



CIRCUIT BREAKER, 1MW 230V, 6KA, 1+N-POLE, C, 20A

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
design of the product	Miniature circuit breaker compact
General technical data	
design of pole	1P+N
tripping characteristic class	C
mechanical service life (operating cycles) typical	10 000
overvoltage category	3
degree of pollution	2
Voltage	
type of voltage of the operating voltage	AC
insulation voltage (U _i) at AC rated value	250 V
<ul style="list-style-type: none"> • operational current <ul style="list-style-type: none"> — at 30 °C rated value — at 40 °C rated value • operational current at AC rated value 	20 A 18.8 A 20 A
Supply voltage	
supply voltage <ul style="list-style-type: none"> • at AC 	230 V
value range of the supply voltage frequency	50/60 Hz
operating voltage <ul style="list-style-type: none"> • minimum • with single-phase operation at AC maximum 	24 V 250 V
Protection class	
protection class IP	IP20, with connected conductors
Breaking Capacity	
switching capacity current <ul style="list-style-type: none"> • according to EN 60898 rated value 	6 kA
energy limitation class	3
Dissipation	
power loss [W] for rated value of the current <ul style="list-style-type: none"> • at AC in hot operating state per pole 	2.2 W
Suitability	
suitability for operation	Residential buildings/infrastructure
Product details	
product feature touch protection	Yes
product component	

• combined terminal top	No
• combined terminal bottom	No
• neutral conductor switching	Yes
product feature properties for main switches in accordance with EN 60204-1	No
product feature halogen-free	Yes
product feature sealable	Yes
product feature silicon-free	Yes
product extension installable supplementary devices	Yes

Product function

product function	
• communication function	No
• other measurement function	No

Connections

connectable conductor cross-section solid	
• minimum	0.75 mm ²
• maximum	16 mm ²
connectable conductor cross-section stranded	
• minimum	0.75 mm ²
• maximum	16 mm ²
connectable conductor cross-section finely stranded with core end processing	
• minimum	0.75 mm ²
• maximum	10 mm ²
tightening torque [lbf·in] with screw-type terminals	
• minimum	10.6 lbf·in
• maximum	22.1 lbf·in
tightening torque with screw-type terminals	
• minimum	1.2 N·m
• maximum	2.5 N·m
position of power supply cord	Any

Mechanical Design

height	90 mm
width	18 mm
depth	76 mm
installation depth	70 mm
number of modular width units	1
fastening method	DIN rail
mounting position	any
Net Weight	118 g

Environmental conditions

standard	IEC/EN60898-1, GB/T10963.1
vibration resistance according to IEC 60068-2-6	Yes
ambient temperature during operation	
• minimum	-25 °C
• maximum	60 °C
ambient temperature during operation	-25...45°C: max. 85%rF. 45...60°C: max. 43%rF
ambient temperature during storage	
• minimum	-40 °C
• maximum	75 °C
number of test cycles for environmental testing according to IEC 60068-2-30	6

Approvals Certificates

Environment	General Product Approval
--------------------	---------------------------------

[Environmental Conformations](#)

[Environmental Conformations](#)



[Miscellaneous](#)



[Confirmation](#)



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=5SY6020-7CC>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY6020-7CC>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY6020-7CC

CAX-Online-Generator

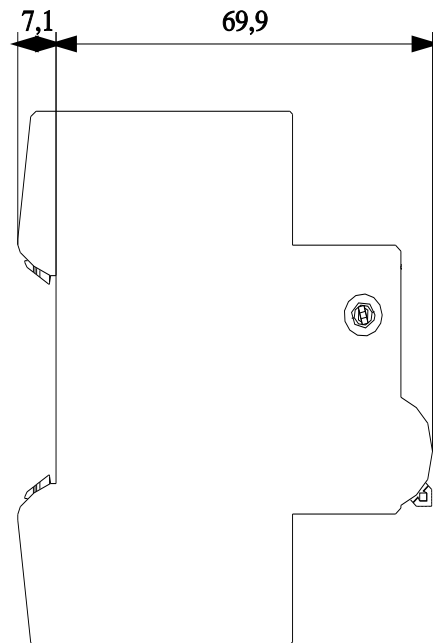
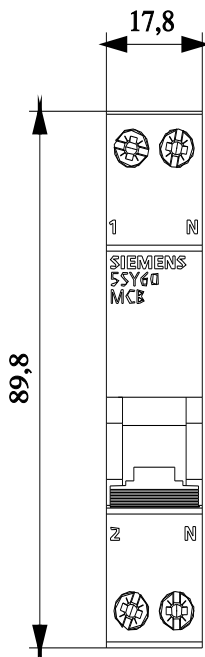
<https://www.siemens.com/cax>

Tender specifications

<https://www.siemens.com/specifications>

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)



last modified:

7/22/2025 