SIEMENS

Data sheet

5SY4220-7



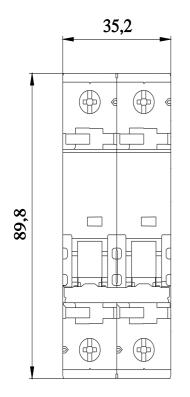
Miniature circuit breaker 400 V 10kA, 2-pole, C, 20 A, D=70 mm

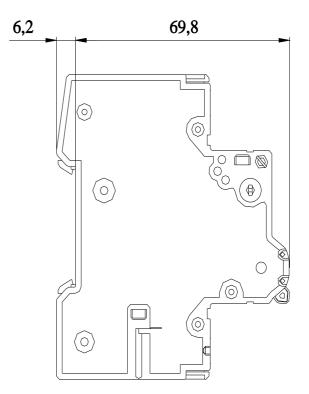
Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	2
design of pole	2P
tripping characteristic class	C
mechanical service life (operating cycles) typical	10 000
overvoltage category	III
degree of pollution	3
Voltage	
type of voltage 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
supply voltage with single-phase operation at AC rated value	230 V
operational current	
 at 40 °C rated value 	18.78 A
 at 50 °C rated value 	17.48 A
 at 55 °C rated value 	16.8 A
 at 60 °C rated value 	16.08 A
 at AC rated value 	20 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
 according to IEC 60947-2 rated value 	20 kA
energy limitation class	3
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	1.7 W
Product details	

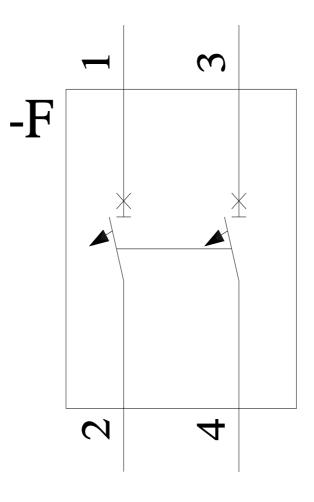
product component	
 combined terminal top 	Yes
 combined terminal bottom 	Yes
neutral conductor switching	No
product feature	
 properties for main switches in accordance with EN 60204-1 	Yes
halogen-free	Yes
• sealable	Yes
silicon-free	Yes
product extension installable supplementary devices	Yes
Product function	
set values setting current (li) for I-tripping	7,5
reference value setting current (li) for I-tripping	x In
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 mm²
connectable conductor cross-section stranded	
• minimum	0.75 mm ²
• maximum	35 mm²
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	
• 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	2 Quick assembly system
mounting position	any 318 g
net weight	318 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	
• 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

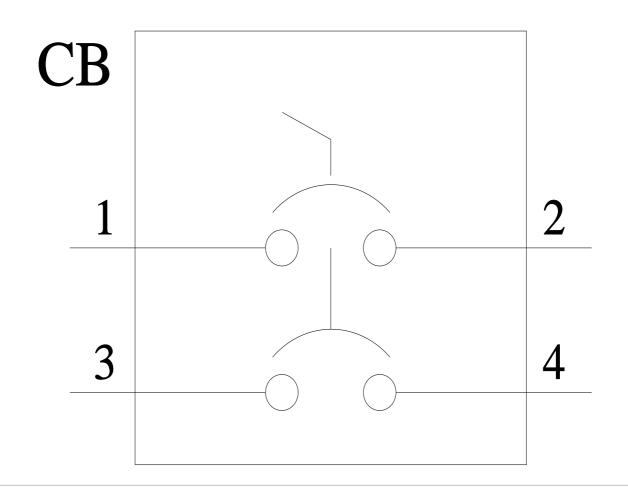
Clobal Warming Datan		16.0	ka		
Global Warming Potential [CO2 eq] total Global Warming Potential [CO2 eq] during manufacturing		facturing 16.8	0		
Global Warming Potential [CO2 eq] during manufacturing Global Warming Potential [CO2 eq] during operation			0		
Global Warming Potential [CO2 eq] after end of life			0		
Ŭ	tial [CO2 eq] after end of it	-0.0	0046 kg		
Approvals Certificates					
General Product App	roval				
CE EG-Konf.	UK CA	<u>Confirmation</u>			SN UR
General Product App	roval				EMV
	<u>Miscellaneous</u>	KC	EHC	<u>Miscellaneous</u>	RCM
Test Certificates		Marine / Shipping			
Miscellaneous	<u>Special Test Certific-</u> <u>ate</u>	6		ĴÅ	Lloyds
		ABS	B U R E A U VERITAS	DNV	URS
Marine / Shipping	other	ABS	BUREAU VERITAS	DNV DNV	URS
Marine / Shipping	other Miscellaneous	ABS			LIRS
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Tender specifications http://www.siemens.com/specifications









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