### DATASHEET - HNC-63/2/003-A

Part no. Catalog No.



Residual current circuit breaker (RCCB), 63A, 2p, 30mA, type A





## **Delivery program**

Basic function			Residual current circuit-breakers
Number of poles			2 pole
Application			Residual current circuit-breaker for residential and commercial applications
Rated current	In	А	63
Rated short-circuit strength	I <sub>cn</sub>	kA	6
Rated fault current	$I_{\Delta N}$	А	0.03
Туре			Туре А
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	Ue	V	
	Ue	V AC	
Rated operating voltage	U <sub>e</sub>	V AC	230
Rated frequency	f	Hz	50
Sensitivity			Pulse-current sensitive
Rated short-circuit strength	I <sub>cn</sub>	kA	6
Mechanical			
Device height		mm	80
Built-in width		mm	35 (2TE)
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	In	А	63
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	9.7
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) (ecl@ss10.0.1-27-14-22-01 [AAB906014])

Rated voit age     V     30       Rated voit age     A     6       Rated voit age     MA     6       Rated insulation voltage Uin     MA     0       Rated insulation voltage Uinp     V     40       Mounting method     V     40       Leakage current type     No     No       Selective protection     KA     6       Short-circuit breaking capacity (Icw)     KA     6       Surg current capacity     KA     6       Veid in number of modular spacings     KA     6       Built-in depth     Ma     5       Anbient temperature during operating     KA     6       Pollution degree     Fer     6     6       Ruti in number of modular spacings     Ma     5     6       Pollution degree     Fer     6     6     6       Pollution degree     Fer     5     6     6     6     6     6     6     6     6     6     6     6     6     6     6     6     6			
Aread current     A     Bated fuir current     BA     Bated fuir current     BA     Bated fuir current     BA     Bated fuir current     BA	Number of poles		2
Rated fault current     max     Bated fault current     max     Bated fault current     max     max <thmax< th="">     max     max     ma</thmax<>	Rated voltage	V	230
Rate disulation voltage Uin     V     40       Rate disulation voltage Uinp     kV     4       Mounting method     KV     10       Leakage current type     DIV ai     10       Selective protection     KV     40       Short-tircuit breaking capacity (Icw)     KA     6       Stort-circuit breaking capacity (Icw)     KA     6       Surge current capacity     KA     6       Stort-circuit breaking capacity (Icw)     KA     6       Surge current capacity     KA     6       Surge current capacity (Icw)     KA     6       Surge current capacity     KA     5       Additional equipment possible     KA     6       Surge current capacity     KA     5       Surge current capacity     KA     5       Surge current capacity     KA     5       Surge current capacity     KA     5 <t< td=""><td>Rated current</td><td>А</td><td>63</td></t<>	Rated current	А	63
Rade dimpulse withstand voltage Uimp   KV   4     Mounting method   IN rail     Leakage current type   A     Selective protection   No     Short-time delayed tripping   KA   6     Short-time capacity (Icw)   KA   6     Surge current capacity (Icw)   KA   6     Frequency   KA   5H2     Additional equipment possible   KA   5H2     With interlocking device   Yes   Selective     Digree of protection (IP)   Yes   Yes     With interporting operating   Mon   Selective     Anbient temperature during operating   Mon   Selective     Anbient temperature during operating   C   Selective     Pollution degree   C   Selective     Rometable conductor cross section multi-wired   mon   Selective	Rated fault current	mA	30
Monting methodImage: set of the set of th	Rated insulation voltage Ui	V	440
Leakage current type   A     Leakage current type   No     Selective protection   No     Short-time delayed tripping   No     Short-circuit breaking capacity (lcw)   KA     Surge current capacity (lcw)   KA     Surge current capacity (lcw)   KA     Additional equipment possible   04     With interlocking device   Ya     Degree of protection (IP)   Ya     With in number of modular spacings   Mo     Built-in depth   Mo     Ambient temperature during operating   C     Pollution degree   C     Connectable conductor cross section multi-wired   Mo	Rated impulse withstand voltage Uimp	kV	4
