



SENTRON, Fuse switch disconnector 3NP1, 3-pole, NH00, 160 A, for assembly and installation on mounting plate, flat terminal, Fuse monitoring: electronic EFM20, Cover level 45 mm

Model	
product designation	Fuse switch disconnector
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	00 and 000
size of fuse link	NH000, NH00
let-through current with closed switch maximum	23 kA
mechanical service life (operating cycles) typical	2 000
I <sub>2t</sub> value with closed switch maximum	223 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	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	160 A
• at 40 °C rated value	155 A
• at 45 °C rated value	145 A
• at 50 °C rated value	140 A
• at 55 °C rated value	133 A
• at AC-21 B at 240 V rated value	160 A
• at AC-21 B at 400 V rated value	160 A
• at AC-21 B at 500 V rated value	160 A
• at AC-21 B at 690 V rated value	160 A
• at AC-22 B at 240 V rated value	160 A
• at AC-22 B at 400 V rated value	160 A
• at AC-22 B at 500 V rated value	160 A
• at AC-22 B at 690 V rated value	125 A

• at AC-23 B at 690 V rated value	35 A
• at AC-23 B at 500 V rated value	63 A
• at AC-23 B at 400 V rated value	160 A
• at AC-23 B at 240 V rated value	160 A
<b>let-through current with high-speed activation maximum permissible</b>	15 kA
<b>operating voltage</b>	
• at AC rated value minimum	230 V
• at AC rated value maximum	690 V
<b>Protection class</b>	
<b>protection class IP</b>	
• with closed switch with cover or cable lug cover	IP40
• with closed switch without cover or cable lug cover	IP30
• open	IP20
<b>Dissipation</b>	
<b>power loss [W]</b>	
• with conventional rated thermal current without fuse per pole	5 W
• with conventional rated thermal current without fuse per device	15 W
• for rated value of the current at AC in hot operating state per pole	17 W
• of the fuse per fuse maximum	12 W
<b>Main circuit</b>	
<b>operational current</b>	
• rated value	160 A
• with capacitive load at 400 V rated value	72 A
• with capacitive load at 500 V rated value	55 A
<b>Auxiliary circuit</b>	
number of CO contacts for auxiliary contacts	0
<b>number of NC contacts for auxiliary contacts</b>	0
<b>number of NO contacts for auxiliary contacts</b>	0
<b>Suitability</b>	
<b>suitability for use main switch</b>	No
<b>suitability for use switch disconnector</b>	Yes
<b>suitability for use EMERGENCY OFF switch</b>	No
<b>suitability for use safety switch</b>	Yes
<b>suitability for use maintenance/repair switch</b>	Yes
<b>Product details</b>	
product function phase failure monitoring	Yes
product component	
• undervoltage release	No
• undervoltage release with leading contact	No
product feature sealable	Yes
product extension auxiliary switch	Yes
<b>product extension optional</b>	
• locking capability	Yes
• voltage trigger	No
<b>Product function</b>	
product function overvoltage protection monitoring	Yes
<b>Short circuit</b>	
<b>conditional short-circuit current (I<sub>q</sub>)</b>	
• 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
<b>Connections</b>	
arrangement of electrical connectors for main current circuit	other
<b>connectable conductor cross-section for main contacts</b>	

• solid or stranded minimum	2.5 mm <sup>2</sup>
• solid or stranded maximum	95 mm <sup>2</sup>
• stranded minimum	2.5 mm <sup>2</sup>
• stranded maximum	95 mm <sup>2</sup>
<b>tightening torque with screw-type terminals</b>	
• minimum	10 N·m
• maximum	12 N·m
type of connectable conductor cross-sections of the laminated conductors maximum	24 x 12 mm
<b>type of connection technology</b>	Flat terminal

#### Mechanical Design

height	202 mm
width	105.8 mm
depth	126.2 mm
<b>fastening method</b>	mounting plate
<b>fastening method</b>	
• floor mounting	Yes
• rail mounting	No
<b>mounting position</b>	horizontal/vertical
<b>net weight</b>	0.87 kg

#### Environmental conditions

<b>ambient temperature during operation</b>	
• minimum	-25 °C
• maximum	55 °C
<b>ambient temperature during storage</b>	
• minimum	-50 °C
• maximum	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
--------------------------	-------------------	-------------------	-------

[Miscellaneous](#)



[Type Test Certificates/Test Report](#)



[Miscellaneous](#)

other	Environment
-------	-------------

[Confirmation](#)

