SIEMENS

Data sheet 5SY4450-7

Miniature circuit breaker 400 V 10kA, 4-pole, C, 50 A, D=70 mm



Model	
Product brand name	SENTRON
Product designation	Miniature circuit breaker
General technical data	
Number of poles	4
Number of poles / Note	4P
Tripping characteristic class	C
circuit-breaker / Design	5SY4
Mechanical service life (switching cycles) / typical	10 000
Overvoltage category	III
Voltage	
Insulation voltage	
• with single-phase operation / at AC / rated value	440 V
• with multi-phase operation / at AC / rated value	440 V
Supply voltage	
Type of voltage	AC
Current / at AC / rated value	50 A

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Supply voltage	
• at AC / rated value	400 V
Supply voltage frequency / rated value	50/60 Hz

Protection class

Protection class IP	IP20, with connected conductors

Switching capacity

Switching capacity current	
• at DC / acc. to IEC 60947-2 / rated value	15 kA
• acc. to EN 60898 / rated value	10 kA
• acc. to IEC 60947-2 / rated value	15 kA
Energy limiting class	3

Dissipation

Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	3.8 W

Electricity

Tripping residual / rated value / derated current / at 40 Cel	48 A
Suitability for operation	Mechanical engineering / industry

Product details

Product function / neutral conductor switching	No
Product feature / Touch protection	Yes
Product component	
• combined terminal top	Yes
• combined terminal bottom	Yes
Product feature	
• Properties for main switches in accordance with EN 60204-1	Yes
• halogen-free	Yes
• sealable	Yes
• silicon-free	Yes
Product extension / can be installed / supplementary devices	Yes

Short circuit

Breaking capacity short-circuit current (Icn)	
• at AC / acc. to UL 1077 and CSA C22.2 No.235	5 kA

Connections

• Connectable conductor cross-section	
— stranded	0.75 ... 35 mm²
	0.75 ... 35 mm²

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• Connectable conductor cross-section / finely stranded / with core end processing	0.75 ... 25 mm²
AWG number / as coded connectable conductor cross section	18 ... 4
Tightening torque [lbf·in] / with screw-type terminals	22 ... 31 lbf·in
Tightening torque / with screw-type terminals	2.5 ... 3 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 width units	4
Mounting type	Quick assembly system
Mounting position	any
Net weight	644 g

Environmental conditions

Ambient temperature	
	-40 ... +70 °C
	-40 ... +75 °C

Certificates

Reference code	
• acc. to DIN EN 61346-2	F
• acc. to DIN EN 81346-2	F

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General Product Approval					
CCC	IMQ	UR	VDE	RCM	Miscellaneous

General Product Approval	Declaration of Conformity	Test Certificates		Shipping Approval	
KC	EG-Konf.	Miscellaneous	Special Test Certificate	ABS	BUREAU VERITAS

Shipping Approval		Railway	
LRS	RINA	Confirmation	Vibration and Shock

Further information

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=5SY4450-7

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/5SY4450-7

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY4450-7

CAx-Online-Generator
http://www.siemens.com/cax

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

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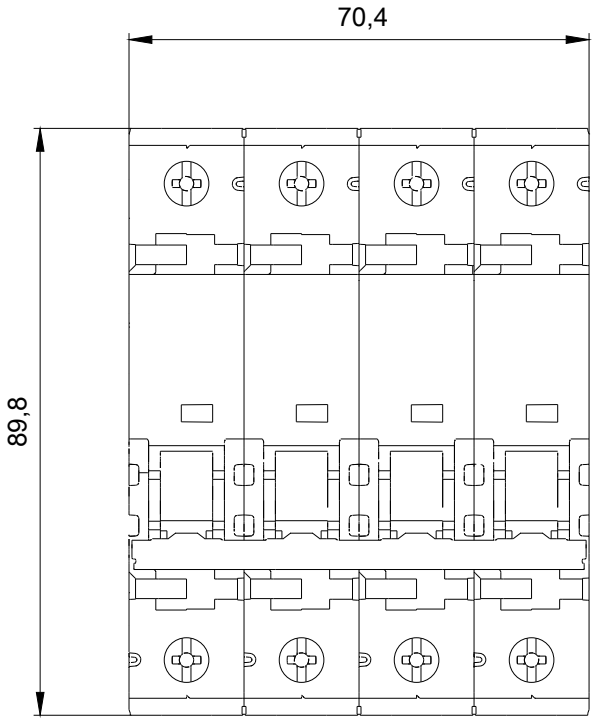

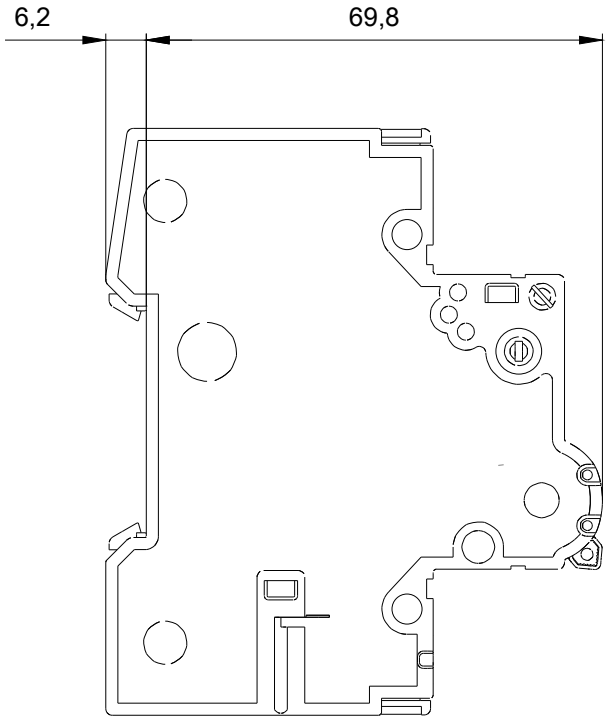

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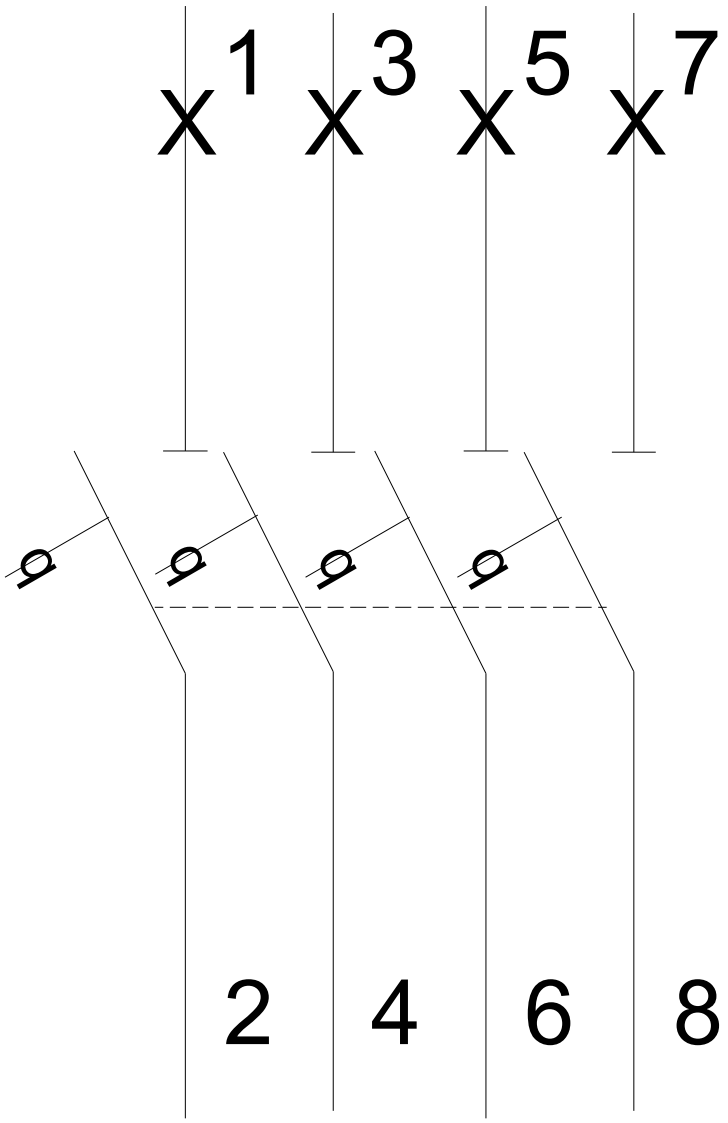

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