

SETRON, Fuse switch disconnecter 3NP1, 3-pole, NH3, 630 A, for Rittal busbar system 60 mm, flat terminal, Fuse monitoring: electronic EFM10, Cover level 32/70 mm



Model	
Product brand name	SETRON
Product designation	3NP1 fuse switch disconnecter
Design of the product	cover level 32/70 mm
Busbar design	busbar thickness 5 or 10 mm
Design of the safety monitoring	electronic EFM 10
Design of the operating mechanism	Cover handle
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 Rittal 60 mm busbar system
Size of disconnecting link	3 and 2
Size of fuse link	NH2, NH3
Continuous current / at 35 °C / rated value	630 A
Let-through current / with closed switch / maximum permissible	60 kA
cut-off value $I^2t_{max.}$ / 500 V	5 400 000 A ² ·s
Power factor	

• at AC-22 B	0.65
• at AC-23 B	0.35
• with capacitive load	-0.25
circuit-breaker / Design	3NP11
Mechanical service life (switching cycles) / typical	1 000
Fuse system	LV HRC fuse

Voltage	
Insulation voltage / rated value	690 V
Power factor / at AC-21 B	0.95
Surge voltage resistance / rated value	8 kV

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
• on the front	IP40
• open	IP20

Electricity	
Continuous current	
• 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
Let-through current / with high-speed activation / maximum permissible	50 kA
Let-through current / I _c / maximum permissible	
• 400 V	60 000 A
• 500V	60 000 A
cut-off value I ² t _{max} / 400 V	5 400 000 A ² ·s

Main circuit	
Operating voltage	
• at AC / rated value / minimum	230 V
• at AC / rated value / maximum	690 V
Operating current / with capacitive load	
• at 400 V / maximum	72 A
• at 500 V / maximum	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
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Suitability

Suitability for use

• Main switch	No
• switch disconnecter	Yes
• EMERGENCY OFF switch	No
• safety switch	Yes
• maintenance/repair switch	Yes

Product details

Product feature / interlock	Yes
Product component	
• Trip indicator	Yes
• Phase failure monitoring	No
• undervoltage release	No
• undervoltage release with leading contact	No
Product feature / sealable	Yes
Product extension	
• Auxiliary switch	Yes
• optional	
— locking capability	Yes
— motor drive	No
— Phase failure monitoring	Yes
— Voltage trigger	No
— Overvoltage protection monitoring	Yes

Product function

Product function	
• fuse monitoring	Yes
• Overvoltage protection monitoring	No

Short circuit

Conditional short-circuit current (I _q)	
• 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 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	
• single or multi-stranded / minimum	120 mm ²
• single or multi-stranded / maximum	300 mm ²
• stranded / minimum	120 mm ²
• stranded / maximum	300 mm ²
Tightening torque / with screw-type terminals	
• minimum	10 N·m
• maximum	12 N·m
Type of electrical connection / for main current circuit	busbar connection

Mechanical Design

Height	306 mm
Width	249.4 mm
Depth	192.7 mm
Mounting position	horizontal/vertical
Mounting type	busbar
Mounting type	
• floor mounting	No
• front mounting	No
• front mounting with 4-hole attachment	No
• front mounting with central attachment	No
• rail mounting	Yes
Busbar center-to-center spacing	60 mm
Net weight	6.98 kg

Environmental conditions

Degree of pollution	2
Ambient temperature	
• during operation / minimum	-25 °C
• during operation / maximum	55 °C
• during storage / minimum	-50 °C
• during storage / maximum	80 °C

Certificates

Reference code	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q