[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=3NP1133-1CA13>

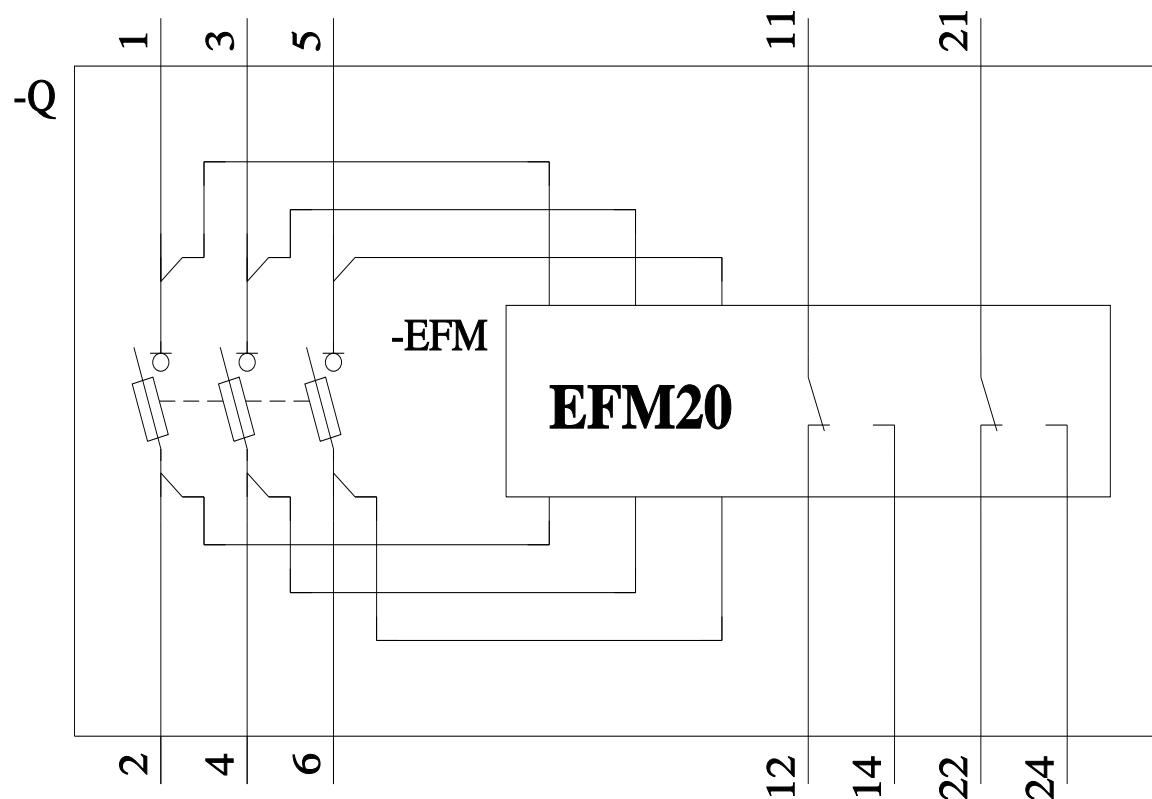
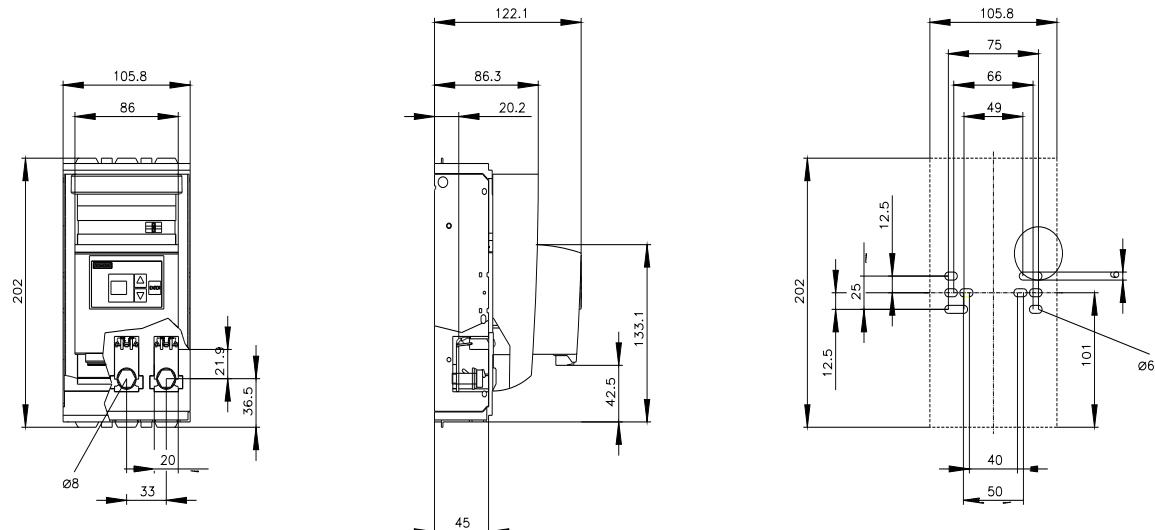
##### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

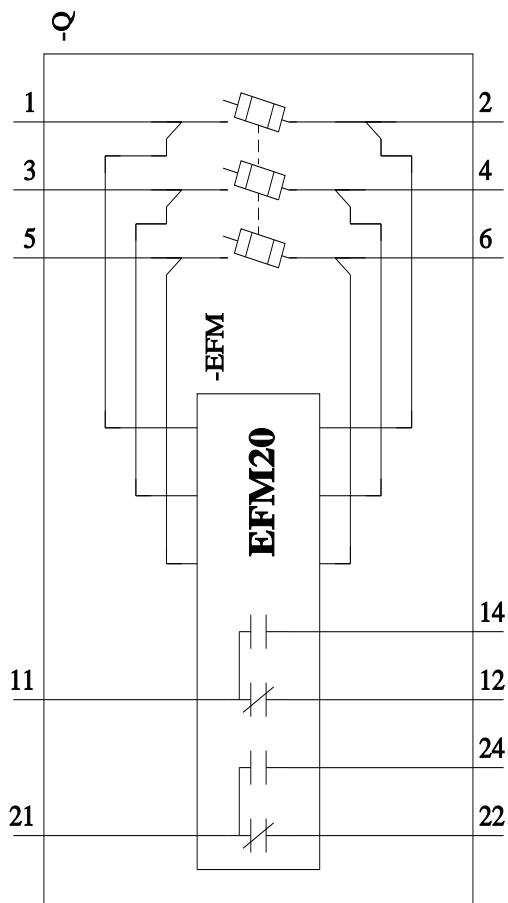
<https://support.industry.siemens.com/cs/ww/en/ps/3NP1133-1CA13>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3NP1133-1CA13](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1133-1CA13)

##### CAx-Online-Generator





last modified:

9/28/2024 

