

# 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

<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 I <sup>2</sup> t=on 0...0.4 s I <sup>2</sup> t=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>Net weight</b>	18 kg

## Environment

<b>Standards</b>	EN/IEC 60947-2
<b>Product certifications</b>	IECEE CB Scheme

<b>Pollution degree</b>	3 conforming to IEC 60947
<b>IP degree of protection</b>	IP40 conforming to IEC 60529
<b>IK degree of protection</b>	IK07 conforming to EN 50102
<b>Ambient air temperature for operation</b>	-25...70 °C
<b>Ambient air temperature for storage</b>	-50...85 °C
<b>Relative humidity</b>	0...95 %
<b>Operating altitude</b>	0...2000 m without derating 2000 m...5000 m with derating

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	30.0 cm
<b>Package 1 Width</b>	40.0 cm
<b>Package 1 Length</b>	60.0 cm
<b>Package 1 Weight</b>	15.79 kg

## Contractual warranty

<b>Warranty</b>	18 months
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## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

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[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

## Well-being performance

Mercury Free

RoHS Exemption Information Yes

## Certifications & Standards

Reach Regulation [REACH Declaration](#)

Eu RoHS Directive Compliant with Exemptions

China RoHS Regulation [China RoHS declaration](#)  
Product out of China RoHS scope. Substance declaration for your information

Environmental Disclosure [Product Environmental Profile](#)

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

Circularity Profile [End of Life Information](#)