Product data sheet
Characteristics

C63N42D630
Circuit breaker, ComPacT NSX630N, 50kA/415VAC, 4 poles, MicroLogic 2.3 trip unit 630A



Main

Range	ComPacT
Product name	ComPacT NSX
Device short name	NSX630N
Product or component type	Circuit breaker
Device application	Distribution
Poles description	4P
Protected poles description	4D 3D + N/2 3D
Neutral position	Left
[In] rated current	630 A at 40 °C
[Ue] rated operational voltage	690 V AC 50/60 Hz
Network type	AC
Network frequency	50/60 Hz
Suitability for isolation	Yes conforming to EN/IEC 60947-2
Utilisation category	Category A
Breaking capacity	85 KA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 50 KA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 42 KA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 30 KA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 22 KA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 10 KA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 85 KA Icu at 240 V AC 50/60 Hz conforming to UL 60947-4-1 50 KA Icu at 480 V AC 50/60 Hz conforming to UL 60947-4-1 20 KA Icu at 600 V AC 50/60 Hz conforming to UL 60947-4-1
Breaking capacity code	N 50 kA 415 V AC
Trip unit name	MicroLogic 2.3
Trip unit technology	Electronic
Trip unit protection functions	LSoI
Control type	Toggle
Mounting mode	Fixed

Complementary

[Ui] rated insulation voltage	800 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	8 KV
[Ics] rated service breaking capacity	85 KA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 50 KA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 42 KA at 440 V AC 50/60 Hz conforming to IEC 60947-2 30 KA at 500 V AC 50/60 Hz conforming to IEC 60947-2 11 KA at 525 V AC 50/60 Hz conforming to IEC 60947-2 10 KA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Mechanical durability	15000 Cycles
Electrical durability	8000 Cycles at 440 V In/2 4000 Cycles at 440 V In 6000 Cycles at 690 V In/2 2000 Cycles at 690 V In
Power dissipation per pole	39.7 W
Mounting support	Backplate
Mounting position	Horizontal and vertical Flat on the back
Upside connection	Front
Downside connection	Front
Connection pitch	45 Mm
Protection type	L : for overload protection (long time) So : for short time short-circuit protection with fixed delay I : for instantaneous short-circuit protection
Trip unit rating	630 A at 40 °C
Long time pick-up adjustment type Ir	Adjustable 9 settings
Long time pick-up adjustment range	250...630 A
Long time delay adjustment type	Fixed
[tr] long-time delay adjustment range	400 S at 1.5 x Ir 16 S at 6 x Ir 11 S at 7.2 x Ir
Neutral protection setting	0.5 x Ir (3D + N/2) 1 x Ir (4D) No protection (3D)
Thermal memory	20 minutes before and after tripping
Short-time pick-up adjustment type Isd	Adjustable 9 settings
[Isd] short-time pick-up adjustment range	1.5...10 x Ir
Short-time delay adjustment type	Fixed
Instantaneous pick-up adjustment type Ii	Fixed
Instantaneous pick-up adjustment range	6900 A
Earth-leakage protection	Without
Zone selective interlocking ZSI	Without
Number of slots	6 slot(s)
Local signalling	Flashing LED (green) for ready to operate LED 105 % Ir (red) for overload LED 90 % Ir (orange) for overload
Width	185 Mm
Height	255 Mm
Depth	110 Mm
Net weight	8.13 Kg

Environment

Standards	EN/IEC 60947-2
Overvoltage category	III
Electrical shock protection class	Class II on front face
Pollution degree	3 conforming to IEC 60664-1
IP degree of protection	IP40 conforming to IEC 60529
IK degree of protection	IK07 conforming to IEC 62262
Ambient air temperature for operation	-25…70 °C
Ambient air temperature for storage	-50…85 °C

Relative humidity	0…95 %
Operating altitude	0...2000 m without derating 2000 m...5000 m with derating

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	15.000 Cm
Package 1 Width	20.000 Cm
Package 1 Length	29.000 Cm
Package 1 Weight	7.433 Kg
Unit Type of Package 2	S04
Number of Units in Package 2	2
Package 2 Height	30.000 Cm
Package 2 Width	40.000 Cm
Package 2 Length	60.000 Cm
Package 2 Weight	15.566 Kg

Offer Sustainability

Recyclability potential, in %	56
Total lifecycle Carbon footprint	705 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	47.214210751157
Carbon footprint of the manufacturing phase [A1 to A3]	47 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	1.1976134834460663
Carbon footprint of the distribution phase [A4]	1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.7819370558917765
Carbon footprint of the installation phase [A5]	0.8 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	641.2622343749998
Carbon footprint of the use phase [B2, B3, B4, B6]	641 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	14.718125311498756
Carbon footprint of the end-of-life phase [C1 to C4]	15 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	705
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	25ca3248-85d0-423a-a9d8-5b7aeb52e7b6
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, w
Halogen-free status	Product contains halogen above thresholds
PVC free	Yes
Silicone-free	No
Updatability	No
End of life manual availability	End Of Life Information
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection a

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised