# DATASHEET - NDRBM-10/2/C/003-F



electronic residual current circuit-breaker/miniature circuit-breaker, 10A, 30mA, miniature circuit-breaker trip curve: C, 2pole, residual current circuit-breaker trip characteristic: F



Part no. NdRBM-10/2/C/003-F Catalog No. 300489

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Basic function			Combined RCD/MCB device, digital
Number of poles			2 pole
Tripping characteristic			C
Application			Switchgear for residential and commercial applications
Rated current	In	Α	10
Rated fault current	$I_{\Delta N}$	Α	0.03
Туре			Type F
Product range			NdRBM

### **Technical data**

#### **Electrical**

Rated fault currents	$I_{\Delta n}$	mA	30
Characteristic			C
Selectivity Class			3
Mechanical			
Degree of protection			
Switch			IP20
Integrated			IP40
Admissible ambient temperature range		°C	-25 +40
Thickness of busbar material		mm	
Material thickness		mm	0.8 2

## **Design verification as per IEC/EN 61439**

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Technical data for design verification		
Operating ambient temperature min.	°C	-25
Operating ambient temperature max.	°C	40
IEC/EN 61439 design verification		
10.2 Strength of materials and parts		
10.2.2 Corrosion resistance		Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures		Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat		Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects $$		Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation		Meets the product standard's requirements.
10.2.5 Lifting		Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact		Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions		Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES		Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances		Meets the product standard's requirements.
10.5 Protection against electric shock		Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components		Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections		Is the panel builder's responsibility.
10.8 Connections for external conductors		Is the panel builder's responsibility.
10.9 Insulation properties		
10.9.2 Power-frequency electric strength		Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage		Is the panel builder's responsibility.

10.9.4 Testing of enclosures made of insulating material	Is the panel builder's responsibility.
10.10 Temperature rise	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

## **Technical data ETIM 7.0**

Circuit breakers and fuses (EG000020) / Earth leakage circuit breaker (EC000905)

Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system / MCB/RCCB combination (ecl@ss10.0.1-27-14-22-07 [AFZ810015])

[AFZ810015])		
Number of poles (total)		2
Number of protected poles		2
Rated voltage	V	240
Rated insulation voltage Ui	V	250
Rated impulse withstand voltage Uimp	kV	4
Rated current	Α	10
Rated fault current	Α	0.03
Leakage current type		A
Current limiting class		3
Rated short-circuit breaking capacity acc. EN 61009	kA	10
Rated short-circuit breaking capacity IEC 60947-2	kA	0
Rated short-circuit breaking capacity Icn acc. EN 61009-1	kA	10
Disconnection characteristic		Short-time delayed
Surge current capacity	kA	3
Voltage type		AC
Frequency		50 Hz
Release characteristic		С
Concurrently switching N-neutral		No
With interlocking device		No
Over voltage category		3
Pollution degree		2
Ambient temperature during operating	°C	-25 - 40
Width in number of modular spacings		2
Built-in depth	mm	70
Suitable for flush-mounted installation		No
Anti-nuisance tripping version		Yes
Degree of protection (IP)		IP20
Connectable conductor cross section solid-core	mm²	1 - 25
Connectable conductor cross section multi-wired	mm²	1 - 25