

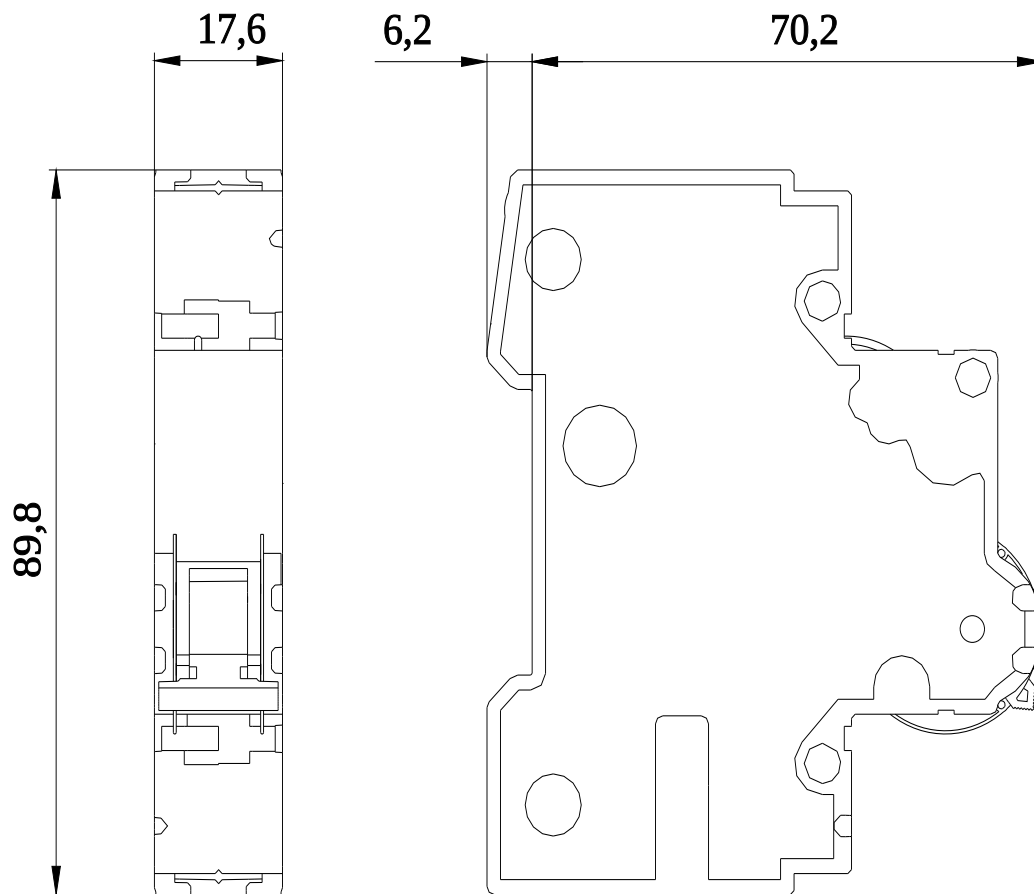


Miniature circuit breaker 230/400 V 6kA, 1-pole, B, 40A, D=70 mm

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	1
design of pole	1P
tripping characteristic class	B
mechanical service life (operating cycles) typical	10 000
overvoltage category	3
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	37.57 A
— at 50 °C rated value	34.96 A
— at 55 °C rated value	33.6 A
• operational current at AC rated value	40 A
Supply voltage	
supply voltage	
• at AC	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	6 kA
• according to IEC 60947-2 rated value	10 kA
energy limitation class	3
Dissipation	
power loss [W] for rated value of the current at AC in hot	3.6 W

operating state per pole	
suitability for operation	Infrastructure / Industry
Product details	
product feature touch protection	Yes
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
product feature halogen-free	Yes
product feature sealable	Yes
product feature silicon-free	Yes
product extension installable supplementary devices	Yes
Product function	
set values setting current (Ii) for I-tripping	4
reference value setting current (Ii) for I-tripping	x I _n
Short circuit	
short-circuit current breaking capacity (I_{cn})	
• at AC according 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
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	18 mm
depth	76 mm
installation depth	70 mm
number of modular width units	1
fastening method	DIN rail
mounting position	any
Net Weight	164 g
Environmental conditions	
influence of the surrounding temperature	max. 95% RH up to 55°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/s ² at 25 to 150Hz
ambient temperature during operation	
• minimum	-25 °C
• maximum	55 °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
Approvals Certificates	
Environmental Product Declaration	
• global warming potential [CO2 eq] / during manufacturing	0.683 kg
• global warming potential [CO2 eq] / during operation	7.83 kg
• global warming potential [CO2 eq] / after end of life	-0.00482 kg
• global warming potential [CO2 eq] / total	8.5 kg



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