

Miniature circuit breaker 400 V 6kA, 2-pole, B, 50 A, D=70 mm



Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	2
number of poles / note	2P
tripping characteristic class	B
mechanical service life (switching cycles) / typical	10 000
circuit-breaker / Design	5SY6
overvoltage category	III
degree of pollution	3
Voltage	
insulation voltage	
<ul style="list-style-type: none"> with single-phase operation / at AC / rated value 	440 V
<ul style="list-style-type: none"> with multi-phase operation / at AC / rated value 	440 V
supply voltage / with single-phase operation / at AC / rated value	230 V

Supply voltage	
type of voltage	AC
operational current / at AC / rated value	50 A
<ul style="list-style-type: none"> supply voltage / at AC / rated value 	400 V
operating voltage	
<ul style="list-style-type: none"> at DC / rated value / maximum 	72 V
supply voltage frequency	
<ul style="list-style-type: none"> rated value 	50/60 Hz

Protection class	
protection class IP	IP20, with connected conductors

Switching capacity	
switching capacity current	
<ul style="list-style-type: none"> at DC / acc. to IEC 60947-2 / rated value 	15 kA
<ul style="list-style-type: none"> acc. to EN 60898 / rated value 	6 kA
<ul style="list-style-type: none"> acc. to IEC 60947-2 / 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	4.3 W

Current	
Tripping residual / rated value / derated current / at 40 Cel	47.6 A
suitability for operation	Mechanical engineering / industry

Product details	
product function / neutral conductor switching	No
product feature / touch protection	Yes
product component	
<ul style="list-style-type: none"> combined terminal top 	Yes
<ul style="list-style-type: none"> combined terminal bottom 	Yes
product feature	
<ul style="list-style-type: none"> properties for main switches in accordance with EN 60204-1 	Yes
<ul style="list-style-type: none"> halogen-free 	Yes
<ul style="list-style-type: none"> sealable 	Yes
<ul style="list-style-type: none"> silicon-free 	Yes
product extension / installable / supplementary devices	Yes

Short circuit	
breaking capacity short-circuit current (I _{cn})	
<ul style="list-style-type: none"> at AC / acc. 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	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	351 g

Environmental conditions

influence of the surrounding temperature	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
ambient temperature	
<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 / acc. to IEC 60068-2-30	6

Certificates

reference code

- acc. to DIN EN 61346-2
- acc. to IEC 81346-2

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F

General Product Approval



CCC



IMQ



UR



VDE

CB

CB

[Miscellaneous](#)

General
Product Ap-
proval

Declaration of
Conformity

Test Certific-
ates

Shipping Approval



RCM



EG-Konf.

[Miscellaneous](#)



ABS



BUREAU
VERITAS

Lloyd's
Register

LRS

Shipping Approval



RINA

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=5SY6250-6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY6250-6>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY6250-6

CAX-Online-Generator

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

Tender specifications

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

