Product datasheet

Specifications

Circuit breaker, ComPacT NS1000N, 50kA at 415VAC, 4P, fixed, manually operated, MicroLogic 5.0A control unit, 1000A

C100N45AFM

Main

Range	ComPacT
product name	ComPacT NS new generation
Range of product	ComPacT NS630b...1600 new generation
Product or component type	Circuit breaker
Device application	Distribution
Number of poles	4P
Protected poles description	4D
Neutral position	Left
(In) rated current up to 65 °C	1000 A at 50 °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 B
[Icu] rated ultimate short-circuit 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 50 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 40 kA Icu at 500/525 V AC 50/60 Hz conforming to IEC 60947-2 30 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Performance level	N 50 kA 415 V AC
Trip unit name	MicroLogic 5.0 A
Trip unit technology	Electronic
Trip unit protection functions	LSI
control type	Manually operated
Mounting mode	Fixed

Complementary

[Ui] rated insulation voltage	800 V AC 50/60 Hz conforming to IEC 60947-2
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947-2
[Ics] rated service short-circuit breaking capacity	50 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 40 kA at 500/525 V AC 50/60 Hz conforming to IEC 60947-2 30 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
[Icw] rated short-time withstand current	19.2 kA 1 s conforming to IEC 60947-2

Mechanical durability	10000 cycles
Electrical durability	2000 cycles at 690 V In 4000 cycles at 690 V In/2 5000 cycles at 440 V In 6000 cycles at 440 V In/2
Power losses	22 W
Mounting support	Backplate
Upside connection	Front
Downside connection	Front
Connection pitch	70 mm
Protection type	L : for overload protection (long time) S : for short time short-circuit protection I : for instantaneous short-circuit protection
Trip unit rating	1000 A at 50 °C
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable 9 settings
[Ir] long-time protection pick-up adjustment range	0.4...1 x In
Long-time protection delay adjustment type tr	Adjustable 9 settings
[tr] long-time protection delay adjustment range	12.5…600 s at 1.5 x Ir 0.5…24 s at 6 x Ir 0.7…16.6 s at 7.2 x Ir
Thermal memory	20 mn
Short-time protection pick-up adjustment type Isd	Adjustable 9 settings
[Isd] Short-time protection pick-up adjustment range	1.5...10 x Ir
Short-time protection delay adjustment type tsd	Adjustable
[tsd] Short-time protection delay adjustment range	0.1…0.4 s I^2t=on 0…0.4 s I^2t=off
Instantaneous protection pick-up adjustment type Ii	Adjustable
[Ii] instantaneous protection pick-up adjustment range	Off 2...15 x In
Earth-leakage protection	Without
Neutral protection settings	No protection (3D) 0.5 x Ir (3D + N/2) 1 x Ir (4D)
Zone selective interlocking ZSI	With
Auxiliary contact composition	1 NO/NC
Local signalling	4 LEDs (red) for fault indication 1 LED (yellow) for overload
Display type	LCD display
Type of measurement	Ammeter
Width (W)	280 mm
Height (H)	327 mm
Depth (D)	147 mm
Net weight	18 kg

Environment

Standards	EN/IEC 60947-2

Product certifications	IECEE CB Scheme
Pollution degree	3 conforming to IEC 60947
IP degree of protection	IP40 conforming to IEC 60529
IK degree of protection	IK07 conforming to EN 50102
ambient air temperature for operation	-25…70 °C
Ambient air temperature for storage	-40…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	30.000 cm
Package 1 Width	40.000 cm
Package 1 Length	60.000 cm
Package 1 Weight	15.735 kg

Environmental Data

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)	**749**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Recycled metal content at CR level	**0**
Packaging made with recycled cardboard	**No**
Packaging without single use plastic	**No**
EU RoHS Directive	**Compliant with Exemptions**
SCIP Number	**76c2e213-3b51-4d8b-afdf-632ded42d731**
REACh Regulation	**REACh Declaration**
Halogen content performance	**Product contains halogen above thresholds**
PVC free	**No**
Silicon free	**No**

Use Again

Repack and remanufacture

Circularity Profile	**End of Life Information**
Removable battery	**User replaceable**
Take-back	**No**
WEEE	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**