



Miniature circuit breaker 400 V 10kA, 3+N-pole, C, 80 A, D=70 mm

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	4
design of pole	3P+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 (Ui)	
• with single-phase operation at AC rated value	440 V
• with multi-phase operation at AC rated value	440 V
operational current	
• at 40 °C rated value	76.84 A
• at 50 °C rated value	73.52 A
• at 55 °C rated value	71.84 A
• at 60 °C rated value	70.08 A
• at AC rated value	80 A
Supply voltage	
supply voltage	
• at AC	400 V
• 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
Breaking Capacity	
switching capacity current	
• at DC according to IEC 60947-2 rated value	15 kA
• according to EN 60898 rated value	10 kA
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	6.7 W
suitability for operation	Infrastructure / Industry
Product details	
product feature touch protection	Yes
product component	

<ul style="list-style-type: none"> combined terminal top combined terminal bottom neutral conductor switching 	Yes Yes Yes
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	72 mm
depth	76 mm
installation depth	70 mm
number of modular width units	4
fastening method	DIN rail
mounting position	any
net weight	664 g
Environmental conditions	
standard	IEC / EN 60898-1, IEC / EN 60947-2
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 	-40 °C 70 °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
Approvals Certificates	
General Product Approval	Test Certificates



EG-Konf.

[Miscellaneous](#)



[Miscellaneous](#)

[Special Test Certificate](#)

other	Railway			Environment	
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[Confirmation](#)

[Miscellaneous](#)

[Special Test Certificate](#)

[Confirmation](#)



[Environmental Confirmations](#)

Environment

[Environmental Confirmations](#)

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=5SY4680-7>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY4680-7>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY4680-7

CAX-Online-Generator

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

Tender specifications

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





