



Miniature circuit breaker 400 V 20kA, 4-pole, 50 A, 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	4
design of pole	4P
tripping characteristic class	D
mechanical service life (operating cycles) typical	10 000
overvoltage category	III
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	50 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	20 kA
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	3.7 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	Yes

60204-1		
• halogen-free	Yes	
• sealable	Yes	
• silicon-free	Yes	
product extension installable supplementary devices	Yes	
Product function		
set values setting current (Ii) for I-tripping	14	
reference value setting current (Ii) for I-tripping	x In	
Short circuit		
short-circuit current breaking capacity (Icn)		
• at AC according to UL 1077 and CSA C22.2 No.235	5 kA	
Connections		
connectable conductor cross-section solid		
• minimum	0.75 mm²	
• maximum	35 mm²	
connectable conductor cross-section stranded		
• minimum	0.75 mm²	
• maximum	35 mm²	
connectable conductor cross-section finely stranded with core end processing		
• minimum	0.75 mm²	
• maximum	25 mm²	
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	
Mechanical Design		
height	90 mm	
width	72 mm	
depth	76 mm	
installation depth	70 mm	
number of modular width units	4	
fastening method	DIN rail	
mounting position	any	
net weight	649 g	
Environmental conditions		
vibration resistance according to IEC 60068-2-6	±1mm at 5 to 25Hz; 50m/s² 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	
Approvals Certificates		
General Product Approval	other	Environment



[Miscellaneous](#)



[Confirmation](#)



Environment

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SY8450-8BB08>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY8450-8BB08>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY8450-8BB08

CAX-Online-Generator

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

Tender specifications

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





