Product data sheet
Characteristics

A9N18357
Miniature circuit breaker (MCB), Acti9 C120N, 1P, 80A, C curve, 10000A (IEC/EN 60898-1), 10kA (IEC/EN 60947-2)



Main

Range	Acti9
Product name	Acti9 C120
Product or component type	Miniature circuit-breaker
Device short name	C120N
Device application	Distribution
Poles description	1P
Number of protected poles	1
[In] rated current	80 A at 30 °C
Network type	AC DC
Trip unit technology	Thermal-magnetic
Curve code	C
Breaking capacity	3 KA Icu at 380...415 V AC 50/60 Hz IT conforming to EN/IEC 60947-2 20 KA Icu at 130 V AC 50/60 Hz conforming to EN/IEC 60947-2 15 KA Icu at 12 V DC conforming to EN/IEC 60947-2 15 KA Icu at 125 V DC conforming to EN/IEC 60947-2 10 KA Icu at <= 144 V DC conforming to EN/IEC 60947-2 10 KA Icu at 220...240 V AC 50/60 Hz conforming to EN/IEC 60947-2 20 KA Icu at 12 V AC 50/60 Hz conforming to EN/IEC 60947-2 10000 A Icn at 230/400 V AC 50/60 Hz conforming to EN/IEC 60898-1
Suitability for isolation	Yes conforming to IEC 60947-2
Standards	EN/IEC 60898-1 EN/IEC 60947-2
Product certifications	EAC

Complementary

Network frequency	50/60 Hz
[Ue] rated operational voltage	380...415 V AC 50/60 Hz 125 V DC <= 144 V DC 12 V DC 220...240 V AC 50/60 Hz 230...400 V AC 50/60 Hz 130 V AC 50/60 Hz 12 V AC 50/60 Hz
Magnetic tripping limit	5...10 x In
[Ics] rated service breaking capacity	15 KA 75 % conforming to EN/IEC 60947-2 - 130 V AC 50/60 Hz 15 KA 100 % conforming to EN/IEC 60947-2 - 125 V DC 2.25 KA 75 % conforming to EN/IEC 60947-2 - 380...415 V AC 50/60 Hz 15 KA 100 % conforming to EN/IEC 60947-2 - 12 V DC 10 KA 100 % conforming to EN/IEC 60947-2 - <= 144 V DC 7.5 KA 75 % conforming to EN/IEC 60947-2 - 220...240 V AC 50/60 Hz 15 KA 75 % conforming to EN/IEC 60947-2 - 12 V AC 50/60 Hz 7500 A 75 % conforming to EN/IEC 60898-1 - 230/400 V AC 50/60 Hz
Limitation class	3 conforming to EN/IEC 60947-2
[Ui] rated insulation voltage	500 V AC 50/60 Hz conforming to EN/IEC 60947-2
[Uimp] rated impulse withstand voltage	6 KV conforming to EN/IEC 60947-2
Contact position indicator	Yes
Control type	Toggle
Local signalling	ON/OFF indication
Mounting mode	Clip-on
Mounting support	35 mm symmetrical DIN rail
Comb busbar and distribution block compatibility	YES
9 mm pitches	3
Height	81 Mm
Depth	73 Mm
Width	27 Mm
Net weight	0.205 Kg
Colour	White
Mechanical durability	20000 Cycles
Electrical durability	5000 Cycles conforming to IEC 60947-2

Locking options description	Handle sealable with cable diameter 0.7mm in OFF or ON position
Connections - terminals	Tunnel type terminals1…50 mm² rigid Tunnel type terminals1.5…35 mm² flexible
Wire stripping length	15 Mm
Tightening torque	3.5 N.M
Earth-leakage protection	Without

Environment

IP degree of protection	IP20 conforming to IEC 60529
Pollution degree	3 conforming to IEC 60947-2
Overvoltage category	IV
Tropicalisation	2 conforming to IEC 60068-1
Relative humidity	95 % at 55 °C
Operating altitude	2000 m
Ambient air temperature for operation	-25…70 °C
Ambient air temperature for storage	-40…85 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.700 Cm
Package 1 Width	7.500 Cm
Package 1 Length	8.700 Cm
Package 1 Weight	193.000 G
Unit Type of Package 2	BB1
Number of Units in Package 2	12
Package 2 Height	8.500 Cm
Package 2 Width	9.200 Cm
Package 2 Length	32.800 Cm
Package 2 Weight	2.377 Kg
Unit Type of Package 3	S03
Number of Units in Package 3	72
Package 3 Height	30.000 Cm
Package 3 Width	30.000 Cm
Package 3 Length	40.000 Cm
Package 3 Weight	14.749 Kg

Offer Sustainability

Recyclability potential, in %	60
Total lifecycle Carbon footprint	19 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	1.1251449843043584
Carbon footprint of the manufacturing phase [A1 to A3]	1 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.025421372997905534
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.009324908536437604
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	17.23413333333333
Carbon footprint of the use phase [B2, B3, B4, B6]	17 kg CO2 eq.
Toxic heavy metal free	Yes
Mercury free	Yes
Sustainable packaging	No
Carbon footprint of the end-of-life phase [C1 to C4]	0.5305091623857032
Carbon footprint of the end-of-life phase [C1 to C4]	0.5 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	19

Packaging made with recycled cardboard	No
Packaging without single use plastic	Yes
SCIP Number	F3fcbd4f-b3e8-41f9-b910-8853888889fe
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant
OECD PFAS Regulation	Item contains PFAS Chemicals
POP Directive	No POPs
Halogen-free status	Product contains halogen above thresholds
PVC free	Yes
Silicone-free	No
End of life manual availability	No need of specific recycling operations
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised