Product datasheet

Specifications



Circuit breaker, ComPacT NSX160F, 36kA/415VAC, 4 poles, MicroLogic 2.2 trip unit 160A

C16F42D160

Main

Range	ComPacT
product name	ComPacT NSX
Device short name	NSX160F
Product or component type	Circuit breaker
Device application	Distribution
Poles description	4P
Protected poles description	4D 3D + N/2 3D
Neutral position	Left
[In] rated current	160 A at 40 °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 220/240 V AC 50/60 Hz conforming to IEC 60947-2 36 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 35 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 30 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 22 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 8 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 85 kA Icu at 240 V AC 50/60 Hz conforming to UL 60947-4-1 35 kA Icu at 480 V AC 50/60 Hz conforming to UL 60947-4-1 10 kA Icu at 600 V AC 50/60 Hz conforming to UL 60947-4-1
Performance level	F 36 kA 415 V AC
Trip unit name	MicroLogic 2.2
Trip unit technology	Electronic
Trip unit protection functions	LSoI
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

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

[Ics] rated service short-circuit breaking capacity	85 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 36 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 35 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2 30 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2 22 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2 8 kA at 660/690 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	9.2 W
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) So : for short time short-circuit protection with fixed delay I : for instantaneous short-circuit protection
Trip unit rating	160 A at 40 °C
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable 9 settings
[Ir] long-time protection pick-up adjustment range	63...160 A
Long-time protection delay adjustment type tr	Fixed
[tr] long-time protection delay adjustment range	400 s at 1.5 x Ir 16 s at 6 x Ir 11 s at 7.2 x Ir
Neutral protection settings	0.5 x Ir (3D + N/2) 1 x Ir (4D) No protection (3D)
Thermal memory	20 minutes before and after tripping
Short-time protection pick-up adjustment type Isd	Adjustable 9 settings
[Isd] Short-time protection pick-up adjustment range	1.5...10 x Ir
Short-time protection delay adjustment type tsd	Fixed
Instantaneous protection pick-up adjustment type Ii	Fixed
[Ii] instantaneous protection pick-up adjustment range	2400 A
Earth-leakage protection	Without
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 % Ir (red) for overload LED 90 % Ir (orange) for overload
Width (W)	140 mm
Height (H)	161 mm
Depth (D)	86 mm
Product weight	2.6 kg

Environment

Standards	EN/IEC 60947-2
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	-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	14.200 cm
Package 1 Width	14.800 cm
Package 1 Length	19.400 cm
Package 1 Weight	2.400 kg
Unit Type of Package 2	S03
Number of Units in Package 2	6
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	14.800 kg

Environmental Data

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)	173
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Compliant with Exemptions
SCIP Number	811c5f45-220d-4e22-b512-f9d771b72680
REACh Regulation	REACh Declaration
Halogen content performance	Product contains halogen above thresholds
PVC free	Yes
Silicon free	No

Use Longer

Lifetime extension

Upgradeability	No

Use Again

Repack and remanufacture

Circularity Profile	End of Life Information
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

