Specifications



# Circuit breaker ComPacT NSX100F, 36kA at 415VAC, TMD trip unit 50A, 3 poles 3d

C10F3TM050

### Main

Range	ComPacT	
product name	ComPacT NSX	
Device short name	NSX100F	
Product or component type	Circuit breaker	
Device application	Distribution	
Poles description	3P	
Protected poles description	3D	
[In] rated current	50 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 25 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 25 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	TM-D	
Trip unit technology	Thermal-magnetic	
Trip unit protection functions	LI	
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	

[Les] rated service short-circuit   85 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2     35 kA at 380/145 V AC 50/60 Hz conforming to IEC 60947-2     35 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2     12 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2     14 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2     4 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2     4 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2     4 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2     4 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2     4 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2     4 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2     4 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2     4 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2     4 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2     4 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2     4 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2     4 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2     14 kA at 52 V AC 50/60 Hz conforming to IEC 60947-2     14 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2     14 kA at 660/690 V In2     10000 cycles at 690 V In2			
Electrical durability   50000 cycles at 440 V In/2 30000 cycles at 690 V In/2 10000 cycles at 690 V In/2 10000 cycles at 690 V In     Power dissipation per pole   4.11 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 (thermal) I : for short-circuit protection (magnetic)     Trip unit rating   50 A at 40 °C     Long-time pick-up adjustment type Ir (thermal protection)   Adjustable     Vipe Ir (thermal protection pick-up adjustment range   0.71 x ln     Instantaneous protection pick-up adjustment type Ir   120400 s at 1.5 x ln 15 s at 6 x lr     Instantaneous protection pick-up adjustment range   500 A     Itil ji instantaneous protection pick-up adjustment range   500 A     Itil ji instantaneous protection pick-up adjustment range   500 A     Earth-leakage protection   Without     Number of slots for electrical auxiliarites   5 slot(s)     Width (W)   105 mm		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 12 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2 11 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2	
30000 cycles at 400 V In     20000 cycles at 690 V In/2     10000 cycles at 690 V In/2     Power dissipation per pole   4.11 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 (thermal) I: for short-circuit protection (magnetic)     Trip unit rating   50 A at 40 °C     Long-time pick-up adjustment   Adjustable     type Ir (thermal protection pick-up adjustment range   0.71 x ln     adjustment range   120400 s at 1.5 x ln 15 s at 6 x lr     Instantaneous protection pick-up adjustment range   500 A     Ling-time protection pick-up adjustment range   500 A     Up at 0400 s at 1.5 x ln 15 s at 6 x lr   11 s at 6 x lr     Instantaneous protection pick-up adjustment range   500 A     Up at 0400 s at 1.5 x ln 15 s at 0 x lr   500 A     Up at 0400 s at 0.5 (s)   500 A     Up at 0400 s at 0.5 (s)   500 A     Up at 0400 s at 0.5 (s)   500 A     Up adjustment range   500 A	Mechanical durability	50000 cycles	
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 (thermal) I : for short-circuit protection (magnetic)   Trip unit rating 50 A at 40 °C   Long-time pick-up adjustment type Ir (thermal protection pick-up adjustment range 0.71 x ln   Long-time protection delay adjustment range 120400 s at 1.5 x ln 15 s at 6 x lr   Itr] long-time protection pick-up adjustment range Fixed   Itr] long-time protection pick-up adjustment range Fixed   Itr] long-time protection pick-up adjustment range 50 A dt 40 °C   Long-time protection pick-up adjustment range Fixed   Itr] long-time protection pick-up adjustment range Son A   Itr] long-time protection pick-up Son A   Itr] long-time protection pick-	Electrical durability	30000 cycles at 440 V In 20000 cycles at 690 V In/2	
