



SENTRON, Fuse switch disconnecter 3NP1, 3-pole, NH3, 630 A, for assembly and installation on mounting plate, Box terminal, Cover level 70 mm

Model	
product designation	Fuse switch disconnecter
design of the safety monitoring	Without
design of the load switch strip form	No
type of the driving mechanism motor drive	No
General technical data	
number of poles	3
type of device	For assembly and installation on mounting plate
size of disconnecting link	3 and 2
size of fuse link	NH2, NH3
let-through current with closed switch maximum	60 kA
mechanical service life (operating cycles) typical	1 000
I ² t value with closed switch maximum	5 400 kA ² ·s
power factor	
• at AC-22 B	0.65
• at AC-23 B	0.35
• with capacitive load	-0.25
fuse system	LV HRC fuse
degree of pollution	3
Voltage	
insulation voltage	
• rated value	690 V
• with degree of pollution 3 at AC rated value	690 V
• with degree of pollution 2 at AC rated value	1 000 V
power factor at AC-21 B	0.95
surge voltage resistance rated value	8 kV
• operational current	
— at 35 °C rated value	630 A
— at 40 °C rated value	610 A
— at 45 °C rated value	575 A
— at 50 °C rated value	555 A
— at 55 °C rated value	530 A
• operational current	
— at AC-21 B at 240 V rated value	630 A
— at AC-21 B at 400 V rated value	630 A
— at AC-21 B at 500 V rated value	630 A
— at AC-21 B at 690 V rated value	630 A
— at AC-22 B at 240 V rated value	630 A

— at AC-22 B at 400 V rated value	630 A
— at AC-22 B at 500 V rated value	630 A
— at AC-22 B at 690 V rated value	500 A
— at AC-23 B at 690 V rated value	200 A
— at AC-23 B at 500 V rated value	500 A
— at AC-23 B at 400 V rated value	630 A
— at AC-23 B at 240 V rated value	630 A
— at DC-21 B at 120 V rated value	630 A
— at DC-21 B at 240 V rated value	630 A
— at DC-21 B at 440 V rated value	630 A
— at DC-22 B at 120 V rated value	630 A
— at DC-22 B at 240 V rated value	630 A
— at DC-22 B at 440 V rated value	500 A
— at DC-23 B at 120 V rated value	400 A
— at DC-23 B at 240 V rated value	400 A
— at DC-23 B at 440 V rated value	250 A
let-through current with high-speed activation maximum permissible	50 kA
operating voltage	
• at AC rated value maximum	690 V
• at DC rated value	440 V
• at DC rated value maximum	440 V
Protection class	
protection class IP	
• with closed switch with cover or cable lug cover	IP40
• with closed switch without cover or cable lug cover	IP30
• open	IP20
Dissipation	
power loss [W]	
• with conventional rated thermal current without fuse per pole	30 W
• with conventional rated thermal current without fuse per device	90 W
• for rated value of the current at AC in hot operating state per pole	36 W
• of the fuse per fuse maximum	48 W
Main circuit	
operational current	
• rated value	630 A
• with capacitive load at 400 V rated value	72 A
• with capacitive load at 500 V rated value	55 A
Auxiliary circuit	
number of CO contacts for auxiliary contacts	0
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
Suitability	
suitability for use main switch	No
suitability for use switch disconnecter	Yes
suitability for use EMERGENCY OFF switch	No
suitability for use safety switch	Yes
suitability for use maintenance/repair switch	Yes
Product details	
product function phase failure monitoring	No
product component	
• undervoltage release	No
• undervoltage release with leading contact	No
product feature sealable	Yes
product extension auxiliary switch	Yes
product extension optional locking capability	Yes
product extension optional phase failure monitoring	Yes

product extension optional fuse monitoring	Yes
product extension optional voltage trigger	No
product extension optional overvoltage protection monitoring	Yes

Product function

product function overvoltage protection monitoring	No
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Short circuit

conditional short-circuit current (I_q)	
• at AC at 240 V with high-speed activation rated value	50 kA
• at AC at 500 V with high-speed activation rated value	50 kA
• at AC at 690 V with high-speed activation rated value	50 kA
• with closed switch at AC at 240 V rated value	100 kA
• with closed switch at AC at 500 V rated value	100 kA
• with closed switch at AC at 690 V rated value	100 kA

Connections

arrangement of electrical connectors for main current circuit	other
connectable conductor cross-section for main contacts	
• solid or stranded minimum	50 mm ²
• solid or stranded maximum	300 mm ²
• finely stranded with core end processing minimum	120 mm ²
• finely stranded with core end processing maximum	240 mm ²
• stranded minimum	50 mm ²
• stranded maximum	300 mm ²
tightening torque with screw-type terminals	
• minimum	25 N·m
• maximum	25 N·m
type of connectable conductor cross-sections of the laminated conductors maximum	32 x 20 mm
type of connection technology	Box terminal

Mechanical Design

height	306 mm
width	249.4 mm
depth	138.5 mm
fastening method	mounting plate
fastening method	
• floor mounting	Yes
• rail mounting	No
mounting position	horizontal/vertical
Net Weight	5.15 kg

Environmental conditions

ambient temperature during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature during storage	
• minimum	-50 °C
• maximum	80 °C

Certificates

reference code according to IEC 81346-2	Q
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Approvals Certificates

Environment	General Product Approval
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[Environmental Con-
firmations](#)

[Environmental Con-
firmations](#)



[Miscellaneous](#)

General Product Approval	Maritime application
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Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3NP1163-1DA20>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1163-1DA20>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1163-1DA20

CAX-Online-Generator

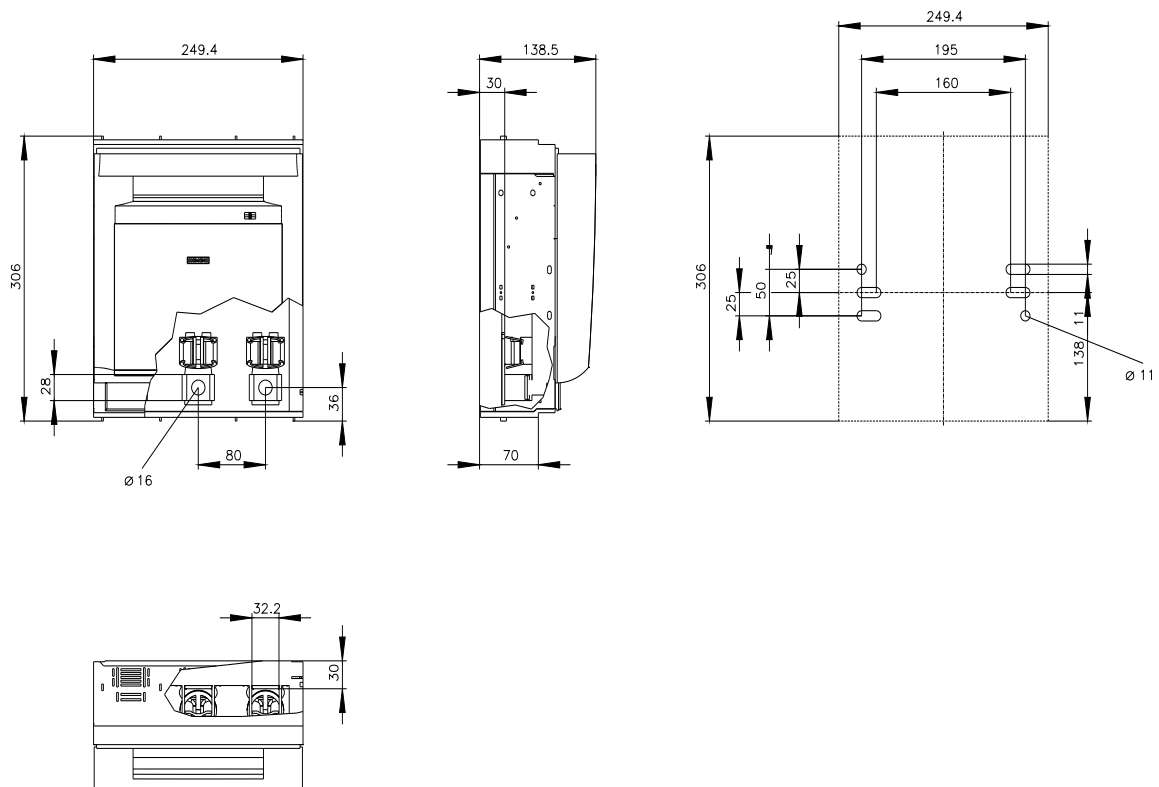
<https://www.siemens.com/cax>

Tender specifications

<https://www.siemens.com/specifications>

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)





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