SIEMENS

Data sheet

5SY4111-7



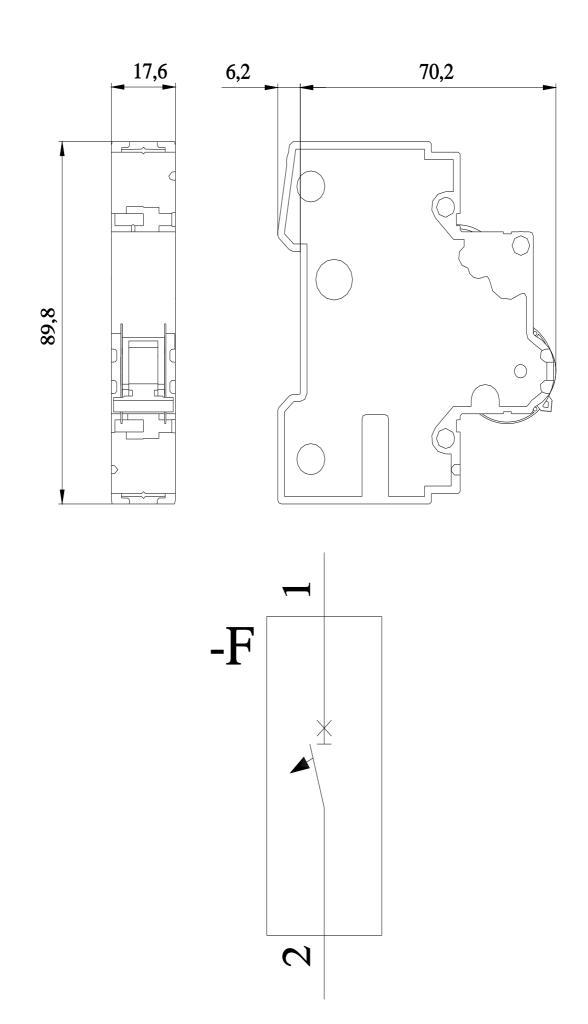
Miniature circuit breaker 230/400 V 10kA, 1-pole, C, 5A, D=70 mm

