# **SIEMENS**

Data sheet 5SY6306-7



Miniature circuit breaker 400 V 6kA, 3-pole, C, 6 A, D=70 mm

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	Williada Ground Steaker
number of poles	3
design of pole	3P
	C
tripping characteristic class	10 000
mechanical service life (operating cycles) typical	III
overvoltage category	3
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
operational current	
• at 40 °C rated value	5.71 A
• at 50 °C rated value	5.41 A
at 55 °C rated value	5.25 A
at AC rated value	6 A
Supply voltage	
supply voltage	
at AC rated value	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	6 kA
according to IEC 60947-2 rated value	30 kA
energy limitation class	3
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	1.6 W
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
<ul> <li>halogen-free</li> </ul>	Yes
• sealable	Yes
• silicon-free	Yes
product extension installable supplementary devices	Yes
Product function	
set values setting current (li) for I-tripping	8
reference value setting current (II) for I-tripping	x In
Short circuit	X III
short-circuit current breaking capacity (Icn)	51.6
at AC according to UL 1077 and CSA C22.2 No.235	5 kA
Connections	
connectable conductor cross-section solid	
• minimum	0.75 mm <sup>2</sup>
maximum	35 mm²
connectable conductor cross-section stranded	
• minimum	0.75 mm <sup>2</sup>
• maximum	35 mm²
connectable conductor cross-section finely stranded with core	
end processing	0.752
• minimum	0.75 mm <sup>2</sup>
• maximum	25 mm <sup>2</sup>
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	54 mm
depth	76 mm
installation depth	70 mm
·	3
number of modular width units	
fastening method	Quick assembly system
mounting position	any
net weight	453 g
Environmental conditions	
influence of the surrounding temperature	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
standard	IEC / EN 60898-1, IEC / EN 60947-2 / UL1077
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
Environmental footprint	
Environmental Product Declaration(EPD)	Yes
Global Warming Potential [CO2 eq] total	17.7 kg
5.5531 Training Fotonia [002 64] total	

Global Warming Potential [CO2 eq] during manufacturing	1.51 kg
Global Warming Potential [CO2 eq] during operation	16.1 kg
Global Warming Potential [CO2 eq] after end of life	0.0022 kg

#### **Approvals Certificates**

## **General Product Approval**







Confirmation





## **General Product Approval**

EMV



**Miscellaneous** 

<u>KC</u>



**Miscellaneous** 



**Test Certificates** 

Marine / Shipping

**Miscellaneous** 











other

Environment

**Miscellaneous** 

Confirmation

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=5SY6306-7

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

https://support.industry.siemens.com/cs/ww/en/ps/5SY6306-7

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

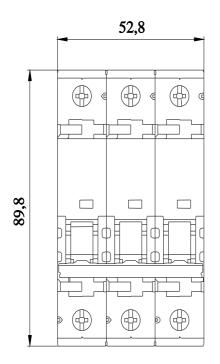
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SY6306-7

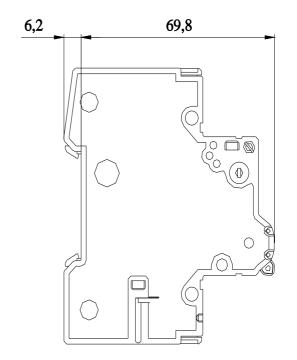
**CAx-Online-Generator** 

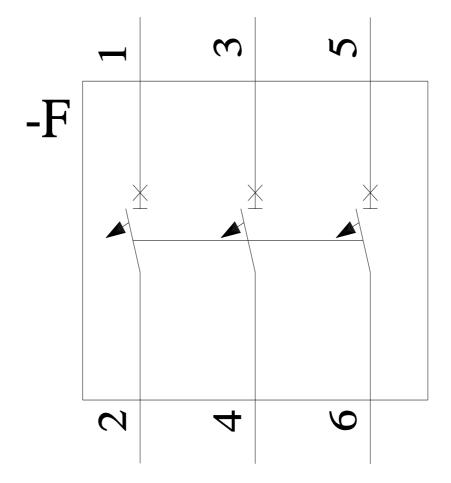
http://www.siemens.com/cax

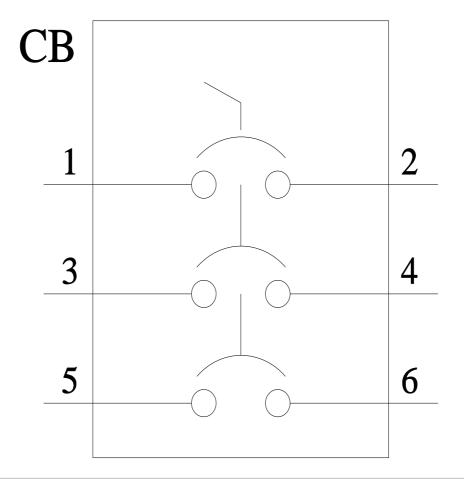
**Tender specifications** 

http://www.siemens.com/specifications









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