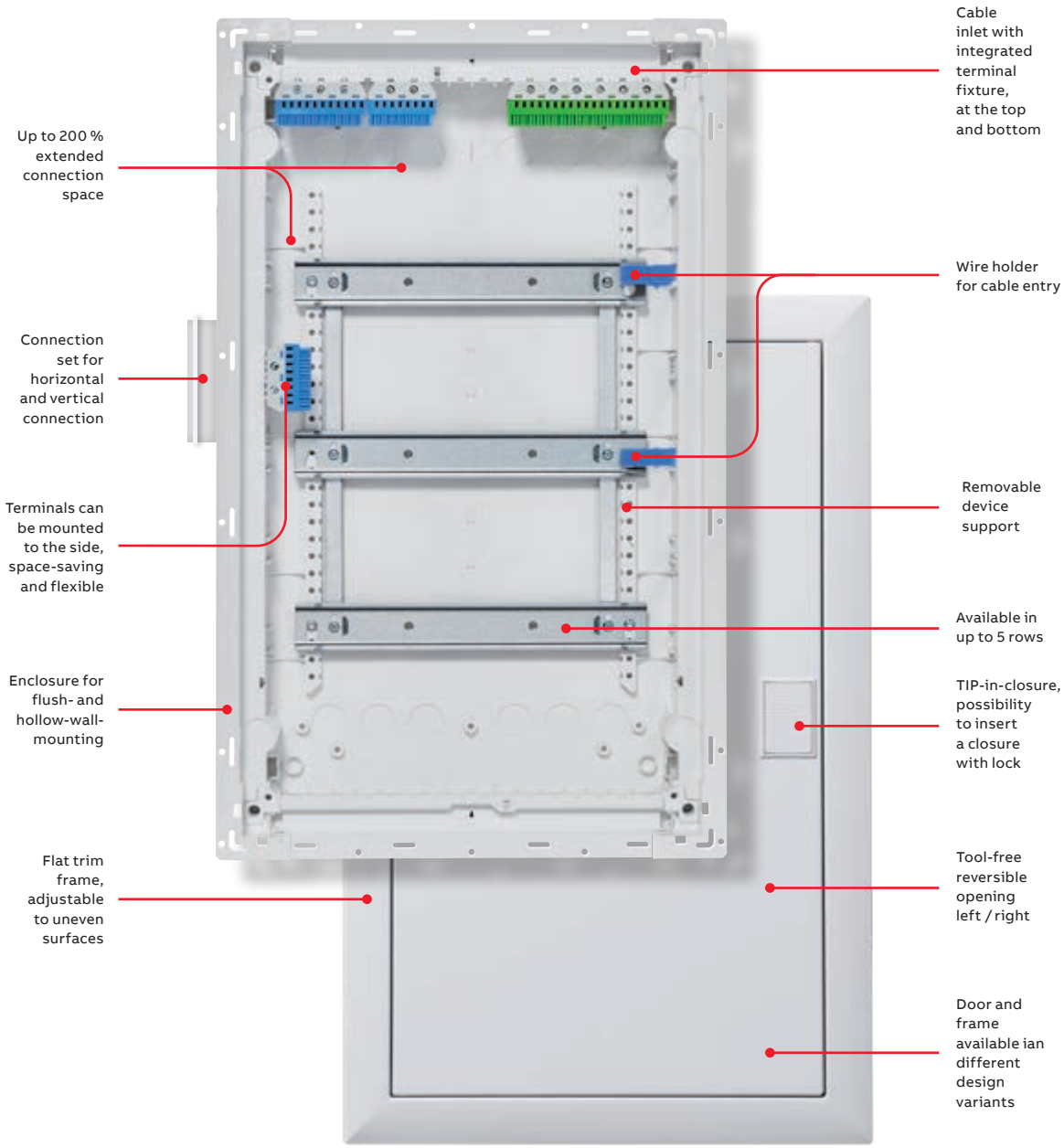
FLCO9244

Spare transparent smoky doors

Spring closing

For fronts type	Order code	Box/pack No items
12 696	12 658	10/40
12 697	12 659	10/40
12 698	12 660	10/20

UK600 Flush-mounting Series
Consumer units





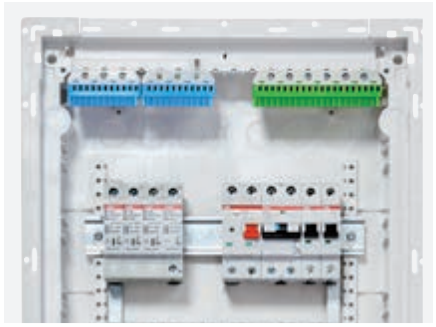
Snap-on cable inlet with integrated terminal fixture allows easy insertion of incoming and outgoing cables and uses a quick, single-hand-operated push and-stay design, resulting in 80 % more cable inlet space. Both cable inlets can be screwed tight when installation is complete.



The generous wiring space considerably facilitates installation works for up to 200 % more wiring space and “slide in” wire holder.



All enclosures of the UK600 series are suitable for hollow-wall installation. Upgrading is incredibly quick and simple – just as easy as the hollow wall installation itself. You just need the UZ91P4 hollow wall set for UK600. No screws, yet nothing can slip. Fastening it is as easy as fastening cable ties.



Time-saving installation thanks to intelligent plug-in technology. The N/PE terminals which are laterally assembled provide a high level of flexibility. There are also versions available with screw-type terminals.



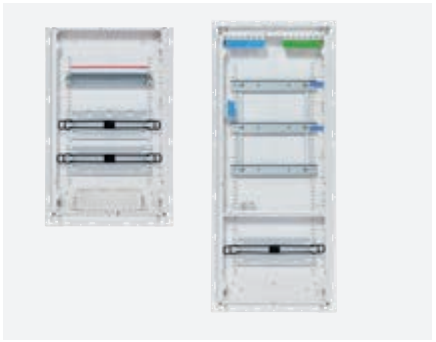
An innovative connection set for horizontal and vertical connection of several combi enclosures enables flexible extension and combination options.



The stable, removable device support can be snapped in and is installed quickly without tools. Here too, a variety of common installation techniques have been catered for – the device support can also be fixed in position using screws.



The triple socket makes the connection of different power supplies very easy. it offers 120° swiveling and can be snapped onto cable inlet.

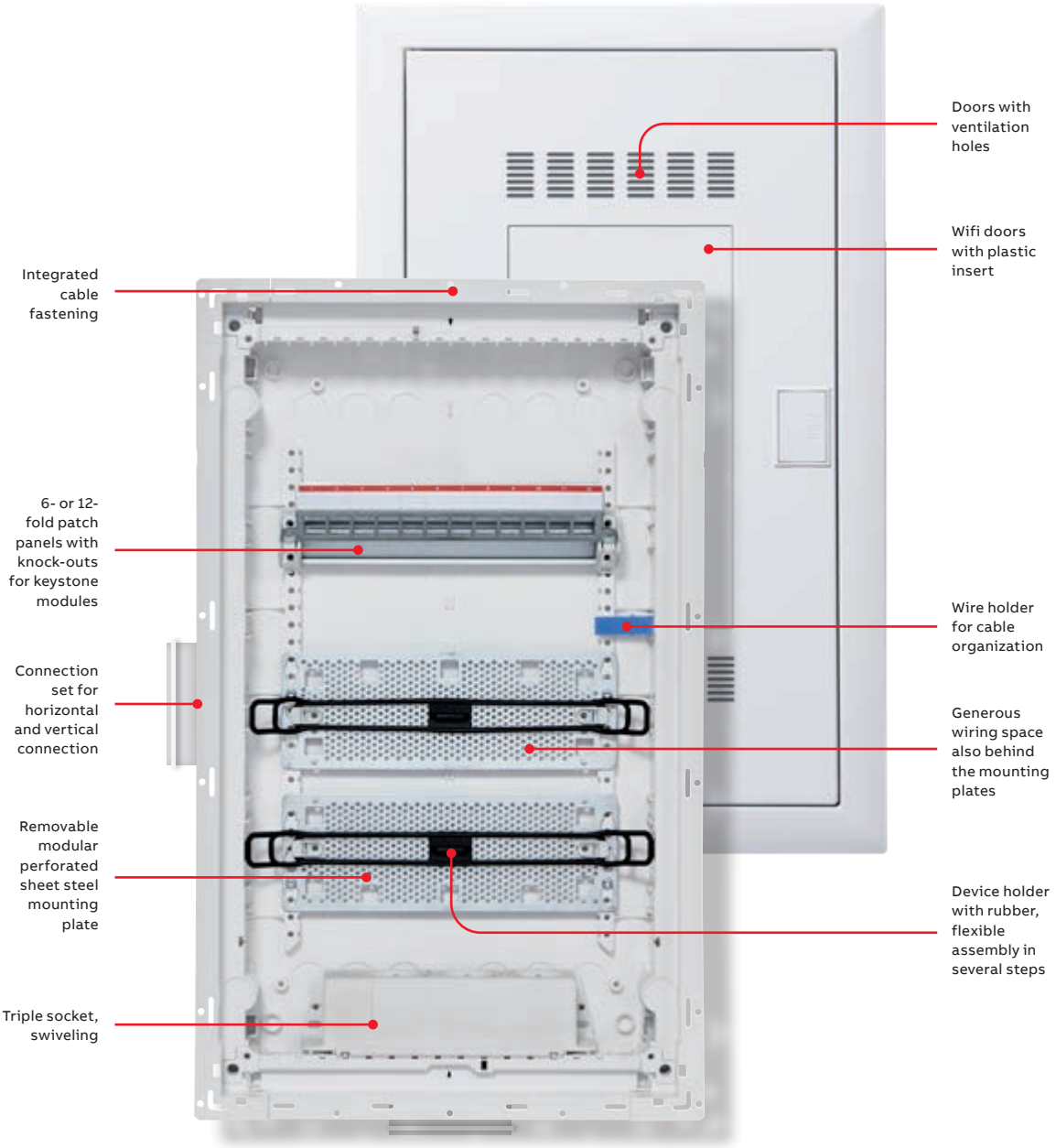


With the new media enclosure all conceivable devices such as routers or media modules find a safe space. The innovative combi enclosure combines the media and the consumer unit in one single cabinet, with a flexible partition separating the two parts from each other.

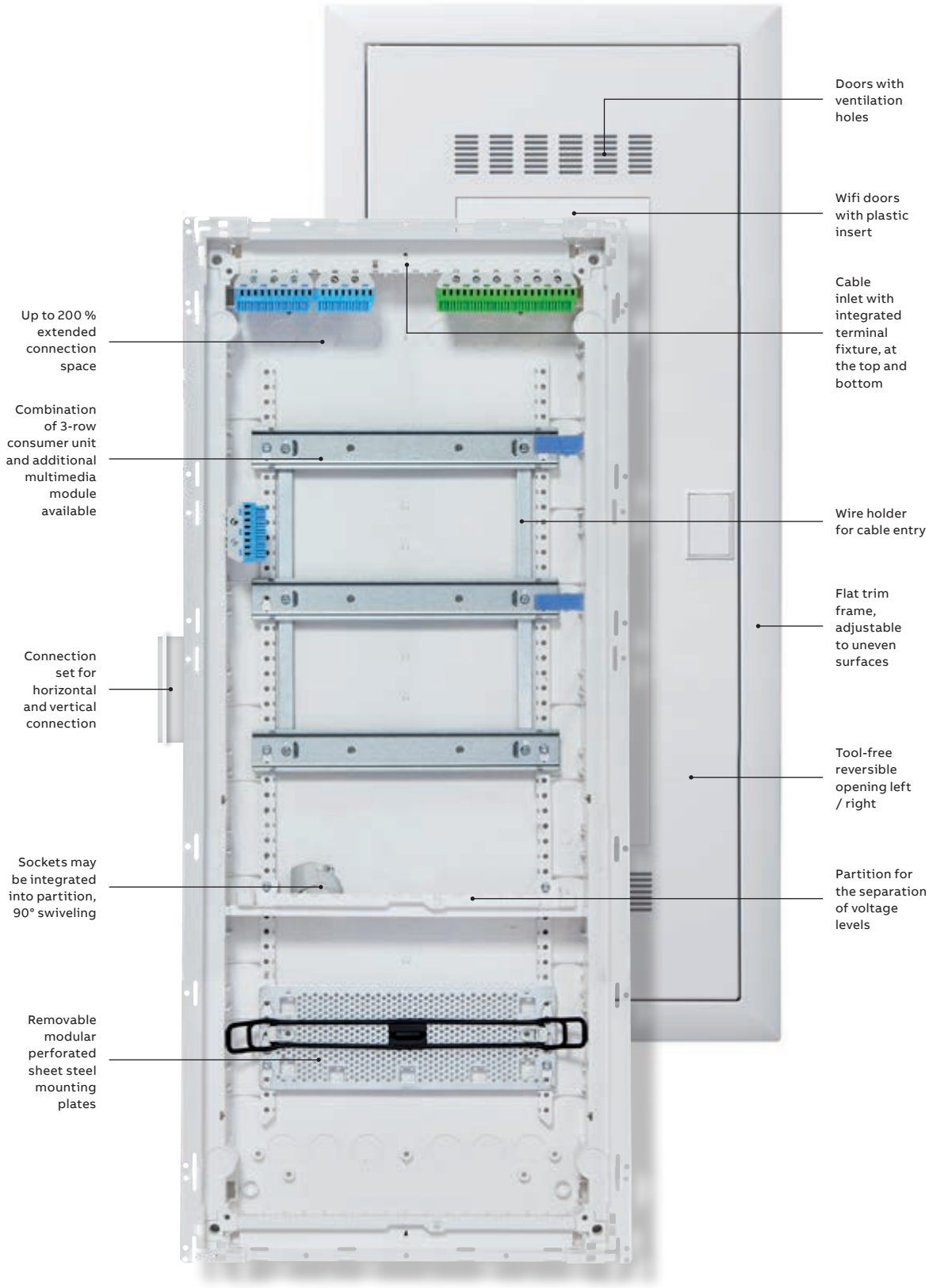


An attractive design feature – a perfect example of how easy it can be to combine functionality with design. The variety of high-quality doors and frame designs make the UK600 consumer units and media enclosures a design element in every living space. Media doors are available as Wifi-friendly and ventilated versions.

UK600 Flush-mounting Series
Media enclosures



UK600 Flush-mounting Series
Combi enclosures



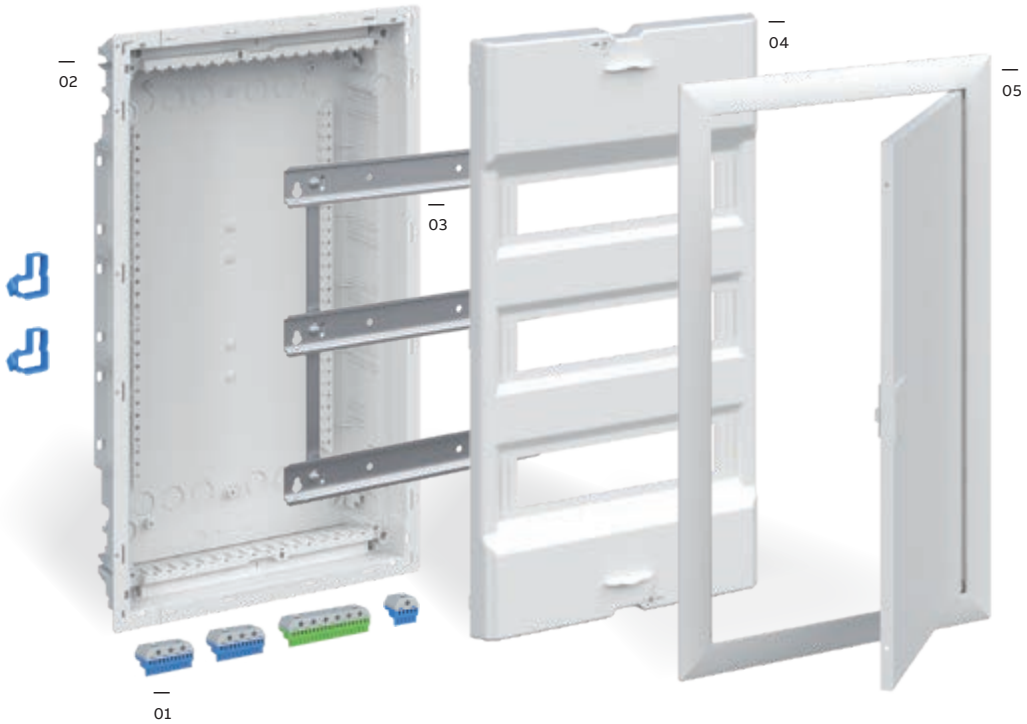
Consumer units

Complete version UK600 with trim frame and door
With N/PE quick-terminals

— 01 N/PE quick-terminals
— 02 Wall box
— 03 Device carrier
— 04 Cover
— 05 Trim frame with sheet steel door

Flush-mounted consumer units – UK600, IP30 - , ;*
I_n up to 63 A
Consumer units DIN EN 60670-24, DIN 43871
Device support with removable DIN rail
Mechanical impact strength: IK07
Available in 1 up to 5 row versions as flush-mounted consumer units
Can be upgraded for surface-mounting or partially recessed mounting
Upgradeable for hollow-wall-mounting using UZ91P4
Wall box:
- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable
Wall grips
Reversible opening (tool-free)
Communication channel for horizontal and vertical connection
For building installation according to DIN 18015
With N/PE quick-terminals
Wire holder for professional cable organization
Cover with 90° quick-action screws, lead-sealable
45 mm slots for 12 devices, expandable to 14
Labelling system
Trim frame and sheet steel door, adjustable for uneven surface
Colour: White, RAL 9016