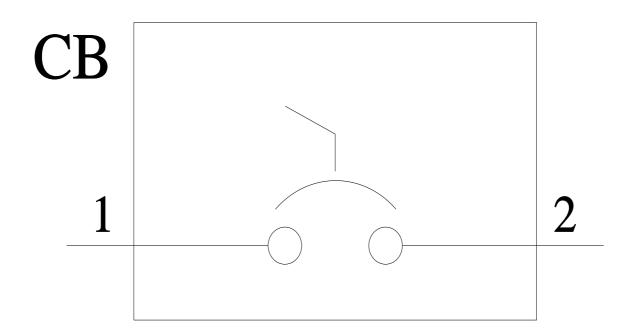
product brand name SENTRON product designation Miniature circuit breaker General tachinical data I number of poles 1 design of pole 1P tripping characteristic class C mechanical service life (switching cycles) typical 10 000 overvoltage category III degree of pole AC insulation voltage (UI) • with single-phase operation at AC rated value • with single-phase operation at AC rated value 440 V • with multi-phase operation at AC rated value 440 V value supply voltage 230 V supply voltage 440 V value 440 V value 440 V supply voltage 230 V value 9 supply voltage 100 V value 400 V supply voltage 100 V value range of the supply voltage frequency 50/60 Hz portection class IP IP20, with connected conductors Switching capacity switching capacity current	Model			
General technical data number of poles 1 design of pole 1P tripping characteristic class C mechanical service life (switching cycles) typical 10 000 overvoitage category 11 dype of voltage of the operating voltage AC insulation voltage (U) 440 V • with single-phase operation at AC rated value 440 V • with single-phase operation at AC rated value 440 V • with single-phase operation at AC rated value 440 V • with single-phase operation at AC rated value 230 V supply voltage 230 V value Supply voltage • at AC rated value 400 V value range of the supply voltage frequency 50/60 Hz operating voltage at DC rated value maximum 72 V Protection class Protection class protection class IP IP20, with connected conductors Switching capacity current 15 KA • at C according to IEC 60947-2 rated value 15 KA • according to IEC 60947-2 rated value 3 Dissipation 3 Dissipation 2.2 W	product brand name	SENTRON		
number of poles 1 design of pole 1P tripping characteristic class C mechanical service life (switching cycles) typical 10 000 overvoltage category III degree of pollution 3 Voltage Voltage of the operating voltage insulation voltage (UI) AC with multi-phase operation at AC rated value 440 V with multi-phase operation at AC rated value 440 V supply voltage 230 V supply voltage Supply voltage supply voltage 400 V value 50/60 Hz operating voltage at DC rated value 400 V value range of the supply voltage frequency 50/60 Hz operating voltage at DC rated value maximum 72 V Protection class IP IP20, with connected conductors Switching capacity 15 kA switching capacity current 15 kA • at DC according to IEC 60947-2 rated value 15 kA • according to IEC 60947-2 rated value 3 Dispation 3 power loss [W] for rated value of the current at AC in hot operating state per pole 2.2 W operational current 5 A • at 40 °C rated value 5 A • at 45 °C rated value <t< td=""><td>product designation</td><td colspan="3">Miniature circuit breaker</td></t<>	product designation	Miniature circuit breaker		
design of pole 1P tripping characteristic class C mechanical service life (switching cycles) typical 10 000 overvoltage category III degree of pollution 3 Voltage type of voltage of the operating voltage AC insulation voltage (Ui) 440 V • with single-phase operation at AC rated value 440 V • with multi-phase operation at AC rated value 440 V • with multi-phase operation at AC rated value 440 V • with multi-phase operation at AC rated value 440 V • with multi-phase operation at AC rated value 400 V value 200 V supply voltage • • at AC rated value 400 V value 400 V value 200 V Protection class IP protection class IP IP20, with connected conductors Switching capacity current 15 KA • according to IEC 60947-2 rated value 15 KA • according to IEC 60947-2 rated value 15 KA • according to IEC 60947-2 rated value 3 • according to IEC 60947-2 rated value 3 • according to IEC 60947-2 rated value 3 • according to IEC 60947-2 rated value 15 KA	General technical data			
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mechanical service life (switching 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 440 V supply voltage with single-phase operation at AC rated value 440 V value supply voltage • at AC rated value 400 V value range of the supply voltage frequency 50/60 Hz operating voltage at DC rated value maximum 72 V Protection class IP IP20, with connected conductors Switching capacity current • at DC according to IEC 60947-2 rated value 15 kA • according to IEC 60947-2 rated value 35 kA • according to IEC 60947-2 rated value 4.5 A • at 45 °C rated value 4.5 A	design of pole	1P		
overvoltage category III degree of pollution 3 Voltage AC 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 440 V supply voltage 230 V supply voltage 400 V value 400 V supply voltage 400 V value 400 V value 230 V supply voltage 400 V value 400 V value 400 V value 230 V supply voltage 400 V value 50/60 Hz operating voltage at DC rated value maximum 72 V Protection class IP IP20, with connected conductors Switching capacity current 6 • at DC according to IEC 60947-2 rated value 15 kA • according to IEC 60947-2 rated value 16 kA • according to IEC 60947-2 rated value 3 Dissipation	tripping characteristic class	C		
degree of pollution 3 Voltage type of voltage of the operating voltage insulation voltage (UI) AC • 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 440 V supply voltage 440 V • at AC rated value 440 V supply voltage 400 V • at AC rated value 400 V value range of the supply voltage frequency 50/60 Hz operating voltage at DC rated value maximum 72 V Protection class IP IP20, with connected conductors Switching capacity current 15 kA • at DC according to IEC 60947-2 rated value 15 kA • according to EC 60947-2 rated value 10 kA • according to EC 60947-2 rated value 10 kA • according to EC 60947-2 rated value 3 Dissipation 2.2 W power loss IW] for rated value of the current at AC in hot operating state per pole 2.2 W current • at 35 °C rated value 5 A • at 40 °C rated value 5 A • at 40 °C rated va	mechanical service life (switching cycles) typical	10 000		
