

# C16B47E160

Circuit breaker, ComPacT NSX160B,  
25kA/415VAC, 4 poles, MicroLogic Vigi 7.2E  
trip unit 160A



## Main

Range	ComPacT new generation
Product name	ComPacT NSX new generation
Device short name	NSX160B
Product or component type	Earth leakage circuit breaker
Device application	Distribution
Poles description	4P
Protected poles description	4D 3D + OSN 3D + N/2 3D
Neutral position	Left
[In] rated current	160 A at 40 °C
[Ue] rated operational voltage	440 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 A
[Icu] rated ultimate short-circuit breaking capacity	40 KA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 25 KA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 20 KA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 15 KA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2
Performance level	B 25 kA 415 V AC
Trip unit name	MicroLogic 7.2 E
Trip unit technology	Electronic
Trip unit protection functions	LSIR
Control type	Toggle
Circuit breaker mounting mode	Fixed

## Complementary

[Ui] rated insulation voltage	500 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	8 kV
[Ics] rated service short-circuit breaking capacity	40 KA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 25 KA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 20 KA at 440 V AC 50/60 Hz conforming to IEC 60947-2 15 KA at 500 V AC 50/60 Hz conforming to IEC 60947-2
Mechanical durability	40000 cycles
Electrical durability	40000 Cycles at 440 V In/2 20000 Cycles at 440 V In 15000 Cycles at 690 V In/2 7500 cycles at 690 V In
Power dissipation per pole	12.29 W N 12.29 W L1 and L3 9.98 W L2

Mounting support	Backplate
Mounting position	Horizontal and vertical Flat on the back
Upside connection	Front
Downside connection	Front
Connection pitch	35 mm
Protection type	L : for overload protection (long time) S : for short time short-circuit protection I : for instantaneous short-circuit protection R : for earth-leakage protection
Trip unit rating	160 A at 40 °C
Long-time pick-up adjustment type I <sub>r</sub> (thermal protection)	Adjustable 9 settings
[I <sub>r</sub> ] long-time protection pick-up adjustment range	63...160 A
Long-time protection delay adjustment type t <sub>r</sub>	Adjustable
[t <sub>r</sub> ] long-time protection delay adjustment range	15...400 S at 1.5 x I <sub>r</sub> 0.5...16 S at 6 x I <sub>r</sub> 0.35...11 s at 7.2 x I <sub>r</sub>
Neutral protection settings	0.5 x I <sub>r</sub> (3D + N/2) 1 x I <sub>r</sub> (4D) No protection (3D)
Thermal memory	20 minutes before and after tripping
Short-time protection pick-up adjustment type I <sub>sd</sub>	Adjustable
[I <sub>sd</sub> ] Short-time protection pick-up adjustment range	1.5...10 x I <sub>r</sub>
Short-time protection delay adjustment type t <sub>sd</sub>	Adjustable
[t <sub>sd</sub> ] Short-time protection delay adjustment range	0...0.4 S I <sub>r</sub> <sup>2</sup> =off 0.1...0.4 s I <sub>r</sub> <sup>2</sup> =on
Instantaneous protection pick-up adjustment type I <sub>i</sub>	Adjustable
[I <sub>i</sub> ] instantaneous protection pick-up adjustment range	1.5...15 x I <sub>n</sub>
Earth-leakage protection	Integrated
Earth-leakage protection class	Class A
Earth-leakage protection sensitivity adjustment type IΔ <sub>n</sub>	Adjustable
[IΔ <sub>n</sub> ] earth-leakage protection sensitivity adjustment range	30 MA 100 MA 300 MA 500 MA 1 A 3 A 5 A
Earth-leakage protection specific mode	OFF using the IΔ <sub>n</sub> rotary switch
Earth-leakage protection time delay adjustment type Δt	Adjustable
[Δt] Earth-leakage protection time delay adjustment range	0 Ms 60 Ms 150 Ms 500 Ms 1 s
Zone selective interlocking ZSI	Without
Number of slots for electrical auxiliaries	5 slot(s)
Local signalling	Flashing LED (green) for ready to operate LED 105 % I <sub>r</sub> (red) for overload LED 90 % I <sub>r</sub> (orange) for overload
Display type	LCD display
Type of measurement	Energy meter
Communication of data	Time-stamped histories and event tables Maintenance indicators Instantaneous and demand values Maximeters/Minimeters Protection and alarm settings Power quality Energy metering Demand current and power
Width (W)	140 mm
Height (H)	161 mm

Depth (D)	86 mm
Net weight	2.6 kg






## Environment

Standards	EN/IEC 60947
Product certifications	CCC[RETURN]EAC[RETURN]Marine
Overvoltage category	Class II
Electrical shock protection class	Class II
Pollution degree	3 conforming to IEC 60664-1
IP degree of protection	IP40 conforming to IEC 60529
IK degree of protection	IK07 conforming to IEC 62262
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	12.0 cm
Package 1 Width	16.0 cm
Package 1 Length	14.0 cm
Package 1 Weight	3.1 kg
Unit Type of Package 2	S03
Number of Units in Package 2	3
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	9.3 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 <a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	 <a href="#">China RoHS Declaration</a>
RoHS exemption information	 <a href="#">Yes</a>
Environmental Disclosure	 <a href="#">Product Environmental Profile</a>
Circularity Profile	 <a href="#">End Of Life Information</a>
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>