#### DATASHEET - NDRBM-15/2/C/003-F-OL



Electronic RCD/MCB combination, 15 A, 30 mA, MCB trip characteristic: C, 2p, RCD trip characteristic: F



Part no. Catalog No. NdRBM-15/2/C/003-F-OL 300505

## **Delivery program**

		2 pole
		C
		Switchgear for residential and commercial applications
	A	15
N A	A	0.03
		Туре F
		NdRBM
N		A

# 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.	٥	°C	-25
Operating ambient temperature max.	0	°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**

Circuiterian electrication process control angine ministratication process control angine minis				
JAZBURGISNumber of poles (total)2Number of poles (total)3Number of poles (total)V3Rate vintageV3Rate vintage vintant ov lange vintant o	Circuit breakers and fuses (EG000020) / Earth leakage circuit breaker (EC000905)			
Number of protected poles2Number of protected polesV3Rated nuclaspiV30Rated insulation voltage UinpV4Rated insulation voltage UinpV4Rated insulation voltage UinpV4Rated insulation voltage UinpV30Rated fulcurentO03Leakage current typeV3Current limiting classV0Rated short-circuit breaking capacity IEC 0094-7.V0Rated short-circuit breaking capacity IEC 0094-7.VNRated short-circuit breaking capacity IEC 0094-7.NNNotame of module spacingNNNVidage typeNNNNotame of module spacingNNNNotame of module spacingNNNNo				
Rad votage   V   90     Rad votage Uin   V   90     Rated inpulse withstand votage Uinp   V   90     Rated inpulse withstand votage Uinp   V   90     Rated inpulse withstand votage Uinp   V   90     Rated corrent   V   90     Rated four corrent Wing   V   90     Lakage corrent Wing capacity acc. EN 6009   V   80     Rated short-circuit breaking capacity acc. EN 6009   V   80     Rated short-circuit breaking capacity acc. EN 6009-10   V   80     Surge corrent capacity   V   80     Votage type   V   90     Votage type   V   90     Votage type   V   90     Votage type   V   90     Votage type	Number of poles (total)		2	
Ratei ansulan valage Ui   V   2     Ratei ansulan valage Uimp   K   4     Ratei ansulan valage Uimp   A   5     Ratei ansulan valage Uimp   A   03     Rated fault current   C   A     Darrent funding class   C   7     Rated short-circuit breaking capacity acc. EN 61009   K   0     Rated short-circuit breaking capacity lic E0847-2   K   0     Rated short-circuit breaking capacity lic E0847-2   K   0     Surge current capacity   K   Not-time delayed     Surge current capacity   Not   Not-time delayed     Surge current current current current curren	Number of protected poles		2	
Retar inputse within a douting building bui	Rated voltage	V	240	
Rated current   A   S     Rated fault current   A   S     Leakage current type   F   S     Current limiting class   S   S     Rated short-circuit breaking capacity acc. EN 61009   F   S     Rated short-circuit breaking capacity lacc. EN 61009-10   F   S     Rated short-circuit breaking capacity lacc. EN 61009-10   F   S     Subschort-circuit breaking capacity lacc. EN 61009-10   F   S     Disconcercitor breaking capacity lacc. EN 61009-10   F   S     Surg current capacity   S   S   S     Surg current capacity   S   S   S   S     Surg current capacity   S	Rated insulation voltage Ui	V	250	
Retafiation   A   B     Retafiation   B   B     Current limiting class   G   G   G     Retaf short-circuit breaking capacity ICE 60847-2   A   B     Rated short-circuit breaking capacity ICE 60847-2   A   B     Disconnection characteristic   M   B     Surg current capacity ICE 60847-2   M   B     Vitage type   KA   B     Surg current capacity ICE 60847-2   KA   B     Vitage type   KA   B     Surg current capacity ICE 60847-2   KA   B     Vitage type   KA   B   B     Surg current capacity ICE 60847-2   KA   B   B     Vitage type   KA   B	Rated impulse withstand voltage Uimp	kV	4	
Lakage current typeFerLakage current type66Current limiting class66Reted short-circuit breaking capacity IEC 60947-260Bated short-circuit breaking capacity IEC 60947-260Disconnection characteristic660Surge current capacity IEC 60947-260Surge current capacity IEC 609	Rated current	А	15	
Concertion     Concerion     Concerti	Rated fault current	А	0.03	