*in connection with hollow-wall-mounting set UZ91P4





UK612N2



UK624N3



UK636N3



UK648N3



UK660N4

Article	H x W x D (mm)	SU	Type	Ord. no.
Flush-mounted consumer units, 1-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** ZK51B, ZK82B, ZK113G	355 x 367 x 95 328 x 340 x 88	12 (13)	UK612N2	2CPX031369R9999
Flush-mounted consumer units, 2-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** ZK51B, ZK82B, ZK144G	480 x 367 x 95 453 x 340 x 88	24 (28)	UK624N3	2CPX031370R9999
Flush-mounted consumer units, 3-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** ZK51B, 2 x ZK113B, ZK206G	605 x 367 x 95 578 x 340 x 88	36 (41)	UK636N3	2CPX031371R9999
Flush-mounted consumer units, 4-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** 2 x ZK82B, ZK144B, ZK237G	730 x 367 x 95 703 x 340 x 88	48 (56)	UK648N3	2CPX031372R9999
Flush-mounted consumer units, 5-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** ZK51B, 2 x ZK82B, ZK144B, ZK268G	855 x 367 x 95 828 x 340 x 88	60 (70)	UK660N4	2CPX031373R9999

> N/PE quick-terminals, see page 41
> Technical specifications UK600 trim frame dimensions, see page 60

Consumer units

Complete version UK600 with trim frame and door
N/PE screw-terminals

— 01 Screw-terminals
— 02 Wall box
— 03 Device carrier
— 04 Cover
— 05 Trim frame with sheet steel door

Flush-mounted consumer units – UK600, IP30 , ;*
I_n up to 63 A
Consumer units DIN EN 60670-24, DIN 43871
For building installation according to DIN 18015
Mechanical impact strength: IK07
Available in 1 up to 5 row versions as flush-mounted consumer units
Can be upgraded for surface-mounting or partially recessed mounting
Upgradeable for hollow-wall-mounting using UZ91P4
Wall box:
- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable
Wall grips
Reversible opening (tool-free)
Communication channel for horizontal and vertical connection
Device support with removable DIN rail
With N/PE screw-terminals
Wire holder for professional cable organization
Cover with 90° quick-action screws, lead-sealable
45 mm slots for 12 devices, expandable to 14
Labelling system
Trim frame and sheet steel door, adjustable for uneven surface
Colour: White, RAL 9016

*in connection with hollow-wall-mounting set UZ91P4





UK612E3



UK624E3



UK636E3



UK648E3



UK660E3

Article	H x W x D (mm)	SU	Type	Ord. no.
Flush-mounted consumer units, 1-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, ZKS6B, ZKS16G	355 x 367 x 95 328 x 340 x 88	12 (13)	UK612E2	2CPX077840R9999
Flush-mounted consumer units, 2-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, ZKS16B, ZKS21G	480 x 367 x 95 453 x 340 x 88	24 (28)	UK624E3	2CPX077841R9999
Flush-mounted consumer units, 3-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, 2 x ZKS11B, ZKS26G	605 x 367 x 95 578 x 340 x 88	36 (41)	UK636E3	2CPX077842R9999
Flush-mounted consumer units, 4-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, ZKS11B, ZKS16B, ZKS26G	730 x 367 x 95 703 x 340 x 88	48 (56)	UK648E3	2CPX077843R9999
Flush-mounted consumer units, 5-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, 2 x ZKS16B, ZKS11G, ZKS21G	855 x 367 x 95 828 x 340 x 88	60 (70)	UK660E3	2CPX077844R9999

> Screw-terminals, see page 42
> Technical specifications UK600 trim frame dimensions, see page 60

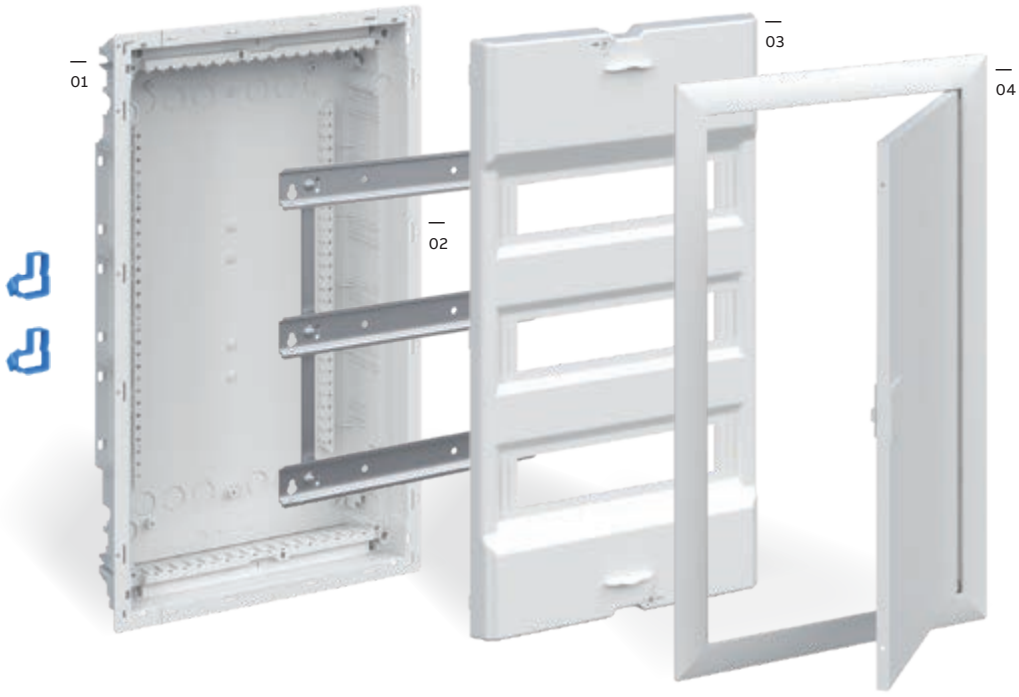
Consumer units

Complete version UK600 with trim frame and door
Without terminals

— 01 Wall box
— 02 Device carrier
— 03 Cover
— 04 Trim frame with sheet steel door

Flush-mounted consumer units – UK600, IP30 , ;*
I_n up to 63 A
Consumer units DIN EN 60670-24, DIN 43871
For building installation according to DIN 18015
Mechanical impact strength: IK07
Available in 1 up to 5 row versions as flush-mounted consumer units
Can be upgraded for surface-mounting or partially recessed mounting
Upgradeable for hollow-wall-mounting using UZ91P4
Wall box:
- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable
Wall grips
Reversible opening (tool-free)
Communication channel for horizontal and vertical connection
Device support with removable DIN rail
Without terminals
Wire holder for professional cable organization
Cover with 90° quick-action screws, lead-sealable
45 mm slots for 12 devices, expandable to 14
Labelling system
Trim frame and sheet steel door, adjustable for uneven surface
Colour: White, RAL 9016

*in connection with hollow-wall-mounting set UZ91P4





UK612K



UK624K



UK636K



UK648K



UK660K

Article	H x W x D (mm)	SU	Type	Ord. no.
Flush-mounted consumer units, 1-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting	355 x 367 x 95 328 x 340 x 88	12 (13)	UK612K	2CPX031379R9999
Flush-mounted consumer units, 2-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting	480 x 367 x 95 453 x 340 x 88	24 (28)	UK624K	2CPX031380R9999
Flush-mounted consumer units, 3-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting	605 x 367 x 95 578 x 340 x 88	36 (41)	UK636K	2CPX031381R9999
Flush-mounted consumer units, 4-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting	730 x 367 x 95 703 x 340 x 88	48 (56)	UK648K	2CPX031382R9999
Flush-mounted consumer units, 5-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting	855 x 367 x 95 828 x 340 x 88	60 (70)	UK660K	2CPX031383R9999

> Technical specifications UK600 trim frame dimensions, see page 60

Consumer units

Basic version UK600 without trim frame and door
With N/PE quick-terminals

— 01 N/PE quick-terminals
— 02 Wall box
— 03 Device carrier
— 04 Cover

Flush-mounted consumer units – UK600, IP30 - , ;*
I_n up to 63 A
Consumer units DIN EN 60670-24, DIN 43871
For building installation according to DIN 18015
Mechanical impact strength: IK07
Available in 1 up to 5 row versions as flush-mounted consumer units
Can be upgraded for surface-mounting or partially recessed mounting
Upgradeable for hollow-wall-mounting using UZ91P4
Wall box:
- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable
Wall grips
Reversible opening (tool-free)
Communication channel for horizontal and vertical connection
Device support with removable DIN rail
With N/PE quick-terminals
Wire holder for professional cable organization
Cover with 90° quick-action screws, lead-sealable
45 mm slots for 12 devices, expandable to 14
Labelling system
Trim frame and sheet steel door, adjustable for uneven surface
Colour: White, RAL 9016

*in connection with hollow-wall-mounting set UZ91P4





UK612NB



UK624NB



UK636NB



UK648NB



UK660NB

Article	H x W x D (mm)	SU	Type	Ord. no.
Flush-mounted consumer units, 1-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** ZK51B, ZK82B, ZK113G	355 x 367 x 95 328 x 340 x 88	12 (13)	UK612NB	2CPX031374R9999
Flush-mounted consumer units, 2-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** ZK51B, ZK82B, ZK144G	480 x 367 x 95 453 x 340 x 88	24 (28)	UK624NB	2CPX031375R9999
Flush-mounted consumer units, 3-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** ZK51B, 2 x ZK113B, ZK206G	605 x 367 x 95 578 x 340 x 88	36 (41)	UK636NB	2CPX031376R9999
Flush-mounted consumer units, 4-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** 2 x ZK82B, ZK144B, ZK237G	730 x 367 x 95 703 x 340 x 88	48 (56)	UK648NB	2CPX031377R9999
Flush-mounted consumer units, 5-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** ZK51B, 2 x ZK82B, ZK144B, ZK268G	855 x 367 x 95 828 x 340 x 88	60 (70)	UK660NB	2CPX031378R9999

> N/PE quick-terminals, see page 40
> Technical specifications UK600 trim frame dimensions, see page 60

Consumer units

Basic version UK600 without trim frame and door
N/PE screw-terminals

— 01 Screw-terminals
— 02 Wall box
— 03 Device carrier
— 04 Cover
— 05 Trim frame with sheet steel door

Flush-mounted consumer units – UK600, IP30 , ;*
I_n up to 63 A
Consumer units DIN EN 60670-24, DIN 43871
For building installation according to DIN 18015
Mechanical impact strength: IK07
Available in 1 up to 5 row versions as flush-mounted consumer units
Can be upgraded for surface-mounting or partially recessed mounting
Upgradeable for hollow-wall-mounting using UZ91P4
Wall box:
- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable
Wall grips
Reversible opening (tool-free)
Communication channel for horizontal and vertical connection
Device support with removable DIN rail
With N/PE screw-terminals
Wire holder for professional cable entry
Cover with 90° quick-action screws, lead-sealable
45 mm slots for 12 devices, expandable to 14
Labelling system
Trim frame and sheet steel door, adjustable for uneven surface
Colour: White, RAL 9016

*in connection with hollow-wall-mounting set UZ91P4





UK612EB



UK624EB



UK636EB



UK648EB



UK660EB

Article	H x W x D (mm)	SU	Type	Ord. no.
Flush-mounted consumer units, 1-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, ZKS6B, ZKS16G	355 x 367 x 95 328 x 340 x 88	12 (13)	UK612EB	2CPX077845R9999
Flush-mounted consumer units, 2-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, ZKS16B, ZKS21G	480 x 367 x 95 453 x 340 x 88	24 (28)	UK624EB	2CPX077846R9999
Flush-mounted consumer units, 3-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, 2 x ZKS11B, ZKS26G	605 x 367 x 95 578 x 340 x 88	36 (41)	UK636EB	2CPX077847R9999
Flush-mounted consumer units, 4-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, ZKS11B, ZKS16B, ZKS26G	730 x 367 x 95 703 x 340 x 88	48 (56)	UK648EB	2CPX077848R9999
Flush-mounted consumer units, 5-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, 2 x ZKS16B, ZKS11G, ZKS21G	855 x 367 x 95 828 x 340 x 88	60 (70)	UK660EB	2CPX077849R9999

* In connection with a standard door, with TIP-in closure there will be one space unit less.

> Screw-terminals, see page 43
> Technical specifications UK600 trim frame dimensions, see page 60

Consumer units

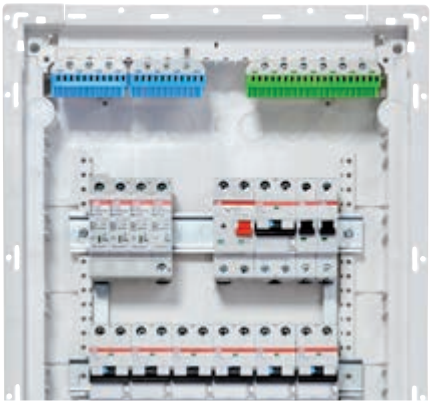
N/PE quick-terminals

Standardized, future-oriented and flexible

Configure based on your needs

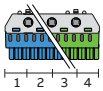
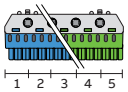
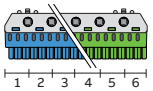
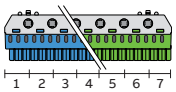
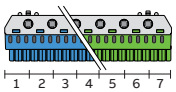
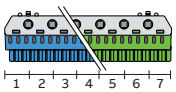
The modularity and the extensive range of products allow customizing the products to the needs based on real-world use. Various quick-terminals can be combined on one quick carrier as necessary. If a larger N or PE terminal has to be used, simply connect two quick-terminals using the ZK10P10 connecting bridge.





Product benefits

- Flexible terminal system for several N potentials: Screw connections: 2.5 to 25 mm² for rigid conductors; for flexible conductors up to 25 mm² (wire end sleeves required)
- Spring connection: 1.5 to 4 mm² for rigid conductors; for flexible conductors up to 25 mm² (wire end sleeves required)
- Optimal when using several residual current circuit breakers
- Ease of expansion using connecting bridges
- Precise assignment of the terminals by clear colour coding: N = blue, PE = yellow-green
- Easy labelling of the terminals using pre-printed, self-adhesive number strips
- Wide range of applications: may be used in the UK600 and MISTRAL65 consumer unit series, in all compact distribution boards, and with all meter cabinets, wall-mounting and floor-standing cabinets

N/PE terminals with units	N quick-terminals		Screw connection system	Spring connection system	PE quick-terminals		Screw connection system	Spring connection system
		ZK50B						
		ZK50BT	0 x 25 mm²	5 x 1,5 - 4 mm²	-		-	-
		ZK51B	1 x 25 mm²	5 x 1,5 - 4 mm²		ZK51G	1 x 25 mm²	5 x 1,5 - 4 mm²
		ZK82B	2 x 25 mm²	8 x 1,5 - 4 mm²		ZK82G	2 x 25 mm²	8 x 1,5 - 4 mm²
		ZK113B	3 x 25 mm²	11 x 1,5 - 4 mm²		ZK113G	3 x 25 mm²	11 x 1,5 - 4 mm²
		ZK144B	4 x 25 mm²	14 x 1,5 - 4 mm²		ZK144G	4 x 25 mm²	14 x 1,5 - 4 mm²
		ZK175B	5 x 25 mm²	17 x 1,5 - 4 mm²		ZK175G	5 x 25 mm²	17 x 1,5 - 4 mm²
		ZK206B	6 x 25 mm²	20 x 1,5 - 4 mm²		ZK206G	6 x 25 mm²	20 x 1,5 - 4 mm²
		ZK237B	7 x 25 mm²	23 x 1,5 - 4 mm²		ZK237G	7 x 25 mm²	23 x 1,5 - 4 mm²
		ZK268B	8 x 25 mm²	26 x 1,5 - 4 mm²		ZK268G	8 x 25 mm²	26 x 1,5 - 4 mm²

