

# Product datasheet

Specifications



Circuit breaker, ComPacT NS800N, 50kA at 415VAC, 4P, fixed, manually operated, MicroLogic 5.0 control unit, 800A

C080N450FM

EAN Code: 3606482097636

## 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	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
[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
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

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

<b>[Icw] rated short-time withstand current</b>	19.2 kA 1 s conforming to IEC 60947-2
<b>Mechanical durability</b>	10000 cycles
<b>Electrical durability</b>	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
<b>Power losses</b>	15 W
<b>Mounting support</b>	Backplate
<b>Upside connection</b>	Front
<b>Downside connection</b>	Front
<b>Connection pitch</b>	70 mm
<b>Protection type</b>	L : for overload protection (long time) S : for short time short-circuit protection I : for instantaneous short-circuit protection
<b>Trip unit rating</b>	800 A at 50 °C
<b>Long-time pick-up adjustment type Ir (thermal protection)</b>	Adjustable 9 settings
<b>[Ir] long-time protection pick-up adjustment range</b>	0.4...1 x In
<b>Long-time protection delay adjustment type tr</b>	Adjustable 9 settings
<b>[tr] long-time protection delay adjustment range</b>	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
<b>Thermal memory</b>	20 mn
<b>Short-time protection pick-up adjustment type Isd</b>	Adjustable 9 settings
<b>[Isd] Short-time protection pick-up adjustment range</b>	1.5...10 x Ir
<b>Short-time protection delay adjustment type tsd</b>	Adjustable
<b>[tsd] Short-time protection delay adjustment range</b>	0.1...0.4 s I²t=on 0...0.4 s I²t=off
<b>Instantaneous protection pick-up adjustment type Ii</b>	Adjustable
<b>[Ii] instantaneous protection pick-up adjustment range</b>	Off 2...15 x In
<b>Earth-leakage protection</b>	Without
<b>Neutral protection settings</b>	No protection (3D) 0.5 x Ir (3D + N/2) 1 x Ir (4D)
<b>Zone selective interlocking ZSI</b>	Without
<b>Auxiliary contact composition</b>	1 NO/NC
<b>Local signalling</b>	4 LEDs (red) for fault indication 1 LED (yellow) for overload
<b>Width (W)</b>	280 mm
<b>Height (H)</b>	327 mm
<b>Depth (D)</b>	147 mm
<b>Product weight</b>	18 kg

## Environment

<b>Standards</b>	EN/IEC 60947-2
<b>Product certifications</b>	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	-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	15.790 kg

## Logistical informations

Country of origin	IT
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## Contractual warranty

Warranty	18 months
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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)	637
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

Use Better

Materials and Substances	
Recycled metal content at CR level	0
Packaging made with recycled cardboard	No
Packaging without single use plastic	No
<a href="#">EU RoHS Directive</a>	Compliant with Exemptions
SCIP Number	76c2e213-3b51-4d8b-afdf-632ded42d731
REACH Regulation	<a href="#">REACH Declaration</a>
Halogen content performance	Product contains halogen above thresholds
PVC free	Yes
Silicon free	No

Use Again

Repack and remanufacture	
Circularity Profile	<a href="#">End of Life Information</a>
Take-back	No
WEEE	 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

