

Circuit breaker, ComPacT NSX100N, 50kA/415VAC, 4 poles 4D (neutral fully protected), TMD trip unit 50A

C10N4TM050

Main

wain		
Range	ComPacT new generation	
product name	ComPacT NSX new generation	
Device short name	NSX100N	
Product or component type	Circuit breaker	
Device application	Distribution	
Poles description	4P	
Protected poles description	4D	
Neutral position	Left	
[In] rated current	50 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	
[Icu] rated ultimate short-circuit 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	
Performance level	N 50 kA 415 V AC	
Trip unit name	TM-D	
Trip unit technology	Thermal-magnetic	
Trip unit protection functions	П	
Control type	Toggle	
Circuit breaker mounting mode	Fixed	

Complementary

[Ui] rated insulation voltage	800 V AC 50/60 Hz	
[Uimp] rated impulse withstand voltage	8 kV	

[Ics] rated service short-circuit	90 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2	
breaking capacity	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	50000 cycles	
Electrical durability	50000 cycles at 440 V In/2	
	30000 cycles at 440 V In	
	20000 cycles at 690 V In/2	
	10000 cycles at 690 V In	
Power dissipation per pole	4.11 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	50 A at 40 °C	
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable	
[Ir] long-time protection pick-up adjustment range	0.71 x ln	
Long-time protection delay adjustment type tr	Fixed	
[tr] long-time protection delay	120400 s at 1.5 x ln	
adjustment range	15 s at 6 x lr	
Neutral protection settings	1 x lr (4D)	
Instantaneous protection pick-up adjustment type li	Fixed	
[li] instantaneous protection pick- up adjustment range	500 A	
Earth-leakage protection	Without	
Number of slots for electrical auxiliaries	5 slot(s)	
Width (W)	140 mm	
Height (H)	161 mm	
Depth (D)	86 mm	
Net weight	2.4 kg	

Environment

Standards	EN/IEC 60947-2
Overvoltage category	Class II
Electrical shock protection class	Class II
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	-2570 °C
Ambient air temperature for storage	-5085 °C

Relative humidity	095 %
Operating altitude	02000 m without derating 2000 m5000 m with derating

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	14.000 cm
Package 1 Width	14.500 cm
Package 1 Length	19.000 cm
Package 1 Weight	2.351 kg
Unit Type of Package 2	S03
Number of Units in Package 2	4
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	9.782 kg



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

∇ Environmental footprint	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	84
Environmental Disclosure	Product Environmental Profile

Use Better

Recycled metal content at CR level	0
EU RoHS Directive	Compliant with Exemptions
REACh Regulation	REACh Declaration
PVC free	Yes

Use Again

○ Repack and remanufacture	
Circularity Profile	End of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Halogen content performance	Product contains halogen above thresholds
Take-back	No