Selective protection     No       Short-time delayed tripping     No       Short-circuit breaking capacity (lcw)     KA       Surge current capacity     KA       Frequency     KA       Additional equipment possible     Surge current capacity       With interlocking device     Yes       Degree of protection (IP)     Yes       With in number of modular spacings     Momentation       Built-in depth     Momentation       Anbient temperature during operating     C     Sold       Pollution degree     C     Sold       Romentation construction     Sold     Sold       Pollution degree     C     Sold       Pollution degree     momentation     Sold	Mounting method		DIN rail
Short-time delayed tripping   No     Short-circuit breaking capacity (low)   KA     Surge current capacity   KA     Frequency   KA     Additional equipment possible   So     Dagree of protection (IP)   Yes     With innumber of modular spacings   Tom     Built-in depth   Tom     Anbient temperature during operating   Tom     Pollution degree   Yes     Pollution degree   So     Pollution degree   So     Pollution degree   Tom     Pollution degree   Tom     Pollution degree   Tom     Pollution degree   Tom	Leakage current type		A
Short-circuit breaking capacity (lcw)   KA   6     Surge current capacity   KA   0.25     Frequency   0.142   0.142     Additional equipment possible   Frequency   Verson     With interlocking device   Frequency   Verson     Degree of protection (IP)   Frequency   Verson     With in number of modular spacings   Frequency   2     Anbient temperature during operating   Frequency   2     Pollution degree   C   2   2     Pollution degree   Frequency   2   2   2     Pollution degree   Frequency   2   2   2     Pollution degree   Frequency	Selective protection		No
Surge current capacity   KA   0.25     Frequency   50 Hz     Additional equipment possible   Yes     With interlocking device   Frequency     Degree of protection (IP)   100     Width in number of modular spacings   Cmm     Built-in depth   7c     Anbient temperature during operating   Cmm     Pollution degree   2     Pollution degree   Cmm     Surge conductor cross section multi-wired   mm²	Short-time delayed tripping		No
Frequency   6   6   50 Hz     Additional equipment possible   6   50 Hz     With interlocking device   7   7     Degree of protection (IP)   6   7     With in number of modular spacings   6   7     Built-in depth   7   7     Ambient temperature during operating   6   °C     Pollution degree   6   °C     Pollution degree   6   mm²     Sometable conductor cross section multi-wired   mm²   15-16	Short-circuit breaking capacity (Icw)	kA	6
Additional equipment possible Mes   With interlocking device Yes   Degree of protection (IP) IP00   With in number of modular spacings Imm   Built-in depth mm   Abbient temperature during operating Imm   Pollution degree Imm   Imm Imm	Surge current capacity	kA	0.25
With interlocking deviceYesDegree of protection (IP)IP20Width in number of modular spacingsMBuilt-in depthmmAmbient temperature during operating°CPollution degree°CConnectable conductor cross section multi-wiredmm²Image: Section multi-wiredmm²Ima	Frequency		50 Hz
Degree of protection (IP) IPD   Width in number of modular spacings Imm   Built-in depth mm   Ambient temperature during operating Imm   Pollution degree Imm   Connectable conductor cross section multi-wired Imm	Additional equipment possible		Yes
Width in number of modular spacingsAmbient temperature during operatingAmbient temperature during operating	With interlocking device		Yes
Built-in depth mm 45   Ambient temperature during operating °C 25 - 40   Pollution degree C 2   Connectable conductor cross section multi-wired Mm <sup>2</sup> 15 - 16	Degree of protection (IP)		IP20
Ambient temperature during operating °C 25 - 40   Pollution degree 2   Connectable conductor cross section multi-wired mm² 15 - 16	Width in number of modular spacings		2
Pollution degree 2   Connectable conductor cross section multi-wired mm <sup>2</sup>	Built-in depth	mm	45
Connectable conductor cross section multi-wired mm <sup>2</sup> 1.5 - 16	Ambient temperature during operating	°C	-25 - 40
	Pollution degree		2
Connectable conductor cross section solid-core mm <sup>2</sup> 1.5 - 35	Connectable conductor cross section multi-wired	mm²	1.5 - 16
	Connectable conductor cross section solid-core	mm²	1.5 - 35