



Miniature circuit breaker 230 V D=70 mm 25 kA according to EN 60947-2, 1P+N, C2

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	2
design of pole	1P+N
tripping characteristic class	C
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 (U _i)	250 V
<ul style="list-style-type: none"> with single-phase operation at AC rated value 	230 V
supply voltage with single-phase operation at AC rated value	230 V
Supply voltage	
supply voltage	230 V
<ul style="list-style-type: none"> at AC rated value at DC rated value 	60 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
Switching capacity	
switching capacity current	15 kA
<ul style="list-style-type: none"> at DC according to IEC 60947-2 rated value according to IEC 60947-2 rated value 	70 kA
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	1.2 W
Current	
operational current	2 A
<ul style="list-style-type: none"> at 45 °C rated value at 50 °C rated value at 55 °C rated value at AC rated value 	1.95 A
	1.9 A
	2 A
suitability for operation	Mechanical engineering / industry
Product details	
product component	

<ul style="list-style-type: none"> • combined terminal top • combined terminal bottom • neutral conductor switching 	<p>Yes</p> <p>Yes</p> <p>Yes</p>
product feature	
<ul style="list-style-type: none"> • properties for main switches in accordance with EN 60204-1 • halogen-free • sealable • silicon-free 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
product extension installable supplementary devices	Yes

Short circuit

short-circuit current breaking capacity (I _{cn})	
<ul style="list-style-type: none"> • at AC according to UL 1077 and CSA C22.2 No.235 	5 kA

Connections

connectable conductor cross-section solid	
<ul style="list-style-type: none"> • minimum • maximum 	<p>0.75 mm²</p> <p>35 mm²</p>
connectable conductor cross-section stranded	
<ul style="list-style-type: none"> • minimum • maximum 	<p>0.75 mm²</p> <p>35 mm²</p>
connectable conductor cross-section finely stranded with core end processing	
<ul style="list-style-type: none"> • minimum • maximum 	<p>0.75 mm²</p> <p>25 mm²</p>
AWG number as coded connectable conductor cross section	
<ul style="list-style-type: none"> • minimum • maximum 	<p>18</p> <p>4</p>
tightening torque [lbf-in] with screw-type terminals	
<ul style="list-style-type: none"> • minimum • maximum 	<p>22 lbf-in</p> <p>31 lbf-in</p>
tightening torque with screw-type terminals	
<ul style="list-style-type: none"> • minimum • maximum 	<p>2.5 N·m</p> <p>3.5 N·m</p>
position of power supply cord	Any

Mechanical Design

height	90 mm
width	36 mm
depth	76 mm
installation depth	70 mm
number of modular width units	2
fastening method	Quick assembly system
mounting position	any
net weight	326 g

Environmental conditions

influence of the surrounding temperature standard	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60947-2 / UL1077
vibration resistance according to IEC 60068-2-6	±1mm at 5 to 25Hz; 50m/s ² at 25 to 150Hz
ambient temperature during operation	
<ul style="list-style-type: none"> • minimum • maximum 	<p>-25 °C</p> <p>55 °C</p>
ambient temperature during storage	
<ul style="list-style-type: none"> • minimum • maximum 	<p>-40 °C</p> <p>75 °C</p>
number of test cycles for environmental testing according to IEC 60068-2-30	6

General Product Approval

Declaration of Conformity

[Confirmation](#)



[Miscellaneous](#)



[Miscellaneous](#)[Confirmation](#)[Environmental Con-
firmations](#)**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=5SY8502-7>**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**<https://support.industry.siemens.com/cs/ww/en/ps/5SY8502-7>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY8502-7**CAX-Online-Generator**<http://www.siemens.com/cax>**Tender specifications**<http://www.siemens.com/specifications>



