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Worldwide English



XNH1-1-A250 - NH fuse-switch 1p flange connection M10 max. 150 mm²; mounting plate; NH1



183049 XNH1-1-A250

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183049 XNH1-1-A250

NH fuse-switch 1p flange connection M10 max. 150 mm²; mounting plate; NH1

EL-Nummer (Norway)

1624024

NH fuse switch-disconnector 1 pole with M10 flat terminal max. 150 mm²; mounting plate; for NH1 fuse-links

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Delivery program

Basic function

Basic device

Number of poles

1 pole

Mounting type

DIN rails

Mounting plate

Size

1

Type of connection

Flat connection

Rated operational current [I_b]

250 A

Front degree of protection (XNH installed)

IP20 (Operating status)

IP2XC (Contact protection)

IP10 (Handle cover open)

Rated operational voltage [U_b]

690 V AC

Rated operational voltage [U_b]

440 V DC

Rated conditional short-circuit current

120 (500 V)

100 (690 V) kA

Flammability characteristics

Self-extinguishing as per UL 94
Description
Current paths of electrolytic copper, silver-plated

Technical data

Electrical

Standards

IEC/EN 60947-3

Rated operational voltage [U_e]

690 V AC

Rated operational voltage [U_e]

440 V DC

Rated operational current [I_e]

250 A

Rated frequency [f]

40 - 60 Hz

Rated insulation voltage [U_i]

800 V AC

Total heat dissipation at I_{th} (without fuses) [P_d]

22 W

Heat dissipation at 80% (without fuses) [P_d]

14.1 W

Rated impulse withstand voltage [U_{imp}]

8 kV

Utilization category AC-23B Rated operating voltage [U_e]

400 V AC

Utilization category AC-23B Rated operating current [I_e]

250 A

Utilization category AC-22B Rated operating voltage [U_e]

500 V AC

Utilization category AC-22B Rated operating current [I_e]

250 A

Utilization category AC-21B Rated operating voltage [U_e]

690 V AC

Utilization category AC-21B Rated operating current [I_e]

250 A

Utilization category DC-22B Rated operating voltage [U_e]

250 V DC

Utilization category DC-22B Rated operating current [I_e]

250 A

Utilization category DC-21B Rated operating voltage [U_e]

440 V DC

Utilization category DC-21B Rated operating current [I_e]

250 A

Rated conditional short-circuit current

120 (500 V)

100 (690 V) kA

Rated short-time withstand current [I_{cw}]

10 kA

Max. fuse size according to DIN VDE 0636-2

1

Max. fuse link Max. permitted power loss per fuse link [P_d]

23 W

Lifespan, electrical [Operations]

200

Mechanical

Front degree of protection (XNH installed)

IP20 (Operating status)

IP2XC (Contact protection)

IP10 (Handle cover open)

Ambient temperature

-25 - +55 °C

Rated operating mode

Permanent operation

Activation

Dependent manual activation

Mounting position

Vertical, horizontal

Altitude
 Max. 2000 m
 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 characteristicsMaterial
 Polyamide
 Material characteristicsColour
 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
 125 °C
 Terminal capacity
 Flange connectionBolt diameter
 M10
 Flange connectionCable lug max. width
 37 mm
 Flange connectionFlat busbar
 30 x 10 mm
 Box terminalStranded
 35 - 150 Cu/Al mm²
 Box terminalCopper strip [Number of segments x width x thickness]
 10 x 16 x 0,8 mm
 Box terminalStranded
 25 - 150 Cu mm²
 Box terminalCopper band [Number of segments x width x thickness]
 6 x 16 x 0,8 mm
 Clamp-type terminalStranded
 10 - 150 Cu/Al mm²
 Double clamp-type terminalStranded
 2x (70 - 95) Cu/Al mm²

Design verification as per IEC/EN 61439

Technical data for design verification
 Rated operational current for specified heat dissipation [I_n]
 250 A
 Heat dissipation per pole, current-dependent [P_{id}]
 5.3 W
 Equipment heat dissipation, current-dependent [P_{id}]
 16 W
 IEC/EN 61439 design verification
 10.2 Strength of materials and parts10.2.2 Corrosion resistance
 Meets the product standard's requirements.
 10.2 Strength of materials and parts10.2.3.1 Verification of thermal stability of enclosures
 Meets the product standard's requirements.
 10.2 Strength of materials and parts10.2.3.2 Verification of resistance of insulating materials to normal heat
 Meets the product standard's requirements.
 10.2 Strength of materials and parts10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects
 Meets the product standard's requirements.
 10.2 Strength of materials and parts10.2.4 Resistance to ultra-violet (UV) radiation
 Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.5 Lifting
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts 10.2.6 Mechanical impact
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts 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
 $U_i = 800 \text{ V AC}$

10.9 Insulation properties 10.9.3 Impulse withstand voltage
Is the panel builder's responsibility.

10.9 Insulation properties 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.

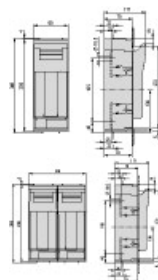
10.13 Mechanical function
The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 7.0

Low-voltage industrial components (EG000017) / Fuse switch disconnecter (EC001040)
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Fuse switch disconnecter (ecl@ss10.0.1-27-37-14-01 [AKF058013])
Version as main switch
No
Version as safety switch
No
Max. rated operation voltage $U_e \text{ AC}$
690 V
Rated permanent current I_n
250 A
Rated operation power at AC-23, 400 V
0 kW
Conditioned rated short-circuit current I_k
120 kA
Rated short-time withstand current I_{cw}
6 kA
Suitable for fuses
NH1
Number of poles
1
With error protection
No
Type of electrical connection of main circuit
Screw connection
Cable entry
Other
Equipped with connectors
No
Suitable for ground mounting
Yes
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
 No
 Version as emergency stop installation
 No
 Degree of protection (IP), front side
 Other

Dimensions



2x XNH1-1-A...

Product photo

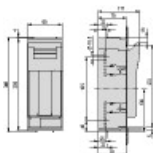


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Photo

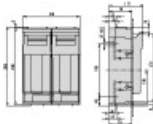
Fuse switch-disconnectors 1P flange connection

Dimensions single product



1230DIM-377

Line drawing



1230DIM-380

Line drawing

Instruction Leaflet

- [IL0131119ZU](#)
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