SIEMENS

Data sheet 3NP1143-1DA20



SENTRON, Fuse switch disconnector 3NP1, 3-pole, NH1, 250 A, for assembly and installation on mounting plate, Box terminal, Cover level 70 mm

Model	
product designation	Fuse switch disconnector
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	1 and 0
size of fuse link	NH0, NH1
let-through current with closed switch maximum	32 kA
mechanical service life (operating cycles) typical	1 600
I2t value with closed switch maximum	780 kA²·s
power factor	
● at AC-22 B	0.65
● at AC-23 B	0.45
● 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	250 A
— at 40 °C rated value	245 A
— at 45 °C rated value	240 A
— at 50 °C rated value	233 A
— at 55 °C rated value	233 A
● operational current	
— at AC-21 B at 240 V rated value	250 A
— at AC-21 B at 400 V rated value	250 A
— at AC-21 B at 500 V rated value	250 A
— at AC-21 B at 690 V rated value	250 A
— at AC-22 B at 240 V rated value	250 A

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— at AC-22 B at 400 V rated value	250 A
— at AC-22 B at 500 V rated value	250 A
— at AC-22 B at 690 V rated value	250 A
— at AC-23 B at 690 V rated value	100 A
— at AC-23 B at 500 V rated value	200 A
— at AC-23 B at 400 V rated value	250 A
— at AC-23 B at 240 V rated value	250 A
— at DC-21 B at 120 V rated value	250 A
— at DC-21 B at 240 V rated value	250 A
— at DC-21 B at 440 V rated value	250 A
— at DC-22 B at 120 V rated value	250 A
— at DC-22 B at 240 V rated value	250 A
— at DC-22 B at 440 V rated value	200 A
— at DC-23 B at 120 V rated value	200 A
— at DC-23 B at 240 V rated value	200 A
— at DC-23 B at 440 V rated value	100 A
let-through current with high-speed activation maximum	25 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	8 W
● with conventional rated thermal current without fuse per device	24 W
● for rated value of the current at AC in hot operating state per pole	9.6 W
● of the fuse per fuse maximum	23 W
Main circuit	
operational current	
● rated value	250 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 disconnector	Yes
suitability for use EMERGENCY OFF switch	No
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

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product extension optional voltage trigger	No
product extension optional overvoltage protection monitoring	Yes
Product function	
product function overvoltage protection monitoring	No
Short circuit	
conditional short-circuit current (Iq)	
• at AC at 240 V with high-speed activation rated value	80 kA
• at AC at 500 V with high-speed activation rated value	80 kA
• at AC at 690 V with high-speed activation rated value	50 kA
• with closed switch at AC at 240 V rated value	120 kA
• with closed switch at AC at 500 V rated value	120 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	70 mm²
• solid or stranded maximum	185 mm²
• finely stranded with core end processing minimum	70 mm²
• finely stranded with core end processing maximum	120 mm²
• stranded minimum	70 mm²
• stranded maximum	185 mm²
tightening torque with screw-type terminals	
• minimum	10 N·m
• maximum	10 N·m
type of connectable conductor cross-sections of the laminated conductors maximum	20 x 10 mm
type of connection technology	Box terminal
Mechanical Design	
height	306 mm
width	183.7 mm
depth	116 mm
fastening method	mounting plate
fastening method	
• floor mounting	Yes
• rail mounting	No
mounting position	horizontal/vertical
Net Weight	2.924 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
Approvals Certificates	

Environment		General Product Approval			Miscellaneous
Environmental Con-firmations	Environmental Con-firmations	CCC	cULus	VDE	

General Product Approval	Test Certificates	Maritime application

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Type Test Certific-ates/Test Report