Consumer units

N/PE quick-terminals

Accessories / equipment with the UK600



ZK50B



ZK50BT



ZK51G



ZK10P10



ZK600

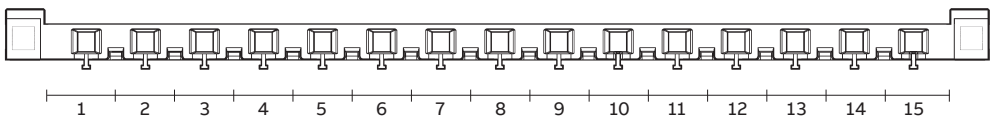


UZB1



ZK603

Article	Number terminals 1.5 x 4 mm²	Number terminals 2.5 x 25 mm²	External dimensions H x W x D in mm	Pieces	Type	Ord. no.
N quick-plug terminals For terminal carriers	5 x 1.5 - 4	0 x 25	23 x 32 x 21	1	ZK50B	2CPX062750R9999
	5 x 1.5 - 4	1 x 25	32 x 32 x 31	1	ZK51B	2CPX062751R9999
	8 x 1.5 - 4	2 x 25	32 x 49 x 31	1	ZK82B	2CPX062752R9999
	11 x 1.5 - 4	3 x 25	32 x 65 x 31	1	ZK113B	2CPX062753R9999
	14 x 1.5 - 4	4 x 25	32 x 82 x 31	1	ZK144B	2CPX062754R9999
	17 x 1.5 - 4	5 x 25	32 x 98 x 31	1	ZK175B	2CPX062755R9999
	20 x 1.5 - 4	6 x 25	32 x 115 x 31	1	ZK206B	2CPX062756R9999
	23 x 1.5 - 4	7 x 25	32 x 132 x 31	1	ZK237B	2CPX063163R9999
	26 x 1.5 - 4	8 x 25	32 x 149 x 31	1	ZK268B	2CPX063164R9999
N quick-plug terminals With adapter ZK15 for lateral assembling in the UK6... or for fastening to the DIN rail	5 x 1.5 - 4	0 x 25	28 x 39 x 25	1	ZK50BT	2CPX062745R9999
PE quick-plug terminals For terminal carriers	5 x 1.5 - 4	1 x 25	32 x 32 x 31	1	ZK51G	2CPX062757R9999
	8 x 1.5 - 4	2 x 25	32 x 49 x 31	1	ZK82G	2CPX062758R9999
	11 x 1.5 - 4	3 x 25	32 x 65 x 31	1	ZK113G	2CPX062759R9999
	14 x 1.5 - 4	4 x 25	32 x 82 x 31	1	ZK144G	2CPX062760R9999
	17 x 1.5 - 4	5 x 25	32 x 98 x 31	1	ZK175G	2CPX062761R9999
	20 x 1.5 - 4	6 x 25	32 x 115 x 31	1	ZK206G	2CPX062762R9999
	23 x 1.5 - 4	7 x 25	32 x 132 x 31	1	ZK237G	2CPX063165R9999
	26 x 1.5 - 4	8 x 25	32 x 149 x 31	1	ZK268G	2CPX063166R9999
Connecting bridges For terminal carriers				10	ZK10P10	2CPX062763R9999
Quick-carriers For UK6... consumer units Usable width for terminals 247 mm 15 units				1	ZK600	2CPX064980R9999
Cable inlet for wall box With integrated terminal carrier Top or bottom, 1 to 5 rows Usable width for terminals 277 mm, 17 units				1	UZB1	2CPX031407R9999
N/PE quick-plug terminal set for UK... Quick-plug terminals: ZK144B: N 4 x 25 + 14 x 4 mm² ZK82B: N 2 x 25 + 8 x 4 mm² ZK206G: PE 6 x 25 + 20 x 4 mm²			**Type** With	1	ZK603	2CPX063177R9999



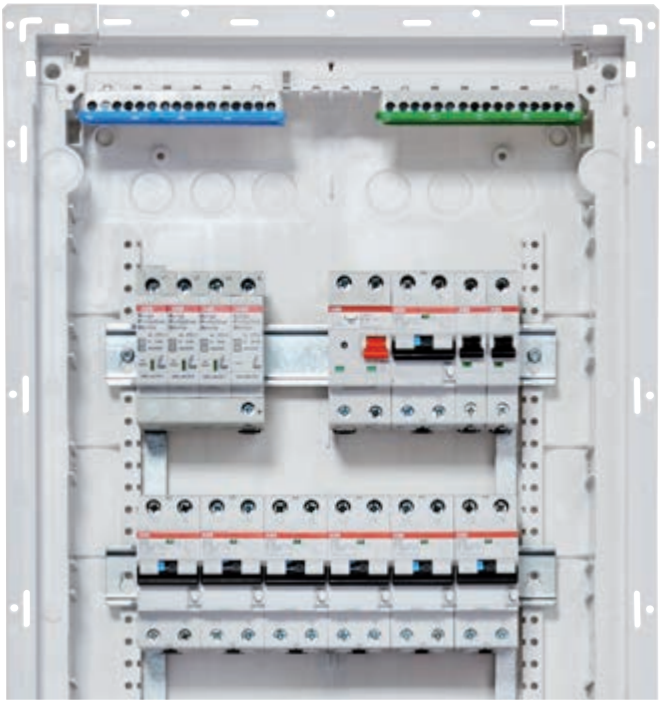
Consumer units

Screw terminals

Standardized, future-oriented and flexible

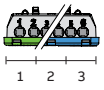
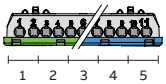
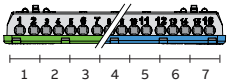
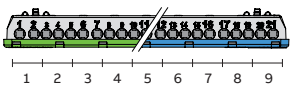
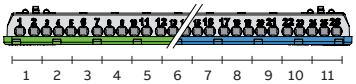
Configure based on your needs

The modularity and the extensive range of products allow customizing the new products to the needs based on realworld use. Various terminals can be combined on one common carrier as necessary.



Product benefits

- Flexible terminal system for several N potentials: Screw connections: 1.5 to 16 mm² for rigid conductors; for flexible conductors up to 16 mm² (wire end sleeves required)
- Optimal when using several residual current circuit breakers
- Precise assignment of the terminals by clear colour coding: N = blue, PE = yellow-green
- Easy labelling of the terminals using pre-printed, self-adhesive number strips
- Wide range of applications: may be used in the UK600 and MISTRAL65 consumer unit series, in all compact distribution boards, and with all meter cabinets, wall-mounting and floor-standing cabinets

N/PE terminals with units	N screw-terminals		Screw connection system		PE screw-terminals		Screw connection system	
		ZKS6B	3 x 6 mm²	3 x 16 mm²		ZKS6G	3 x 6 mm²	3 x 16 mm²
		ZKS11B	5 x 6 mm²	5 x 16 mm²		ZKS11G	5 x 6 mm²	5 x 16 mm²
		ZKS16B	9 x 6 mm²	7 x 16 mm²		ZKS16G	9 x 6 mm²	7 x 16 mm²
		ZKS21B	12 x 6 mm²	9 x 16 mm²		ZKS21G	12 x 6 mm²	9 x 16 mm²
		ZKS26B	15 x 6 mm²	11 x 16 mm²		ZKS26G	15 x 6 mm²	11 x 16 mm²

Consumer units

Screw terminals

Accessories / equipment with the UK600



ZK...



ZKS11B



ZKS16B



ZKS21B



ZKS26B



ZKS6G



ZKS11G



ZKS16G



ZKS21G



ZKS21G

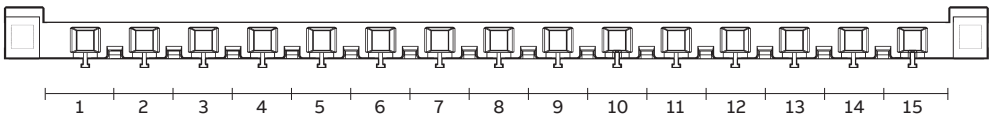


ZK507



ZK600

Article	Number terminals 1.5 x 6 mm²	Number terminals 1.5 x 16 mm²	External dimensions H x W x D in mm	Pieces	Type	Ord. no.
N screw-terminals For terminal carriers	3 x 6	3 x 16	27 x 50 x 20	1	ZKS6B	2CPX063167R9999
	6 x 6	5 x 16	27 x 83 x 20	1	ZKS11B	2CPX063168R9999
	9 x 6	7 x 16	27 x 116 x 20	1	ZKS16B	2CPX063169R9999
	12 x 6	9 x 16	27 x 149 x 20	1	ZKS21B	2CPX063170R9999
	15 x 6	11 x 16	27 x 182 x 20	1	ZKS26B	2CPX063171R9999
PE screw-terminals For terminal carriers	3 x 6	3 x 16	27 x 50 x 20	1	ZKS6G	2CPX063172R9999
	6 x 6	5 x 16	27 x 83 x 20	1	ZKS11G	2CPX063173R9999
	9 x 6	7 x 16	27 x 116 x 20	1	ZKS16G	2CPX063174R9999
	12 x 6	9 x 16	27 x 149 x 20	1	ZKS21G	2CPX063175R9999
	15 x 6	11 x 16	27 x 182 x 20	1	ZKS26G	2CPX063176R9999
N-FI rail 3 x 16 mm² + 2 x 10 mm² Cu pluggable				1	ZK507	2CPX030892R9999
Quick-carriers For UK6... consumer units Usable width for terminals 247 mm 15 units				1	ZK600	2CPX063178R9999



Consumer units

UK600 consumer unit

Project options



UZB636



UZS636B



UZS636N



UZS636K

Article	Pieces	Type	Ord. no.
Wall box with wall grips			
To be used with UK61...	1	UZB612	2CPX031113R9999
To be used with UK62...	1	UZB624	2CPX031114R9999
To be used with UK63...	1	UZB636	2CPX031115R9999
To be used with UK64...	1	UZB648	2CPX031116R9999
To be used with UK66..	1	UZB660	2CPX031117R9999
Cover, device support and N/PE quick-plug terminals			
To be used with UK61...	1	UZS612B	2CPX031139R9999
To be used with UK62...	1	UZS624B	2CPX031140R9999
To be used with UK63...	1	UZS636B	2CPX031141R9999
To be used with UK64...	1	UZS648B	2CPX031142R9999
To be used with UK66..	1	UZS660B	2CPX031143R9999
Trim frame with door, cover, device support and N/PE quick-plug terminals			
To be used with UK61...	1	UZS612N	2CPX031131R9999
To be used with UK62...	1	UZS624N	2CPX031132R9999
To be used with UK63...	1	UZS636N	2CPX031133R9999
To be used with UK64...	1	UZS648N	2CPX031134R9999
To be used with UK66..	1	UZS660N	2CPX031135R9999
Trim frame with door, cover, device support and DIN rail for terminal blocks			
To be used with UK63...	1	UZS636K	2CPX031136R9999
To be used with UK64...	1	UZS648K	2CPX031137R9999
To be used with UK66..	1	UZS660K	2CPX031138R9999

Consumer units

UK600 consumer unit

Spare parts and accessories



AP636



UZB1



UZB2



UZB3



UZT1



UZT2



UZT3



UZT4

Article	Pieces	Type	Ord. no.
Surface mounting For wall-mounting or partially recessed installation with predetermined breaking points, only suitable for standard door			
To be used with UK61...	1	AP612	2CPX031402R9999
To be used with UK62...	1	AP624	2CPX031403R9999
To be used with UK63...	1	AP636	2CPX031404R9999
To be used with UK64...	1	AP648	2CPX031405R9999
To be used with UK66..	1	AP660	2CPX031406R9999
Cable inlet With integrated terminal carrier Top or bottom, 1 to 5 rows Usable width for terminals 277 mm, 17 units	1	UZB1	2CPX031407R9999
Connecting channel for horizontal and vertical apposition and cross-wiring of the consumer units	1	UZB2	2CPX031408R9999
Horizontal partition with integrated terminal carrier, Knock-out for two sockets, type ZE224 and five knock-outs for communications racks*	1	UZB3	2CPX031409R9999
Hinge set for UK600	2	UZT1	2CPX031410R9999
TIP-in-closure Colour: White, RAL 9016	1	UZT2	2CPX031411R9999
Closure with lock, standard With 2 keys	1	UZT3	2CPX031412R9999
Closure with lock, Ronis With 2 keys	1	UZT4	2CPX031413R9999

Consumer units

UK600 consumer unit

Spare parts and accessories



UZT5



UZ4P2



UZG636



UZA636



UZM620



UZ91P4



ZA120



ZA89P20

Article	Pieces	Type	Ord. no.
Labelling system Self-adhesive With labelling panels and numbers 1-70 with legend	1	UZT5	2CPX031429R9999
Wall grips To fix the wall box in two mounting depths	4	UZ4P2	2CPX062447R9999
DIN rail with device insert			
To be used with UK61...	1	UZG612	2CPX031118R9999
To be used with UK62...	1	UZG624	2CPX031119R9999
To be used with UK63...	1	UZG636	2CPX031120R9999
To be used with UK64...	1	UZG648	2CPX031121R9999
To be used with UK66..	1	UZG660	2CPX031122R9999
Cover with 90° quick-action screws			
To be used with UK61...	1	UZA612	2CPX031123R9999
To be used with UK62...	1	UZA624	2CPX031124R9999
To be used with UK63...	1	UZA636	2CPX031125R9999
To be used with UK64...	1	UZA648	2CPX031126R9999
To be used with UK66..	1	UZA660	2CPX031127R9999
Mounting plate, sheet steel, galvanised			
To be used with UK61..., H x W = 212 x 242 mm	1	UZM610	2CPX031414R9999
To be used with UK62..., H x W = 337 x 242 mm	1	UZM620	2CPX031415R9999
To be used with UK63..., H x W = 462 x 242 mm	1	UZM630	2CPX031416R9999
To be used with UK64..., H x W = 587 x 242 mm	1	UZM640	2CPX031417R9999
To be used with UK65..., H x W = 712 x 242 mm	1	UZM650	2CPX031418R9999
Hollow-wall-mounting set To modify the flush-mounting consumer unit into a hollow-wall consumer unit UK600 (type label and 20 cable ties included) wall thickness min. 8 mm, max. 35 mm	4	UZ91P4	2CPX031434R9999
Touch-up applicator Colour: RAL 9016, 12 ml	1	ZA120	2CPX039043R9999
Screws 20 pcs. for fixing DIN rails and mounting plates	1	ZA89P20	2CPX062376R9999

Consumer units

UK600 consumer unit

Trim frame with door and design foils

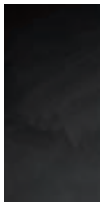


BL610



BL611

Article	To be used with...	Pieces	Type	Ord. no.
Trim frame with door (standard) Colour: White, RAL 9016 sheet steel, powder coated	UK61..	1	BL610	2CPX031081R9999
	UK62..	1	BL620	2CPX031082R9999
	UK63..	1	BL630	2CPX031083R9999
	UK64..	1	BL640	2CPX031084R9999
	UK66..	1	BL650	2CPX031085R9999
Trim frame with door Colour: Anthracite, RAL 7016 sheet steel, powder coated	UK61..	1	BL611	2CPX031086R9999
	UK62..	1	BL621	2CPX031087R9999
	UK63..	1	BL631	2CPX031088R9999
	UK64..	1	BL641	2CPX031089R9999
	UK66..	1	BL651	2CPX031090R9999



Blackboard foil



Stones

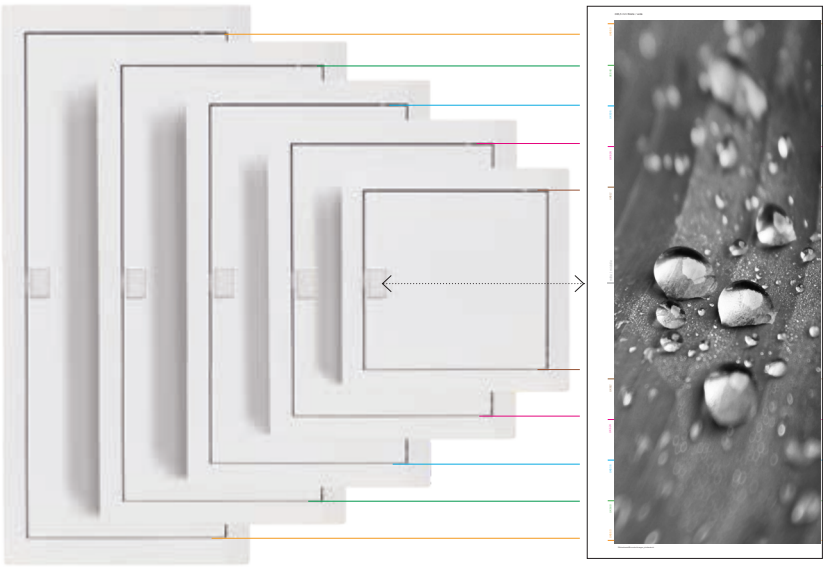


Wooden walkway



Water drops

Article	To be used with...	Pieces	Type	Ord. no.
Blackboard foil For labelling of UK600 sheet steel doors	UK61.. UK62.. UK63.. UK64.. UK66..	1	UZ640D	
		10	UZ640DP10	2CPX031790R9999
Stones Design foil for UK600 sheet steel doors	UK61.. UK62.. UK63.. UK64.. UK66..	1	UZ641D	2CPX031787R9999
		10	UZ641DP10	2CPX031791R9999
Wooden walkway Design foil for UK600 sheet steel doors	UK61.. UK62.. UK63.. UK64.. UK66..	1	UZ642D	2CPX031788R9999
		10	UZ642DP10	2CPX031792R9999
Water drops Design foil for UK600 sheet steel doors	UK61.. UK62.. UK63.. UK64.. UK66..	1	UZ643D	2CPX031789R9999
		10	UZ643DP10	2CPX031793R9999



Consumer units

UK600 consumer unit

Design frames and inserts



BL630D



UZD630



UZD631



UZD632



UZD633



UZD634



UZD635

Article	To be used with...	Pieces	Type	Ord. no.
Interchangeable design frame Aluminium brushed, stainless steel finish without insert	UK62..	1	BL620D	2CPX031794R9999
	UK63..	1	BL630D	2CPX031795R9999
	UK64..	1	BL640D	2CPX031796R9999
	UK66..	1	BL650D	2CPX031797R9999
Inserts for the interchangeable design frame				
Image insert For your own images as you wish	UK62..	1	UZD620	2CPX031762R9999
	UK63..	1	UZD630	2CPX031768R9999
	UK64..	1	UZD640	2CPX031774R9999
	UK66..	1	UZD650	2CPX031780R9999
Pinboard insert Grey felt with pins	UK62..	1	UZD621	2CPX031763R9999
	UK63..	1	UZD631	2CPX031769R9999
	UK64..	1	UZD641	2CPX031775R9999
	UK66..	1	UZD651	2CPX031781R9999
Mirror insert	UK62..	1	UZD622	2CPX031764R9999
	UK63..	1	UZD632	2CPX031770R9999
	UK64..	1	UZD642	2CPX031776R9999
	UK66..	1	UZD652	2CPX031782R9999
Stainless steel finish insert	UK62..	1	UZD623	2CPX031765R9999
	UK63..	1	UZD633	2CPX031771R9999
	UK64..	1	UZD643	2CPX031777R9999
	UK66..	1	UZD653	2CPX031783R9999
LED panel insert With backlight foil*	UK62..	1	UZD624	2CPX031766R9999
	UK63..	1	UZD634	2CPX031772R9999
	UK64..	1	UZD644	2CPX031778R9999
	UK66..	1	UZD654	2CPX031784R9999
Wooden finish insert With 5 magnetic pins	UK62..	1	UZD625	2CPX031767R9999
	UK63..	1	UZD635	2CPX031773R9999
	UK64..	1	UZD645	2CPX031779R9999
	UK66..	1	UZD655	2CPX031785R9999

*12 V DC REG voltage supply must be ordered separately.

