## **SIEMENS**

Data sheet 5SY6616-7



Miniature circuit breaker 400 V 6kA, 3+N-pole C, 16A, 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	С
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	
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
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>	6 kA
<ul> <li>according to IEC 60947-2 rated value</li> </ul>	15 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	Yes
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
Product function	165
set values setting current (li) for I-tripping	8
reference value setting current (II) for I-tripping	x In
Short circuit	A
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 mm <sup>2</sup>
connectable conductor cross-section stranded	
• minimum	0.75 mm²
maximum	35 mm <sup>2</sup>
connectable conductor cross-section finely stranded with core	
end processing	
• minimum	0.75 mm <sup>2</sup>
• 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	72 mm
depth	76 mm
installation depth	70 mm
number of modular width units	4
fastening method	Quick assembly system
mounting position	any
net weight	612 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	40.2 kg
Global Warming Potential [CO2 eq] during manufacturing	2.1 kg
Global Warming Potential [CO2 eq] during operation	38.1 kg
global warming potential [CO2 eq] after end of life	-0.048 kg
Approvals Certificates	
Approvals Certificates	
Approvals Certificates  General Product Approval	













**General Product Approval** 

EMC

**Declaration of Conformity** 

**Test Certificates** 



**Miscellaneous** 







Miscellaneous

Marine / Shipping









Confirmation

other

other

Environment

**Miscellaneous** 

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=5SY6616-7

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

https://support.industry.siemens.com/cs/ww/en/ps/5SY6616-7

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

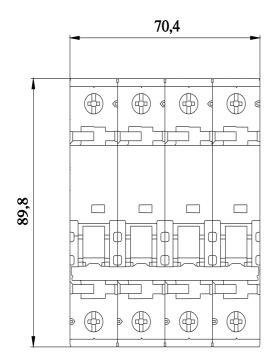
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SY6616-7

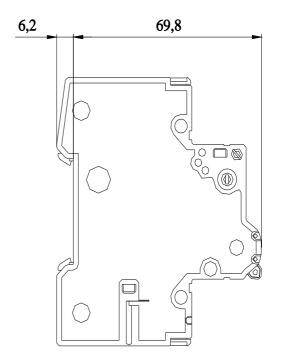
**CAx-Online-Generator** 

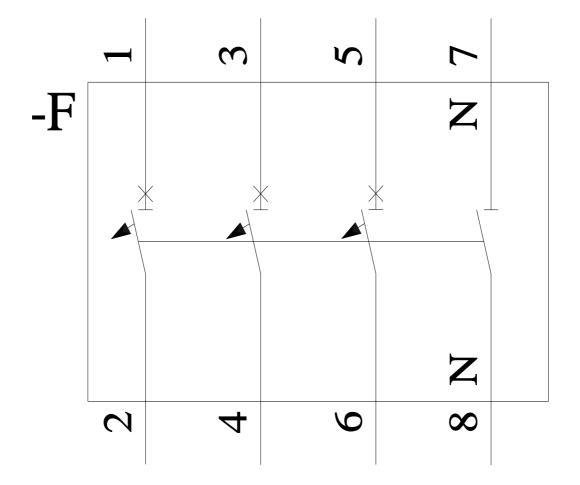
http://www.siemens.com/cax

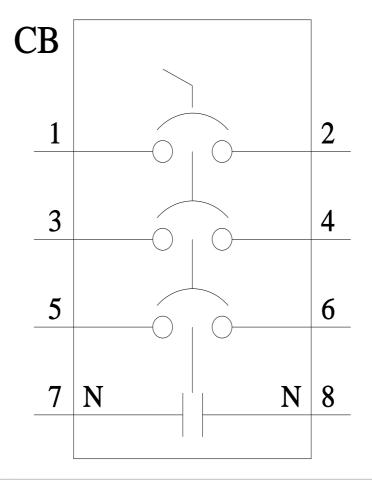
Tender specifications

http://www.siemens.com/specifications









last modified: 11/3/2023 🖸