

Miniature circuit breaker 230/400 V 15kA, 1-pole, C, 20A



Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	1
number of poles / note	1P
tripping characteristic class	C
mechanical service life (switching cycles) / typical	10 000
circuit-breaker / Design	5SY7CC
overvoltage category	III
degree of pollution	3
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 / with single-phase operation / at AC / rated value	230 V

Supply voltage	
type of voltage	AC
operational current / at AC / rated value	20 A
• supply voltage / at AC / rated value	400 V
operating voltage	
• at DC / rated value / maximum	72 V
supply voltage frequency	
• rated value	50/60 Hz
Protection class	
protection class IP	IP20, with connected conductors
Switching capacity	
switching capacity current	
• acc. to IEC 60947-2 / rated value	25 kA
Dissipation	
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	1.7 W
Current	
Tripping residual / rated value / derated current / at 40 Cel	17.78 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	No
• halogen-free	Yes
• sealable	Yes
• silicon-free	Yes
product extension / installable / supplementary devices	Yes
Short circuit	
breaking capacity short-circuit current (I _{cn})	
• at AC / acc. to UL 1077 and CSA C22.2 No.235	5 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 mm ²
connectable conductor cross-section / finely stranded / with core end processing	
• minimum	0.75 mm ²
• maximum	25 mm ²
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	18 mm
depth	76 mm
installation depth	70 mm
number of modular width units	1
fastening method	Quick assembly system
mounting position	any
net weight	165 g

Environmental conditions

influence of the surrounding temperature	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
vibration resistance / acc. to IEC 60068-2-6	±1mm at 5 to 25Hz; 50m/s ² at 25 to 150Hz
ambient temperature	
• minimum	-25 °C
• maximum	55 °C
ambient temperature / during storage	
• minimum	-40 °C
• maximum	75 °C
number of test cycles / for environmental testing / acc. to IEC 60068-2-30	28

Certificates

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

General Product Approval	Declaration of Con- formity	Railway
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[Miscellaneous](#)



[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=5SY7120-7CC>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY7120-7CC>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY7120-7CC

CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>



