SIEMENS

Data sheet 5SY4380-7



Miniature circuit breaker 400 V 10kA, 3-pole, C, 80 A, D=70 mm

Model			
product brand name	SENTRON		
product designation	Miniature circuit breaker		
General technical data			
number of poles	3		
design of pole	3P		
tripping characteristic class	C		
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		
operational current			
• at 40 °C rated value	76.8 A		
 at 50 °C rated value 	73.52 A		
• at 55 °C rated value	71.84 A		
 at 60 °C rated value 	70.08 A		
at AC rated value	80 A		
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		
Breaking Capacity			
switching capacity current			
 at DC according to IEC 60947-2 rated value 	15 kA		
 according to EN 60898 rated value 	10 kA		
Dissipation			
power loss [W] for rated value of the current at AC in hot operating state per pole	6.7 W		
Product details			
product component			
 combined terminal top 	Yes		
combined terminal bottom	Yes		

- no vitral condicator ovitables	No	
neutral conductor switching product feature	No	
product reature properties for main switches in accordance with EN 60204-1	Yes	
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	0.0.	
connectable conductor cross-section solid		
minimum	0.75 mm²	
maximum	35 mm ²	
connectable conductor cross-section stranded	00 11111	
minimum	0.75 mm²	
• maximum	35 mm ²	
connectable conductor cross-section finely stranded with core	66 11111	
end processing		
• minimum	0.75 mm²	
• 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	54 mm	
depth	76 mm	
installation depth	70 mm	
number of modular width units	3	
fastening method	Quick assembly system	
mounting position	any	
net weight	480 g	
Environmental conditions		
influence of the surrounding temperature	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C	C
standard	IEC / EN 60898-1, IEC / EN 60947-2	
vibration resistance according to IEC 60068-2-6	±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz	
ambient temperature during operation		
• minimum	-40 °C	
• maximum	70 °C	
ambient temperature during storage		
• minimum	-40 °C	
• maximum	75 °C	
number of test cycles for environmental testing according to IEC 60068-2-30	6	
Environmental footprint		
Environmental Product Declaration(EPD)	Yes	
Global Warming Potential [CO2 eq] total	25 kg	
Global Warming Potential [CO2 eq] during manufacturing	1.53 kg	
Global Warming Potential [CO2 eq] during operation	23.5 kg	
Global Warming Potential [CO2 eq] after end of life	0.026 kg	
Approvals Certificates		
General Product Approval		Test Certificates





Confirmation

Miscellaneous



Special Test Certificate

Test Certificates	other		Railway	Environment	
<u>Miscellaneous</u>	<u>Miscellaneous</u>	Confirmation	Confirmation	Environmental Con- firmations	EPD Typ II/III (with life cylce assessment)

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=5SY4380-7

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

https://support.industry.siemens.com/cs/ww/en/ps/5SY4380-7

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

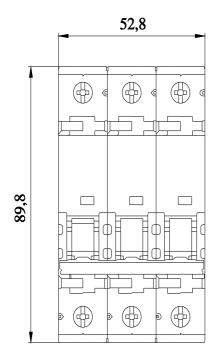
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY4380-7

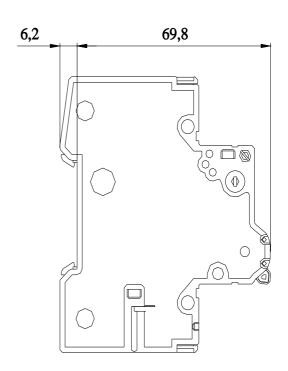
CAx-Online-Generator

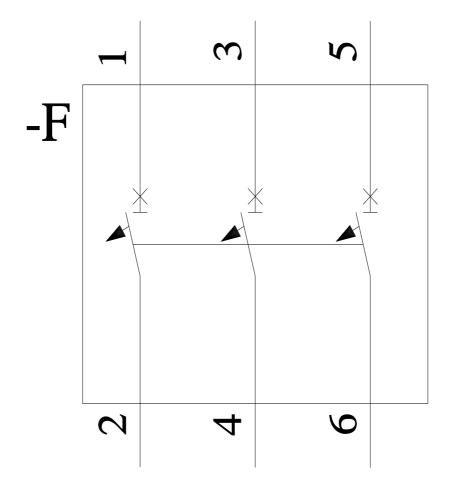
http://www.siemens.com/cax

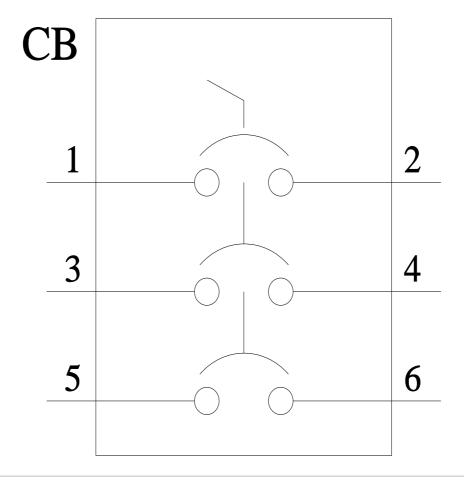
Tender specifications

http://www.siemens.com/specifications









last modified: 11/3/2023 🖸