

CIRCUIT BREAKER 230/400V 4.5KA, 1-POLE, C, 20A,
D=70MM

Model		
product brand name		SENTRON
Product designation		5SY miniature circuit breaker
Design of the product		5SY miniature circuit breakers
General technical data		
Number of poles		1
Number of poles / Note		1P
Tripping characteristic class		C
circuit-breaker / Design		5SY3
Mechanical service life (switching cycles) / typical		20 000
Overvoltage category		3
Voltage		
Type of voltage		AC/DC
Insulation voltage		
• with single-phase operation / at AC / rated value	V	250
• with multi-phase operation / at AC / rated value	V	440
Supply voltage		
Supply voltage / at AC / rated value	V	400
Protection class		
Protection class IP		IP20, with connected conductors
Energy limiting class		3
Switching capacity		
Switching capacity current		
• at DC / acc. to IEC 60947-2 / rated value	kA	15
• acc. to EN 60898 / rated value	kA	4.5
• acc. to IEC 60947-2 / rated value	kA	15
Dissipation		
Power loss [W]		
• for rated value of the current / at AC / in hot operating state / per pole	W	1.7
• maximum	W	1.7
Electricity		

Current / at AC / rated value	A	20
Product details		
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		Yes
• halogen-free		Yes
• sealable		Yes
• silicon-free		Yes
Product extension / can be installed / supplementary devices		Yes
Product function		
Product function / neutral conductor switching		No
Short circuit		
Breaking capacity short-circuit current (I_{cn})		
• at AC / acc. to UL 1077 and CSA C22.2 No.235	kA	5
• at DC / acc. to EN 60898-2	kA	10
Number		
Number of test cycles / for environmental testing / acc. to IEC 60068-2-30		6
Connections		
Connectable conductor cross-section / stranded		
• minimum	mm ²	0.75
• maximum	mm ²	35
Connectable conductor cross-section		
• solid		
— minimum	mm ²	0.75
— maximum	mm ²	35
• finely stranded / with core end processing		
— minimum	mm ²	0.75
— maximum	mm ²	25
AWG number / as coded connectable conductor cross section		
• minimum		14
• maximum		4
Tightening torque [lbf·in] / with screw-type terminals		
• minimum	lbf·in	22
• maximum	lbf·in	26

Tightening torque / with screw-type terminals		
	• minimum	N·m 2.5
	• maximum	N·m 3
Position / of power supply cord		Any

Mechanical Design

Mounting position		any
Installation depth	mm	70
Number of width units		1
Mounting type		Quick assembly system
Net weight	g	163

Environmental conditions

Influence of the surrounding temperature		Max. 95% humidity
Shock resistance / acc. to IEC 60068-2-27		150m/s ² at 11ms half-sine
Vibration resistance / acc. to IEC 60068-2-6		50m/s ² at 25 to 150Hz and 60m/s ² at 35Hz (4sec)
Ambient temperature		
• minimum	°C	-25
• maximum	°C	55
• during storage / minimum	°C	-40
• during storage / maximum	°C	75

Certificates

General Product Approval	Declaration of Conformity
 IMQ  VDE  EAC  sonstig  RCM  EG-Konf.	

Test Certificates	Shipping Approval
sonstig spezielle Prüfbescheinigung  LRS  RINA	

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/5SY3120-7>

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

<http://support.automation.siemens.com/WW/view/en/5SY3120-7/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY3120-7

CAX-Online-Generator
<http://www.siemens.com/cax>

Tender specifications
<http://ausschreibungstexte.siemens.com/tiplv>

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