

# Product datasheet

Specifications



circuit breaker ComPact  
NSX100HB1. 75 kA at 690 V AC.  
MicroLogic 6.2 E-M trip unit 80 A.  
3 poles 3d

LV433317

! Discontinued

! Discontinued on: 30 Jun 2023

## Main

Range	ComPact
Product Name	ComPact NSX
Range Of Product	ComPact NSX100...250
Device Short Name	NSX100HB1
Product Or Component Type	Circuit breaker
Device Application	Motor
Number Of Poles	3P
Protected Poles Description	3t
[In] Rated Current	80 A at 65 °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 A
[Icu] Rated Ultimate Short-Circuit Breaking Capacity	85 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 80 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 75 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Performance Level	HB1 75 kA 690 V AC
Trip Unit Name	MicroLogic 6.2 E-M
Trip Unit Technology	Electronic
Trip Unit Protection Functions	LSIG
Control Type	Toggle
Circuit Breaker Mounting Mode	Fixed

## Complementary

[Ui] Rated Insulation Voltage	800 V AC 50/60 Hz
[Uimp] Rated Impulse Withstand Voltage	8 kV
[Ics] Rated Service Short-Circuit Breaking Capacity	85 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2 80 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2 75 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Mechanical Durability	50000 cycles

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

<b>Electrical Durability</b>	10000 cycles at 690 V In 20000 cycles at 690 V In/2 30000 cycles at 440 V In 50000 cycles at 440 V In/2
<b>Mounting Support</b>	Backplate
<b>Upside Connection</b>	Front
<b>Downside Connection</b>	Front
<b>Connection Pitch</b>	35 mm
<b>Protection Type</b>	L : for overload protection (long time) S : for short time short-circuit protection I : for instantaneous short-circuit protection G : for ground fault protection
<b>Trip Unit Rating</b>	80 A at 65 °C
<b>Motor Tripping Class</b>	10 20 5 30
<b>Complementary Motor Protection</b>	Phase unbalance Stalled rotor Underload Protracted starting time
<b>Long-Time Pick-Up Adjustment Type Ir (Thermal Protection)</b>	Adjustable 9 settings
<b>[Ir] Long-Time Protection Pick-Up Adjustment Range</b>	35...80 A
<b>Long-Time Protection Delay Adjustment Type Tr</b>	Adjustable
<b>[Tr] Long-Time Protection Delay Adjustment Range</b>	10 s at 7.2 x Ir for trip class 10 120 s at 1.5 x Ir for trip class 5 20 s at 7.2 x Ir for trip class 20 240 s at 1.5 x Ir for trip class 10 26 s at 6 x Ir for trip class 20 480 s at 1.5 x Ir for trip class 20 5 s at 7.2 x Ir for trip class 5 13.5 s at 6 x Ir for trip class 10 6.5 s at 6 x Ir for trip class 5 30 s at 7.2 x Ir for trip class 30 38 s at 6 x Ir for trip class 30 720 s at 1.5 x Ir for trip class 30
<b>Thermal Memory</b>	20 minutes before and after tripping
<b>Short-Time Protection Pick-Up Adjustment Type Isd</b>	Adjustable
<b>[Isd] Short-Time Protection Pick-Up Adjustment Range</b>	5...13 x Ir
<b>Short-Time Protection Delay Adjustment Type Tsd</b>	Fixed
<b>Instantaneous Protection Pick-Up Adjustment Type Ii</b>	Fixed
<b>[Ii] Instantaneous Protection Pick-Up Adjustment Range</b>	1200 A
<b>Ground-Fault Protection Pick-Up Adjustment Type Ig</b>	Adjustable 9 settings
<b>[Ig] Ground-Fault Protection Pick-Up Adjustment Range</b>	0.6...1 x In for In = 25 A 0.3...1 x In for In = 50 A 0.2...1 x In for In > 50 A Ig enable on/off
<b>Ground-Fault Protection Time Delay Adjustment Type Tg</b>	Adjustable
<b>[Tg] Ground-Fault Protection Time Delay Adjustment Range</b>	0...0.4 s
<b>Earth-Leakage Protection</b>	Without
<b>Zone Selective Interlocking Zsi</b>	With
<b>Number Of Slots For Electrical Auxiliaries</b>	5 slot(s)

<b>Local Signalling</b>	Flashing LED (green) for ready to operate LED 95 % lth (red) for temperature over set point
<b>Display Type</b>	LCD display
<b>Type Of Measurement</b>	Energy meter
<b>Communication Of Data</b>	Maintenance indicators Phase sequence Maximeters/minimeters Power quality Thermal image function Time-stamped histories and event tables Energy metering Protection and alarm settings Demand current and power Instantaneous and demand values
<b>Width (W)</b>	105 mm
<b>Height (H)</b>	161 mm
<b>Depth (D)</b>	86 mm
<b>Net Weight</b>	2.05 kg

## Environment

<b>Standards</b>	EN/IEC 60947
<b>Product Certifications</b>	Marine CCC EAC
<b>Overvoltage Category</b>	Class II
<b>Electrical Shock Protection Class</b>	Class II
<b>Pollution Degree</b>	3 conforming to IEC 60664-1
<b>Ip Degree Of Protection</b>	IP40 conforming to IEC 60529
<b>Ik Degree Of Protection</b>	IK07 conforming to IEC 62262
<b>Ambient Air Temperature For Operation</b>	-25...70 °C
<b>Ambient Air Temperature For Storage</b>	-40...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>	10.8 cm
<b>Package 1 Width</b>	13.5 cm
<b>Package 1 Length</b>	19.2 cm
<b>Package 1 Weight</b>	2.009 kg

## Contractual warranty

<b>Warranty</b>	18 months
-----------------	-----------

## 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.

[Learn more about Green Premium >](#)

[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](#)

Circularity Profile [End of Life Information](#)