DATASHEET - XNH2-A400

NH fuse-switch 3p flange connection M10 max. 240 mm²; mounting plate; NH2



Part no.	XNH2-A400
Catalog No.	183057

1624032

EL-Nummer (Norway)

Delivery program

Basic function			Basic device
Number of poles			3 pole
Mounting type			DIN rails Mounting plate
Size			2
Type of connection			Flat connection
Rated operational current	le	А	400
Front degree of protection (XNH installed)			IP20 (Operating status) IP2XC (Contact protection) IP10 (Handle cover open)
Rated operational voltage	U _e	V AC	690
Rated operational voltage	Ue	V DC	440
Rated conditional short-circuit current		kA	120 (500 V) 100 (690 V)
Flammability characteristics			Self-extinguishing as per UL 94
Description			Current paths of electrolytic copper, silver-plated
Successor to			021996 284647

Technical data

Electrical			
Standards			IEC/EN 60947-3
Rated operational voltage	U _e	V AC	690
Rated operational voltage	U _e	V DC	440
Rated operational current	le	Α	400
Rated frequency	f	Hz	40 - 60
Rated insulation voltage	Ui	V AC	800
Total heat dissipation at I_{th} (without fuses)	Pv	W	28
Heat dissipation at 80% (without fuses)	Pv	W	17.8
Rated impulse withstand voltage	U _{imp}	kV	8
Utilization category AC-23B			
Rated operating voltage	U _e	V AC	400
Rated operating current	le	Α	400
Utilization category AC22B			
Rated operating voltage	Ue	V AC	500
Rated operating current	l _e	А	400
Utilization category AC-21B			
Rated operating voltage	Ue	V AC	690
Rated operating current	l _e	А	400
Utilization category DC-22B			
Rated operating voltage	U _e	V DC	440
Rated operating current	l _e	Α	400
Rated conditional short-circuit current		kA	120 (500 V) 100 (690 V)
Rated short-time withstand current	I _{cw}	kA	10
Max. fuse			
Size according to DIN VDE 0636-2			2

Max. permitted power loss per fuse link	Pv	W	34
Lifespan, electrical	Operations		200
Mechanical	oporationo		200
Front degree of protection (XNH installed)			IP20 (Operating status) IP2XC (Contact protection) IP10 (Handle cover open)
Ambient temperature		°C	-25 - +55
Rated operating mode			Permanent operation
Activation			Dependent manual activation
Mounting position			Vertical, horizontal
Altitude		m	Max. 2000
Overvoltage category/pollution degree			111/3
RoHS (in accordance with Directive 2002/95/EC of the European Parliament and Council)			Yes
Direction of incoming supply			as required
Lockable			Yes, optional
Sealable			Yes, Standard
Material characteristics			
Material			Polyamide
Colour			Grey
Flammability characteristics			Self-extinguishing as per UL 94
Halogen-free			Yes
Voltage test			Yes, sliding inspection windows
Lifespan, mechanical	Operations		800
Track resistance			CTI 600
Heat deflection temperature		°C	125
Terminal capacity			
Flange connection			
Bolt diameter			M10
Cable lug max. width		mm	48
Flat busbar		mm	40 x 10
Box terminal			
Stranded		mm ²	95 - 300 Cu/Al
Copper strip	Number of segments x width x thickness	mm	6 x 16 x 0,8 - 10 x 32 x 1
Box terminal			
Stranded		mm ²	25 - 240 Cu
Copper band	Number of segments x width x thickness	mm	10 x 16 x 0,8
Clamp-type terminal			
Stranded		mm ²	120 - 240 Cu/Al
Double clamp-type terminal			
Stranded		mm ²	2x (120 - 150) Cu/Al
Stranded		mm ²	zx (120 - 150) Cu/Al

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	Α	400
Heat dissipation per pole, current-dependent	P _{vid}	W	7.3
Equipment heat dissipation, current-dependent	P _{vid}	W	22
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	Is the panel builder's responsibility.
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	U _i = 800 V AC
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 8.0

