SIEMENS

Data sheet

5SY6416-7



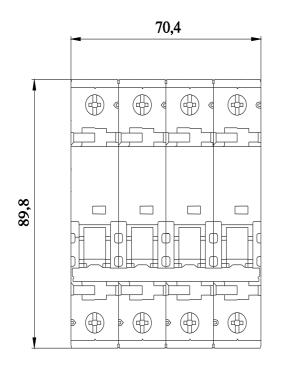
Miniature circuit breaker 400 V 6kA, 4-pole, C, 16A, D=70 mm

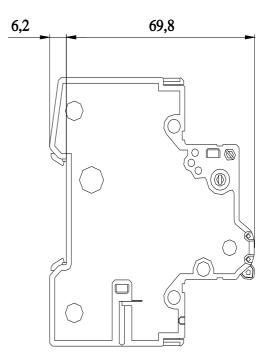
Model					
product brand name	SENTRON				
product designation	Miniature circuit breaker				
General technical data					
number of poles	4				
design of pole	4P				
tripping characteristic class	С				
mechanical service life (operating cycles) typical	10 000				
overvoltage category					
degree of pollution	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				

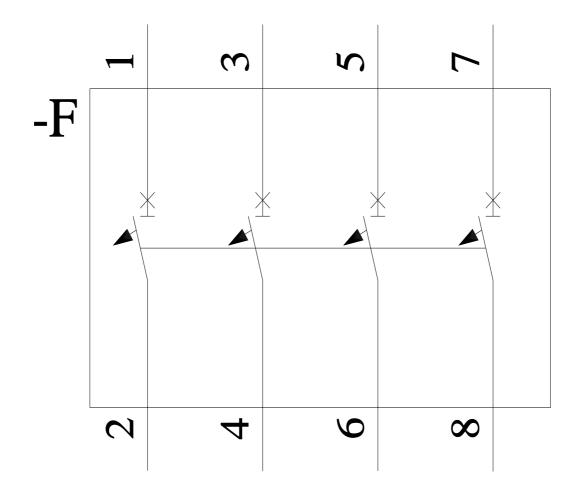
product feature	
properties for main switches in accordance with EN	Yes
60204-1	
 halogen-free 	Yes
• sealable	Yes
• silicon-free	Yes
product extension installable supplementary devices	Yes
Short circuit	
short-circuit current breaking capacity (Icn)	
 at AC according to UL 1077 and CSA C22.2 No.235 	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 mm ²
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	
	10
 minimum maximum 	18 4
	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
	T
fastening method	Quick assembly system any
	Quick assembly system
fastening method mounting position net weight	Quick assembly system any
fastening method mounting position net weight Environmental conditions	Quick assembly system any 629 g
fastening method mounting position net weight Environmental conditions influence of the surrounding temperature	Quick assembly system any 629 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard	Quick assembly system any 629 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60898-1, IEC / EN 60947-2 / UL1077
fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6	Quick assembly system any 629 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard	Quick assembly system any 629 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60898-1, IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s ² at 25 to 150Hz
fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation	Quick assembly system any 629 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60898-1, IEC / EN 60947-2 / UL1077
fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum	Quick assembly system any 629 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60898-1, IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s ² at 25 to 150Hz -25 °C
fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum	Quick assembly system any 629 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60898-1, IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s ² at 25 to 150Hz -25 °C
fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum ambient temperature during storage	Quick assembly system any 629 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60898-1, IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s ² at 25 to 150Hz -25 °C 55 °C
fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum	Quick assembly system any 629 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60898-1, IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz -25 °C 55 °C -40 °C
fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation minimum maximum ambient temperature during storage minimum maximum maximum	Quick assembly system any 629 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60898-1, IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz -25 °C 55 °C -40 °C 75 °C
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fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • maximum number of test cycles for environmental testing according to IEC 60068-2-30 General Product Approval	Quick assembly system any 629 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60898-1, IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz -25 °C 55 °C -40 °C 75 °C 6
fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • maximum • maximum number of test cycles for environmental testing according to IEC 60068-2-30	Quick assembly system any 629 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60898-1, IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz -25 °C 55 °C -40 °C 75 °C
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fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum number of test cycles for environmental testing according to IEC 60068-2-30 General Product Approval Confirmation	Quick assembly system any 629 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60898-1, IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz -25 °C 55 °C -40 °C 75 °C 6
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<u>KC</u>	EHC	<u>Miscellaneous</u>	RCM	CE EG-Konf.	UK CA	
Test Certificates	Marine / Shipping					
<u>Miscellaneous</u>	ABS	BUREAU VERITAS	Lloyds Register us	RINA	DNV-GL	
other		Environment				
<u>Confirmation</u>	<u>Miscellaneous</u>	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						

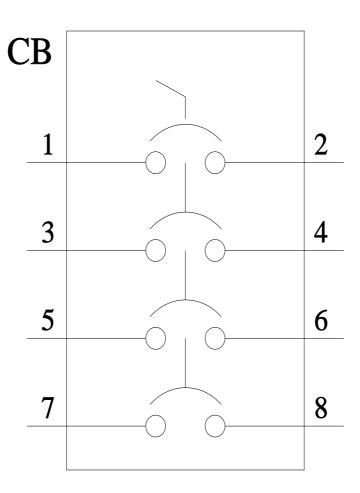
Tender specifications http://www.siemens.com/specifications







4/10/2023



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