Voltage AC type of voltage of the operating voltage insulation voltage (U) AC • 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 400 V • at AC rated value 400 V value range of the supply voltage frequency 50/60 Hz operating voltage at DC rated value maximum 72 V Protection class P 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 IEC 60947-2 rated value 35 kA energy limitation class 3 Dissipation 2.2 W pover loss [W] for rated value of the current at AC in hot operating state per pole 5 A current • at 35 °C rated value 5 A • at 45 °C rated value 4.7 A • at 45 °C rated value 4.54 A	overvoltage category	III		
type of voltage of the operating voltage insulation voltage (Ui) AC • 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 230 V • at AC rated value 400 V value 400 V supply voltage 400 V • at AC rated value 400 V value range of the supply voltage frequency 50/60 Hz operating voltage at DC rated value maximum 72 V Protection class IP20, with connected conductors switching capacity current 15 kA • at DC according to IEC 60947-2 rated value 15 kA • according to IEC 60947-2 rated value 15 kA • according to IEC 60947-2 rated value 35 kA energy limitation class 3 Dissipation 2.2 W operating state per pole 5 A current e at 35 "C rated value 5 A • at 40 'C rated value 4.7 A • at 45 "C rated value 4.54 A	degree of pollution	3		
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supply voltage 400 V value range of the supply voltage frequency 50/60 Hz operating voltage at DC rated value maximum 72 V Protection class IP20, with connected conductors switching capacity switching capacity current • at DC according to IEC 60947-2 rated value 15 kA • according to IEC 60947-2 rated value 10 kA • according to IEC 60947-2 rated value 35 kA energy limitation class 3 Dissipation 2.2 W power loss [W] for rated value of the current at AC in hot operating state per pole 2.2 W current • at 35 °C rated value 5 A • at 40 °C rated value 4.7 A • at 45 °C rated value 4.54 A		230 V		
 at AC rated value 400 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 according to IEC 60947-2 rated value bkA power loss [W] for rated value of the current at AC in hot operating state per pole current at 35 °C rated value tat 35 °C rated value tat 40 °C rated value tat 40 °C rated value tat 45 °C rated value tat 45 °C rated value 	Supply voltage			
value range of the supply voltage frequency operating voltage at DC rated value maximum 50/60 Hz Protection class 72 V 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 IEC 60947-2 rated value 10 kA • according to IEC 60947-2 rated value 35 kA energy limitation class 3 Dissipation 2.2 W corrent operational current • at 35 °C rated value 5 A • at 40 °C rated value 5 A • at 40 °C rated value 4.7 A • at 45 °C rated value 4.54 A	supply voltage			
operating voltage at DC rated value maximum 72 V Protection class IIP20, with connected conductors switching capacity IIP20, with connected conductors Switching capacity current 15 kA • 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 2.2 W corrent current operational current 5 A • at 35 °C rated value 5 A • at 40 °C rated value 4.7 A • at 45 °C rated value 4.54 A		400 V		
Protection class 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 2.2 W power loss [W] for rated value of the current at AC in hot operating state per pole 2.2 W current • at 35 °C rated value 5 A • at 40 °C rated value 4.7 A • at 45 °C rated value 4.54 A	value range of the supply voltage frequency			
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 2.2 W power loss [W] for rated value of the current at AC in hot operating state per pole 2.2 W Current • at 35 °C rated value 5 A • at 40 °C rated value 4.7 A • at 45 °C rated value 4.54 A	operating voltage at DC rated value maximum	72 V		
Switching capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to EN 60898 rated value • according to EN 60898 rated value • according to IEC 60947-2 rated value • power loss [W] for rated value of the current at AC in hot operating state per pole Current • at 35 °C rated value 5 A • at 40 °C rated value 5 A • at 40 °C rated value 4.7 A • at 45 °C rated value 4.54 A	Protection class			
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 according to EN 60898 rated value according to IEC 60947-2 rated value bissipation Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole current operational current at 35 °C rated value 5 A at 40 °C rated value A A A 	switching capacity current			
 according to IEC 60947-2 rated value according to IEC 60947-2 rated value bissipation Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole Current operational current at 35 °C rated value 5 A at 40 °C rated value AT A at 45 °C rated value AA 	 at DC according to IEC 60947-2 rated value 	15 kA		
energy limitation class3Dissipationpower loss [W] for rated value of the current at AC in hot operating state per pole2.2 WCurrent2.2 Woperational current • at 35 °C rated value5 A• at 40 °C rated value5 A• at 45 °C rated value4.54 A	 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 2.2 W Current operational current • at 35 °C rated value • at 40 °C rated value 5 A • at 45 °C rated value 4.7 A • at 45 °C rated value 4.54 A	5	35 kA		
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operating state per pole Current operational current • at 35 °C rated value • at 40 °C rated value • at 45 °C rated value 4.54 A				
operational current5 A• at 35 °C rated value5 A• at 40 °C rated value4.7 A• at 45 °C rated value4.54 A	power loss [W] for rated value of the current at AC in hot operating state per pole	2.2 W		
 at 35 °C rated value at 40 °C rated value at 45 °C rated value 4.7 A 4.54 A 	Current			
 at 40 °C rated value at 45 °C rated value 4.7 A 4.54 A 	operational current			
• at 45 °C rated value 4.54 A	• at 35 °C rated value	5 A		
	• at 40 °C rated value	4.7 A		
	• at 45 °C rated value	4.54 A		
• at 50 °C rated value 4.37 A	• at 50 °C rated value	4.37 A		
• at 55 °C rated value 4.2 A	● at 55 °C rated value	4.2 A		