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(eid8s10.1-27-37-14-01 [AKR058013]) No Version as main switch No Version as main switch No Version as safety switch No Max. rated operation voltage Ue AC V Rated operation voltage Ue AC A Conditioned tated short-circuit current lu A Rated operation voltage Ue AC KW Conditioned tated short-circuit current lu KW Rated short-circuit current lu KW Number of poles KM Number of poles KM Version as main switch Serve connection You of electrical connection of main circuit YM Suitable for fusor YM Suitable for fusor YM Suitable for fusor YM Suitable for fusor YM Suitable for fusor mounting YM Suitable for	Low-voltage industrial components (EG000017) / Fuse switch disconnector (EC001040)			
Vision as safety switchImage: state operation voltage Ue ACImage: state operation power AC-23, 400 VImage: state opera					
Nax. rated operation voltage Ue ACV60Rated peration voltage Ue ACA40Rated operation power at AC-23,400 VConditioned rated short-circuit current IqK12Conditioned rated short-circuit current IqKM12Rated short-time withstand current IcwKMMSuitable for fusesKM12Number of polesKKServe connectionVich error protectionKKNoSuitable for fusonKKServe connectionSuitable for fusonKKNoSuitable for fusonKKKSuitable for fusonK<	Version as main switch		No		
Ated peration power at AC-23, 400 V M M Conditioned rated short-circuit current Iq KW 0 Rated operation power at AC-23, 400 V KW 10 Conditioned rated short-circuit current Iq KM 10 Rated short-time withstand current Icw KA 10 Suitable for fuses KA 10 Number of poles KA 10 Vith error protection KA 10 Suitable for fuses KA 10 Suitable for fuse mounting for fuse KA 10 Suitable for from mounting KA 10 Suitable for from mounting KA 10 Suitable for from mounting KA 10 Suitable for fuse mounting </td <td>Version as safety switch</td> <td></td> <td>No</td>	Version as safety switch		No		
Ref operation power at AC-23, 400 V Image: Ref operation power at AC-23, 400 V	Max. rated operation voltage Ue AC	V	690		
Conditioned rated short-circuit current Iq Image: Imag	Rated permanent current lu	А	400		
Kated short-time withstand current low KA A	Rated operation power at AC-23, 400 V	kW	0		
Suitable for fuses Image of poles Ima	Conditioned rated short-circuit current Iq	kA	120		
Number of poles Image: Constraint of main circuit I	Rated short-time withstand current lcw	kA	3		
With error protectionNoType of electrical connection of main circuitScew connectionCable entryOtherEquipped with connectorsNoSuitable for floor mountingYesSuitable for front mountingNoSuitable for front mountingNoSuitable for floor mountingNoSuit	Suitable for fuses		NH2		
Type of electrical connection of main circuitImage: Section ConnectionType of electrical connection of main circuitSectionCable entryOtherEquipped with connectorsNoSuitable for floor mountingYesSuitable for front mountingNoSuitable for busbar mountingNoSuitable for busbar mountingNoSuitable for busbar mountingFord SectionSuitable for busbar mountingFord SectionSuitable for busbar mountingFord SectionSuitable for busbar mountingFord SectionSuitable for busbar mountingNoSuitable for busbar mountingFord SectionSuitable for busbar mountingNoSuitable for busbar mountingFord SectionSuitable for busbar mountingNoSuitable for busbar mountingFord SectionSuitable for busbar	Number of poles		3		
Cable entry Other Equipped with connectors No Suitable for floor mounting Yes Suitable for front mounting No Suitable for front mounting No Suitable for floor mounting No Suitable for front mounting No Suitable for busbar mounting No Suitable for busbar mounting No Type of control element Fore grip Motor drive optional No Motor drive integrated No Yes on as emergency stop installation Sole	With error protection		No		
Equipped with connectorsNoSuitable for floor mountingYesSuitable for front mountingNoSuitable for husbar mountingNoSuitable for busbar mountingNoType of control elementCover gripPosition control elementFront sideMotor drive optionalSoMotor drive integratedNoVersion as emergency stop installationSo	Type of electrical connection of main circuit		Screw connection		
Suitable for floor mountingYesSuitable for fnot mountingNoSuitable for fnot mountingNoSuitable for busbar mountingCover gripType of control elementCover gripPosition control elementFont sideMotor drive optionalNoMotor drive integratedSoVersion as emergency stop installationSo	Cable entry		Other		
Suitable for front mountingNoSuitable for husbar mountingNoSuitable for busbar mountingNoType of control elementCover gripPosition control elementFront sideMotor drive optionalNoMotor drive integratedNoVersion as emergency stop installationSolowe	Equipped with connectors		No		
Suitable for busbar mounting No Type of control element Cover grip Position control element Front side Motor drive optional No Motor drive integrated Mo Version as emergency stop installation Image: Stop installation	Suitable for floor mounting		Yes		
Type of control element Cover grip Position control element Front side Motor drive optional No Motor drive integrated No Version as emergency stop installation Sector	Suitable for front mounting		No		
Position control element Font side Motor drive optional No Motor drive integrated No Version as emergency stop installation Image: Control optional installation	Suitable for busbar mounting		No		
Motor drive optional No Motor drive integrated No Version as emergency stop installation Image: Comparison of the stop of	Type of control element		Cover grip		
Motor drive integrated No Version as emergency stop installation Model	Position control element		Front side		
Version as emergency stop installation No	Motor drive optional		No		
	Motor drive integrated		No		
Degree of protection (IP), front side Other	Version as emergency stop installation		No		
	Degree of protection (IP), front side		Other		