



**Residual current circuit breaker (RCCB), 40A, 4p, 30mA, type A**



**Part no.** HNC-40/4/003-A  
**Catalog No.** 194688

**Delivery program**

Basic function			Residual current circuit-breakers
Number of poles			4 pole
Application			Residual current circuit-breaker for residential and commercial applications
Rated current	$I_n$	A	40
Rated short-circuit strength	$I_{cn}$	kA	6
Rated fault current	$I_{\Delta N}$	A	0.03
Type			Type A
Tripping		s...	non-delayed
Product range			HNC
Sensitivity			Pulse-current sensitive
Impulse withstand current			Partly surge-proof 250 A

**Technical data**

**Electrical**

Rated operational voltage	$U_e$	V	
	$U_e$	V AC	
Rated operating voltage	$U_e$	V AC	230/400
Rated frequency	f	Hz	50
Sensitivity			Pulse-current sensitive
Rated short-circuit strength	$I_{cn}$	kA	6

**Mechanical**

Device height		mm	80
Built-in width		mm	70 (4TE)
Thickness of busbar material		mm	0.8 - 2

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

Technical data for design verification			
Rated operational current for specified heat dissipation	$I_n$	A	40
Heat dissipation per pole, current-dependent	$P_{vid}$	W	0
Equipment heat dissipation, current-dependent	$P_{vid}$	W	9.6
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) / Residual current circuit breaker (RCCB) (EC000003)			
Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system / Residual current circuit breaker (RCCB) (ec@ss10.0.1-27-14-22-01 [AAB906014])			
Number of poles			4
Rated voltage		V	230
Rated current		A	40
Rated fault current		mA	30
Rated insulation voltage Ui		V	440
Rated impulse withstand voltage Uimp		kV	4
Mounting method			DIN rail
Leakage current type			A
Selective protection			No
Short-time delayed tripping			No
Short-circuit breaking capacity (Icw)		kA	6
Surge current capacity		kA	0.25
Frequency			50 Hz
Additional equipment possible			Yes
With interlocking device			Yes
Degree of protection (IP)			IP20
Width in number of modular spacings			4
Built-in depth		mm	45
Ambient temperature during operating		°C	-25 - 40
Pollution degree			2
Connectable conductor cross section multi-wired		mm <sup>2</sup>	1.5 - 16
Connectable conductor cross section solid-core		mm <sup>2</sup>	1.5 - 35