## **SIEMENS**

Data sheet 5SY4525-7



Miniature circuit breaker 230 V 10kA, 1+N-pole, C, 25A, D=70 mm

Model		
product brand name	SENTRON	
product designation	Miniature circuit breaker	
General technical data		
number of poles	2	
design of pole	1P+N	
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)		
<ul> <li>with single-phase operation at AC rated value</li> </ul>	250 V	
supply voltage with single-phase operation at AC rated value	230 V	
Supply voltage		
supply voltage		
<ul> <li>at AC rated value</li> </ul>	230 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		
<ul> <li>at DC according to IEC 60947-2 rated value</li> </ul>	15 kA	
<ul> <li>according to EN 60898 rated value</li> </ul>	10 kA	
<ul> <li>according to IEC 60947-2 rated value</li> </ul>	20 kA	
energy limitation class	3	
Dissipation		
power loss [W] for rated value of the current at AC in hot operating state per pole	2.2 W	
Current		
operational current		
<ul> <li>at 35 °C rated value</li> </ul>	25 A	
<ul> <li>at 40 °C rated value</li> </ul>	23.8 A	
<ul> <li>at 45 °C rated value</li> </ul>	23.18 A	
<ul> <li>at 50 °C rated value</li> </ul>	22.55 A	
• at 55 °C rated value	21.88 A	
• at 60 °C rated value	21.2 A	

at AC rated value	25 A
suitability for operation	Mechanical engineering / industry
Product details	
product component	
combined terminal top	Yes
combined terminal bottom	Yes
neutral conductor switching	Yes
product feature	
<ul> <li>properties for main switches in accordance with EN 60204-1</li> </ul>	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	
connectable conductor cross-section solid	
minimum	0.75 mm²
maximum	35 mm <sup>2</sup>
connectable conductor cross-section stranded	
• minimum	0.75 mm²
maximum	35 mm²
connectable conductor cross-section finely stranded with core end processing	
• minimum	0.75 mm <sup>2</sup>
• 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	36 mm
depth	76 mm
installation depth	70 mm
number of modular width units	2
fastening method	Quick assembly system
mounting position	any
net weight	317 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 60898-1, IEC / EN 60947-2 / UL1077
vibration resistance according to IEC 60068-2-6	±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz
ambient temperature during operation	
• minimum	-40 °C
• maximum	70 °C
ambient temperature during storage	40.00
• minimum	-40 °C
maximum  number of test evalue for any ironmental testing according.	75 °C
number of test cycles for environmental testing according to IEC 60068-2-30	6
Certificates	
reference code	
according to EN 61346-2	F
# according to LIN 0 1340-2	

## **General Product Approval**



Confirmation







**Miscellaneous** 

General Product Approval

EMC

**Declaration of Conformity** 

**Test Certificates** 









**Miscellaneous** 

Special Test Certificate

Marine / Shipping











**Miscellaneous** 

other

other

Railway

Environmental Confirmations

Vibration and Shock

Confirmation

## **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=5SY4525-7

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

https://support.industry.siemens.com/cs/ww/en/ps/5SY4525-7

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SY4525-7

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications







