## SIEMENS

## Data sheet

## 5SY6416-7



Miniature circuit breaker 400 V 6kA, 4-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	4P					
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 with single-phase operation at AC rated value	230 V					
operational current						
• at 40 °C rated value	15.23 A					
• at 50 °C rated value	14.43 A					
<ul> <li>at 55 °C rated value</li> </ul>	14 A					
<ul> <li>at AC rated value</li> </ul>	16 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						
<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						

combined terminal top	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 (li) for I-tripping	x In
Short circuit	
short-circuit current breaking capacity (Icn)	
<ul> <li>at AC according to UL 1077 and CSA C22.2 No.235</li> </ul>	5 kA
Connections	
connectable conductor cross-section solid	
• minimum	0.75 mm²
• 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	
• minimum	0.75 mm²
• 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	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	629 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
Approvals Certificates	
General Product Approval	

	CE EG-Konf.	UK CA	<u>Confirmation</u>		<b>FN</b> UR
General Product App	proval				EMV
VDE	<u>Miscellaneous</u>	KC	EHC	<u>Miscellaneous</u>	RCM
Test Certificates	Marine / Shipping				
Miscellaneous	ABS	BUREAU		Hoyds Register uis	RINA
other		Environment			
<b>Confirmation</b>	<b>Miscellaneous</b>	Environmental Con- firmations			

## 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=5SY6416-7

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

https://support.industry.siemens.com/cs/ww/en/ps/5SY6416-7

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

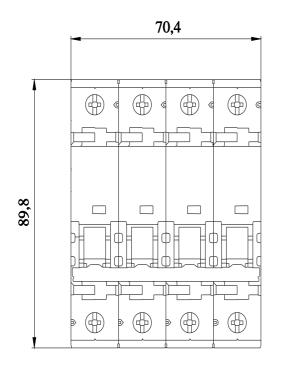
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SY6416-7

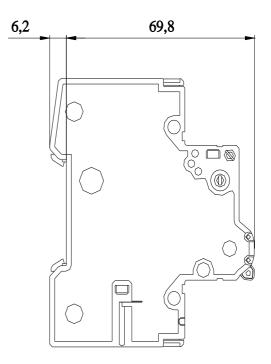
CAx-Online-Generator

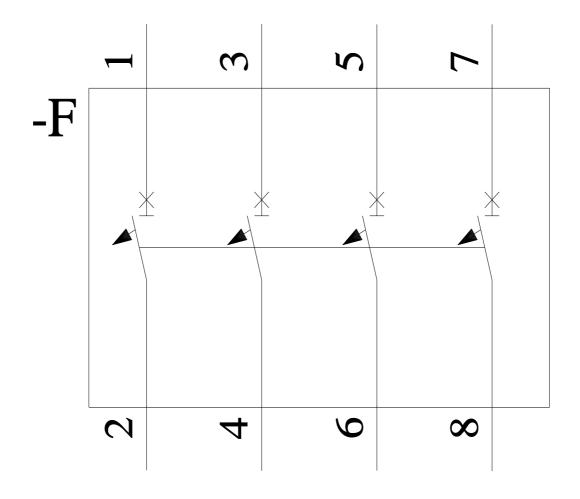
http://www.siemens.com/cax

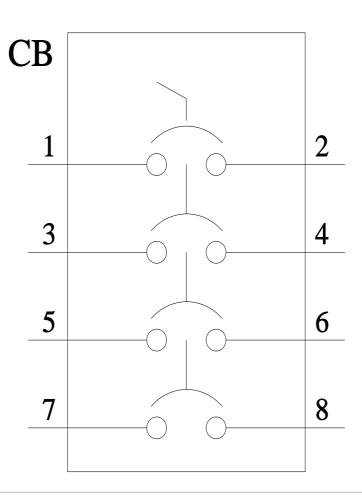
**Tender specifications** 

http://www.siemens.com/specifications









last modified:

8/25/2023 🖸