DATASHEET - EAM802H



Residual current circuit-breaker; 80 A; 2-pole; 30mA; Type AC

Part no. Catalog No.

EAM802H EAM802H



Delivery program

Basic function			Residual current circuit-breakers
Number of poles			2 pole
Application			Switchgear for residential and commercial applications
Rated current	In	А	80
Rated short-circuit strength	I _{cn}	kA	10 with back-up fuse
Rated fault current	$I_{\Delta N}$	А	0.03
Туре			Туре АС
Tripping		s	non-delayed
Product range			EAM
Sensitivity			AC current sensitive
Impulse withstand current			Partly surge-proof 250 A

Technical data Electrical

Electrical			
Types conform to			IEC/EN 61008
Standards			IEC/EN 61008
Rated operational voltage	U _e	V	
	U _e	V AC	
Rated operating voltage	U _e	V AC	230
Rated frequency	f	Hz	50
Limit values of the operating voltage			
Test circuit		V AC	196 - 264
Sensitivity			AC current sensitive
Rated insulation voltage	Ui	V	440
Rated impulse withstand voltage	U _{imp}	kV	4
Rated short-circuit strength	I _{cn}	kA	10 with back-up fuse
Max. admissible back-up fuse			
Short-circuit	gG/gL	А	63
Overload	gG/gL	А	25
Rated making and breaking capacity / Rated residual making and breaking capacity	$I_m / I_{\Delta m}$	Α	800
Max. back-up fuse		A gL/gG	25
Maximum max. as short-circuit protective device		A gL	
Back-up fuse		A gL	63
lifespan			
Electrical	Operations		≧ 4000
Mechanical	Operations		≧ 20000
Mechanical			
Standard front dimension		mm	45
Device height		mm	80
Built-in width		mm	35 (2TE)
Mounting			IEC/EN 60715 top-hat rail
Degree of Protection			IP40, IP54 (with moisture-proof enclosure)
Terminals top and bottom			Box clamp
Terminal protection			finger and hand touch safe, DGUV VS3, EN 50274
Terminal cross-section			

Solid	mm ²	1.5 - 35
Permissible storage and transport temperatures	°C	-35 - +60
Climatic proofing		25-55°C/90-95% relative humidity according to IEC 60068-2
Thickness of busbar material	mm	
Material thickness	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	А	80
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	8.6
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	60
			Starting at 40 °C, the max. permissible continuous current decreases by 3% for every 1 °C
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])

Number of poles		2
Rated voltage	V	230
Rated current	А	80
Rated fault current	mA	30
Rated insulation voltage Ui	V	440
Rated impulse withstand voltage Uimp	kV	4

Leakage current type Image: Construction			
Selective protection Model Short-time delayed tripping Model Short-time delayed tripping Model Short-time delayed tripping Model Short-circuit breaking capacity (low) KA 0 Surge current capacity (low) KA 0 Stripping Jol Jol Additional equipment possible Model Surge current capacity With interlocking device Model Surge current capacity Built-in depth Model Surge current capacity Muth in number of modular spacings Model Surge current capacity Built-in depth mm Surge current capacity Anbient temperature during operating Surge current capacity Surge current capacity Pollution degree mm Surge current capacity Surge current capacity	Mounting method		DIN rail
Short-dire delayed tripping No Short-circuit breaking capacity (lcw) KA 0 Surge current capacity (lcw) KA 0.5 Frequency 50 Hz 50 Hz Additional equipment possible Yes 10 Degree of protection (IP) Yes 10 With in number of modular spacings Yes 10 Built-in depth mm 70.5 Anbient temperature during operating Yes 25-60 Pollution degree mm ² 25-60	Leakage current type		AC
Short-circuit breaking capacity (Icw) Short-circuit breaking capacity (Icw) Surge current capacity Frequency Additional equipment possible With interlocking device Degree of protection (IP) With in number of modular spacings Built-in depth Ambient temperature during operating Pollution degree Pollution degree Constant device Pollution temperature during operating Constant device Pollution degree Constant device Pollution temperature during operating Pollution degree Constant device Pollution temperature during operating Pollution degree Pollution temperature during operating Pollution temperature	Selective protection		No
Surge current capacity KA 0.25 Frequency 50 Hz Additional equipment possible Yes With interlocking device Yes Degree of protection (IP) IP20 With in number of modular spacings mm 0.5 Built-in depth mm 7.5 Ambient temperature during operating °C 2.5 Pollution degree mm 5.16	Short-time delayed tripping		No
Frequency 50 Hz Additional equipment possible Yes With interlocking device P20 Degree of protection (IP) Imm With in number of modular spacings Imm Built-in depth Imm Pollution degree 2 Pollution degree Imm State 1 Interlocking device Imm Interlocking device Imm Interlocking device Imm Interlocking device Imm Interlocking device	Short-circuit breaking capacity (Icw)	kA	10
Additional equipment possible Yes With interlocking device Yes Degree of protection (IP) IP0 With in number of modular spacings Imm Built-in depth mm Ambient temperature during operating Imm Pollution degree Imm Image: Pollution degree Imm Image: Pollution degree Imm Image: Pollution degree Imm Image: Pollution degree Imm ²	Surge current capacity	kA	0.25
With interlocking device Yes Degree of protection (IP) IP20 With in number of modular spacings mm 70.5 Built-in depth °C 25.60 Pollution degree 2 2 Pollution degree °C 25.60 Runder of modular space of multi-wired mm² 15.16	Frequency		50 Hz
Degree of protection (IP) IPD Width in number of modular spacings IPD Built-in depth Imm Ambient temperature during operating IPD Pollution degree IPD Innectable conductor cross section multi-wired Imm ²	Additional equipment possible		Yes
Width in number of modular spacings mm 2 Built-in depth mm 70.5 Ambient temperature during operating °C 25 - 60 Pollution degree C 2 Connectable conductor cross section multi-wired mm ² 15 - 16	With interlocking device		Yes
Built-in depth mm 70.5 Ambient temperature during operating °C -25 - 60 Pollution degree °C 2 Connectable conductor cross section multi-wired mm ² 1.5 - 16	Degree of protection (IP)		IP20
Ambient temperature during operating°C-25 - 60Pollution degree2Connectable conductor cross section multi-wiredmm²1.5 - 16	Width in number of modular spacings		2
Pollution degree 2 Connectable conductor cross section multi-wired mm ²	Built-in depth	mm	70.5
Connectable conductor cross section multi-wired mm ² 1.5 - 16	Ambient temperature during operating	°C	-25 - 60
	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