Retad shor-circuit breaking capacity IcC 6094-2     Image: Algorithm of the shing capacity IcC 6094-2       Retad shor-circuit breaking capacity IcC 6094-2     KA     0       Bisconection characteristic     Sort-time delayed     Sort-time delayed       Surge current capacity     KA     0       Vitage type     Algorithm of the shing capacity IcC 6094-2     Sort-time delayed       Notage type     Sort-time delayed     Sort-time delayed       Vitage type     Sort-time delayed     Sort-time delayed       Release characteristic     Sort-time delayed     Sort-time delayed       Concurrently switching N-neutral     Sort-time delayed     Sort-time delayed       Vita interlocking device     Sort-time delayed     Sort-time delayed       Notage category     Sort-time delayed     Sort-time delayed       Notage	Leakage current type		F	
Rate abort-circuit breaking capacity IEC 60947-2     KA     0       Rated short-circuit breaking capacity ICE 60947-2     KA     0       Disconnection characteristic     Short-time delayed     Short-time delayed       Surge current capacity     Short-time delayed     Short-time delayed       Voltage type     AC     Short-time delayed       Frequency     Short-time delayed     Short-time delayed       Release characteristic     Short-time delayed     Short-time delayed       Concurrently switching N-neutral     Short-time delayed     Short-time delayed       Vitage type     Short-time delayed     Short-time delayed       Voltage category     Short-time delayed     Short-time delayed       Vitage type     Short-time delayed     Short-time delayed       Vitage category     Short-time delayed     Short-time delayed       Vitage type     Short-time de	Current limiting class		3	
Rated short-circuit breaking capacity lon acc. EN 61009-1   kA   0     Disconnection characteristic   Short-time delayed     Surge current capacity   KA   3     Voltage type   KA   6     Frequency   KA   6     Release characteristic   C   6     Concurrently switching N-neutral   KA   No     Vitage type   No   7     Pollution degree   2   9     Nubient temperature during operating   C   2     With innumber of modular spacings   Moment   2     Suitable for flush-mounted installation   Moment   No     Anti-insiance triping version   Ka   No     Digree of protection (IP)   Ka   No     Connectable conductor cross section solid-core   Moment   12	Rated short-circuit breaking capacity acc. EN 61009	kA	10	
Disconnection characteristic     Marking Mont-time delayed       Surge current capacity     Sint-time delayed       Voltage type     Sint-time delayed       Frequency     C       Release characteristic     Sint-time delayed       Concurrently switching N-neutral     Sint-time delayed       Voltage type     Sint-time delayed       Poleus category     Sint-time delayed       Pollution degree     Sint-time delayed       Muth interporature during operating     Sint-time delayed       Voltage tripping version     Sint-time delayed       Suitable for flush-mounted installation     Sint-time delayed       Anti-nuisance tripping version     Sint-time delayed       Degree of protection (IP)     Sint-time delayed       Sint-time delayed     Sint-time delayed       Sint-time delayed to consistencion Solid-core     Sint-time delayed	Rated short-circuit breaking capacity IEC 60947-2	kA	0	
Surge current capacity     KA     A       Voltage type     C     C       Frequency     50 H2     C       Release characteristic     C     C       Concurrently switching N-neutral     C     C       With interlocking device     No     C       Over voltage category     C     S       Pollution degree     C     S       Mith interlocking device     C     S       Voltage type     S     S       Pollution degree     C     S       Motint temperature during operating     C     S       With in number of modular spacings     Mon     S       Suitable for flush-mounted installation     Mon     S       Anti-nuisance tripping version     C     S     S       Degree of protection (IP)     C     Mon     S       Concettable conductor cross section solid-core     mon     125	Rated short-circuit breaking capacity Icn acc. EN 61009-1	kA	10	