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 (thermal) I : for short-circuit protection (magnetic)   Trip unit rating 50 A at 40 °C   Long-time pick-up adjustment type Ir (thermal protection) Adjustable   Inglustment range 0.71 x In   adjustment type tr Fixed   It'l long-time protection delay adjustment range 120400 s at 1.5 x In 15 s at 6 x Ir   Instantaneous protection pick-up adjustment range 500 A   Ling time protection pick-up adjustment range 500 A   Without Without   Number of slots for electrical auxiliaries 5 slot(s)   Width (W) 105 mm	Power dissipation per pole	4.11 W	
Flat on the back     Upside connection   Front     Downside connection   Front     Connection pitch   35 mm     Protection type   L : for overload protection (thermal) 1 : for short-circuit protection (magnetic)     Trip unit rating   50 A at 40 °C     Long-time pick-up adjustment type Ir (thermal protection)   Adjustable     I/r] long-time protection pick-up adjustment range   0.71 x ln     Long-time protection delay adjustment range   120400 s at 1.5 x ln     Instantaneous protection pick-up adjustment range   120400 s at 1.5 x ln     III] Instantaneous protection pick-up adjustment range   500 A     Lung-time protection pick-up adjustment range   500 A     Up adjustment range   5 slot(s)     Bauxillaries   5 slot(s)     Without </td <td>Mounting support</td> <td>Backplate</td>	Mounting support	Backplate	
Downside connection Front   Connection pitch 35 mm   Protection type L : for overload protection (thermal) I : for short-circuit protection (magnetic)   Trip unit rating 50 A at 40 °C   Long-time pick-up adjustment type Ir (thermal protection) Adjustable   [Ir] long-time protection pick-up adjustment range 0.71 x ln   Long-time protection delay adjustment range 120400 s at 1.5 x ln 15 s at 6 x lr   Itr] long-time protection pick-up adjustment type Ir Fixed   [Ir] long-time protection pick-up adjustment type I 500 A   Itr] long-time protection pick-up adjustment type Ii Fixed   Instantaneous protection pick-up adjustment range 500 A   Up adjustment range 500 A   Up adjustment range 5 slot(s)   Without 105 mm   Height (H) 161 mm	Mounting position		
Connection pitch   35 mm     Protection type   L : for overload protection (thermal) 1: for short-circuit protection (magnetic)     Trip unit rating   50 A at 40 °C     Long-time pick-up adjustment type Ir (thermal protection)   Adjustable     [Ir] long-time protection pick-up adjustment range   0.71 x ln     Long-time protection delay adjustment type tr   120400 s at 1.5 x ln     [Ir] long-time protection delay adjustment type tr   120400 s at 1.5 x ln     [Ir] long-time protection pick-up adjustment range   120400 s at 1.5 x ln     15 s at 6 x lr   15 s at 6 x lr     Instantaneous protection pick-up adjustment type li   500 A     [Ii] instantaneous protection pick-up adjustment range   500 A     Earth-leakage protection   Without     Number of slots for electrical auxiliaries   5 slot(s)     Width (W)   105 mm     Height (H)   161 mm	Upside connection	Front	
Protection type   L : for overload protection (thermal) 1 : for short-circuit protection (magnetic)     Trip unit rating   50 A at 40 °C     Long-time pick-up adjustment type Ir (thermal protection)   Adjustable     [Ir] long-time protection pick-up adjustment range   0.71 x ln     Long-time protection delay adjustment type tr   Fixed     [Ir] long-time protection delay adjustment range   120400 s at 1.5 x ln     Itr] long-time protection pick-up adjustment range   120400 s at 1.5 x ln     [Ir] long-time protection pick-up adjustment range   15 s at 6 x lr     [Ir] long-time protection pick-up adjustment range   500 A     [II] instantaneous protection pick-up adjustment range   500 A     [II] without   105 mm     Number of slots for electrical auxiliaries   5 slot(s)     Width (W)   105 mm	Downside connection	Front	
I: for short-circuit protection (magnetic)     Trip unit rating   50 A at 40 °C     Long-time pick-up adjustment type Ir (thermal protection)   Adjustable     [Ir] long-time protection pick-up adjustment range   0.71 x ln     Long-time protection delay adjustment type tr   0.71 x ln     [Ir] long-time protection delay adjustment type tr   120400 s at 1.5 x ln     [Ir] long-time protection pick-up adjustment range   120400 s at 1.5 x ln     Instantaneous protection pick-up adjustment type Ii   Fixed     Instantaneous protection pick-up adjustment range   Fixed     Instantaneous protection pick-up adjustment range   Fixed     Ili] instantaneous protection pick- up adjustment range   500 A     Earth-leakage protection   Without     Number of slots for electrical auxiliaries   5 slot(s)     Width (W)   105 mm     Height (H)   161 mm	Connection pitch	35 mm	
