

Siemens
EcoTech



miniature circuit breaker 230 V, 6 kA, 1+N-pole/1 MW, B20



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	B
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 (Ui) 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 — at 50 °C rated value — at 55 °C rated value — at 60 °C rated value ● operational current at AC rated value 	20 A 19.04 A 18.02 A 17.5 A 16.95 A 20 A
Supply voltage	
supply voltage <ul style="list-style-type: none"> ● at AC ● at DC rated value 	230 V 60 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	
• at AC in hot operating state per pole	2.5 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	122 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 storage	
• minimum	-40 °C
• maximum	75 °C
number of test cycles for environmental testing according to IEC 60068-2-30	6
Approvals Certificates	

Environment

[Environmental Confirmations](#)

[Environmental Confirmations](#)



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General Product Approval



[Confirmation](#)



Maritime application

other



[Confirmation](#)



[Miscellaneous](#)

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=5SL6020-6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SL6020-6>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SL6020-6

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=)



