



Miniature circuit breaker 230/400 V 10kA, 1-pole, D, 80 A, D=70 mm

Figure similar

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	1
design of pole	1P
tripping characteristic class	D
mechanical service life (operating cycles) typical	10 000
overvoltage category	3
degree of pollution	3
Voltage	
type of voltage of the operating voltage	AC
insulation voltage (Ui)	
• at AC rated value	440 V
• with single-phase operation at AC rated value	250 V
• with multi-phase operation at AC rated value	440 V
• operational current	
— at 30 °C rated value	80 A
— at 40 °C rated value	75.2 A
— at 50 °C rated value	70 A
— at 60 °C rated value	64.8 A
• operational current at AC rated value	80 A
Supply voltage	
supply voltage at AC	400 V
value range of the supply voltage frequency	50/60 Hz
Protection class	
protection class IP	IP20 with connected conductors, IP40 in the area of the handle with distribution cover
Breaking Capacity	
switching capacity current	
• according to EN 60898 rated value	10 kA
energy limitation class	3
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	7 W
suitability for operation	Infrastructure / Industry
Product details	

product feature touch protection	Yes
product component	
• tunnel terminals top	Yes
• tunnel terminals bottom	Yes
product feature properties for main switches in accordance with EN 60204-1	Yes
product feature halogen-free	Yes
product feature sealable	Yes
product feature silicon-free	Yes
product extension installable supplementary devices	Yes

Connections

connectable conductor cross-section solid	
• minimum	25 mm ²
• maximum	50 mm ²
connectable conductor cross-section stranded	
• minimum	25 mm ²
• maximum	50 mm ²
connectable conductor cross-section finely stranded with core end processing	
• minimum	25 mm ²
• maximum	35 mm ²
AWG number as coded connectable conductor cross section	
• minimum	3
• maximum	1
tightening torque [lbf-in] with screw-type terminals	
• minimum	22.1 lbf-in
• maximum	31 lbf-in
tightening torque with screw-type terminals	
• minimum	2.5 N·m
• maximum	3.5 N·m
position of power supply cord	Any

Mechanical Design

height	90 mm
width	27 mm
depth	76 mm
installation depth	70 mm
number of modular width units	1.5
fastening method	DIN rail
mounting position	any
Net Weight	265 g

Environmental conditions

influence of the surrounding temperature	Max. 95% rel. humidity
shock resistance according to IEC 60068-2-27	150m/s ² at 11ms half-sine
vibration resistance according to IEC 60068-2-6	50m/s ² at 25 to 150Hz and 60m/s ² at 35Hz (4sec)
ambient temperature during storage	
• minimum	-40 °C
• maximum	75 °C

Approvals Certificates

Environment	General Product Approval
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[Environmental Confirmations](#)

[Environmental Confirmations](#)



General Product Approval	Maritime application
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Maritime application	other	Railway	Dangerous goods
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[Confirmation](#)

[Miscellaneous](#)

[Confirmation](#)

[Transport Information](#)

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=5SP4180-8>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SP4180-8>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SP4180-8

CAX-Online-Generator

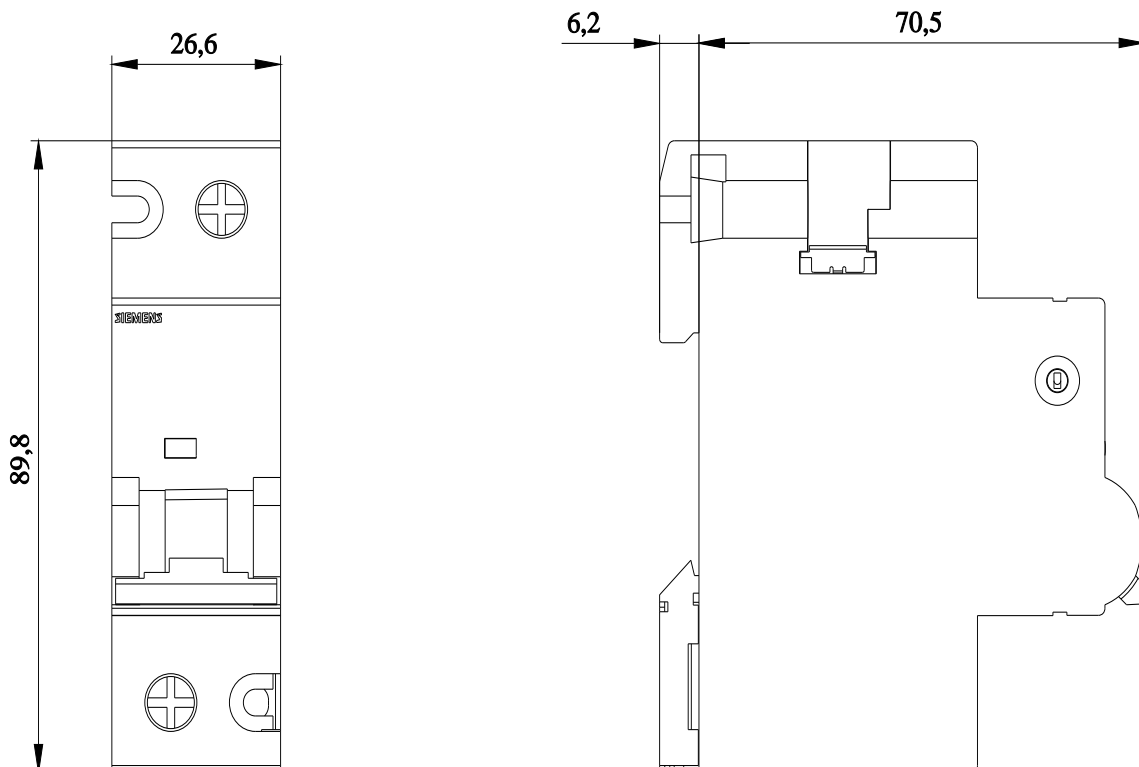
<https://www.siemens.com/cax>

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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