



FUSE-SWITCH-DISCONNECTOR 3-POLE, NH000, 160A MOUNTING PLATE CONSTRUCTION COVER LEVEL 45 MM BOX TERMINAL FUSE MONITORING ELECTRONIC, EFM 10

Model		
product brand name		SENTRON
Product designation		Fuse switch disconnecter
Design of the product		3-pole
Design of the safety monitoring		electronic EFM 10
Design of the operating mechanism		handle unit
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		Construction and installation
Size of disconnecting link		000
Size of fuse link		NH000
Continuous current / at 35 °C / Rated value	A	160
Let-through current / with closed switch / maximum permissible	kA	15
cut-off value I²t_{max.} / 500 V	A ² ·s	56 000
I²t value / with closed switch / maximum permissible	kA ² ·s	56
Power factor		
• at AC-22 B		0.65
• at AC-23 B		0.45
• with capacitive load		-0.25
circuit-breaker / Design		3NP11
Mechanical service life (switching cycles) / typical		2 000
Fuse system		LV HRC fuse

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

Protection class		
Protection class IP		
<ul style="list-style-type: none"> • with closed switch / with cover or cable lug cover 		IP40
<ul style="list-style-type: none"> • with closed switch / without cover or cable lug cover 		IP30
<ul style="list-style-type: none"> • on the front 		IP40
<ul style="list-style-type: none"> • open 		IP20

Dissipation		
Active power loss		
<ul style="list-style-type: none"> • maximum 	W	9

Electricity		
Continuous current		
<ul style="list-style-type: none"> • Rated value 	A	100
<ul style="list-style-type: none"> • at 40 °C / Rated value 	A	150
<ul style="list-style-type: none"> • at 45 °C / Rated value 	A	140
<ul style="list-style-type: none"> • at 50 °C / Rated value 	A	130
<ul style="list-style-type: none"> • at 55 °C / Rated value 	A	120
Let-through current / with high-speed activation / maximum permissible	kA	10
Let-through current / I_c / maximum permissible		
<ul style="list-style-type: none"> • 400 V 	A	15 000
<ul style="list-style-type: none"> • 500V 	A	15 000
cut-off value I²t_{max} / 400 V	A ² ·s	56 000

Main circuit		
Operating voltage		
<ul style="list-style-type: none"> • with AC / Rated value / minimum 	V	230
<ul style="list-style-type: none"> • with AC / Rated value / maximum 	V	690
Operating current		
<ul style="list-style-type: none"> • at AC-21 B / at 400 V / Rated value 	A	160
<ul style="list-style-type: none"> • at AC-21 B / at 500 V / Rated value 	A	160
<ul style="list-style-type: none"> • at AC-21 B / at 690 V / Rated value 	A	160
<ul style="list-style-type: none"> • at AC-22 B / at 400 V / Rated value 	A	160
<ul style="list-style-type: none"> • at AC-22 B / at 500 V / Rated value 	A	125
<ul style="list-style-type: none"> • at AC-22 B / at 690 V / Rated value 	A	50
<ul style="list-style-type: none"> • at AC-23 B / at 400 V / Rated value 	A	160
<ul style="list-style-type: none"> • at AC-23 B / at 500 V / Rated value 	A	40

- at AC-23 B / at 690 V / Rated value
- with capacitive load / at 400 V / maximum
- with capacitive load / at 500 V / maximum

A	25
A	72
A	55

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
• 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 property / sealable	Yes
Product expansion	
• 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	kA 80
• with AC / at 500 V / with high-speed activation / Rated value	kA 80

• with AC / at 690 V / with high-speed activation / Rated value	kA	80
• with closed switch / with AC / at 500 V / Rated value	kA	120
• with closed switch / with AC / at 690 V / Rated value	kA	120

Connections

Arrangement of electrical connectors / for main current circuit		other
Connectable conductor cross-section / for main contacts		
• single or multi-stranded / minimum	mm ²	1.5
• single or multi-stranded / maximum	mm ²	50
• finely stranded / with core end processing / minimum	mm ²	1.5
• finely stranded / with core end processing / maximum	mm ²	35
• stranded / minimum	mm ²	1.5
• stranded / maximum	mm ²	50
Tightening torque / with screw-type terminals		
• minimum	N·m	3.5
• maximum	N·m	4
Type of connectable conductor cross-section / of the laminated conductors / maximum		8 x 8 mm
Type of electrical connection / for main current circuit		box terminals

