

# Product data sheet

## Characteristics

# C10R4TM080

Circuit breaker, ComPacT NSX100R,  
200kA/415VAC, 4 poles 4D (neutral fully  
protected), TMD trip unit 80A



### Main

Range	ComPacT new generation
Product name	ComPacT NSX new generation
Device short name	NSX100R
Product or component type	Circuit breaker
Device application	Distribution
Poles description	4P
Protected poles description	4D
Neutral position	Left
[In] rated current	80 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	200 KA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 200 KA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 200 KA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 80 KA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 65 KA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 45 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Performance level	R 200 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
[Ics] rated service short-circuit breaking capacity	200 KA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 200 KA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 200 KA at 440 V AC 50/60 Hz conforming to IEC 60947-2 80 KA at 500 V AC 50/60 Hz conforming to IEC 60947-2 65 KA at 525 V AC 50/60 Hz conforming to IEC 60947-2 45 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Mechanical durability	20000 cycles
Electrical durability	20000 Cycles at 440 V In/2 10000 Cycles at 440 V In 10000 Cycles at 690 V In/2 5000 cycles at 690 V In

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Power dissipation per pole	8.77 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	80 A at 40 °C
Long-time pick-up adjustment type $I_r$ (thermal protection)	Adjustable
[ $I_r$ ] long-time protection pick-up adjustment range	0.7...1 x $I_n$
Long-time protection delay adjustment type $t_r$	Fixed
[ $t_r$ ] long-time protection delay adjustment range	120...400 S at 1.5 x $I_n$ 15 s at 6 x $I_r$
Neutral protection settings	1 x $I_r$ (4D)
Instantaneous protection pick-up adjustment type $I_{ii}$	Fixed
[ $I_{ii}$ ] instantaneous protection pick-up adjustment range	640 A
Earth-leakage protection	Without
Number of slots for electrical auxiliaries	5 slot(s)
Width (W)	140 mm
Height (H)	161 mm
Depth (D)	86 mm
Net weight	2.4 kg

## Environment

Standards	EN/IEC 60947
Product certifications	Marine[RETURN]CCC[RETURN]IEAC
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	14.000 cm
Package 1 Width	15.000 cm
Package 1 Length	20.000 cm
Package 1 Weight	2.390 kg
Unit Type of Package 2	S03
Number of Units in Package 2	4
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	9.560 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	 Yes
Environmental Disclosure	 <a href="#">Product Environmental Profile</a>
Circularity Profile	 <a href="#">End Of Life Information</a>
PVC free	Yes