Consumer units

UK600 consumer unit
Design frames and inserts

A special highlight of the UK600 consumer unit system are the numerous door and frame options, which turn your consumer unit into an attractive design object at home. Images, pinboards, mirrors, magnetic boards and much more may be inserted into the interchangeable design frame.



—
01 Basic version UK600
—
02 Interchangeable design frame
—
03 Insert example with backlight foil LED backlight



—
01

—
02

—
03

Consumer units

Media enclosure UK600

With and without trim frame and door

Flush-mounted consumer units – UK600, IP30 - , ; *
Consumer units UK600 as multimedia version, dimensions according to the standard enclosures as per DIN 43871
Mechanical impact strength: IK07
Available in 2 up to 5 row versions as flush-mounted consumer units
Can be upgraded for surface-mounting or partially recessed mounting
Upgradeable for hollow-wall-mounting using UZ91P4
Wall box: - non-warp, break-proof, non-flammable, low-halogen plastic - with cable strain relief comb - with detachable cable inlets - combinable
Reversible opening (tool-free)
Communication channel for horizontal and vertical connection
With removable DIN rail in the top row
Patch panel in isolated design for up to 12 keystone modules
Modular perforated sheet steel mounting plate for devices
Simple and tool-free installation of the devices using the "device strap"
120° swiveling triple socket for the power supply of built-in devices
Wire holder for professional cable organization
With trim frame and sheet steel doors as sheet steel door with white plastic insert, for improved Wifi signals or as basic option without trim frame and door

*in connection with hollow-wall-mounting set UZ91P4





UK636MV

Article	Dimensions	H x D x D (mm)	Type	Ord. no.
Flush-mounted media enclosure with trim frame and door with ventilation holes				
Wall box with modular perforated sheet steel mounting plates and removable DIN rail Wire holder for cable entry Patch panel for up to 12 keystone modules Snap-on triple socket swiveling 120° with EURO insert Device strap for tool-free installation. Sheet steel door ventilated	3 rows Niche wall cut out dimensions	605 x 367 x 95 578 x 340 x 88	UK636MV	2CPX031384R9999
	4 rows Niche wall cut out dimensions	730 x 367 x 95 703 x 340 x 88	UK648MV	2CPX031385R9999
	5 rows Niche wall cut out dimensions	855 x 367 x 95 828 x 340 x 88	UK660MV	2CPX031386R9999



UK636MW

Flush-mounted media enclosure with trim frame and ventilated Wifi door				
Wall box with modular perforated sheet steel mounting plates and removable DIN rail Wire holder for cable entry Patch panel for up to 12 keystone modules Snap-on triple socket swiveling 120° with EURO insert Device strap for tool-free installation. Sheet steel door with white plastic insert, for improved Wifi signals	3 rows Niche wall cut out dimensions	605 x 367 x 95 578 x 340 x 88	UK636MW	2CPX031387R9999
	4 rows Niche wall cut out dimensions	730 x 367 x 95 703 x 340 x 88	UK648MW	2CPX031388R9999
	5 rows Niche wall cut out dimensions	855 x 367 x 95 828 x 340 x 88	UK660MW	2CPX031389R9999



UK630MV

Flush-mounted media enclosure with trim frame and door with ventilation holes				
Wall box with modular perforated sheet steel mounting plates and removable DIN rail Wire holder for cable entry Dual socket with mounting bracket Device strap for tool-free installation Sheet steel door ventilated	2 rows Niche wall cut out dimensions	480 x 367 x 95 453 x 340 x 88	UK620MV	2CPX031390R9999
	3 rows Niche wall cut out dimensions	605 x 367 x 95 578 x 340 x 88	UK630MV	2CPX031391R9999
	4 rows Niche wall cut out dimensions	730 x 367 x 95 703 x 340 x 88	UK640MV	2CPX031392R9999
	5 rows Niche wall cut out dimensions	855 x 367 x 95 828 x 340 x 88	UK650MV	2CPX031393R9999
Flush-mounted media enclosure as basis without trim frame and door				
Wall box with modular perforated sheet steel mounting plates and removable DIN rail Wire holder for cable entry Mounting bracket Device strap for tool-free installation	2 rows Niche wall cut out dimensions	480 x 367 x 95 453 x 340 x 88	UK624MB	2CPX031394R9999
	3 rows Niche wall cut out dimensions	605 x 367 x 95 578 x 340 x 88	UK636MB	2CPX031395R9999
	4 rows Niche wall cut out dimensions	730 x 367 x 95 703 x 340 x 88	UK648MB	2CPX031396R9999
	5 rows Niche wall cut out dimensions	855 x 367 x 95 828 x 340 x 88	UK660MB	2CPX031397R9999



UK630MB

Consumer units

Combi enclosure UK600

With trim frame and door

Flush-mounted consumer units – UK600, IP30 , ;*
I_n up to 63 A
Combi enclosure as consumer unit and media enclosure dimensions according to the standard enclosures as per DIN 43871
For building installation according to DIN 18015
Mechanical impact strength: IK07
Available as 2 or 3 row versions as flush-mounted consumer units
Can be upgraded for surface-mounting or partially recessed mounting
Upgradeable for hollow-wall-mounting using UZ91P4
Wall box: - non-warp, break-proof, non-flammable, low-halogen plastic - with cable strain relief comb - with detachable cable inlets - combinable
Reversible opening (tool-free)
Communication channel for horizontal and vertical connection
With N/PE quick-plug terminal
Cover with 90° quick-action screws, lead-sealable
45 mm slots for 12 devices, expandable to 14
Labelling system
Standardized separation of the voltage levels using a partition with knock-out for socket and media modules
Modular perforated sheet steel mounting plate for devices
Simple and tool-free installation of the devices using the "device strap"
“Click in” socket, swiveling 90° for the power supply of built-in devices
Wire holder for professional cable organization
With trim frame and sheet steel door or sheet steel door with white plastic insert, for improved Wifi signal, with surface compensation

*in connection with hollow-wall-mounting set UZ91P4





UK662CV



UK662CW

Article	Dimensions	H x D x D (mm)	Type	Ord. no.
Flush-mounted combi enclosure with trim frame and ventilated door				
Wall box with modular perforated sheet steel mounting plates and removable device support Wire holder for cable entry Partition for electrical isolation, snap-on socket, swiveling 90° with EURO insert “Device strap” for tool-free installation Sheet steel door ventilated	2 rows Niche wall cut out dimensions	855 x 367 x 95 828 x 340 x 88	UK662CV	2CPX031398R9999
	3 rows Niche wall cut out dimensions	855 x 367 x 95 828 x 340 x 88	UK663CV	2CPX031399R9999
Flush-mounted combination enclosure with trim frame and ventilated Wifi door				
Wall box with modular perforated sheet steel mounting plates and removable device support Wire holder for cable entry Partition for electrical isolation, snap-on socket, swiveling 90° with EURO insert “Device strap” for tool-free installation Sheet steel door ventilated with white plastic insert, for improved Wifi signals	2 rows Niche wall cut out dimensions	855 x 367 x 95 828 x 340 x 88	UK662CW	2CPX031400R9999
	3 rows Niche wall cut out dimensions	855 x 367 x 95 828 x 340 x 88	UK663CW	2CPX031401R9999

Consumer units
Media enclosure
Accessories



UZM61M



ZX340



ZE336



ZE338



ZE224



ZE225



ZE226



UZB3

Article	Pieces	Type	Ord. no.
Perforated mounting plate for media enclosures	1	UZM61M	2CPX031421R9999
Media device support Device strap elastic with 2 clips for assembly, e.g. to UZM61M	1	ZX340	2CPX031422R9999
Patch panel empty for communication modules, e.g. RJ45, COAX module, etc. For the direct and insulated assembly to the EDF-rail, DIN rail or mounting plate			
Patch panel, 6-fold	1	ZE335	2CPX031423R9999
Patch panel, 12-fold	1	ZE336	2CPX031424R9999
Patch panel holder	1	ZE338	2CPX031426R9999
Single socket Snap-in, swiveling 90° with touch guard and strain relief, for assembling to partition UZB3 with EURO insert	1	ZE224	2CPX031427R9999
Dual socket 230 V AC voltage for assembling to mounting plate ZX29 with EURO insert	1	ZE225	2CPX061177R9999
Triple socket 230 V AC voltage, 120° swiveling with EURO insert to be snapped on to the cable inlet or DIN rail; to be screwed to the mounting plate	1	ZE227	2CPX061211R9999
Partition For standard-compliant electrical isolation with terminal block with 2 knock-outs for the installation of the socket ZE224 5 knock-outs for assembling keystone modules		UZB3	2CPX031409R9999



ZX29



UZED1



ZX287P10



ZE316



ZE317



ZE318



ZE319



ZE320



ZE311



ZE310



ZB120

Article	Pieces	Type	Ord. no.
Mounting plate For clamping on to terminal carrier or for assembling to the perforated sheet steel plate of the UK... media enclosures and of the 1MM... media panels	1	ZX29	2CPX061178R9999
Wire holder UK600	1	UZED1	2CPX031419R9999
	10	UZED1P	2CPX031420R9999
Screws M4 x 14 thread rolling for the perforated sheet steel mounting plate	10	ZX287P10	2CPX061180R9999
Connectors for patch panels			
COAX module F/F connector	1	ZE316	2CPX039246R9999
COAX module IEC connector	1	ZE317	2CPX039247R9999
COAX module IEC plug	1	ZE318	2CPX039248R9999
OpDAT module LC guide sleeve, ceramics	1	ZE319	2CPX039249R9999
Blind module	1	ZE320	2CPX039250R9999
RJ45 connector Plastic	1	ZE311	2CPX038612R9999
IP patch module RJ45 module with adapter for assembling the DIN rail	1	ZE310	2CPX038625R9999
Insulating tube For communication line			
50 mm	1	ZB120	2CPX071111R9999
150 mm	1	ZB122	2CPX071112R9999

Consumer units

Media enclosure

Doors



BL620V



BL620W

Article	To be used with...	Pieces	Type	Ord. no.
Trim frame with door and ventilation holes Colour: White, RAL 9016 Sheet steel, powder-coated	UK62..	1	BL620V	2CPX031091R9999
	UK63..	1	BL630V	2CPX031092R9999
	UK64..	1	BL640V	2CPX031093R9999
	UK66..	1	BL650V	2CPX031094R9999
Trim frame with door and ventilation holes Sheet steel with white plastic insert, for improved Wifi signal	UK62..	1	BL620W	2CPX031095R9999
	UK63..	1	BL630W	2CPX031096R9999
	UK64..	1	BL640W	2CPX031097R9999
	UK66..	1	BL650W	2CPX031098R9999

Notes

Mini EUROPA40

Wall-mounting covers without door IP40



Available in white and grey and three different sizes to accommodate 2 to 6 modules.

The particularly robust and shock resistant frame ensures complete protection of the equipment installed.

The range is manufactured in accordance with the IEC 60670-24 standard.

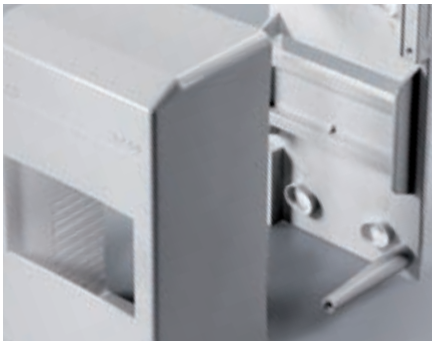
Each cover is equipped with a DIN bar.



This consumer unit without door reachs IP40.



The upper and lower walls include precuts on the internal side for the passing through of wiring trunking.



These covers can be opened from the front side to ensure easier access during installation.

Technical characteristics

Protection degree: IP40.

Colour: RAL 9016 red and RAL 7035 grey.

Material: manufactured in self-extinguishing thermoplastic resistant to abnormal heat and to fire up to 650°C (glow wire test), according to IEC 60695-2-11 standard.

Installation temperature: -25°C ÷ +60°C.

Shock resistant: 6 joule (with mounted circuit breakers).

Conformity: IEC 60670-24 certification.



Consumer units

Mini EUROPA40 - Order codes



2 modules



4 modules

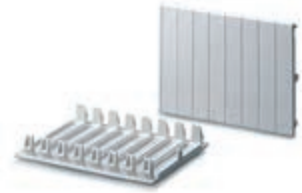


6 modules

Description	No. of modules [18 mm]	Dimensions WxHxD [mm]	Order code	Packaging
RAL 9016 white	2	50x140x65	1SL2402A00	1/45
RAL 7035 grey	2	50x140x65	12422	1/45
RAL 9016 white	4	95x160x65	1SL2404A00	1/20
RAL 7035 grey	4	95x160x65	12424	1/20
RAL 9016 white	6	140x160x65	1SL2406A00	1/12
RAL 7035 grey	6	140x160x65	12426	1/12



Description No of holes x Ø holes (mm) + No of holes x mm²	For covers type	Order code	Packaging
Terminal bars			
	1SL2404A00 - 1SL2406A00		
2x16 + 3x25	12424 - 12426	12502	25/750



Description	No. of modules [18 mm]	Order code	Packaging
Module covers			
RAL 9016 white	1	1SL2857A00	50/1500
RAL 9016 white	4	1SL2859A00	25/300
RAL 7035 grey	1	12861	50/1500
RAL 7035 grey	4	12863	25/300



Description	Order code	Packaging
Screw lead sealing accessory	12860	50/1500

MISTRAL41W
Wall-mounted series

The MISTRAL41W series of consumer units gives installers the freedom and flexibility to implement any type of electrical distribution system in residential buildings. This wide range of wall-mounted, IP41-rated units has been designed from scratch to enhance the unique features that make ABB the leading industry standard.

The units are fast and easy to install and look great anywhere thanks to their elegant design. Furthermore, ample internal space, a choice of doors and a unified range of accessories offer endless possibilities to create high-quality work installers can be proud of.



MISTRAL41W
Endless installation possibilities

Fast and easy to be installed. Design and simplicity “all in one”.



Concealed rear mounts for secure wall installation.

Door opens up to 180° allowing full access to theinterior of the unit.

Door available in two versions: petrol blue and opaque. Units without doors are also available.

The symmetrical design allows opening of the reversible door either from the left or from the right.

Endless installation possibilities

Invisible cable entry and exit
Pre-cut knockout slots allow cable entry and exit from the top and bottom. When not used, the slots remain invisible on the outside maintaining the consumer unit's sleek look and feel.



More than enough internal space
Lots of internal space makes cabling even easier. Cable clips and holes allow wires to be fastened to the frame with simple cable ties.





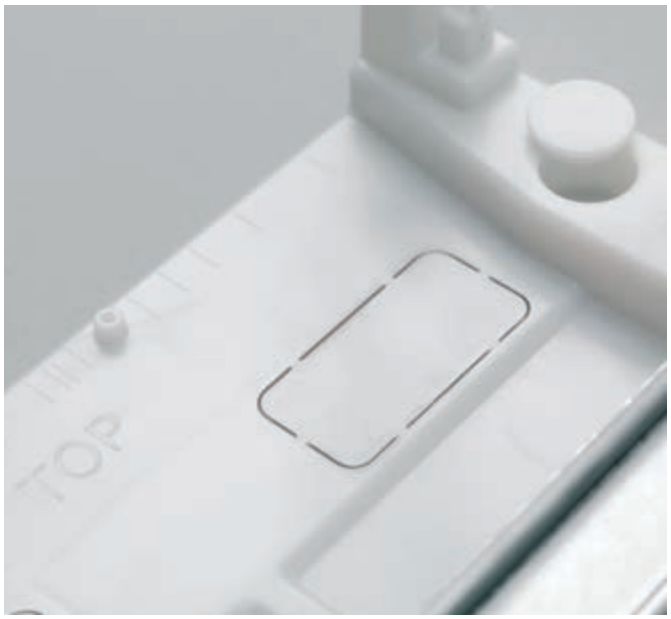
Easy installation of extra modules
An extra module can be added by removing two pre-cut elements. This offers a quick and easy solution when unexpected additional installation is required.