	4.00.4
at 60 °C rated value	4.02 A
at AC rated value	5 A Mechanical engineering / industry
suitability for operation	Mechanical engineering / industry
Product details	
product component	N
combined terminal top	Yes
combined terminal bottom	Yes
neutral conductor switching	No
 product feature properties for main switches in accordance with EN 	Yes
• properties for main switches in accordance with EN 60204-1	res
halogen-free	Yes
• sealable	Yes
• silicon-free	Yes
product extension installable supplementary devices	Yes
Short circuit	
breaking capacity short-circuit current (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 mm²
• maximum	25 mm²
AWG number as coded connectable conductor cross	
section	10
• minimum	18
maximum tightening terminole	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	,
	90 mm
height width	90 mm 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	155 g
Environmental conditions	
	max 95% to 55°C max 55% to 70°C max 35% to 75°C
influence of the surrounding temperature standard	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60898-1, IEC / EN 60947-2 / UL1077
vibration resistance according to IEC 60068-2-6	±1mm at 5 to 25Hz; 50m/s ² 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
Certificates	
reference code	

 according to EN according to IE General Product Ap 	C 81346-2	F			
<u>Confirmation</u>	CCC		SAN UR	UDE VDE	<u>Miscellaneous</u>
General Product Ap	proval	EMC	Declaration of Cont	formity	Test Certificates
EHC	<u>Miscellaneous</u>	RCM	UK CA	CE EG-Konf.	<u>Miscellaneous</u>
Test Certificates	Marine / Shipping				
Special Test Certific- ate	ABS	BUREAU VERITAS	Llovd's Register us	RINA	
other		Railway			
Environmental Con- firmations	<u>Miscellaneous</u>	Vibration and Shock	<u>Confirmation</u>		

	loadcenter (Catalogs, Brochures,)	
http://www.siemens.cor	<u>/lowvoltage/catalogs</u>	
Industry Mall (Online of		
https://mall.industry.siei	ens.com/mall/en/en/Catalog/product?mlfb=5SY4111-7	
	uals, Certificates, Characteristics, FAQs,) iemens.com/cs/ww/en/ps/5SY4111-7	
0	ct images, 2D dimension drawings, 3D models, device circuit diagra emens.com/bilddb/cax_en.aspx?mlfb=5SY4111-7	ams,)
CAx-Online-Generator		
http://www.siemens.cor	/cax	
Tender specifications		
http://www.siemens.cor	/specifications	





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