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Worldwide English



Powering Business Worldwide

XNH1-S250 - NH fuse-switch 3p flange connection M10 max. 150 mm²; busbar 60 mm; NH1



183051 XNH1-S250

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183051 XNH1-S250

NH fuse-switch 3p flange connection M10 max. 150 mm²; busbar 60 mm; NH1

EL-Nummer (Norway)

1624026

NH fuse switch-disconnector 3 pole with M10 flat terminal max. 150 mm²; busbar 60 mm; for NH1 fuse-links; optionally lockable with XNH-XLOCK and padlock; upper/lower cable connection can be changed in seconds.



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Delivery program

Basic function

Basic device

Number of poles

3 pole

Mounting type

Busbars of 60 mm

Size

1

Type of connection

Flat connection

Rated operational current [I_n]

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
 Cable connection optionally at the top or bottom
 Successor to
 107250
 107251
 269348

Technical data

Electrical
 Standards
 IEC/EN 60947-3
 Rated operational voltage [U_b]
 690 V AC
 Rated operational voltage [U_b]
 440 V DC
 Rated operational current [I_b]
 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_b]
 400 V AC
 Utilization category AC-23B Rated operating current [I_b]
 250 A
 Utilization category AC22B Rated operating voltage [U_b]
 500 V AC
 Utilization category AC22B Rated operating current [I_b]
 250 A
 Utilization category AC-21B Rated operating voltage [U_b]
 690 V AC
 Utilization category AC-21B Rated operating current [I_b]
 250 A
 Utilization category DC-22B Rated operating voltage [U_b]
 250 V DC
 Utilization category DC-22B Rated operating current [I_b]
 250 A
 Utilization category DC21B Rated operating voltage [U_b]
 440 V DC
 Utilization category DC21B Rated operating current [I_b]
 250 A
 Rated conditional short-circuit current
 120 (500 V)
 100 (690 V) kA
 Rated short-time withstand current [I_{cw}]
 10 kA
 Max. fuseSize according to DIN VDE 0636-2
 1

Max. fuseMax. permitted power loss per fuse link [P]
 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 (FLEX System)
 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}]

7.3 W

Equipment heat dissipation, current-dependent [P_{id}]

22 W

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 Strength of materials and parts 10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.3.2 Verification of resistance of insulating materials to normal heat

Meets the product standard's requirements.

10.2 Strength of materials and parts 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 Strength of materials and parts 10.2.4 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 AC

690 V

Rated permanent current I_u

250 A

Rated operation power at AC-23, 400 V

0 kW

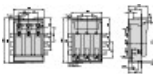
Conditioned rated short-circuit current I_k

120 kA




Rated short-time withstand current I_{cw}

6 kA
Suitable for fuses
NH1
Number of poles
3
With error protection
No
Type of electrical connection of main circuit
Screw connection
Cable entry
Other
Equipped with connectors
No
Suitable for ground mounting
No
Suitable for front mounting 4-hole
No
Suitable for busbar 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
No
Degree of protection (IP), front side
Other

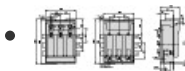
Dimensions



Product photo

- 
vt59815
Photo
Fuse switch-disconnectors
- 
vt59915
Photo
Fuse switch-disconnectors
- 
vt64815
Photo
Fuse switch-disconnectors

Dimensions single product



Instruction Leaflet

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