



**RCD/RCB combination, 20 A, 30 mA, MCB trip characteristic: C, 3p+N,  
RCD trip characteristic: A**

**Part no. FRBM4-C20/3N/003-A**  
**Catalog No. 171000**  
**Alternate Catalog No. FRBM4-C20/3N/003-A**

Similar to illustration

## Delivery program

Basic function			Combined RCD/RCB devices
Number of poles			3 pole+N
Tripping characteristic			C
Application			Switchgear for industrial and advanced commercial applications
Rated current	$I_n$	A	20
Rated switching capacity according to IEC/EN 61009		kA	4.5
Rated fault current	$I_{\Delta n}$	A	0.03
Type			Type A
Tripping		s...	non-delayed
Product range			FRBm4
Sensitivity			Pulse-current sensitive
Impulse withstand current			Partly surge-proof 250 A
Contact sequence			

## Technical data

### Electrical

Protected pole			4
Rated voltage according to IEC/EN 60947-2	$U_n$	V AC	240
Rated frequency	f	Hz	50
Rated fault current	$I_{\Delta n}$	mA	30
Sensitivity			Pulse-current sensitive
Rated current	$I_n$	A	20
Tripping characteristic			C

## Design verification as per IEC/EN 61439

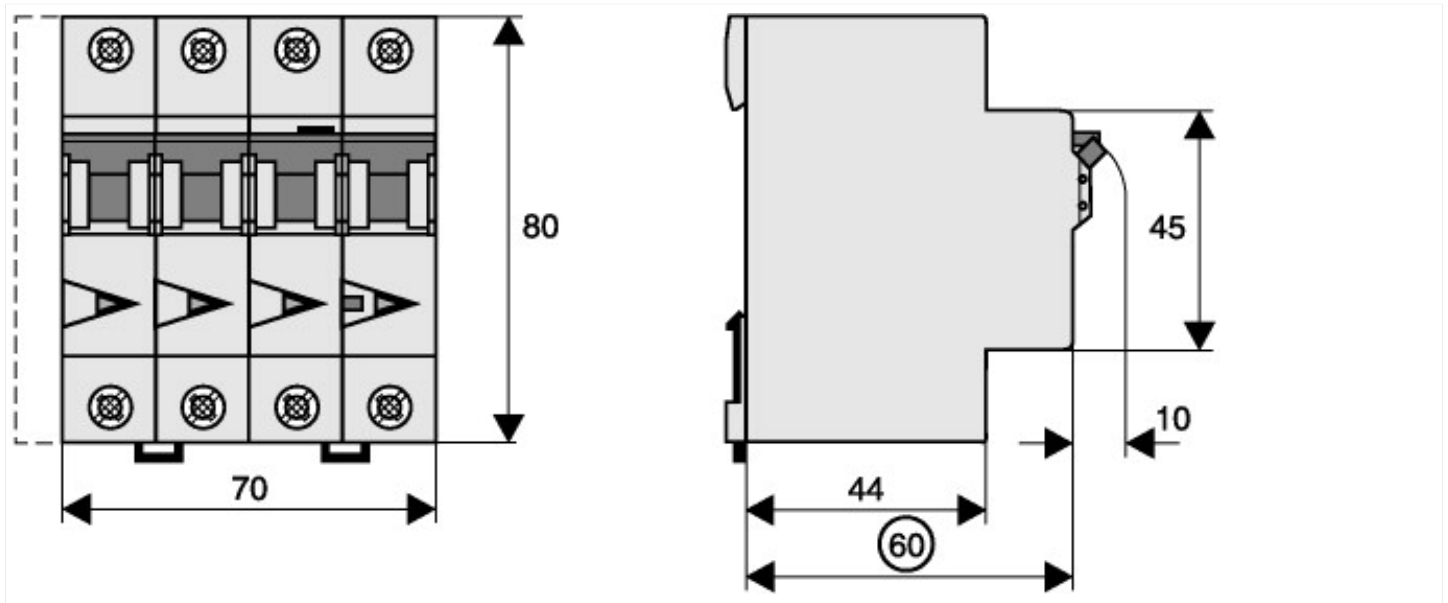
Technical data for design verification			
Rated operational current for specified heat dissipation	$I_n$	A	20
Heat dissipation per pole, current-dependent	$P_{vid}$	W	0
Equipment heat dissipation, current-dependent	$P_{vid}$	W	5.4
Static heat dissipation, non-current-dependent	$P_{vs}$	W	0
Heat dissipation capacity	$P_{diss}$	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	40
			0

## 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])			
Number of poles (total)			4

Number of protected poles		4
Rated voltage	V	415
Rated insulation voltage $U_i$	V	500
Rated impulse withstand voltage $U_{imp}$	kV	4
Rated current	A	20
Rated fault current	A	0.03
Leakage current type		A
Current limiting class		3
Rated short-circuit breaking capacity acc. EN 61009	kA	4.5
Rated short-circuit breaking capacity IEC 60947-2	kA	4.5
Rated short-circuit breaking capacity $I_{cn}$ acc. EN 61009-1	kA	4.5
Disconnection characteristic		
Surge current capacity	kA	0.25
Voltage type		AC
Frequency		50 Hz
Release characteristic		C
Concurrently switching N-neutral		Yes
With interlocking device		No
Over voltage category		3
Pollution degree		2
Ambient temperature during operating	°C	-25 - 40
Width in number of modular spacings		4
Built-in depth	mm	75.5
Suitable for flush-mounted installation		No
Anti-nuisance tripping version		No
Degree of protection (IP)		IP20
Connectable conductor cross section solid-core	mm <sup>2</sup>	1 - 25
Connectable conductor cross section multi-wired	mm <sup>2</sup>	1 - 25

## Dimensions



## Additional product information (links)

Product overview (Web)

<http://www.eaton.eu/Europe/Electrical/ProductsServices/CircuitProtection/DigitalCircuitBreakers/index.htm>