Mechanical Design

Height	mm	141.7
Width	mm	88.8
Depth	mm	118.2
mounting position		horizontally or vertically
Mounting type		floor mounting
Mounting type		
• floor mounting		Yes
• front mounting		No
• front mounting with 4-hole attachment		No
• front mounting with central attachment		No
• rail mounting		No

Environmental conditions

Ambient temperature		
• during operation / minimum	°C	-25
• during operation / maximum	°C	55
• during storage / minimum	°C	-50

• during storage / maximum

°C 80

Certificates

Equipment marking

- acc. to DIN EN 61346-2
- acc. to DIN EN 81346-2

Q
Q

General Product Approval

CB

CB



CCC



GOST



UL



UR

EAC

Declaration of Conformity



EG-Konf.

Test Certificates

[Type Test Certificates/Test Report](#)



DNV

Shipping Approval



GL



LRS

Further information

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

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

Industry Mall (Online ordering system)

<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3NP11231CA22>

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

<http://support.automation.siemens.com/WW/view/en/3NP11231CA22/all>

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

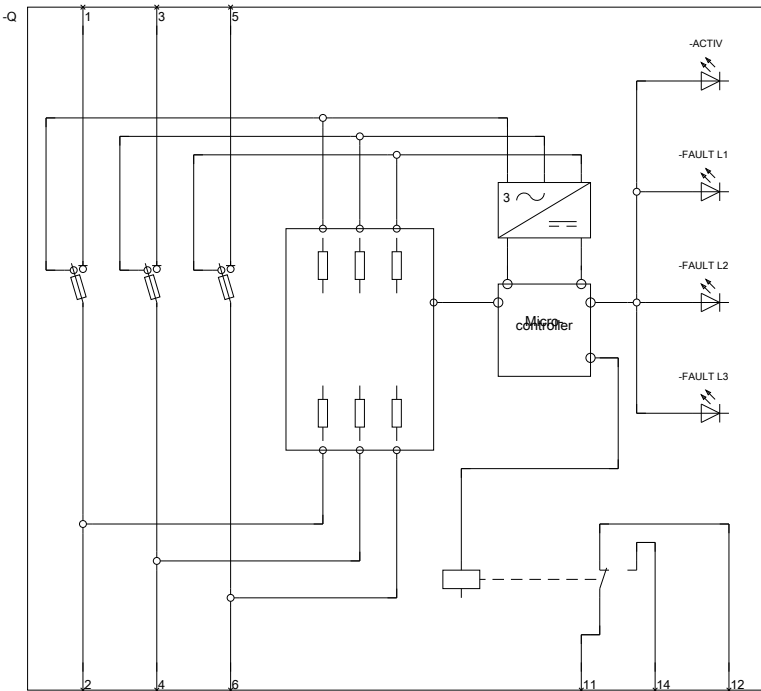
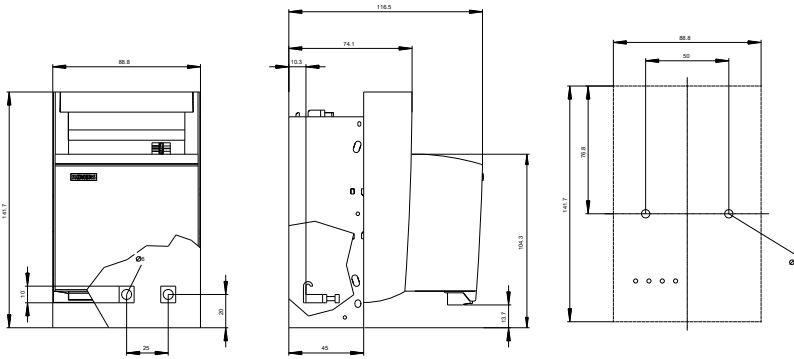
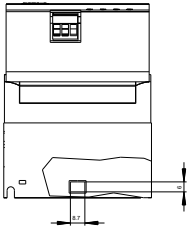
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP11231CA22

CAX-Online-Generator

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

Tender specifications

<http://ausschreibungstexte.siemens.com/tiplv>



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