DATASHEET - XNH1-FCL-A250-BT



NH fuse-switch 3p box terminal 35 - 150 $\mathrm{mm^2}$; mounting plate; light fuse monitoring; NH1



Part no. XNH1-FCL-A250-BT Catalog No. 183046

EL-Nummer 1624021

(Norway)

Delivery program

		Fuse control - light
		3 pole
		DIN rails Mounting plate
		1
		Box terminal
l _e	Α	250
		IP20 (Operating status) IP2XC (Contact protection) IP10 (Handle cover open)
U _e	V AC	690
U _e	V DC	440
	kA	120 (500 V) 100 (690 V)
		Self-extinguishing as per UL 94
		Current paths of electrolytic copper, silver-plated With optical signalling of triggered fuse-links
	U _e	U _e VAC

Technical data

Electrical

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	l _e	Α	250
Rated frequency	f	Hz	40 - 60
Rated insulation voltage	Ui	V AC	800
Total heat dissipation at I _{th} (without fuses)	P_{v}	W	16
Heat dissipation at 80% (without fuses)	P_{v}	W	10.2
Rated impulse withstand voltage	U_{imp}	kV	8
Utilization category AC-23B			
Rated operating voltage	U _e	V AC	400
Rated operating current	I _e	Α	250
Utilization category AC22B			
Rated operating voltage	U _e	V AC	500
Rated operating current	I _e	Α	250
Utilization category AC-21B			
Rated operating voltage	U _e	V AC	690
Rated operating current	I _e	Α	250
Utilization category DC-22B			
Rated operating voltage	U _e	V DC	DC values on request
Rated operating current	l _e	Α	DC values on request
Utilization category DC21B			
Rated operating voltage	U _e	V DC	DC values on request
Rated operating current	l _e	Α	DC values on request
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			1
Max. permitted power loss per fuse link	P_{v}	W	23
Lifespan, electrical	Operations		200
Mechanical			
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			III/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		1400
Track resistance			CTI 600
Heat deflection temperature		°C	125
Terminal capacity			
Flange connection			
Bolt diameter			M10
Cable lug max. width		mm	37
Flat busbar		mm	30 x 10
Box terminal			
Stranded		mm ²	35 - 150 Cu/Al
Copper strip	Number of segments x width x thickness	mm	10 x 16 x 0,8
Box terminal			
Stranded		mm ²	25 - 150 Cu
Copper band	Number of segments x width x thickness	mm	6 x 16 x 0,8
Clamp-type terminal Stranded		mm ²	10 - 150 Cu/Al
		111111	·
Double clamp-type terminal		2	2v./70_0E\ Cv./A\
Stranded		mm ²	2x (70 - 95) Cu/Al

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	250
Heat dissipation per pole, current-dependent	P _{vid}	W	5.3
Equipment heat dissipation, current-dependent	P _{vid}	W	16
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 observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must observed.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

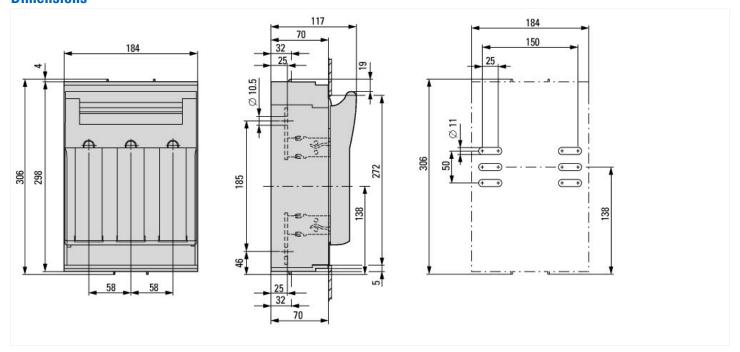
Technical data ETIM 7.0

Low-voltage industrial components (EG000017) / Fuse switch disconnector (EC001040)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Fuse switch disconnector (ecl@ss10.0.1-27-37-14-01 [AKF058013])

