



SENTRON, Fuse switch disconnecter 3NP1, 3-pole, NH3, 630 A, for assembly and installation on mounting plate, Box terminal, Fuse monitoring: electronic EFM20, Cover level 70 mm

Model	
product designation	Fuse switch disconnecter
design of the safety monitoring	electronic EFM 20
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	2
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
• 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

<ul style="list-style-type: none"> • at AC-23 B at 690 V rated value • at AC-23 B at 500 V rated value • at AC-23 B at 400 V rated value • at AC-23 B at 240 V rated value 	200 A 500 A 630 A 630 A
let-through current with high-speed activation maximum permissible	50 kA
operating voltage <ul style="list-style-type: none"> • at AC rated value minimum • at AC rated value maximum 	230 V 690 V
Protection class	
protection class IP <ul style="list-style-type: none"> • with closed switch with cover or cable lug cover • with closed switch without cover or cable lug cover • open 	IP40 IP30 IP20
Dissipation	
power loss [W] <ul style="list-style-type: none"> • with conventional rated thermal current without fuse per pole • with conventional rated thermal current without fuse per device • for rated value of the current at AC in hot operating state per pole • of the fuse per fuse maximum 	30 W 90 W 78 W 48 W
Main circuit	
operational current <ul style="list-style-type: none"> • rated value • with capacitive load at 400 V rated value • with capacitive load at 500 V rated value 	630 A 72 A 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	Yes
product component	
<ul style="list-style-type: none"> • undervoltage release • undervoltage release with leading contact 	No No
product feature sealable	Yes
product extension auxiliary switch	Yes
product extension optional <ul style="list-style-type: none"> • locking capability • voltage trigger 	Yes No
Product function	
product function overvoltage protection monitoring	Yes
Short circuit	
conditional short-circuit current (I_q) <ul style="list-style-type: none"> • at AC at 240 V with high-speed activation rated value • at AC at 500 V with high-speed activation rated value • at AC at 690 V with high-speed activation rated value • with closed switch at AC at 240 V rated value • with closed switch at AC at 500 V rated value • with closed switch at AC at 690 V rated value 	50 kA 50 kA 50 kA 100 kA 100 kA 100 kA
Connections	
arrangement of electrical connectors for main current circuit	other
connectable conductor cross-section for main contacts	

<ul style="list-style-type: none"> • solid or stranded minimum • solid or stranded maximum • finely stranded with core end processing minimum • finely stranded with core end processing maximum • stranded minimum • stranded maximum 	50 mm ² 300 mm ² 120 mm ² 240 mm ² 50 mm ² 300 mm ²
tightening torque with screw-type terminals	
<ul style="list-style-type: none"> • minimum • maximum 	25 N·m 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	169.7 mm
fastening method	mounting plate
fastening method	
<ul style="list-style-type: none"> • floor mounting • rail mounting 	Yes No
mounting position	horizontal/vertical
net weight	4.77 kg
Environmental conditions	
ambient temperature during operation	
<ul style="list-style-type: none"> • minimum • maximum 	-25 °C 55 °C
ambient temperature during storage	
<ul style="list-style-type: none"> • minimum • maximum 	-50 °C 80 °C
Certificates	
reference code according to IEC 81346-2	Q
Approvals Certificates	
General Product Approval	



[Confirmation](#)



General Product Approval	Test Certificates	Marine / Shipping	other
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[Miscellaneous](#)



[Type Test Certificates/Test Report](#)



[Confirmation](#)

other	Environment
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[Miscellaneous](#)

[Environmental Confirmations](#)

[Environmental Confirmations](#)

Further information

Information on the packaging
<https://support.industry.siemens.com/cs/ww/en/view/109813875>
Information- and Downloadcenter (Catalogs, Brochures,...)
<http://www.siemens.com/lowvoltage/catalogs>
Industry Mall (Online ordering system)
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3NP1163-1DA23>
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3NP1163-1DA23>