Fast and tidy cabling
Various snap-on terminal blocks for N and PE connection be installed in the upper and lower part of the unit. Two versions offer screw or spring couplings.

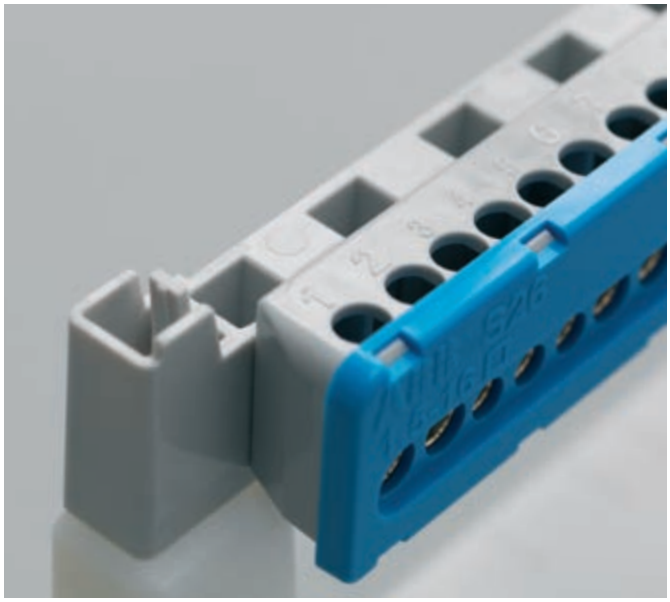
Double insulation protection
The unit housing and all accessories have been designed and developed to ensure Class II double insulation protection.

Multi-row units
Multi-row units are available with a standard distance of 125 mm between DIN rails.







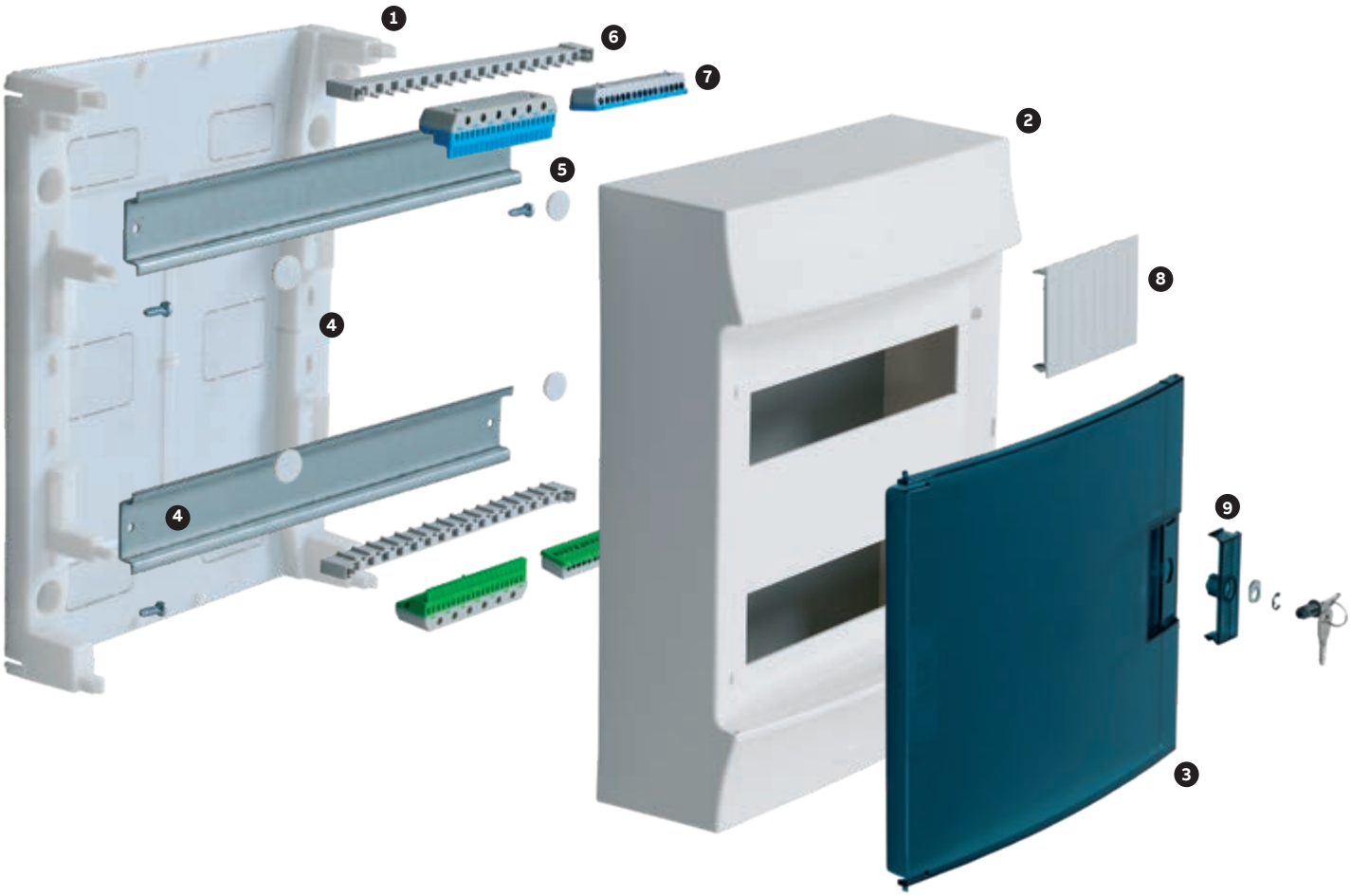


Optional door lock
The standard door with ergonomic handle is available with a lock for added security.

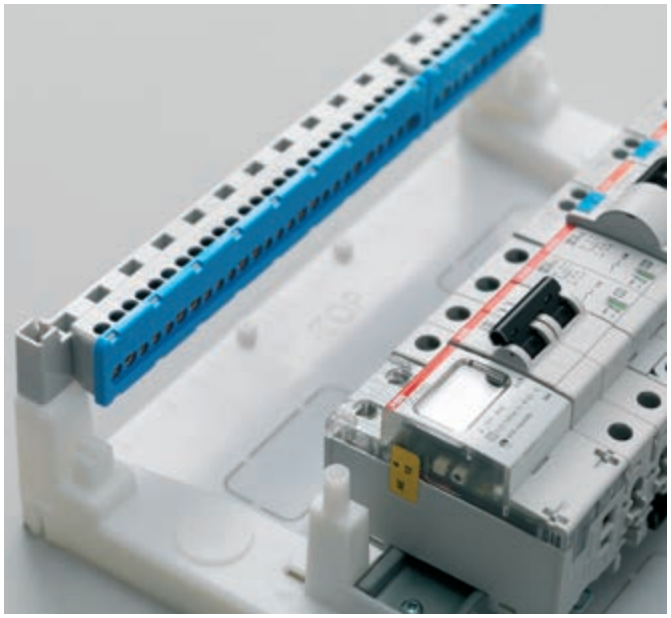
New generation terminals
The MISTRAL range of consumer units is amended with a wide, completely new ABB terminal blocks. Two different versions offer screw and spring fast coupling for easy and effective cabling up to 63A or 100A.

A versatile range suitable for every application

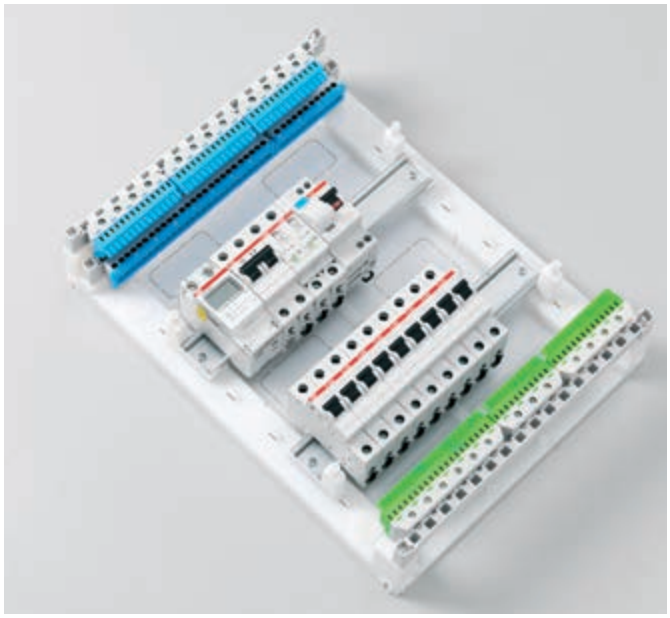
The simple construction of the MISTRAL41W series makes the units fast and easy to assemble. Furthermore, they can be easily adapted to various application requirements thanks to their flexible design.



1. Base for wall mounting
2. Reversible cover
3. Transparent door
4. DIN rail
5. Plugs, protection class II
6. Terminal carrier
7. Quick coupling terminal blocks
8. Module cover
9. Finish or closure element (optional lock)



A unified range of products
The MISTRAL41W series is compatible with a unified range of ABB products. As a result, terminal blocks, circuit breakers, switches, surge protective devices and many other components can all be installed in the units for a wide variety of applications.



3 different terminal systems available
A new generation of terminal blocks is available in different colours, wide range of sizes and two different connection options.

Consumer units

MISTRAL41W – Order codes wall-mounted (650)



2 modules



4 modules



8 modules



12 modules



18 modules



24 modules



36 modules

MISTRAL41W – Order codes 650

Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41 wall - 1 Row						
Without door 2M	2	650	68 x 210 x 93	1SPE007717F0100	41P02X10	1/36
Without door 4M	4	650	96 x 210 x 93	1SPE007717F0200	41P04X10	1/24
Opaque door 4M	4	650	96 x 210 x 93	1SPE007717F0210	41P04X11	1/24
Transparent door 4M	4	650	96 x 210 x 93	1SPE007717F0220	41P04X12	1/24
Without door 8M	8	650	202 x 257 x 120	1SPE007717F0300	41P08X10	1/7
Opaque door 8M	8	650	202 x 257 x 120	1SPE007717F0310	41P08X11	1/7
Transparent door 8M	8	650	202 x 257 x 120	1SPE007717F0320	41P08X12	1/7
Without door 12M	12	650	292 x 257 x 120	1SPE007717F0400	41P12X10	1/3
Opaque door 12M	12	650	292 x 257 x 120	1SPE007717F0410	41P12X11	1/3
Transparent door 12M	12	650	292 x 257 x 120	1SPE007717F0420	41P12X12	1/3
Without door 18M	18	650	382 x 257 x 120	1SPE007717F0800	41P18X10	1/3
Opaque door 18M	18	650	382 x 257 x 120	1SPE007717F0810	41P18X11	1/3
Transparent door 18M	18	650	382 x 257 x 120	1SPE007717F0820	41P18X12	1/3
Consumer units MISTRAL41 wall - 2 Rows						
Without door 24M	24	650	292 x 382 x 120	1SPE007717F0500	41P12X20	1/2
Opaque door 24M	24	650	292 x 382 x 120	1SPE007717F0510	41P12X21	1/2
Transparent door 24M	24	650	292 x 382 x 120	1SPE007717F0520	41P12X22	1/2
Without door 36M 2F	36	650	382 x 382 x 120	1SPE007717F0900	41P18X20	1/2
Opaque door 36M 2F	36	650	382 x 382 x 120	1SPE007717F0910	41P18X21	1/2
Transparent door 36M 2F	36	650	382 x 382 x 120	1SPE007717F0920	41P18X22	1/2



36 modules



54 modules



48 modules



72 modules

MISTRAL41W – Order codes 650

Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41 wall - 3 Rows						
Without door 36M 3F	36	650	292 x 507 x 120	1SPE007717F0600	41P12X30	1/2
Opaque door 36M 3F	36	650	292 x 507 x 120	1SPE007717F0610	41P12X31	1/2
Transparent door 36M 3F	36	650	292 x 507 x 120	1SPE007717F0620	41P12X32	1/2
Without door 54M	54	650	382 x 507 x 120	1SPE007717F1000	41P18X30	1/2
Opaque door 54M	54	650	382 x 507 x 120	1SPE007717F1010	41P18X31	1/2
Transparent door 54M	54	650	382 x 507 x 120	1SPE007717F1020	41P18X32	1/2
Consumer units MISTRAL41 wall - 4 Rows						
Without door 48M	48	650	292 x 656 x 120	1SPE007717F0700	41P12X40	1/1
Opaque door 48M	48	650	292 x 656 x 120	1SPE007717F0710	41P12X41	1/1
Transparent door 48M	48	650	292 x 656 x 120	1SPE007717F0720	41P12X42	1/1
Without door 72M	72	650	382 x 656 x 120	1SPE007717F1100	41P18X40	1/1
Opaque door 72M	72	650	382 x 656 x 120	1SPE007717F1110	41P18X41	1/1
Transparent door 72M	72	650	382 x 656 x 120	1SPE007717F1120	41P18X42	1/1

Consumer units

MISTRAL41W – Order codes wall-mounted (750)



2 modules



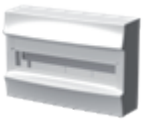
4 modules



8 modules



12 modules



18 modules



24 modules



36 modules

MISTRAL41W – Order codes 750

Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41 wall - 1 Row						
Without door 2M	2	750	68 x 210 x 93	1SPE007717F1500	41P02X100750	1/36
Without door 4M	4	750	96 x 210 x 93	1SPE007717F1600	41P04X100750	1/24
Without door 8M	8	750	202 x 257 x 120	1SPE007717F1700	41P08X100750	1/7
Without door 12M	12	750	292 x 257 x 120	1SPE007717F1800	41P12X100750	1/3
Without door 18M	18	750	382 x 257 x 120	1SPE007717F2200	41P12X200750	1/3
Consumer units MISTRAL41 wall - 2 Rows						
Without door 24M	24	750	292 x 382 x 120	1SPE007717F1900	41P12X300750	1/2
Without door 36M 2F	36	750	382 x 382 x 120	1SPE007717F2300	41P12X400750	1/2



36 modules



54 modules



48 modules



72 modules

MISTRAL41W – Order codes 750

Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41 wall - 3 Rows						
Without door 36M 3F	36	750	292 x 507 x 120	1SPE007717F2000	41P18X100750	1/2
Without door 54M	54	750	382 x 507 x 120	1SPE007717F2400	41P18X300750	1/2
Consumer units MISTRAL41 wall - 4 Rows						
Without door 48M	48	750	292 x 656 x 120	1SPE007717F2100	41P18X200750	1/1
Without door 72M	72	750	382 x 656 x 120	1SPE007717F2500	41P18X400750	1/1

Consumer units

MISTRAL41W – Order codes with terminals (650)



8 modules



12 modules



18 modules



24 modules



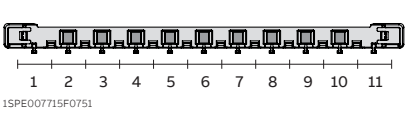
36 modules



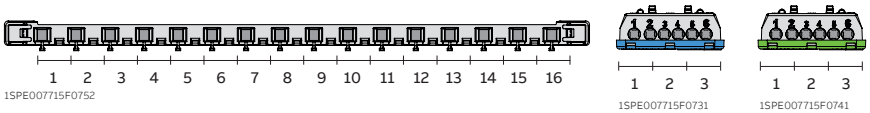
36 modules

MISTRAL41W – Order codes

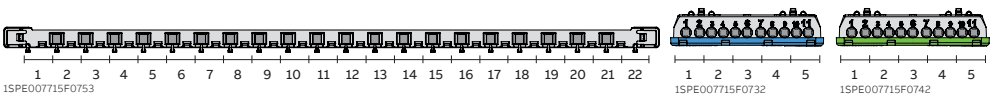
Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41W						
Opaque door 8M 12SM	8	650	202 x 257 x 120	1SLM004102A3102	41P08X11A	1/7
Transparent door 8M 12SM	8	650	202 x 257 x 120	1SPE007717F0321	41P08X12A	1/7



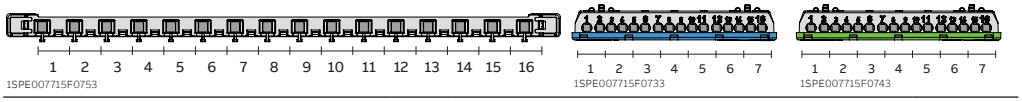
Opaque door 12M 12SM	12	650	292 x 257 x 120	1SLM004102A3103	41P12X11A	1/3
Transparent door 12M 12SM	12	650	292 x 257 x 120	1SPE007717F0421	41P12X12A	1/3



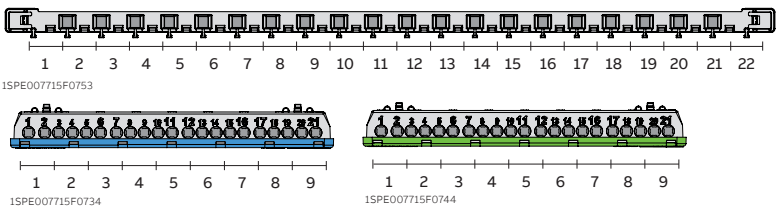
Opaque door 18M 22SM	18	650	382 x 257 x 120	1SLM004102A3104	41P12X21A	1/3
Transparent door 18M 22SM	18	650	382 x 257 x 120	1SPE007717F0821	41P12X22A	1/3