Version as main switch Mean control safety switch Mean control safety switch Mean control safety switch Mean control safety switch Void control safety switch Max. rated operation voltage Ue AC V 69 Rated permanent current lu A 25 Rated operation power at AC-23,400 V KM 10 Conditioned rated short-circuit current lq KM 10 Rated short-time withstand current lcw MA 10 Suitable for fuses MI MI Number of poles MI Yes Viber of poles MA 50 Viber of electrical connection of main circuit MA Yes Cable entry Formac clamp 10 Yes Suitable for ground mounting Yes Yes Suitable for front mounting 4-hole Yes Yes Suitable for protont mounting 4-hole Yes Yes Suitable for protont element Yes Yes Motor drive optional Yes Yes Motor drive integrated Yes Yes Worker Yes Yes Motor drive integrated Yes Yes Worker Yes Yes Worker Yes Yes Yes Yes <th>(ecl@ss10.0.1-27-37-14-01 [AKF058013])</th> <th></th> <th></th> <th></th>	(ecl@ss10.0.1-27-37-14-01 [AKF058013])			
Max. rated operation voltage Ue AC V 690 Rated permanent current Iu A 250 Rated operation power at AC-23, 400 V kW 0 Conditioned rated short-circuit current Iq kA 120 Rated short-time withstand current Icw kA 6 Suitable for fuses NH1 NH1 Number of poles Yes 3 With error protection Yes Frame clamp Cable entry Other Other Equipped with connectors Yes No Suitable for ground mounting Yes No Suitable for front mounting 4-hole No No Suitable for busbar mounting Yes No Type of control element Cover grip Cover grip Position control element No No Motor drive optional No No Motor drive integrated No No Worsen No No No No No No No No	Version as main switch			No
Rated permanent current lu A 550 Rated operation power at AC-23, 400 V kW 0 Conditioned rated short-circuit current lq kA 120 Rated short-time withstand current lcw kA 6 Suitable for fuses NH1 Number of poles 3 3 With error protection Yes Frame clamp Type of electrical connection of main circuit Yes No Cable entry No Yes Suitable for ground mounting Yes No Suitable for front mounting 4-hole Yes No Suitable for busbar mounting Yes No Specific control element Yes No Position control element Yes No Motor drive optional Yes Front side Motor drive integrated Yes No Word of yes prior to make a region ystop installation Yes No	Version as safety switch			No
Rated operation power at AC-23,400 V Conditioned rated short-circuit current Iq Rated short-time withstand current Icw Rated short-time withstand current Icw Rumber of pules Number of poles Nith error protection Type of electrical connection of main circuit Cable entry Equipped with connectors Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting 4-hole Suitable for found element Position control element Position control element Motor drive optional Motor drive integrated Version as emergency stop installation	Max. rated operation voltage Ue AC	V	/	690
Conditioned rated short-circuit current Iq	Rated permanent current lu	А	4	250
Rated short-time withstand current lcw Suitable for fuses Number of poles With error protection Type of electrical connection of main circuit Cable entry Equipped with connectors Suitable for ground mounting Suitable for ground mounting Suitable for front mounting 4-hole Suitable for busbar mounting Type of control element Position control element Motor drive ontegrated Motor drive integrated Ves No Rated short-time withstand current lcw No No Rate Rated short-time withstand current lcw No No Cover grip Front side No No Motor drive integrated No No No No Motor drive integrated No No No No No No No No No N	Rated operation power at AC-23, 400 V	k'	(W	0
Suitable for fuses Number of poles With error protection Yes Type of electrical connection of main circuit Cable entry Equipped with connectors Suitable for ground mounting Suitable for ground mounting Suitable for front mounting 4-hole Suitable for busbar mounting Type of control element Position control element Motor drive optional Motor drive integrated Vesion as emergency stop installation	Conditioned rated short-circuit current Iq	k	κA	120
Number of poles With error protection Yes Type of electrical connection of main circuit Cable entry Equipped with connectors Suitable for ground mounting Suitable for front mounting 4-hole Suitable for busbar mounting Type of control element Position control element Motor drive optional Motor drive integrated Ves No Suitable of poles A Suitable of Poles A Suitable for B Suitable of Poles A Suitable of Poles	Rated short-time withstand current lcw	k	κA	6
With error protectionYesType of electrical connection of main circuitFrame clampCable entryOtherEquipped with connectorsNoSuitable for ground mountingYesSuitable for front mounting 4-holeNoSuitable for busbar mountingNoType of control elementCover gripPosition control elementFront sideMotor drive optionalNoMotor drive integratedNoVersion as emergency stop installationNo	Suitable for fuses			NH1
Type of electrical connection of main circuit Cable entry Other Equipped with connectors No Suitable for ground mounting Suitable for front mounting 4-hole Suitable for busbar mounting Type of control element Cover grip Position control element Motor drive optional Motor drive integrated Version as emergency stop installation Frame clamp Other Cover	Number of poles			3
Cable entry Equipped with connectors No Suitable for ground mounting Suitable for front mounting 4-hole Suitable for busbar mounting No Suitable for busbar mounting Type of control element Cover grip Position control element Motor drive optional Motor drive integrated Version as emergency stop installation Other No Other Other No No No No No Other No No No No Other No No No Other No No No No No No No No No N	With error protection			Yes
Equipped with connectors Suitable for ground mounting Suitable for front mounting 4-hole Suitable for busbar mounting Type of control element Position control element Motor drive optional Motor drive integrated Version as emergency stop installation No No No No No No No No No	Type of electrical connection of main circuit			Frame clamp
Suitable for ground mounting Suitable for front mounting 4-hole Suitable for busbar mounting Type of control element Position control element Motor drive optional Motor drive integrated Version as emergency stop installation Yes No No Version 4-hole No No No No No No No No No N	Cable entry			Other
Suitable for front mounting 4-hole No Suitable for busbar mounting No Type of control element Cover grip Position control element Front side Motor drive optional No Motor drive integrated Version as emergency stop installation No No	Equipped with connectors			No
Suitable for busbar mounting No Type of control element Position control element Motor drive optional Motor drive integrated Version as emergency stop installation No No No No No No No No No	Suitable for ground mounting			Yes
Type of control element Position control element Motor drive optional Motor drive integrated Version as emergency stop installation Cover grip Front side No No No	Suitable for front mounting 4-hole			No
Position control element Motor drive optional Motor drive integrated Version as emergency stop installation Front side No No No	Suitable for busbar mounting			No
Motor drive optional No Motor drive integrated No Version as emergency stop installation No	Type of control element			Cover grip
Motor drive integrated No Version as emergency stop installation No	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

Dimensions



Additional product information (links)

IL0131110ZU Fuse switch-disconnector XNH

IL0131110ZU Fuse switch-disconnector XNH

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL0131110ZU2017_02.pdf