SIEMENS

Data sheet 5SY4106-7



Miniature circuit breaker 230/400 V 10kA, 1-pole, C, 6 A, D=70 mm

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	1
design of pole	1P
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 	10 kA
 according to IEC 60947-2 rated value 	35 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
 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
Product function	
set values setting current (li) for I-tripping	8
reference value setting current (Ii) for I-tripping	x ln
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 mm ²
connectable conductor cross-section stranded	
• minimum	0.75 mm ²
• 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	
• 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	
Mechanical Design height	90 mm
Mechanical Design height width	90 mm 18 mm
Mechanical Design height width depth	90 mm 18 mm 76 mm
Mechanical Design height width depth installation depth	90 mm 18 mm 76 mm 70 mm
Mechanical Design height width depth installation depth number of modular width units	90 mm 18 mm 76 mm 70 mm
Mechanical Design height width depth installation depth number of modular width units fastening method	90 mm 18 mm 76 mm 70 mm 1
Mechanical Design height width depth installation depth number of modular width units fastening method mounting position	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any
Mechanical Design height width depth installation depth number of modular width units fastening method mounting position net weight	90 mm 18 mm 76 mm 70 mm 1
Mechanical Design height width depth installation depth number of modular width units fastening method mounting position net weight Environmental conditions	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any 158 g
Mechanical Design height width depth installation depth number of modular width units fastening method mounting position net weight Environmental conditions influence of the surrounding temperature	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any 158 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
Mechanical Design height width depth installation depth number of modular width units fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any 158 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
Mechanical Design height width depth installation depth number of modular width units fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any 158 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
height width depth installation depth number of modular width units 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	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any 158 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
height width depth installation depth number of modular width units 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	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any 158 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 -40 °C
height width depth installation depth number of modular width units 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	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any 158 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
height width depth installation depth number of modular width units 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	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any 158 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 -40 °C 70 °C
Mechanical Design height width depth installation depth number of modular width units 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	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any 158 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 -40 °C 70 °C
height width depth installation depth number of modular width units 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	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any 158 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 -40 °C 70 °C -40 °C 75 °C
height width depth installation depth number of modular width units 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	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any 158 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 -40 °C 70 °C
height width depth installation depth number of modular width units 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 Environmental footprint	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any 158 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 -40 °C 70 °C -40 °C 75 °C 6
height width depth installation depth number of modular width units 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 Environmental Product Declaration(EPD)	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any 158 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 -40 °C 70 °C -40 °C 75 °C 6
height width depth installation depth number of modular width units 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 Environmental Product Declaration(EPD) Global Warming Potential [CO2 eq] total	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any 158 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 -40 °C 70 °C -40 °C 75 °C 6
height width depth installation depth number of modular width units 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 Environmental footprint Environmental Product Declaration(EPD) Global Warming Potential [CO2 eq] total Global Warming Potential [CO2 eq] during manufacturing	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any 158 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 -40 °C 70 °C -40 °C 75 °C 6
height width depth installation depth number of modular width units 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 Environmental footprint Environmental Product Declaration(EPD) Global Warming Potential [CO2 eq] during manufacturing Global Warming Potential [CO2 eq] during operation	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any 158 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 -40 °C 70 °C -40 °C 75 °C 6 Yes 13.3 kg 0.713 kg 12.7 kg
height width depth installation depth number of modular width units 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 Environmental footprint Environmental Product Declaration(EPD) Global Warming Potential [CO2 eq] total Global Warming Potential [CO2 eq] during manufacturing	90 mm 18 mm 76 mm 70 mm 1 Quick assembly system any 158 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 -40 °C 70 °C -40 °C 75 °C 6









<u>Miscellaneous</u>

General Product Approval

EMC

Declaration of Conformity

<u>KC</u>



Miscellaneous







Test Certificates

Marine / Shipping

Special Test Certificate

Miscellaneous









Marine / Shipping

other

Railway

Environment



Miscellaneous

Confirmation

Confirmation

Vibration and Shock

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=5SY4106-7

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

https://support.industry.siemens.com/cs/ww/en/ps/5SY4106-7

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

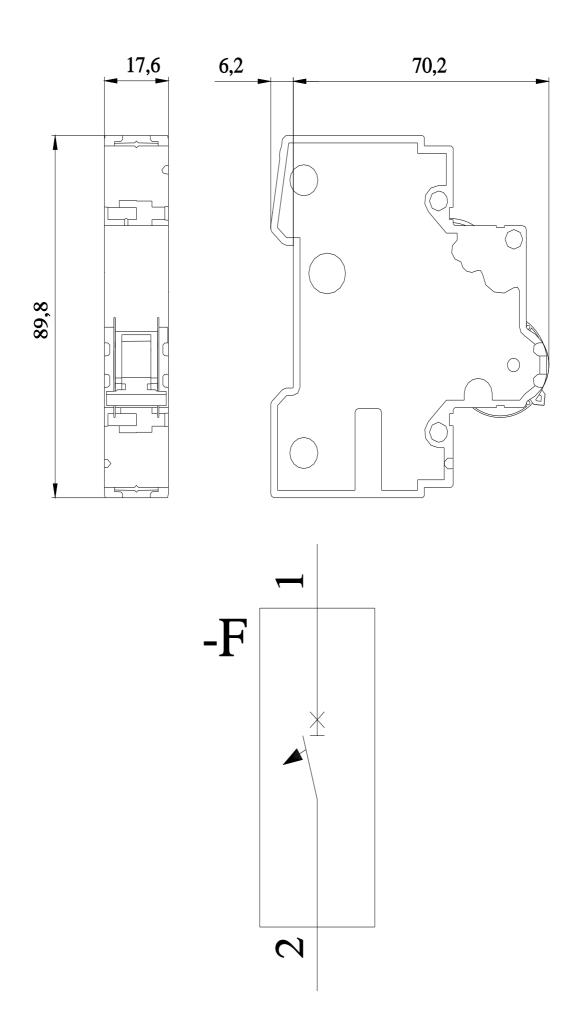
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY4106-7

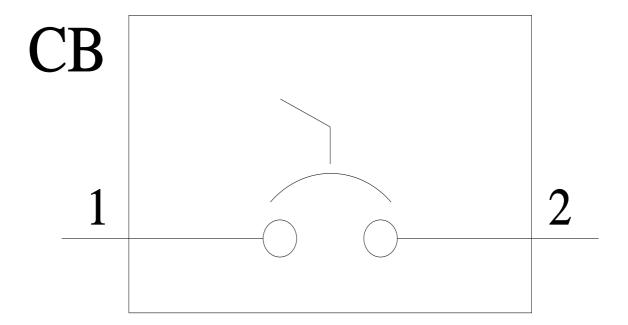
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications





last modified: 11/3/2023 🖸