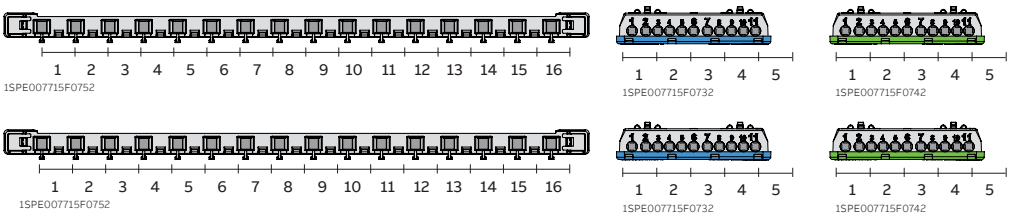
Opaque door 24M 32SM	24	650	292 x 382 x 120	1SLM004102A3105	41P12X31A	1/2
Transparent door 24M 32SM	24	650	292 x 382 x 120	1SPE007717F0521	41P12X32A	1/2



Opaque door 36M 2F 42SM	36	650	382 x 382 x 120	1SLM004102A3106	41P12X41A	1/2
Transparent door 36M 2F 42SM	36	650	382 x 382 x 120	1SPE007717F0921	41P12X42A	1/2



Opaque door 36M 3F 44SM	36	650	292 x 507 x 120	1SLM004102A3107	41P18X11A	1/2
Transparent door 36M 3F 44SM	36	650	292 x 507 x 120	1SPE007717F0621	41P18X12A	1/2





54 modules



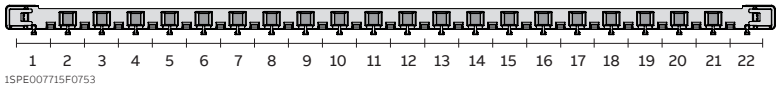
48 modules

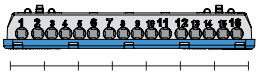


72 modules

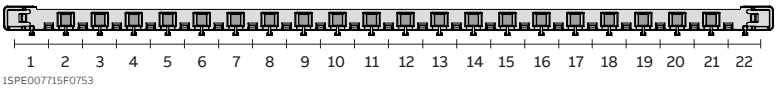
MISTRAL41W – Order codes

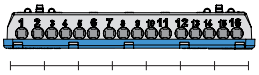
Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41W						
Opaque door 54M 64SM	54	650	382 x 507 x 120	1SLM004102A3109	41P18X31A	1/2
Transparent door 54M 64SM	54	650	382 x 507 x 120	1SPE007717F1021	41P18X32A	1/2

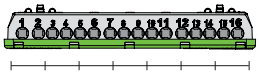




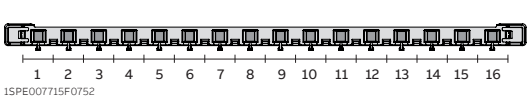






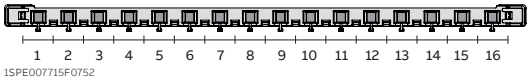


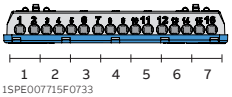
Opaque door 48M 64SM	48	650	292 x 656 x 120	1SLM004102A3108	41P18X21A	1/1
Transparent door 48M 64SM	48	650	292 x 656 x 120	1SPE007717F0721	41P18X22A	1/1

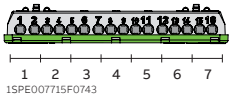




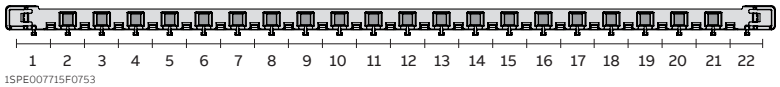


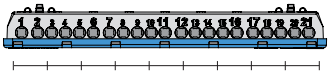


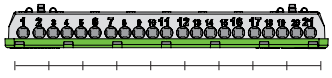


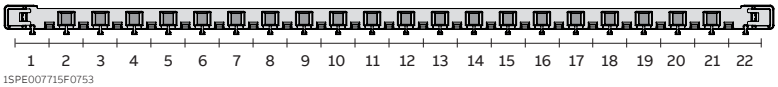


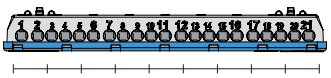
Opaque door 72M 84SM	72	650	382 x 656 x 120	1SLM004102A3110	41P18X41A	1/1
Transparent door 72M 84SM	72	650	382 x 656 x 120	1SPE007717F1121	41P18X42A	1/1

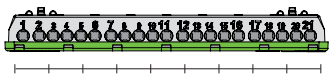












Consumer units

MISTRAL41W – Order codes accessories





MISTRAL41W – Accessories doors

Description	N° of modules [18 mm]	Order code	Type number	Packaging
Opaque door				
Opaque door 4M MISTRAL41W	4	1SPE007717F9900	41Z33	1/24
Opaque door 8M MISTRAL41W	8	1SPE007717F9901	41Z34	1/14
Opaque door 12M MISTRAL41W	12	1SPE007717F9902	41Z35	1/14
Opaque door 24/48M MISTRAL41W	24/48	1SPE007717F9903	41Z36	1/15
Opaque door 36M (3 rows) MISTRAL41W	36	1SPE007717F9904	41Z37	1/18
Opaque door 18M MISTRAL41W	18	1SPE007717F9905	41Z38	1/14
Opaque door 36/72M (2 rows) MISTRAL41W	36/72	1SPE007717F9906	41Z39	1/18
Opaque door 54M MISTRAL41W	54	1SPE007717F9907	41Z40	1/18
Transparent door				
Transparent door blue 4M MISTRAL41W	4	1SPE007717F9908	41Z41	1/24
Transparent door blue 8M MISTRAL41W	8	1SPE007717F9909	41Z42	1/14
Transparent door blue 12M MISTRAL41W	12	1SPE007717F9910	41Z43	1/14
Transparent door blue 24/48M MISTRAL41W	24/48	1SPE007717F9911	41Z44	1/15
Transparent door blue 36M (3 rows) MISTRAL41W	36	1SPE007717F9912	41Z45	1/18
Transparent door blue 18M MISTRAL41W	18	1SPE007717F9913	41Z46	1/14
Transparent door blue 36/72M (2 rows) MISTRAL41W	36/72	1SPE007717F9914	41Z47	1/18
Transparent door blue 54M MISTRAL41W	54	1SPE007717F9915	41Z48	1/18



41Z14, 41Z15, 41Z16



41Z17, 41Z18



41Z19, 41Z20

41Z21, 41Z22

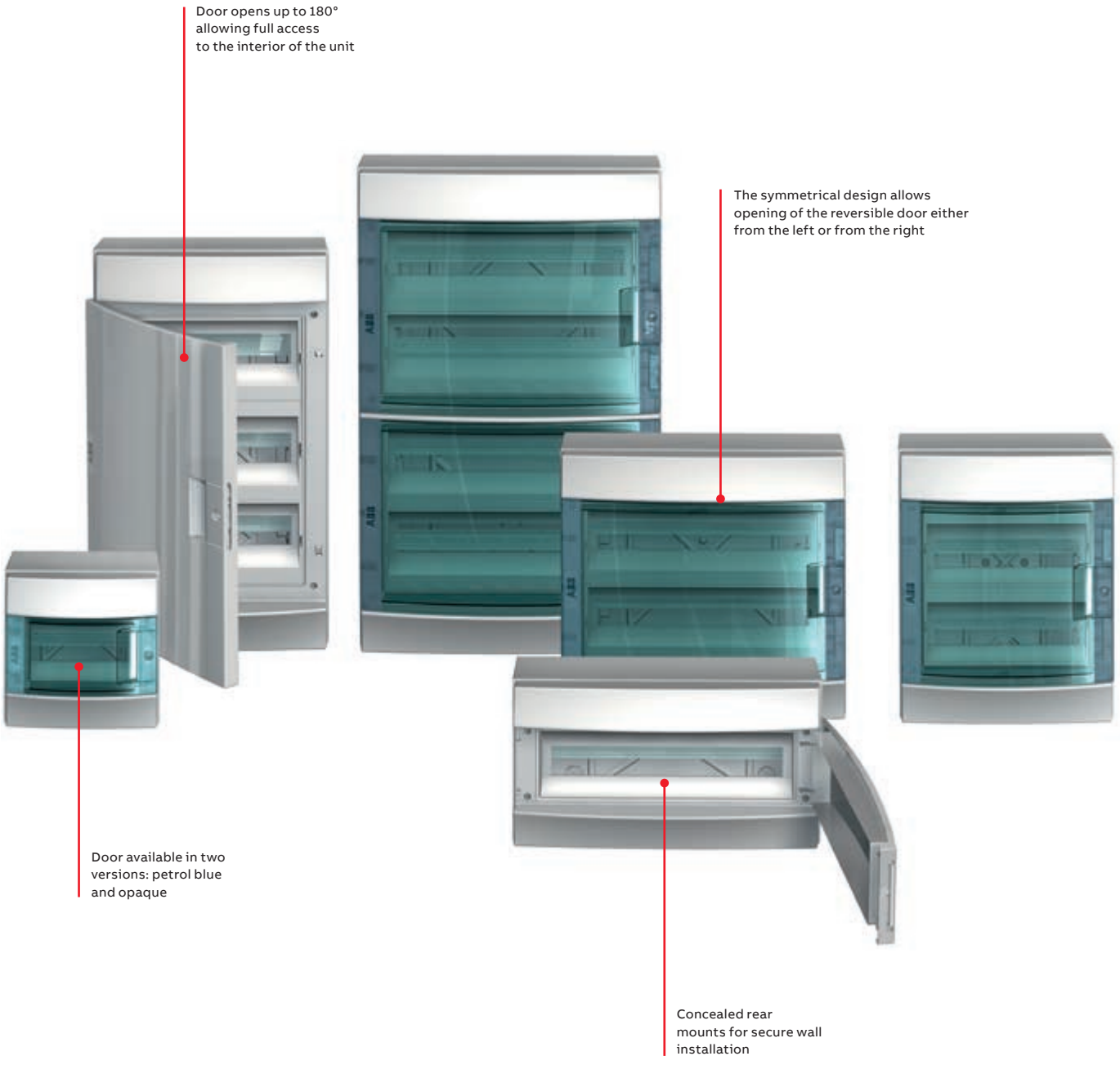


41Z23, 41Z24

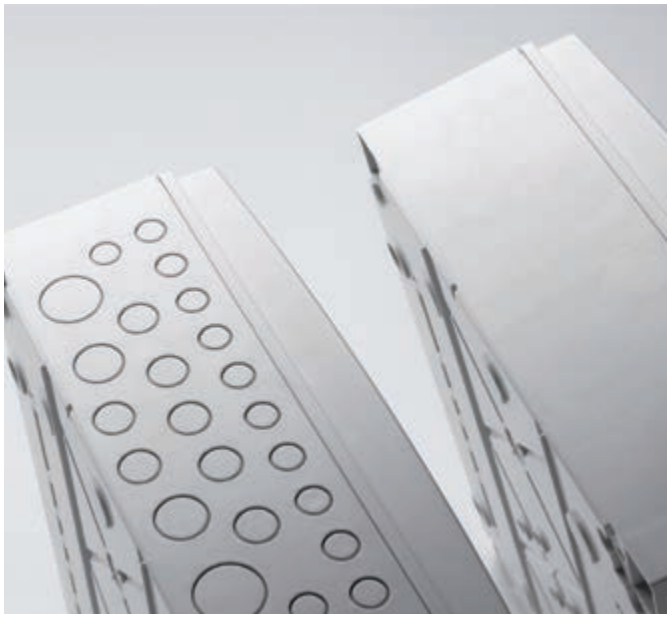
MISTRAL41W – Other accessories

Description	N° of modules [18 mm]	Order code	Type number	Packaging
Other accessories				
Lock set white LMW		1SPE007715F5009	41Z14	1
Lock set blue LMB		1SPE007715F5010	41Z16	1
Flange for conduit derivation GWT 650		1SLM004100A1951	41Z17	1/30
Flange for conduit derivation GWT 750		1SPE007715F5111	41Z18	1/30
Label holder 12M	12	1SPE007715F5012	41Z19	5
Label holder 18M	18	1SPE007715F5018	41Z20	5
Partition wall 12M	12	1SPE007715F5112	41Z21	5
Partition wall 18M	18	1SPE007715F5118	41Z22	5
MCB cover 12M GWT 650	12	1SPE007715F5650	41Z23	5/180
MCB cover 12M GWT 750	12	1SPE007715F5750	41Z24	5/180

MISTRAL65
Endless installation possibilities



Invisible cable entry and exit
The MISTRAL65 (GWT 650) comes with smooth surfaces for the cables entry on top and bottom. The MISTRAL65 (GWT 750) version is provided with knockouts of various dimensions.

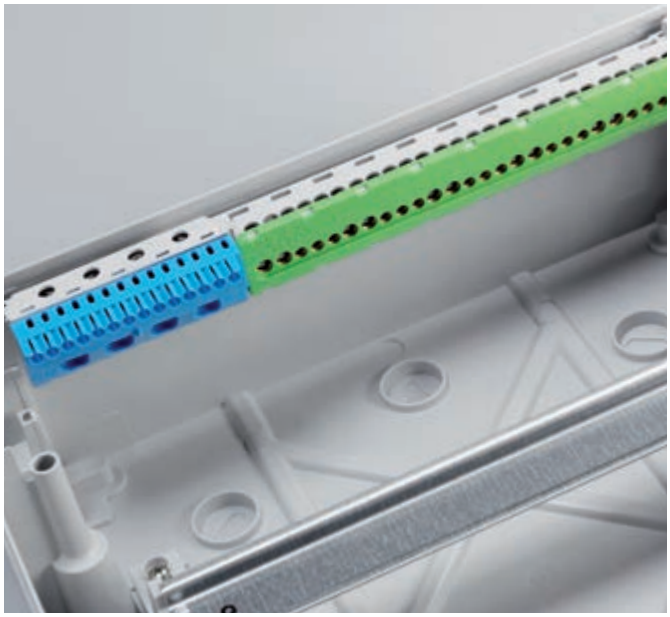


More internal space
Internal spaces have been created to make cabling even easier, with cable clips and holes for fastening wires to the frame with simple cable ties.





Easy installation of extra modules
Additional modules can be installed by removing two pre-trimmed elements. This offers an easy and tidy solution when there are unforeseen installation requirements.



New generation terminals
The new MISTRAL range of consumer units is amended with a wide, completely new ABB terminal blocks. To different versions offer screw and spring fast coupling for easy and effective cabling up to 63A or 100A.

MISTRAL65
Endless installation possibilities

Protected trunking entry
The new polycarbonate accessory for trunking entry can be positioned at the top or bottom of the consumer unit, connecting and protecting the conductor bundles. A series of internal knockouts allows it to house any type of trunking.

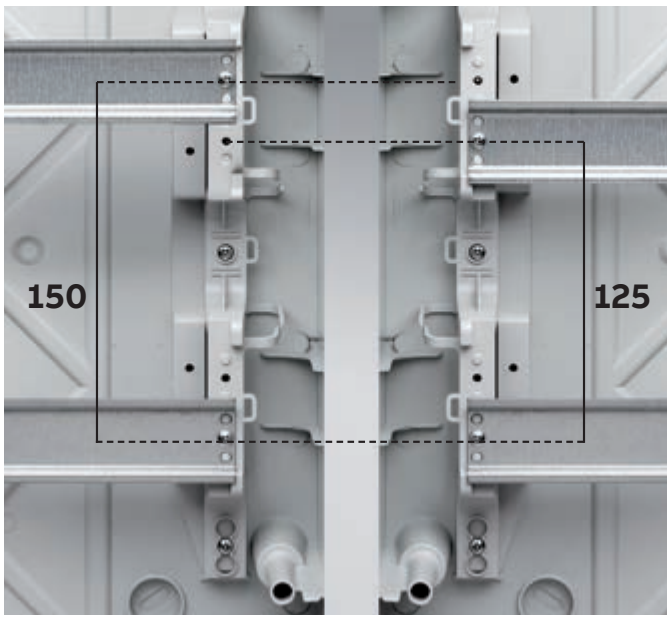


Aesthetically clean installation
Interior slots allow the unit to be fixed to the wall at points that cannot be seen from the outside, making for an aesthetically clean installation. Special snap-in closure plugs guarantee class II protection (double insulation).





Optional door lock
The standard door with ergonomic handle and snap-on closure can be supplied with a lock and key on request. This ensures only authorized people have access and prevents tampering or incorrect operation.



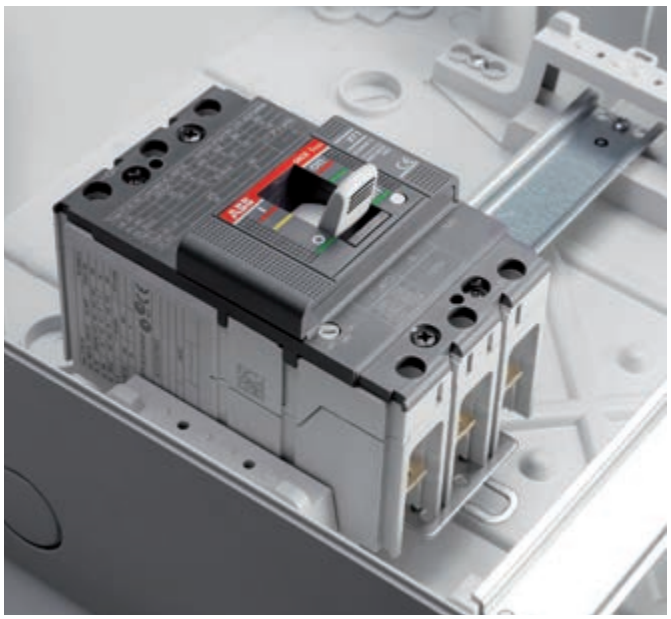
Variable distance between DIN-Rails
To create space at the top or bottom of the consumer unit, the central distance between the DIN-Rails can be modified from the standard 150 mm to 125 mm. The front panel can be removed, reversed and re-installed with a simple click.

Horizontal coupling
The consumer units can be installed side by side, with cable gland accessories protecting the conductors' path between adjacent units.

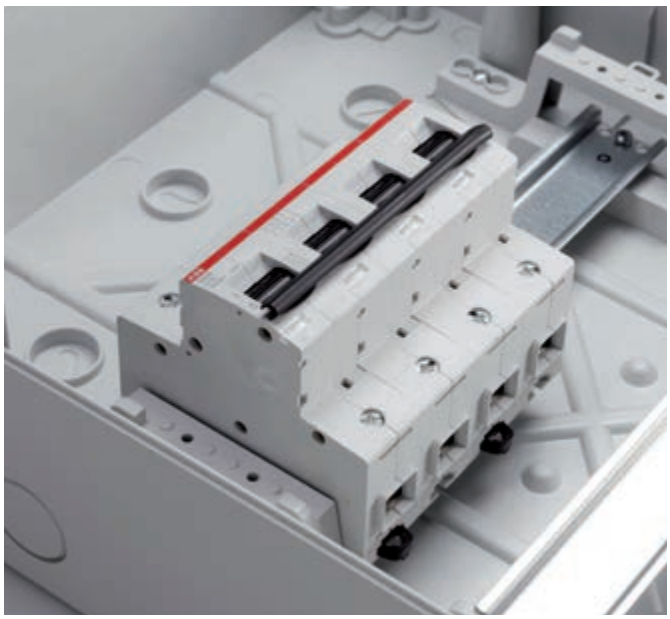


Blind panels for small automation application
Accessories include blind panels and base plates allowing the installation of other types of devices, in addition to modular DIN-Rail products, like contactors, motor starters or devices on the front of the panel.





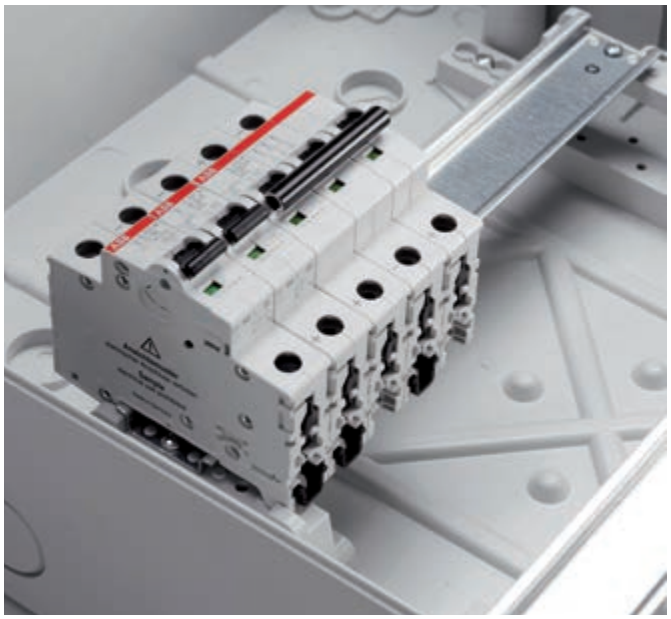
Two DIN positions
The frame has two DIN-Rail positions so accessories of different depths, like MCCBs, can be installed in perfect alignment.



Easy installation of non-standard devices
The flexibility of the frame allows easy installation of devices with above-standard depth like high-performance MCBs.

MISTRAL65
Endless installation possibilities

Compatible with standard modular devices
The first depth allows the installation of standard products. These include most modular devices currently on the market.



Non-modular equipment
Accessories like blind panels and base plates enable the installation of other types of devices, in addition to modular DIN products, on the front of the panel. These include control buttons and indicator lights.



Consumer units

MISTRAL65 650



4 modules
2CSC000995F0014



4 modules
2CSC000996F0014



8 modules
2CSC000997F0014



8 modules
2CSC000998F0014



12 modules
2CSC000999F0014



12 modules
2CSC001000F0014



18 modules
2CSC001001F0014



18 modules
2CSC001002F0014



24 modules
2CSC001003F0014



24 modules
2CSC001004F0014



36 modules
2CSC001005F0014



36 modules
2CSC001006F0014

Description	N° of modules [18 mm]	GWT	Dimensions WxHxD [mm]	Order code	Type number	Price	Packaging
Consumer units MISTRAL65 wall - 1 Row							
Opaque door 4M	4	650	152x202x117	1SL1100A00	65P04X11		1/24
Transparent door 4M	4	650	152x202x117	1SL1200A00	65P04X12		1/24
Opaque door 8M	8	650	232x250x154	1SL1101A00	65P08X11		1/11
Transparent door 8M	8	650	232x250x154	1SL1201A00	65P08X12		1/11
Opaque door 12M	12	650	320x250x155	1SL1102A00	65P12X11		1/7
Transparent door 12M	12	650	320x250x155	1SL1202A00	65P12X12		1/7
Opaque door 18M	18	650	430x250x155	1SL1103A00	65P18X11		1/4
Transparent door 18M	18	650	430x250x155	1SL1203A00	65P18X12		1/4
Consumer units MISTRAL65 wall - 2 Rows							
Opaque door 24M	24	650	320x435x155	1SL1104A00	65P12X21		1/4
Transparent door 24M	24	650	320x435x155	1SL1204A00	65P12X22		1/4
Opaque door 36M2F	36	650	430x435x155	1SL1105A00	65P18X21		1/2
Transparent door 36M2F	36	650	430x435x155	1SL1205A00	65P18X22		1/2

Consumer units

MISTRAL65 650°



36 modules
2CSC001007F0014



36 modules
2CSC001008F0014



54 modules
2CSC001009F0014



54 modules
2CSC001010F0014



48 modules
2CSC001011F0014



48 modules
2CSC001012F0014



72 modules
2CSC001013F0014



72 modules
2CSC001014F0014

Description	N° of modules [18 mm]	GWT	Dimensions WxHxD [mm]	Order code	Type number	Packaging
Consumer units MISTRAL65 wall - 3 Rows						
Opaque door 36M3F	36	650	320x600x155	1SL1106A00	65P12X31	1/3
Transparent door 36M3F	36	650	320x600x155	1SL1206A00	65P12X32	1/3
Opaque door 54M	54	650	430x600x155	1SL1108A00	65P18X31	1/1
Transparent door 54M	54	650	430x600x155	1SL1208A00	65P18X32	1/1
Consumer units MISTRAL65 wall - 4 Rows						
Opaque door 48M	48	650	320x735x155	1SL1107A00	65P12X41	1/1
Transparent door 48M	48	650	320x735x155	1SL1207A00	65P12X42	1/1
Opaque door 72M	72	650	430x735x155	1SL1109A00	65P18X41	1/1
Transparent door 72M	72	650	430x735x155	1SL1209A00	65P18X42	1/1

Consumer units

MISTRAL65 750°



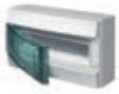
—
4 modules
2CSC001015F0014



—
8 modules
2CSC001016F0014



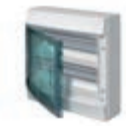
—
12 modules
2CSC001017F0014



—
18 modules
2CSC001018F0014



—
24 modules
2CSC001019F0014



—
36 modules
2CSC001020F0014



—
36 modules
2CSC001021F0014



—
54 modules
2CSC001022F0014



—
48 modules
2CSC001023F0014



—
72 modules
2CSC001024F0014

Description	N° of modules [18 mm]	GWT	Dimensions WxHxD [mm]	Order code	Type number	Packaging
MISTRAL65 – 1 Row						
Transparent door 4M	4	750	152x202x117	1SL1210A00	1SLM006500A1210	1/24
Transparent door 8M	8	750	232x250x154	1SL1211A00	1SLM006500A1211	1/11
Transparent door 12M	12	750	320x250x155	1SL1212A00	1SLM006500A1212	1/7
Transparent door 18M	18	750	430x250x155	1SL1213A00	1SLM006500A1213	1/4
MISTRAL65 – 2 Row						
Transparent door 24M	24	750	320x435x155	1SL1214A00	1SLM006500A1214	1/4
Transparent door 36M 2R	36	750	430x435x155	1SL1215A00	1SLM006500A1215	1/2
MISTRAL65 – 3 Row						
Transparent door 36M 3R	36	750	320x600x155	1SL1216A00	1SLM006500A1216	1/3
Transparent door 54M	54	750	430x600x155	1SL1218A00	1SLM006500A1218	1/1
MISTRAL65 – 4 Row						
Transparent door 48M	48	750	320x735x155	1SL1217A00	1SLM006500A1217	1/1
Transparent door 72M	72	750	430x735x155	1SL1219A00	1SLM006500A1219	1/1

Consumer units

MISTRAL65 with terminals



8 modules
2CSC001025F0014



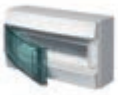
8 modules
2CSC000997F0014



12 modules
2CSC001027F0014



12 modules
2CSC000999F0014



18 modules
2CSC001029F0014



18 modules
2CSC001001F0014



18 modules
2CSC001031F0014



18 modules
2CSC001001F0014

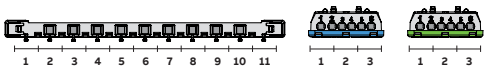


24 modules
2CSC001033F0014

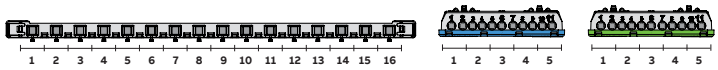


24 modules
2CSC001003F0014

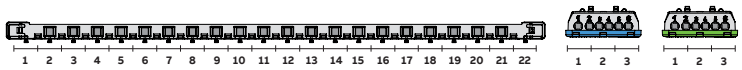
Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL65 wall - 8 modules						
Opaque door 8M 12SM	8	650	232x250x154	1SLM006501A1101	65P08X11A	1/11
Transparent door 8M 12SM	8	650	232x250x154	1SLM006501A1201	65P08X12A	1/11



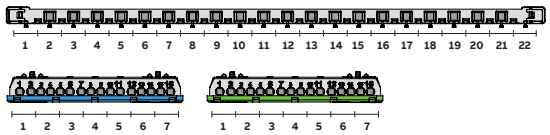
Consumer units MISTRAL65 wall - 12 modules						
Opaque door 12M 22SM	12	650	320x250x155	1SLM006501A1102	65P12X11A	1/7
Transparent door 12M 22SM	12	650	320x250x155	1SLM006501A1202	65P12X12A	1/7



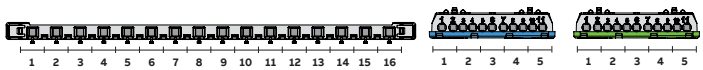
Consumer units MISTRAL65 wall - 18 modules						
Opaque door 18M 12SM	18	650	430x250x155	1SLM006501A1103	65P18X11Z	1/4
Transparent door 18M 12SM	18	650	430x250x155	1SLM006501A1203	65P18X12Z	1/4



Consumer units MISTRAL65 wall - 18 modules						
Opaque door 18M 32SM	18	650	430x250x155	1SLM006502A1103	65P18X11A	1/4
Transparent door 18M 32SM	18	650	430x250x155	1SLM006502A1203	65P18X12A	1/4



Consumer units MISTRAL65 wall - 24 modules						
Opaque door 24M 24SM	24	650	320x435x155	1SLM006501A1104	65P12X21Z	1/4
Transparent door 24M 24SM	24	650	320x435x155	1SLM006501A1204	65P12X22Z	1/4





—
24 modules
2CSC001035F0014



—
24 modules
2CSC001003F0014



—
36 modules
2CSC001037F0014



—
36 modules
2CSC001005F0014



—
36 modules
2CSC001039F0014

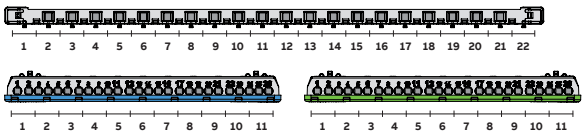


—
36 modules
2CSC001007F0014

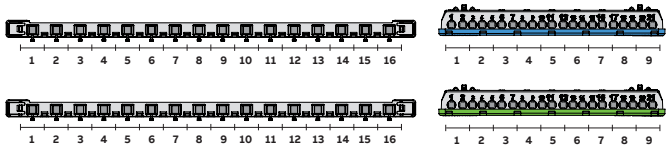
Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL65 wall - 24 modules						
Opaque door 24M 42SM	24	650	320x435x155	1SLM006502A1104	65P12X21A	1/4
Transparent door 24M 42SM	24	650	320x435x155	1SLM006502A1204	65P12X22A	1/4



Consumer units MISTRAL65 wall - 36 modules						
Opaque door 36M2F 52SM	36	650	430x435x155	1SLM006501A1105	65P18X21A	1/2
Transparent door 36M2F 52SM	36	650	430x435x155	1SLM006501A1205	65P18X22A	1/2



Consumer units MISTRAL65 wall - 36 modules						
Opaque door 36M3F 42SM	36	650	320x600x155	1SLM006501A1106	65P12X31A	1/3
Transparent door 36M3F 42SM	36	650	320x600x155	1SLM006501A1206	65P12X32A	1/3



Consumer units

MISTRAL65 with terminals



—
48 modules
2CSC001041F0014



—
48 modules
2CSC001011F0014



—
54 modules
2CSC001043F0014



—
54 modules
2CSC001009F0014

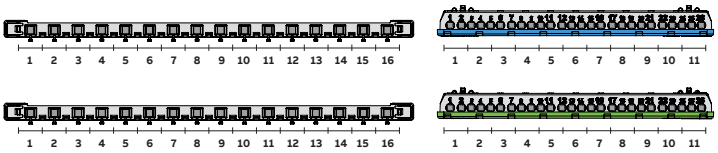


—
72 modules
2CSC001045F0014

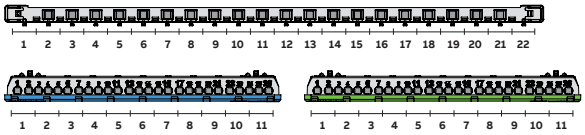


—
72 modules
2CSC001013F0014

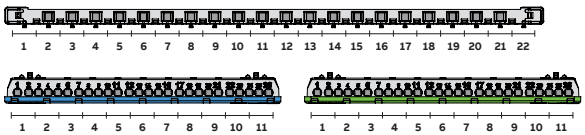
Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL65 wall - 48 modules						
Opaque door 48M 52SM	48	650	320x735x155	1SLM006501A1107	65P12X41A	1/1
Transparent door 48M 52SM	48	650	320x735x155	1SLM006501A1207	65P12X42A	1/1



Consumer units MISTRAL65 wall - 54 modules						
Opaque door 54M 52SM	54	650	430x600x155	1SLM006501A1108	65P18X31A	1/1
Transparent door 54M 52SM	54	650	430x600x155	1SLM006501A1208	65P18X32A	1/1



Consumer units MISTRAL65 wall - 72 modules						
Opaque door 72M 52SM	72	650	430x735x155	1SLM006501A1109	65P18X41A	1/1
Transparent door 72M 52SM	72	650	430x735x155	1SLM006501A1209	65P18X42A	1/1



