Product data sheet
Characteristics

C16N3TM080
Circuit breaker, ComPacT NSX160N, 50kA/415VAC, 3 poles, TMD trip unit 80A



Main

Range	ComPacT
Product name	ComPacT NSX
Device short name	NSX160N
Product or component type	Circuit breaker
Device application	Distribution
Poles description	3P
Protected poles description	3D
[In] rated current	80 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	90 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 50 KA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 36 KA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 35 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 10 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	TM-D
Trip unit technology	Thermal-magnetic
Trip unit protection functions	LI
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	90 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 50 KA at 440 V AC 50/60 Hz conforming to IEC 60947-2 36 KA at 500 V AC 50/60 Hz conforming to IEC 60947-2 35 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	40000 Cycles
Electrical durability	40000 Cycles at 440 V In/2 20000 Cycles at 440 V In 15000 Cycles at 690 V In/2 7500 Cycles at 690 V In
Power dissipation per pole	8.06 W
Mounting support	Backplate
Mounting position	Horizontal and vertical Flat on the back
Upside connection	Front
Downside connection	Front
Connection pitch	35 Mm
Protection type	L : for overload protection (thermal) I : for short-circuit protection (magnetic)
Trip unit rating	80 A at 40 °C
Long time pick-up adjustment type Ir	Adjustable
Long time pick-up adjustment range	0.7...1 x In
Long time delay adjustment type	Fixed
[tr] long-time delay adjustment range	120…400 S at 1.5 x In 15 S at 6 x Ir
Instantaneous pick-up adjustment type Ii	Fixed

Instantaneous pick-up adjustment range	640 A
Earth-leakage protection	Without
Number of slots	5 slot(s)
Width	105 Mm
Height	161 Mm
Depth	86 Mm
Net weight	2.2 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	14 Cm
Package 1 Width	11.5 Cm
Package 1 Length	19 Cm
Package 1 Weight	2.28 Kg
Unit Type of Package 2	S03
Number of Units in Package 2	8
Package 2 Height	30 Cm
Package 2 Width	30 Cm
Package 2 Length	40 Cm
Package 2 Weight	18.24 Kg

Offer Sustainability

Recyclability potential, in %	54
Total lifecycle Carbon footprint	148 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	12.594285714285716
Carbon footprint of the manufacturing phase [A1 to A3]	13 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.6572338192419825
Carbon footprint of the distribution phase [A4]	0.7 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.19244839650145776
Carbon footprint of the installation phase [A5]	0.2 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	130.28843519999998
Carbon footprint of the use phase [B2, B3, B4, B6]	130 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	3.854618075801749
Carbon footprint of the end-of-life phase [C1 to C4]	4 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	148
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	3874e08b-fcb8-4aa9-87c4-d36abebf2833

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, which
Halogen-free status	Product contains halogen above thresholds
PVC free	Yes
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 and

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised