Product datasheet

Specifications



Circuit breaker, ComPacT NS800N, 50kA at 415VAC, 4P, fixed, manually operated, MicroLogic 2.0 control unit, 800A

C080N420FM

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	800 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
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
Breaking capacity code	N 50 kA 415 V AC
Trip unit name	MicroLogic 2.0
Trip unit technology	Electronic
Trip unit protection functions	LI
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 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

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

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	15 W
Mounting support	Backplate
Upside connection	Front
Downside connection	Front
Connection pitch	70 mm
Protection type	L : for overload protection (long time) I : for instantaneous short-circuit protection
Trip unit rating	800 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 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
Instantaneous protection pick-up adjustment type Ii	Adjustable
[Ii] instantaneous protection pick-up adjustment range	1.5...10 x Ir
Earth-leakage protection	Without
Neutral protection setting	No protection (3D) 0.5 x Ir (3D + N/2) 1 x Ir (4D)
Zone selective interlocking ZSI	Without
Auxiliary contact composition	1 NO/NC
Local signalling	4 LEDs (red) for fault indication 1 LED (yellow) for overload
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
Overvoltage category	III
Electrical shock protection class	Class II on front face
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	-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	30.000 cm
Package 1 Width	40.000 cm
Package 1 Length	60.000 cm
Package 1 Weight	15.632 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	633
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Compliant with Exemptions
SCIP Number	76c2e213-3b51-4d8b-afdf-632ded42d731
REACh Regulation	REACh Declaration
Halogen-free status	Product contains halogen above thresholds
PVC free	Yes
Silicone-free	No

Use Again

Repack and remanufacture

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 never end up in rubbish bins

Technical Illustration

Assembly's dimensions