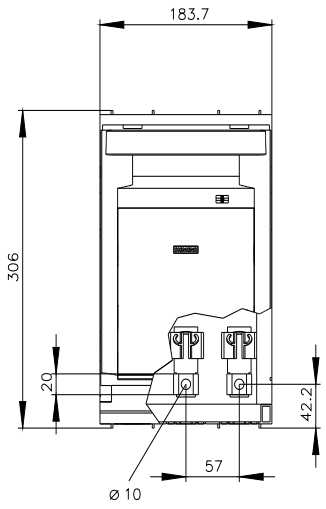
Special Test Certific-ate

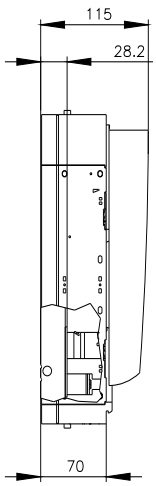
Maritime application	other

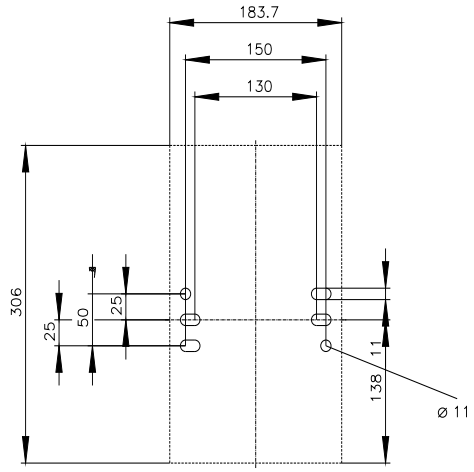
Confirmation

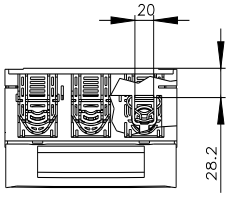
Further information

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=3NP1143-1DA20
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3NP1143-1DA20
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1143-1DA20
CAx-Online-Generator
https://www.siemens.com/cax
Tender specifications
https://www.siemens.com/specifications
Kennlinien
https://curves.simaris.siemens.com/curves/3NP1143-1DA20

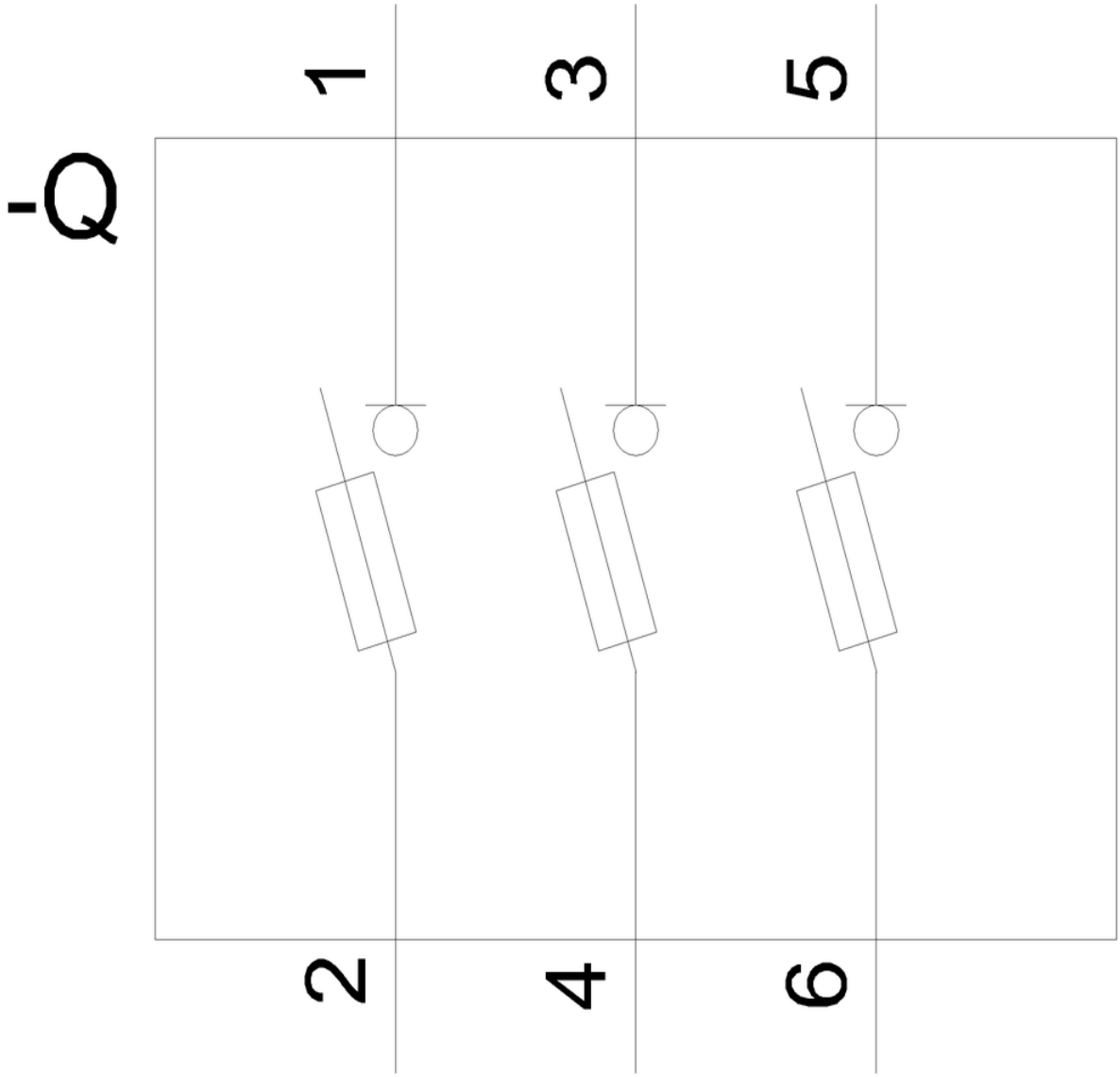




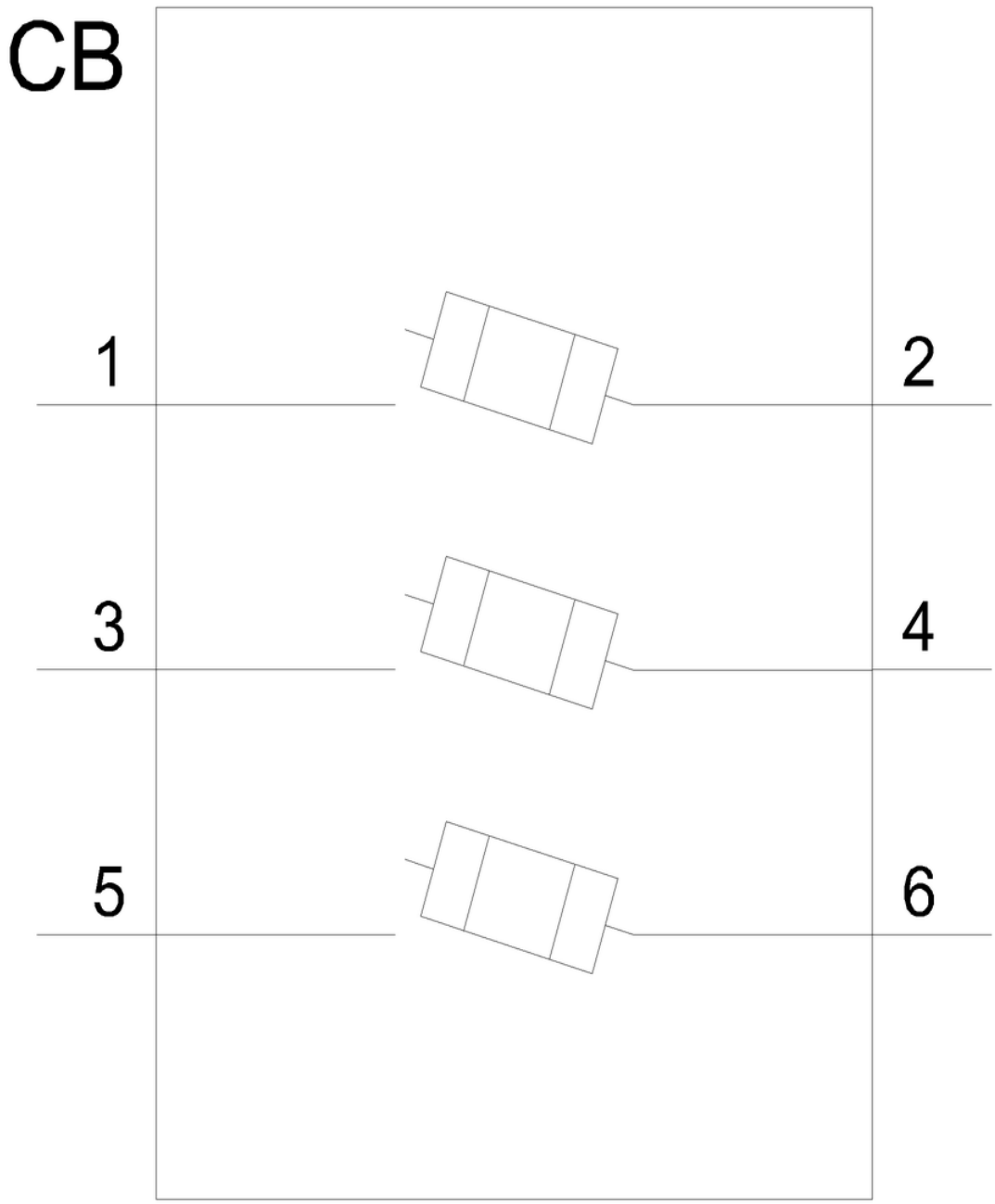




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