Long-time pick-up adjustment type Ir (thermal protection)Adjustable[Ir] long-time protection pick-up adjustment range0.71 x lnLong-time protection delay adjustment type trFixed[Ir] long-time protection delay adjustment range120400 s at 1.5 x lnItr] long-time protection pick-up adjustment range120400 s at 1.5 x ln[Itr] long-time protection pick-up adjustment rangeFixedInstantaneous protection pick-up adjustment type IiFixed[Ii] instantaneous protection pick- up adjustment range500 AEarth-leakage protectionWithoutNumber of slots for electrical auxiliaries5 slot(s)Width (W)105 mmHeight (H)161 mm	Protection type		
type Ir (thermal protection)     [Ir] long-time protection pick-up adjustment range   0.71 x In     Long-time protection delay adjustment type tr   Fixed     [tr] long-time protection delay adjustment type tr   120400 s at 1.5 x In     [tr] long-time protection pick-up adjustment range   120400 s at 1.5 x In     Instantaneous protection pick-up adjustment type Ii   Fixed     [li] instantaneous protection pick-up adjustment range   500 A     Earth-leakage protection   Without     Number of slots for electrical auxiliaries   5 slot(s)     Width (W)   105 mm     Height (H)   161 mm	Trip unit rating	50 A at 40 °C	
adjustment range     Long-time protection delay adjustment type tr   Fixed     [tr] long-time protection delay adjustment range   120400 s at 1.5 x ln 15 s at 6 x lr     Instantaneous protection pick-up adjustment type li   Fixed     [li] instantaneous protection pick- up adjustment range   500 A     Earth-leakage protection   Without     Number of slots for electrical auxiliaries   5 slot(s)     Width (W)   105 mm     Height (H)   161 mm		Adjustable	
adjustment type tr     [tr] long-time protection delay adjustment range   120400 s at 1.5 x ln 15 s at 6 x lr     Instantaneous protection pick-up adjustment type li   Fixed     [II] instantaneous protection pick- up adjustment range   500 A     Earth-leakage protection   Without     Number of slots for electrical auxiliaries   5 slot(s)     Width (W)   105 mm     Height (H)   161 mm		0.71 x ln	
adjustment range   15 s at 6 x lr     Instantaneous protection pick-up   Fixed     adjustment type li   500 A     [Ii] instantaneous protection pick-up adjustment range   500 A     Earth-leakage protection   Without     Number of slots for electrical auxiliaries   5 slot(s)     Width (W)   105 mm     Height (H)   161 mm		Fixed	
adjustment type li     [li] instantaneous protection pick- up adjustment range   500 A     Earth-leakage protection   Without     Number of slots for electrical auxiliaries   5 slot(s)     Width (W)   105 mm     Height (H)   161 mm			
up adjustment range Without   Earth-leakage protection Without   Number of slots for electrical auxiliaries 5 slot(s)   Width (W) 105 mm   Height (H) 161 mm		Fixed	
Number of slots for electrical auxiliaries 5 slot(s)   Width (W) 105 mm   Height (H) 161 mm		500 A	
Auxiliaries   Width (W)   105 mm   Height (H)   161 mm	Earth-leakage protection	Without	
Height (H) 161 mm		5 slot(s)	
	Width (W)	105 mm	
Depth (D) 86 mm	Height (H)	161 mm	
	Depth (D)	86 mm	
Net weight 2.05 kg	Net weight	2.05 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	-2570 °C	
Ambient air temperature for storage	-5085 °C	
Relative humidity	095 %	

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	14.000 cm
Package 1 Width	11.000 cm
Package 1 Length	19.000 cm
Package 1 Weight	1.804 kg
Unit Type of Package 2	S03
Number of Units in Package 2	7
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	13.014 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  $\geq$ 

ą	Environmental footprint	
	Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	80
	Environmental Disclosure	Product Environmental Profile

### **Use Better**

<sup>⊗</sup> Materials and Substances	
Recycled metal content at CR level	0
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Compliant with Exemptions
SCIP Number	3874e08b-fcb8-4aa9-87c4-d36abebf2833
REACh Regulation	REACh Declaration
Halogen content performance	Product contains halogen above thresholds
PVC free	Yes

### Use Again

$^{igodoldolde{U}}$ 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