Voltage type     AC       Frequency     50 Hz       Release characteristic     50 Hz       Concurrently switching N-neutral     6       With interlocking device     No       Over voltage category     8       Pollution degree     2       Ambient temperature during operating     6       Vith interlocking texters     2       Suitable for flush-mounted installation     7       Anti-nuisance tripping version     6       Degree of protection (IP)     man       Ponentable conductor cross section solid-core     man	Disconnection characteristic		Short-time delayed	
Frequency   6   6   50 Hz     Release characteristic   C   C     Concurrently switching N-neutral   No   C     With interlocking device   No   C     Over voltage category   S   S     Pollution degree   C   S   S     Mith interlocking operating   C   S   S     Vidth in number of modular spacings   Mo   S   S     Suitable for flush-mounted installation   Mo   S   S     Anti-nuisance tripping version   Mo   S   S   S     Degree of protection (IP)   Mo   Mo   S   S     Romettable conductor cross section solid-core   mm²   125   S	Surge current capacity	kA	3	
Release characteristic   Concurrently switching N-neutral   Concurrently switching N-neutral   No     With interlocking device   No   No     Over voltage category   So   So     Pollution degree   So   So     With in number of modular spacings   So   So     Built-in depth   mm   Co     Suitable for flush-mounted installation   Mo   So     Anti-nuisance tripping version   So   So     Degree of protection (IP)   mm²   To     Suncetable conductor cross section solid-core   mn²   To	Voltage type		AC	
Concurrently switching N-neutral No   With interlocking device No   Over voltage category Second   Pollution degree C 3   Ambient temperature during operating C 2   With in number of modular spacings Mo 2   Built-in depth mm 7   Stable for flush-mounted installation Mo No   Anti-nuisance tripping version Mo 9   Degree of protection (IP) Mn 12   Panceable conductor cross section solid-core mm² 125	Frequency		50 Hz	
With interlocking deviceNoOver voltage category5Pollution degree5Ambient temperature during operating6With in number of modular spacings6Built-in depth7Suitable for flush-mounted installation6Anti-nuisance tripping version6Degree of protection (IP)102No125No125Internet of the space of protection space of protect	Release characteristic		С	
Normalization Normalization Normalization Normalization Normalization Normalization Normalization Normalization Normalization   Nutable for flush-mounded installation Normalization Normalization Normalization Normalization   Anti-nuisance tripping version Normalization Normalization Normalization   Degree of protection (IP) Image normalization Normalization   Normalization Image normalization Normalization   Normalization Normalization Normalization	Concurrently switching N-neutral		No	
Pollution degreePollution degreePollu	With interlocking device		No	
Ambient temperature during operating   PC   25 - 40     Width in number of modular spacings   PC   2     Buit-in depth   mm   70     Suitable for flush-mounted installation   MM   M     Anti-nuisance tripping version   MM   M     Degree of protection (IP)   Imm   120     Connectable conductor cross section solid-core   MM   125	Over voltage category		3	
Width in number of modular spacingsAnti-nuisance tripping versionAnti-nuisance tripping versionMathematical anti-nuisance tripping	Pollution degree		2	
Built-in depth mm 70   Suitable for flush-mounted installation M M   Anti-nuisance tripping version M M   Degree of protection (IP) Mn <sup>2</sup> IP0   Connectable conductor cross section solid-core Mn <sup>2</sup> 1.25	Ambient temperature during operating	°C	-25 - 40	
Suitable for flush-mounted installation Mo   Anti-nuisance tripping version Mo   Degree of protection (IP) IP20   Connectable conductor cross section solid-core mm² 1-25	Width in number of modular spacings		2	
Anti-nuisance tripping versionMarkMarkYesDegree of protection (IP)IP20Connectable conductor cross section solid-coremm²1-25	Built-in depth	mm	70	
Degree of protection (IP) IP20   Connectable conductor cross section solid-core mm² 1 - 25	Suitable for flush-mounted installation		No	
Connectable conductor cross section solid-core mm <sup>2</sup> 1 - 25	Anti-nuisance tripping version		Yes	
	Degree of protection (IP)		IP20	
Connectable conductor cross section multi-wired mm <sup>2</sup> 1 - 25	Connectable conductor cross section solid-core	mm <sup>2</sup>	1 - 25	
	Connectable conductor cross section multi-wired	mm²	1 - 25	