

Miniature circuit breakers 1 MW 230V, 4.5kA, 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	4 000
overvoltage category	3
degree of pollution	2
Voltage	
type of voltage of the operating voltage	AC
insulation voltage (Ui) at AC rated value	250 V
supply voltage with single-phase operation at AC rated value	230 V
<ul style="list-style-type: none"> operational current <ul style="list-style-type: none"> — at 30 °C rated value operational current at AC rated value 	20 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
Breaking Capacity	
switching capacity current <ul style="list-style-type: none"> according to EN 60898 rated value 	4.5 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 	3.1 W
Suitability	
suitability for operation	Residential buildings/infrastructure
Product details	
product feature touch protection	Yes
product component <ul style="list-style-type: none"> combined terminal top combined terminal bottom neutral conductor switching 	No No Yes
product feature halogen-free	Yes
product feature sealable	Yes
product feature silicon-free	Yes
product extension installable supplementary devices	Yes
Product function	
product function <ul style="list-style-type: none"> 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	17.7 lbf-in
• maximum	22.1 lbf-in
tightening torque with screw-type terminals	
• minimum	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	0.106 kg

Environmental conditions	
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

Approvals Certificates		
Environment	General Product Approval	other

[Environmental Confirmations](#)



[Confirmation](#)



[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=5SJ3020-7CR>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/5SJ3020-7CR>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SJ3020-7CR
- 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=)

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