Consumer units

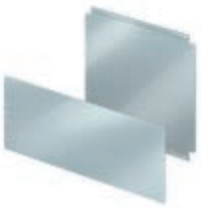
Accessories for MISTRAL65



Opaque door
2CSC001047F0014



Transparent door
2CSC001048F0014



Base plates
2CSC001049F0014



Blind panel
2CSC001050F0014

Description	Order code	Type number	Price	Packaging
Opaque door				
Opaque door 4M MISTRAL65	1SL1900A00	1SLM006500A1900		1/15
Opaque door 8M MISTRAL65	1SL1902A00	1SLM006500A1902		1/20
Opaque door 12M MISTRAL65	1SL1904A00	1SLM006500A1904		1/10
Opaque door 18M MISTRAL65	1SL1906A00	1SLM006500A1906		1/20
Opaque door 24M / 48M MISTRAL65	1SL1908A00	1SLM006500A1908		1/6
Opaque door 36M (3 rows) MISTRAL65	1SL1910A00	1SLM006500A1910		1/10
Opaque door 36M (2 rows) / 72M MISTRAL65	1SL1912A00	1SLM006500A1912		1/14
Opaque door 54M MISTRAL65	1SL1914A00	1SLM006500A1914		1/8
Transparent door				
Transparent door 4M MISTRAL65	1SL1901A00	1SLM006500A1901		1/15
Transparent door 8M MISTRAL65	1SL1903A00	1SLM006500A1903		1/20
Transparent door 12M MISTRAL65	1SL1905A00	1SLM006500A1905		1/10
Transparent door 18M MISTRAL65	1SL1907A00	1SLM006500A1907		1/20
Transparent door 24M / 48M MISTRAL65	1SL1909A00	1SLM006500A1909		1/6
Transparent door 36M (3 rows) MISTRAL65	1SL1911A00	1SLM006500A1911		1/10
Transparent door 36M (2 rows) / 72M MISTRAL65	1SL1913A00	1SLM006500A1913		1/14
Transparent door 54M MISTRAL65	1SL1915A00	1SLM006500A1915		1/8
Base plates				
Metal base plate 12M MISTRAL65	1SL1920A00	1SLM006500A1920		1/12
Metal base plate 2x12M MISTRAL65	1SL1921A00	1SLM006500A1921		1/4
Metal base plate 18M MISTRAL65	1SL1922A00	1SLM006500A1922		1/8
Metal base plate 2x18M MISTRAL65	1SL1923A00	1SLM006500A1923		1/4
Blind panel				
Central blind panel 12M MISTRAL65 *	1SL1945A00	1SLM006500A1945		1/15
Blind panel 12M MISTRAL65	1SL1946A00	1SLM006500A1946		1/20
Central blind panel 18M MISTRAL65 **	1SL1947A00	1SLM006500A1947		1/30
Blind panel 18M MISTRAL65	1SL1948A00	1SLM006500A1948		1/30

* Blind panel for the central rowof MISTRAL65 36 modules (3 x 12)
** Blind panel for the central rowof MISTRAL65 54 modules (3 x 18)

Consumer units

Accessories for MISTRAL65



Wall fixing brackets
2CSC001051F0014



Module cover
2CSC001052F0014



Lock
2CSC001053F0014



Cable gland
2CSC001054F0014



Adapter for trunking
2CSC001055F0014



Junction unit
2CSC001056F0014

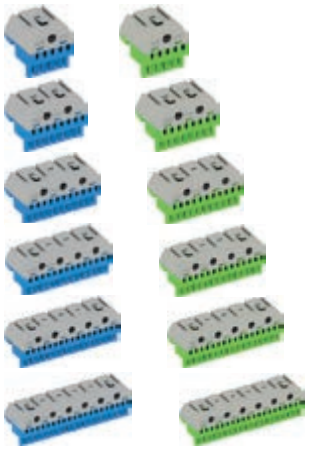
Description	Order code	Type number	Price	Packaging
Other accessories				
Wall fixing brackets (4 pcs) MISTRAL65	1SL1927A00	1SLM006500A1927		1/30
Module cover 12M MISTRAL65	1SL1929A00	1SLM006500A1929		5/180
Sealing kit MISTRAL65	1SL1950A00	1SLM006500A1950		1/50
Lock with key MISTRAL65	1SL1931A00	1SLM006500A1931		1/10
Cable glands				
Cable gland Ø 16	1SL1935A00	1SLM006500A1935		10/100
Cable gland Ø 20	1SL1936A00	1SLM006500A1936		10/100
Cable gland Ø 25	1SL1937A00	1SLM006500A1937		10/100
Cable gland Ø 32	1SL1938A00	1SLM006500A1938		5/50
Adapter				
Adapter for trunking MISTRAL65	1SL1942A00	1SLM006500A1942		1/10
Junction unit				
Junction unit Ø 28,5 MISTRAL65	1SL1949A00	1SLM006500A1949		10/400

Consumer units
Terminal blocks



MISTRAL41 – Terminal blocks

Description	Maximum current [A]	Order code	Type number	Packaging
Terminal block				
Terminal block N 3 x 16 mm²+3 x 6 mm²	100	1SPE007715F0731	41Z57	5/270
Terminal block N 5 x 16 mm²+6 x 6 mm²	100	1SPE007715F0732	41Z58	5/150
Terminal block N 7 x 16 mm²+9 x 6 mm²	100	1SPE007715F0733	41Z59	5/120
Terminal block N 9 x 16 mm²+12 x 6 mm²	100	1SPE007715F0734	41Z60	5/90
Terminal block N 11 x 16 mm²+15 x 6 mm²	100	1SPE007715F0735	41Z61	5/90
Terminal block PE 3 x 16 mm²+3 x 6 mm²	100	1SPE007715F0741	41Z62	5/270
Terminal block PE 5 x 16 mm²+6 x 6 mm²	100	1SPE007715F0742	41Z63	5/150
Terminal block PE 7 x 16 mm²+9 x 6 mm²	100	1SPE007715F0743	41Z64	5/120
Terminal block PE 9 x 16 mm²+12 x 6 mm²	100	1SPE007715F0744	41Z65	5/90
Terminal block PE 11 x 16 mm²+15 x 6 mm²	100	1SPE007715F0745	41Z66	5/90



MISTRAL41 – Terminal blocks screwless

Description	Maximum current [A]	Order code	Type number	Packaging
Terminal block screwless				
Terminal block screwless N 5 x 1,5–4mm²	63	1SPE007715F9701	41Z70	5/280
Terminal block screwless N 5 x 1,5–4 mm²+1 x 25 mm²	63	1SPE007715F9702	41Z71	5/180
Terminal block screwless N 8 x 1,5–4 mm²+2 x 25 mm²	63	1SPE007715F9703	41Z72	5/150
Terminal block screwless N 11 x 1,5–4 mm²+3 x 25 mm²	63	1SPE007715F9704	41Z73	5/100
Terminal block screwless N 14 x 1,5–4 mm²+4 x 25 mm²	63	1SPE007715F9705	41Z74	5/90
Terminal block screwless N 17 x 1,5–4 mm²+5 x 25 mm²	63	1SPE007715F9706	41Z75	5/70
Terminal block screwless N 20 x 1,5–4 mm²+6 x 25 mm²	63	1SPE007715F9707	41Z76	5/60
Terminal block screwless PE 5 x 1,5–4 mm²+1 x 25 mm²	63	1SPE007715F9712	41Z77	5/180
Terminal block screwless PE 8 x 1,5–4 mm²+2 x 25 mm²	63	1SPE007715F9713	41Z78	5/150
Terminal block screwless PE 11 x 1,5–4 mm²+3 x 25 mm²	63	1SPE007715F9714	41Z79	5/100
Terminal block screwless PE 14 x 1,5–4 mm²+4 x 25 mm²	63	1SPE007715F9715	41Z80	5/90
Terminal block screwless PE 17 x 1,5–4 mm²+5 x 25 mm²	63	1SPE007715F9716	41Z81	5/70
Terminal block screwless PE 20 x 1,5–4 mm²+6 x 25 mm²	63	1SPE007715F9717	41Z82	5/60



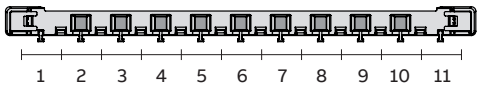
MISTRAL41 – Terminal block carriers

Description	Order code	Type number	Packaging
Terminal carriers			
Carrier 8M	1SPE007715F0751	41Z67	5/280
Carrier 12M	1SPE007715F0752	41Z68	5/225
Carrier 18M	1SPE007715F0753	41Z69	5/150

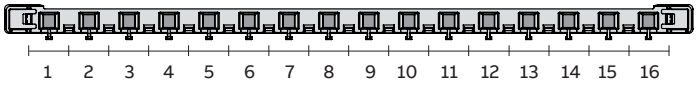
Consumer units
Terminal blocks

Terminal block carriers

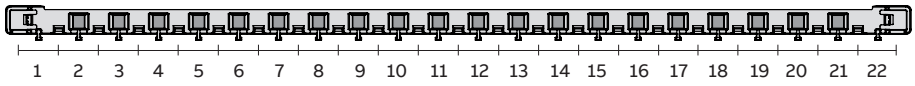
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1SPE007715F0752

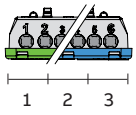


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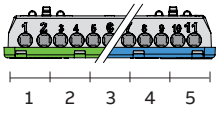


Terminal blocks

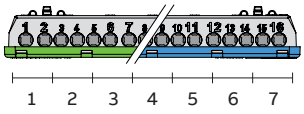
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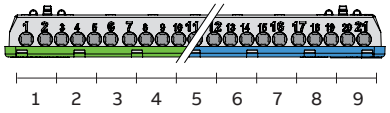
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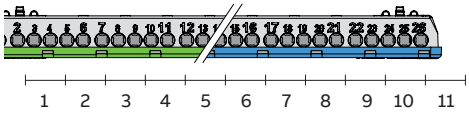
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1SPE007715F0744
1SPE007715F0734

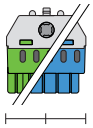


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1SPE007715F0735



Terminal blocks screwless

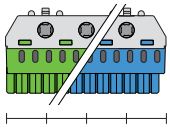
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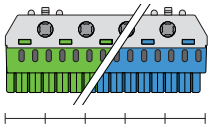
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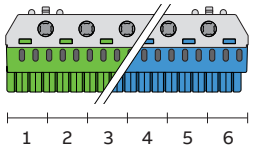
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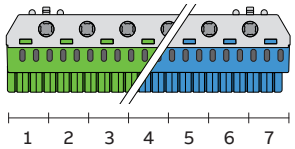
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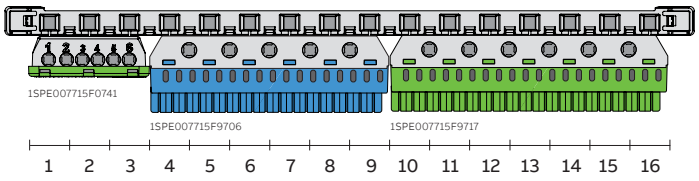


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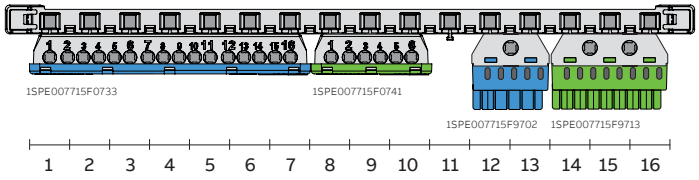


Assembly examples

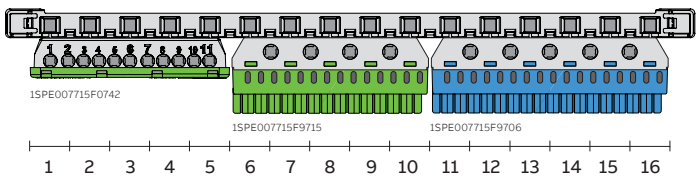
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1SPE007715F0752

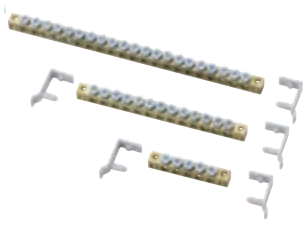


1SPE007715F0752



Consumer units

Terminal blocks for MISTRAL series



MISTRAL41 – Terminal bars

Description	Order code	Type number
Terminal bars		
Terminal bar 5 holes D.4.5 mm	12531	41Z28
Terminal bar 10 holes D.4.5 mm and 3 holes D.5.6 mm	12532	41Z29
Terminal bar 16 holes D.4.5 mm and 3 holes D.5.6 mm	12533	41Z30
Terminal bar 15 holes D.4.5 mm and 6 holes D.5.6 mm	12534	41Z31
Terminal bar 19 holes D.4.5 mm and 6 holes D.5.6 mm	12535	41Z32



MISTRAL41 – Terminal bar carriers

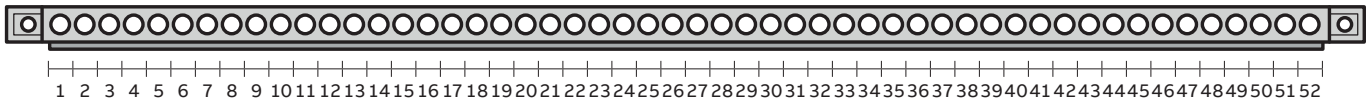
Description	Order code	Type number
Terminal carrier		
Carrier for 8 moduls	1SLM004100A1953	41Z25
Carrier for 12 modules	1SLM004100A1954	41Z26
Carrier for 18 modules	1SLM004100A1955	41Z27

Consumer units

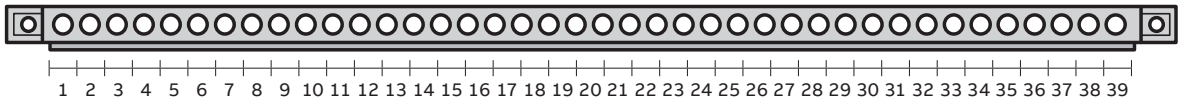
Terminal blocks – assembly examples

Terminal bar carriers

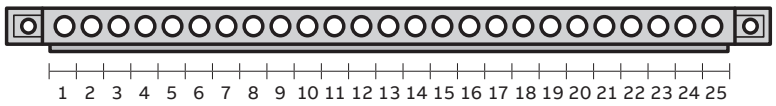
1SLM004100A1955



1SLM004100A1954

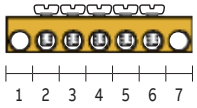


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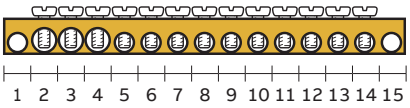


Terminal bars

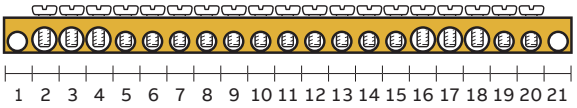
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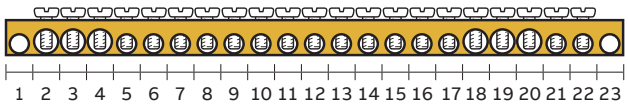
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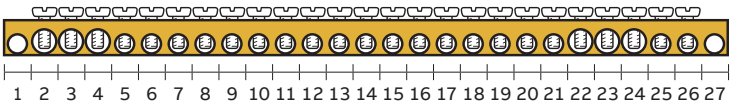
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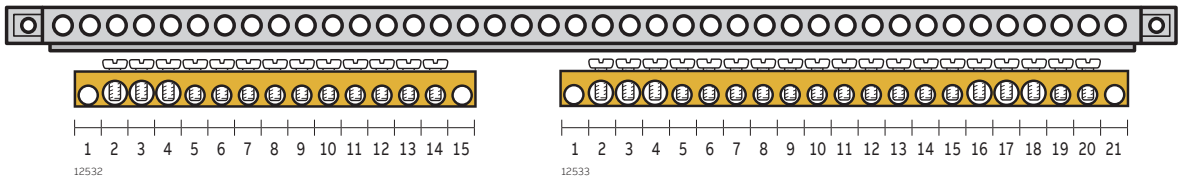


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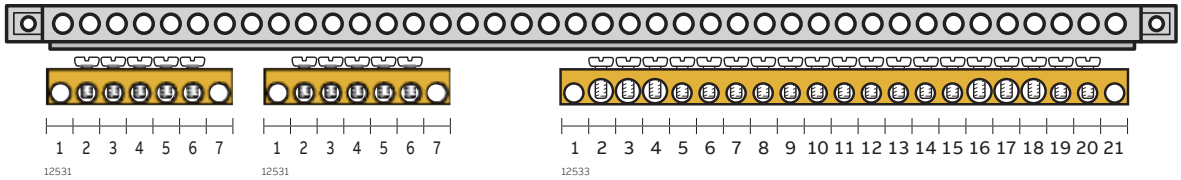


Assembly examples

1SLM004100A1954



1SLM004100A1954



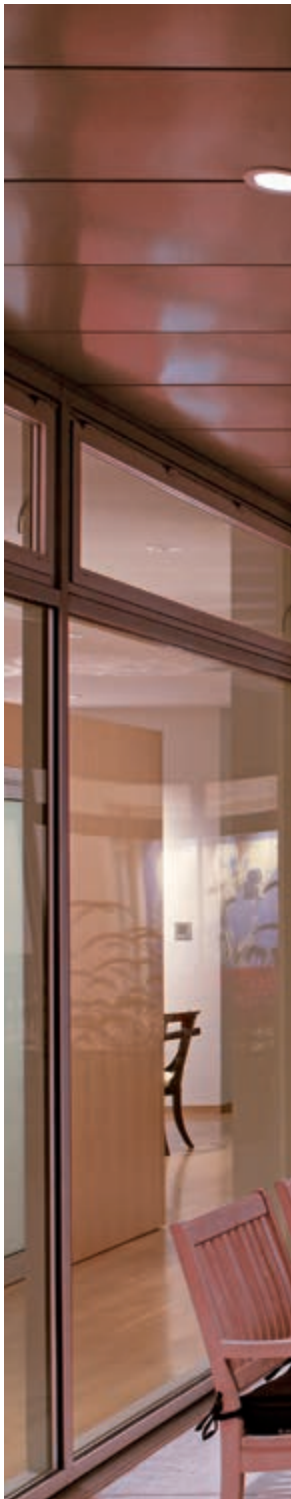
Notes

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