

# Product datasheet

Specifications



## Circuit breaker, ComPacT NS1600N, 50kA at 415VAC, 4P, fixed, manually operated, MicroLogic 2.0 control unit, 1600A

C160N420FM

### 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
(I <sub>n</sub> ) rated current up to 65 °C	1600 A at 50 °C
[U <sub>e</sub> ] 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
[I <sub>cu</sub> ] rated ultimate short-circuit breaking capacity	85 kA I <sub>cu</sub> at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 50 kA I <sub>cu</sub> at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 50 kA I <sub>cu</sub> at 440 V AC 50/60 Hz conforming to IEC 60947-2 40 kA I <sub>cu</sub> at 500/525 V AC 50/60 Hz conforming to IEC 60947-2 30 kA I <sub>cu</sub> 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 2.0
Trip unit technology	Electronic
[I <sub>cs</sub> ] rated service short-circuit breaking capacity	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 37 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2

<b>Trip unit protection functions</b>	LI
<b>Control type</b>	Manually operated
<b>Mounting mode</b>	Fixed
<b>Complementary</b>	
<b>[Ui] rated insulation voltage</b>	800 V AC 50/60 Hz conforming to IEC 60947-2
<b>[Uimp] rated impulse withstand voltage</b>	8 kV conforming to IEC 60947-2
	30 kA at 500/525 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
<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>	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
<b>Power losses</b>	74 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) I : for instantaneous short-circuit protection
<b>Trip unit rating</b>	1600 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>Instantaneous protection pickup adjustment type Ii</b>	Adjustable
<b>[Ii] instantaneous protection pick-up adjustment range</b>	1.5...10 x Ir
<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
<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>	37.0 cm
<b>Package 1 Width</b>	38.0 cm
<b>Package 1 Length</b>	30.0 cm
<b>Package 1 Weight</b>	16.966 kg

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Compliant <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>

**WEEE**

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

**Recommended replacement(s)**

