



LVSG3CPZ



NH Fuse-switch vertical design LV size 3 185mm 3pole M12

Technical properties

Architecture

Number of poles	3 P
Type of pole	3 P

Configuration

Distance between rail centre, 40 mm	No
Distance between rail centre, 50 mm	No
Distance between rail centre, 60 mm	No
Distance between rail centre, 100 mm	No
Distance between rail centre, 185 mm	Yes

Main electrical features

Rated operational voltage Ue	690 V
Frequency	50/60 Hz

Voltage

Rated insulation voltage	1000 V
Rated impulse withstand voltage	12 kV

Electric current

Cut off current	120 kA
Rated current for Ue=400V AC according to IEC 61439-1 5.3.2	630 A
Rated current for Ue=500V AC according to IEC 61439-1 5.3.2	630 A
Rated current for Ue=690V AC according to IEC 61439-1 5.3.2	630 A
Rated current	630 A
Rated short-time withstand current 1s	15 kA
Rated conditional short-circuit current for Ue=400V IEC 61439-1 3.8.10.4	120 kA
Rated conditional short-circuit current for Ue=690V IEC 61439-1 3.8.10.4	100 kA
Fuse-links test rated cond. short-circuit current Ue=400V IEC 61439-1 3.8.10.4	630 A
Fuse-links test rated cond. short-circuit current Ue=500V IEC 61439-1 3.8.10.4	630 A
Fuse-links test rated cond. short-circuit current Ue=690V IEC 61439-1 3.8.10.4	500 A
Conventional free air thermal current with Trennmesser and std. cross section	680 A
Conv. free air therm.current w/fuse-links and std.cross sect. IEC60947-1 4.3.2.1	630 A

Rated current for Ue=800V AC according to IEC 61439-1 5.3.2	400 A
Rated conditional short-circuit current for Ue=800V IEC 61439-1 3.8.10.4	10 kA
Acceptable current rating with AC22 category B	630 A
Acceptable current rating with AC23 category B	630 A
Fuse-links test rated cond. short-circuit current Ue=800V IEC 61439-1 3.8.10.4	400 A
Rated conditional short-circuit current for Ue=500V IEC 61439-1 3.8.10.4	120 kA

Electric current / temperature

Rating current 40°C	630 A
Rating current 45°C	598.5 A
Rating current 50°C	567 A
Rating current 55°C	535.5 A
Rating current 60°C	504 A
Rating current 65°C	472.5 A
Rating current 70°C	441 A

Fuse

Fuse Size	NH3
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Dimensions

Depth of installed product	190 mm
Height of installed product	741 mm
Length	741 mm
Width of installed product	100 mm
Width of the busbars	5 / 10 mm
Busbar distance	185 mm

Power

Total power loss under IN	111 W
Loss power at full load	255 W
Maximum Power loss of the Fuse-Link installed in device	48 W
Dissipated energy in cable	159.27 W

Endurance

Electric endurance in number of cycles	200
Number of mechanical operations	800
Total service life (mechanical and electrical endurance) IEC 60947-3 Table 4	1000

Materials

Copper weight of the product	2845 g
Silver weight of the product	3.37 g
Material	Plastic/metal

Installation, mounting

Tightening torque	32Nm
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Subject to technical modifications

Torque at mounting on busbar	32 Nm
Connection	
Connection cross-sect. flexible conductor	35 - 300mm ²
Connection cross-sect. rigid cable	35 - 300mm ²
Type of connection	Screw connection
Standards	
Rated duties according to IEC 60947-1 4.3.4	Continuous operation
Operation of switching devices according to IEC 60947-1 2.4	depending manual operation (of a mechanical switching device)
Utilisation category for Ue=400V AC according to IEC 60947-3 Table 5	AC-23B
Utilisation category for Ue=500V AC according to IEC 60947-3 Table 5	AC-22B
Utilisation category for Ue=690V AC according to IEC 60947-3 Table 5	AC-21B
European directive WEEE	concerned
Utilisation category for Ue=800V AC according to IEC 60947-3 Table 5	AC-21B
Standard cross section according to IEC 60947-1 Tables 9 and 10	185 mm ²
Safety	
Protection index IP	IP2X
REACH conform	Yes
RoHS conform	Yes
Use conditions	
Operating temperature	-25...55 °C
Degree of pollution according to IEC 60664 / IEC 60947-2	3
Storage/transport temperature	-40...70 °C