Product datasheet

Specifications



Discontinued

Circuit breaker, ComPact NS1600N, 50kA/415VAC, Micrologic 5.0E trip unit, 1600A, fixed, 4 poles 4d

34438

Discontinued on: 31 Mar 2024

Main

Range	ComPact
Product name	ComPact NS
Range of product	ComPact NS630b...1600
Device short name	Compact NS1600N
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	1600 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	30 kA Icu at 660/690 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 85 kA Icu at 220/240 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
Performance level	N 50 kA 415 V AC
Trip unit name	MicroLogic 5.0 E
Trip unit technology	Electronic
Trip unit protection functions	LSI
Control type	Rotary handle Toggle
Circuit breaker 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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[Ics] rated service short-circuit breaking capacity	30 kA at 500/525 V AC 50/60 Hz conforming to IEC 60947-2 37 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 37 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 22 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 37 kA at 440 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	1000 cycles at 690 V In 2000 cycles at 690 V In/2 2000 cycles at 440 V In 5000 cycles at 440 V In/2
Power losses	74 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	1600 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	Energy meter
Width (W)	280 mm
Height (H)	327 mm

Depth (D)	147 mm
Net weight	18 kg

Environment

Standards	EN/IEC 60947-2
Product certifications	ASTA ASEFA
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	37.0 cm
Package 1 Width	38.0 cm
Package 1 Length	30.0 cm
Package 1 Weight	17.037 kg

Contractual warranty

Warranty (in months)	18

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

Total lifecycle Carbon footprint	**1 621 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**
Carbon footprint of the manufacturing phase [A1 to A3]	**238 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**5 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**2 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**1 351 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**25 kg CO2 eq.**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**No**
SCIP Number	**76c2e213-3b51-4d8b-afdf-632ded42d731**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**
Halogen-free status	**Product contains halogen above thresholds**
PVC free	**No**
Silicone-free	**No**

Use Longer

Lifetime extension

Repair	**No**

Use Again

Repack and remanufacture

Recyclability potential, in %	**56**
End of life manual availability	**End of Life Information**
Removable battery	**User replaceable**
Take-back	**No**

WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins