

Product datasheet

Specifications



Circuit breaker, ComPacT NSX500 TM DC EP, 50kA/1500VDC, 4 poles, TM-DC trip unit 320A

C50F4TM320D3

Main

Range	ComPacT
Product name	ComPacT NSX DC EP
Device short name	NSX500 DC EP
Product or component type	Circuit breaker
Device application	Special application
Poles description	4P
Protected poles description	4D
[In] rated current	320 A at 40 °C
[Ue] rated operational voltage	1500 V DC
Network type	DC
Suitability for isolation	Yes conforming to EN/IEC 60947-2
Utilisation category	Category A
Breaking capacity	50 kA Icu at 1500 V DC 4 poles in series conforming to IEC 60947-2 50 kA Icu at 1100 V DC 4 poles in series conforming to IEC 60947-2
Breaking capacity code	F 50 kA 1500 V DC
Trip unit name	TM-DC
Trip unit technology	Thermal-magnetic
Trip unit protection functions	LI
Control type	Toggle
Circuit breaker mounting mode	Fixed

Complementary

[Ui] rated insulation voltage	1600 V DC conforming to IEC 60947-2
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947-2
[Ics] rated service breaking capacity	20 kA at 1500 V DC conforming to IEC 60947-2 50 kA at 1100 V DC conforming to IEC 60947-2
Mechanical durability	8000 cycles
Electrical durability	3000 cycles at 1500 V In
Mounting support	Backplate
Mounting position	Horizontal and vertical Flat on the back
Upside connection	Front
Downside connection	Front

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

Protection type	L : for overload protection (thermal) I : for short-circuit protection (magnetic)
Trip unit rating	320 A at 40 °C
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable
[Ir] long-time protection pick-up adjustment range	0.7...1 x In
Long-time protection delay adjustment type tr	Fixed
Instantaneous protection pick-up adjustment type Ii	Adjustable
[Ii] instantaneous protection pick-up adjustment range	5...10 x In
Width (W)	185 mm
Height (H)	255 mm
Depth (D)	110 mm
Net weight	8.1 kg

Environment

Standards	EN/IEC 60947-2
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	15.0 cm
Package 1 Width	20.0 cm
Package 1 Length	30.0 cm
Package 1 Weight	8.13 kg
Unit Type of Package 2	P06
Number of Units in Package 2	8
Package 2 Height	75.0 cm
Package 2 Width	60.0 cm
Package 2 Length	80.0 cm
Package 2 Weight	74.34 kg

Contractual warranty

Warranty (in months)	18
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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

Total lifecycle Carbon footprint	1 020 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Carbon footprint of the manufacturing phase [A1 to A3]	48 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	956 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	15 kg CO2 eq.

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No, we have minimized the use of plastic in the packaging in compliance with regulations and considering quality and safety standards
SCIP Number	83de8459-139c-4821-9a5a-0f72ec0b18da
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	51
End of life manual availability	End of Life Information
Take-back	Yes
WEEE Label	 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

