DATASHEET - HNC-25/2/003

Part no. Catalog No.



Residual current circuit breaker (RCCB), 25A, 2p, 30mA, type AC

HNC-25/2/003 194690



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	25
Rated short-circuit strength	I _{cn}	kA	6
Rated fault current	$I_{\Delta N}$	А	0.03
Туре			Туре АС
Tripping		s	non-delayed
Product range			HNC
Sensitivity			AC current sensitive
Impulse withstand current			Partly surge-proof 250 A

Technical data

Electrical			
Rated operational voltage	U _e	V	
	Ue	V AC	
Rated operating voltage	U _e	V AC	230
Rated frequency	f	Hz	50
Sensitivity			AC current sensitive
Rated short-circuit strength	I _{cn}	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	25
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	2
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])

Relativity V 30 Relativity A 5 Relativity MA 0 Relativity MA 0 Retativity V 40 Retativity V 40 Munting method V 40 Leakage current type V No Selective protection V No Short-ince dayad tripping V No Structurent possible V Sold Muitini number of modular spacing (Icw) V No Muitini number of modular spacings M Sold Muitin number of			
Aread current Aread Aread Science Science Rated fuil current MA Science Rated insulation voltage Uin V 40 Rated insulation voltage Uinp Image: Science Science Mounting method Image: Science Science Lakage current type Image: Science Science Selective protection Image: Science Science Stort-circuit breaking capacity (low) Image: Science Science Stort-circuit preaking capacity (low) Image: Science Science Additional equipment possible Image: Science Science Vick interlocking device Image: Science Science Vick interlocking device Image: Science Science Subit-in depth Image: Science Science Mith interlocking device Image: Science Science Subit-in depth Image: Science Science Additional equipment of modular spacings Image: Science Science Subit-in depth Image: Science Science Science Anbient temperature during	Number of poles		2
Rated fault current max Bated insulation voltage Uimp max max <thmax< th=""> max max</thmax<>	Rated voltage	V	230
Rated insulation voltage Uin V 40 Rated insulation voltage Uinpo KV 40 Mounting method KV 10 Leakage current type Division Division Selective protection KV AC Short-circuit breaking capacity (Icw) K AC Surge current capacity K B Additional equipment possible K B Vint interlocking device K B Digree of protection (IP) K B With interlocking device K B Bitlin depth K B Additional equipment possible K B With interlocking device K B Bitlin depth K B Additional equipment possible K B Bitlin depth K B Albitlin temperature during operating K B Albitlin temperature during operating K B Albitlin temperature during operating K S <t< td=""><td>Rated current</td><td>А</td><td>25</td></t<>	Rated current	А	25
Red impulse withstand voltage UimpKV4Mounting methodIN railLeakage current typeACSelective protectionNoSolt-time delayed trippingINSolt-time delayed trippingKASolt-time capacity (Icw)KASurge current capacity (Icw)KASurge current capacityKAFrequencyKAAdditional equipment possibleSoltWith interlocking deviceSoltBuilt-in depthMoMutintengerature during operatingMoMutintengerature during operatingMoAnbient temperature during operatingCPollution degreeCSolt conductor cross section muti-twiredmnSolt conductor co	Rated fault current	mA	30
Moning method IN rail Leakage current type AC Selective protection No Short-time delayed tripping No Short-time delayed tripping KA Surge current capacity (low) KA Surge current capacity KA Frequency No Additional equipment possible So With interlocking device Yo Digree of protection (IP) Yo With interder fundular spacings Man Buil-in depth Man Anbient temperature during operating C Pollution degree C Pollution degree C Romet Sc Romet beconductor cross section multi-wired Man	Rated insulation voltage Ui	V	440
Leakage current type C 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 Surge current capacity With interlocking device Yes Degree of protection (IP) Yes With in number of modular spacings Yes Built-in depth Yes Ambient temperature during operating Yes Pollution degree Yes Pollution degree Yes Surge current capacity Yes	Rated impulse withstand voltage Uimp	kV	4
Selective protection No Selective protection No Short-time delayed tripping No Short-circuit breaking capacity (lcw) KA Surge current capacity KA Frequency KA Additional equipment possible So With interlocking device Yes Degree of protection (IP) Yes With in number of modular spacings Mom Built-in depth Mom Anbient temperature during operating C Pollution degree So Pollution degree So Connectable conductor cross section multi-wired mm	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 By er of protection (IP) Verson With intenuber of modular spacings Imm Buit-in depth Tom Abient emperature during operating Imm Pollution degree So Pollution degree Imm Short-circuit bestime during operating Imm	Leakage current type		AC
Short-circuit breaking capacity (lcw) KA 6 Surge current capacity KA 0.25 Frequency 0.12 0.12 Additional equipment possible Yes Yes Vith interlocking device Yes Yes Degree of protection (IP) Yes Yes Width in number of modular spacings Yes Yes Built-in depth Yes Yes Anbient temperature during operating Yes Yes Pollution degree Yes Yes	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 600 mm Built-in depth 70 Anbient temperature during operating 600 mm Pollution degree 20 Polution degree 20 <td>Short-time delayed tripping</td> <td></td> <td>No</td>	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 man Pollution degree 6 6 Pollution degree 6 7 Pollution degree 7 6 Polution degree 6 8 Polution degree 7 15	Short-circuit breaking capacity (Icw)	kA	6
Additional equipment possibleYesWith interlocking deviceYesDegree of protection (IP)IP00With in number of modular spacingsImmBuilt-in depthImmAmbient temperature during operatingImmPollution degreeImmConcetable conductor cross section multi-wiredImm </td <td>Surge current capacity</td> <td>kA</td> <td>0.25</td>	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) IPO Width in number of modular spacings I IPO Built-in depth mm 45 Ambient temperature during operating IC S25 - 40 Pollution degree mm 15 - 16	Additional equipment possible		Yes
Width in number of modular spacingsMethodsMethods2Built-in depthmm45Ambient temperature during operating°C25 - 40Pollution degreeC2Connectable conductor cross section multi-wiredmm²15 - 16	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 ² 15 - 16	Degree of protection (IP)		IP20
Ambient temperature during operating C C 25 - 40 Pollution degree 2 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 ²	Built-in depth	mm	45
Connectable conductor cross section multi-wired mm ² 1.5 - 16	Ambient temperature during operating	°C	-25 - 40
	Pollution degree		2
Connectable conductor cross section solid-core mm ² 1.5 - 35	Connectable conductor cross section multi-wired	mm²	1.5 - 16
	Connectable conductor cross section solid-core	mm²	1.5 - 35