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)		
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	
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		
 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	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	
suitability for operation	Mechanical engineering / industry	
Product details		
product component		
combined terminal top	Yes	
combined terminal bottom	Yes	
neutral conductor switching	No	
product feature		

properties for main switches in accordance with EN	Yes
60204-1	103
halogen-free	Yes
• sealable	Yes
• silicon-free	Yes
product extension installable supplementary devices	Yes
Product function	
set values setting current (Ii) for I-tripping	8
reference value setting current (Ii) for I-tripping	x In
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 mm ²
• maximum	35 mm²
connectable conductor cross-section stranded	
• minimum	0.75 mm ²
maximum	35 mm²
connectable conductor cross-section finely stranded with core end processing	
• minimum	0.75 mm ²
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	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	07.10
• minimum	-25 °C
maximum ambient temperature during storage	55 °C
ambient temperature during storage	40 °C
• minimum	-40 °C
maximum number of test cycles for environmental testing according to IEC.	75 °C
number of test cycles for environmental testing according to IEC 60068-2-30	O Company of the Comp
Approvals Certificates	
General Product Approval	



Confirmation







Miscellaneous



EMC

Declaration of Conformity

<u>KC</u>



Miscellaneous







Test Certificates

Marine / Shipping

Miscellaneous











other

Environment

Confirmation

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=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

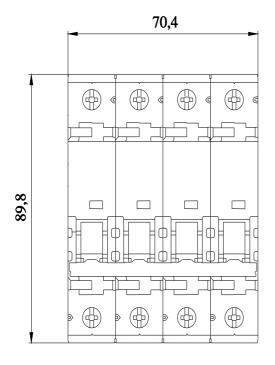
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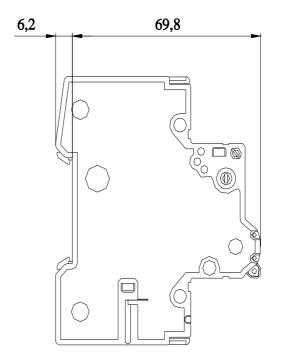
http://www.siemens.com/cax

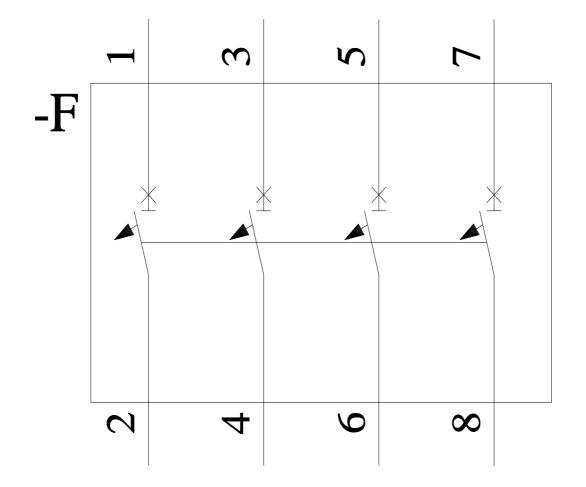
Tender specifications

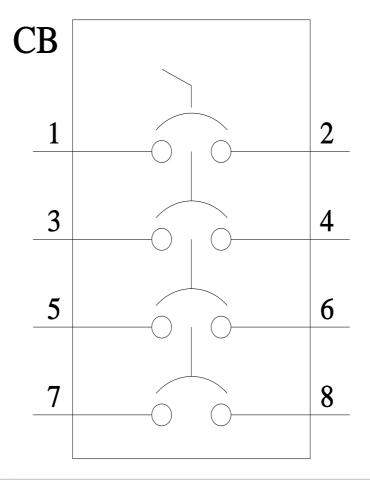
http://www.siemens.com/specifications











last modified: 8/25/2023 🖸

