## **SIEMENS**

Data sheet 5SY4180-6



Miniature circuit breaker 230/400 V 10kA, 1-pole, B, 80 A, D=70 mm

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	1
design of pole	1P
tripping characteristic class	В
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)	
<ul> <li>with single-phase operation at AC rated value</li> </ul>	440 V
<ul> <li>with multi-phase operation at AC rated value</li> </ul>	440 V
supply voltage with single-phase operation at AC rated value	230 V
Supply voltage	
supply voltage	
<ul> <li>at AC rated value</li> </ul>	400 V
<ul> <li>at DC rated value</li> </ul>	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	
<ul> <li>at DC according to IEC 60947-2 rated value</li> </ul>	15 kA
<ul> <li>according to EN 60898 rated value</li> </ul>	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	Mechanical engineering / industry
Product details	
product component	
<ul> <li>combined terminal top</li> </ul>	Yes
<ul> <li>combined terminal bottom</li> </ul>	Yes
neutral conductor switching	No
product feature	
<ul> <li>properties for main switches in accordance with EN 60204-1</li> </ul>	Yes

• halogen-free	Yes	
• sealable	Yes	
• silicon-free	Yes	
product extension installable supplementary devices	Yes	
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	18 mm	
depth	76 mm	
installation depth	70 mm	
number of modular width units	1	
fastening method	Quick assembly system	
mounting position	any	
net weight	153 g	
Environmental conditions		
influence of the surrounding temperature	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°	С
standard	IEC / EN 60898-1, IEC / EN 60947-2	
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	55 °C	
ambient temperature during storage		
• minimum	-40 °C	
• maximum	75 °C	
number of test cycles for environmental testing according to IEC 60068-2-30	6	
General Product Approval	Declaration of Conformity	Test Certificates
Confirmation Miscellaneous	· UK cc	Miscellaneous







Test Certificates	other		Railway		Environment
Special Test Certific- ate	Miscellaneous	Confirmation	Confirmation	Vibration and Shock	Environmental Confirmations

## Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

## Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

## 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=5SY4180-6

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

https://support.industry.siemens.com/cs/ww/en/ps/5SY4180-6

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

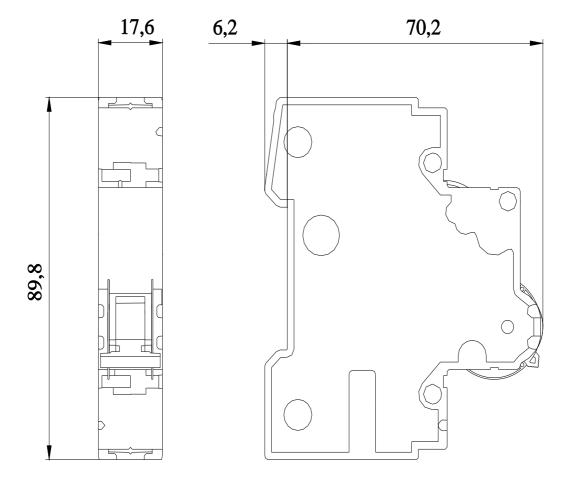
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SY4180-6

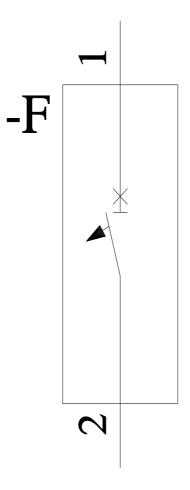
**CAx-Online-Generator** 

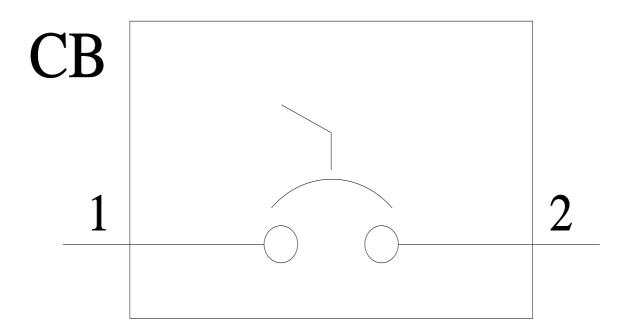
http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications







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