



Miniature circuit breaker 400 V D=70 mm 25 kA according to EN 60947-2, 3P, D10

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	3
design of pole	3P
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
supply voltage with single-phase operation at AC rated value	230 V
Supply voltage	
supply voltage	
• at AC rated value	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
Switching capacity	
switching capacity current	
• at DC according to IEC 60947-2 rated value	15 kA
• according to IEC 60947-2 rated value	40 kA
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	0.9 W
Current	
operational current	
• at 45 °C rated value	10 A
• at 50 °C rated value	9.75 A
• at 55 °C rated value	9.49 A
• at AC rated value	10 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 	Yes Yes No
product feature	
<ul style="list-style-type: none"> properties for main switches in accordance with EN 60204-1 halogen-free sealable silicon-free 	Yes Yes Yes Yes
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 	0.75 mm ² 35 mm ²
connectable conductor cross-section stranded	
<ul style="list-style-type: none"> minimum maximum 	0.75 mm ² 35 mm ²
connectable conductor cross-section finely stranded with core end processing	
<ul style="list-style-type: none"> minimum maximum 	0.75 mm ² 25 mm ²
AWG number as coded connectable conductor cross section	
<ul style="list-style-type: none"> minimum maximum 	18 4
tightening torque [lbf-in] with screw-type terminals	
<ul style="list-style-type: none"> minimum maximum 	22 lbf-in 31 lbf-in
tightening torque with screw-type terminals	
<ul style="list-style-type: none"> minimum maximum 	2.5 N·m 3.5 N·m
position of power supply cord	Any
Mechanical Design	
height	90 mm
width	54 mm
depth	76 mm
installation depth	70 mm
number of modular width units	3
fastening method	Quick assembly system
mounting position	any
net weight	444 g
Environmental conditions	
influence of the surrounding temperature	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
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 	-25 °C 55 °C
ambient temperature during storage	
<ul style="list-style-type: none"> minimum maximum 	-40 °C 75 °C
number of test cycles for environmental testing according to IEC 60068-2-30	6
Certificates	
reference code	
<ul style="list-style-type: none"> according to EN 61346-2 according to IEC 81346-2 	F F
General Product Approval	
Declaration of Conformity	

other

[Environmental Confirmations](#)
[Miscellaneous](#)

Further information

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=5SY8310-8>
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/5SY8310-8>
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY8310-8
CAX-Online-Generator
<http://www.siemens.com/cax>
Tender specifications
<http://www.siemens.com/specifications>




