



Miniature circuit breaker 400 V 25kA, 2-pole, 12.5A, D=70 mm only magnetic tripping

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
design of the product	Only magnetic tripping operation
General technical data	
number of poles	2
design of pole	2P
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)	
• with single-phase operation at AC rated value	440 V
• with multi-phase operation at AC rated value	440 V
• operational current at AC rated value	12.5 A
Supply voltage	
supply voltage	
• at AC	400 V
value range of the supply voltage frequency	50/60 Hz
operating voltage at DC rated value maximum	72 V
Protection class	
protection class IP	IP20, with connected conductors
Breaking Capacity	
switching capacity current	
• according to IEC 60947-2 rated value	25 kA
energy limitation class	3
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	1.4 W
suitability for operation	Infrastructure / Industry
Product details	
product feature touch protection	Yes
product component	
• combined terminal top	Yes
• combined terminal bottom	Yes
• neutral conductor switching	No

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
<b>Product function</b>	
set values setting current (Ii) for I-tripping	15
reference value setting current (Ii) for I-tripping	x I <sub>n</sub>
<b>Short circuit</b>	
short-circuit current breaking capacity (I <sub>cn</sub> )	
• at AC according to UL 1077 and CSA C22.2 No.235	5 kA
<b>Connections</b>	
connectable conductor cross-section solid	
• minimum	0.75 mm <sup>2</sup>
• maximum	35 mm <sup>2</sup>
connectable conductor cross-section stranded	
• minimum	0.75 mm <sup>2</sup>
• maximum	35 mm <sup>2</sup>
connectable conductor cross-section finely stranded with core end processing	
• minimum	0.75 mm <sup>2</sup>
• maximum	25 mm <sup>2</sup>
AWG number as coded connectable conductor cross section	
• minimum	18
• maximum	4
tightening torque [lbf-in] with screw-type terminals	
• minimum	22 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
<b>Mechanical Design</b>	
height	90 mm
width	36 mm
depth	76 mm
installation depth	70 mm
number of modular width units	2
fastening method	DIN rail
mounting position	any
Net Weight	301 g
<b>Environmental conditions</b>	
influence of the surrounding temperature	max. 95% RH up to 45°C
vibration resistance according to IEC 60068-2-6	±1mm at 5 to 25Hz; 50m/s <sup>2</sup> at 25 to 150Hz
ambient temperature during operation	
• minimum	-25 °C
• maximum	45 °C
ambient temperature during storage	
• minimum	-40 °C
• maximum	75 °C
number of test cycles for environmental testing according to IEC 60068-2-30	28
<b>Approvals Certificates</b>	
Environment	General Product Approval



General Product Approval

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=5SY8224-8BB08>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY8224-8BB08>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY8224-8BB08](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY8224-8BB08)

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='HAUPT'></mmp_prod_no>)





