SIEMENS

Data sheet 5SY5102-7



Circuit breaker Universal current 220 V DC 230/400 V AC 10kA, 1-pole, C, 2A

Model		
product brand name	SENTRON	
product designation	Miniature circuit breaker	
General technical data		
number of poles	1	
design of pole	1P	
tripping characteristic class	C	
mechanical service life (switching cycles) typical	10 000	
overvoltage category	III	
degree of pollution	3	
Voltage		
type of voltage of the operating voltage	AC/DC	
insulation voltage (Ui)		
 at DC rated value 	250 V	
 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 	220 V	
value range of the supply voltage frequency	50/60 Hz	
operating voltage at DC rated value maximum	250 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 	10 kA	
energy limitation class	3	
Dissipation		
power loss [W] for rated value of the current at AC in hot operating state per pole	1.2 W	
Current		
operational current		
 at 35 °C rated value 	2 A	
 at 40 °C rated value 	1.9 A	
 at 45 °C rated value 	1.85 A	
 at 50 °C rated value 	1.8 A	

-t-FF 90t-d-v-lv-	4.75 A
• at 55 °C rated value	1.75 A
at 60 °C rated value at 60 rated value	1.7 A 2 A
 at AC rated value suitability for operation 	universal current
Product details	universal current
product component	Voc
 combined terminal top combined terminal bottom 	Yes Yes
neutral conductor switching	No
product feature	NO
product readure properties for main switches in accordance with EN	Yes
60204-1	166
 halogen-free 	Yes
• sealable	Yes
• silicon-free	Yes
product extension installable supplementary devices	Yes
Short circuit	
breaking capacity short-circuit current (Icn)	
 at DC according to EN 60898-2 	10 kA
Connections	
connectable conductor cross-section solid	
• minimum	0.75 mm ²
maximum	35 mm ²
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	40
• minimum	18
maximum tightoning torque [lbf in] with corour type tormingle.	4
tightening torque [lbf·in] with screw-type terminals • minimum	22 lbf·in
• maximum	31 lbf·in
tightening torque with screw-type terminals	ווו ועו ועו
• minimum	2.5 N·m
maximum	3.5 N·m
position of power supply cord	AC as required, observe DC polarity
Mechanical Design	The do roquired, essente se polarity
	90 mm
height	18 mm
width depth	76 mm
installation depth	70 mm
number of modular width units	1
fastening method	Quick assembly system
mounting position	any
net weight	173 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 60898-2, UL1077
vibration resistance according to IEC 60068-2-6	±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz
ambient temperature during operation	THIRD ALO TO ZOLIZ, OUTING ALZO TO TOULZ
minimum	-40 °C
maximum	70 °C
ambient temperature during storage	
minimum	-40 °C
• maximum	75 °C
number of test cycles for environmental testing according	6
to IEC 60068-2-30	
Certificates	

reference code

• according to EN 61346-2

• according to IEC 81346-2

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General Product Approval

Confirmation







Miscellaneous



General Product Approval

Declaration of Conformity

Test Certificates

Marine / Shipping

Miscellaneous





Special Test Certific-<u>ate</u>

Miscellaneous



other

Railway

Dangerous Good

Environmental Confirmations

Miscellaneous

Vibration and Shock

Confirmation

Transport Informa-<u>tion</u>

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=5SY5102-7

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

https://support.industry.siemens.com/cs/ww/en/ps/5SY5102-7

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

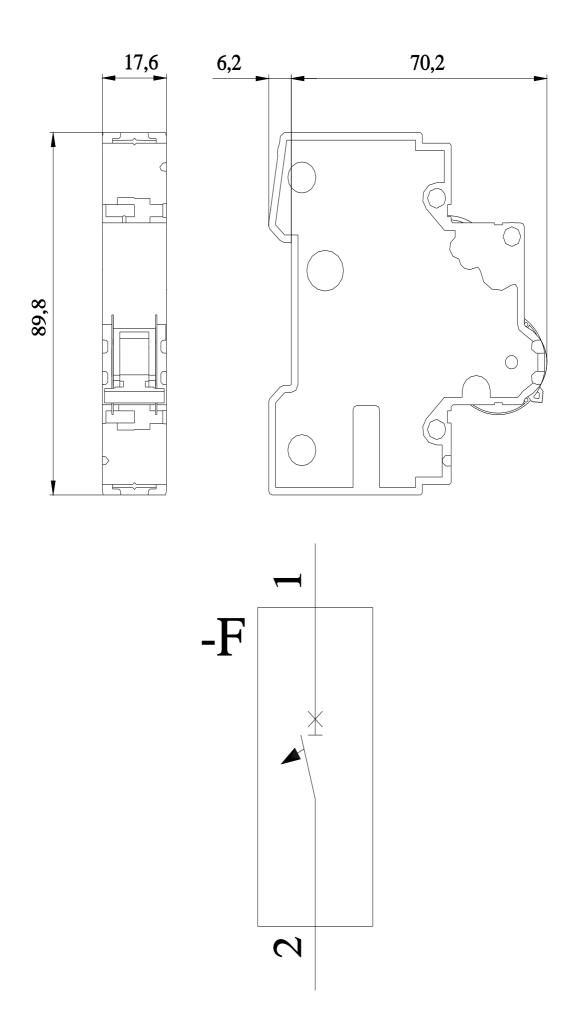
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY5102-7

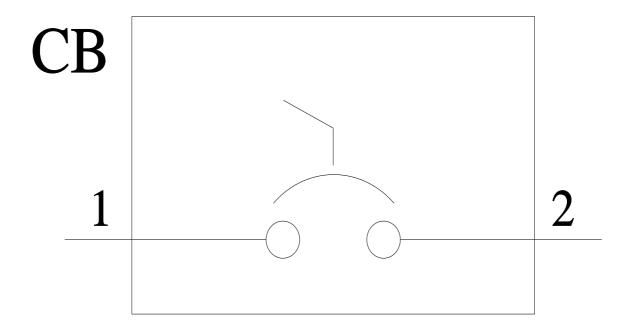
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications





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