



Miniature circuit breaker 240 V 10kA, 1-pole, D, 45 A, D=70 mm according to UL 489

Model	
product brand name	SENTRON
product designation	Miniature circuit breakers
design of the product	Miniature circuit-breaker 5SJ4
General technical data	
number of poles	1
design of pole	1P
tripping characteristic class	D
mechanical service life (operating cycles) typical	10 000
installation environment regarding EMC	Suitable for environment B (immunity to interference not applicable)
reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750	F
overvoltage category	3
degree of pollution	3
Voltage	
insulation voltage (Ui) at AC rated value	440 V
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 AC according to UL 489 and CSA C22.2 No. 5-02 maximum	240 V
• at DC rated value maximum	60 V
• at DC single channel according to UL 489 and CSA C22.2 No. 5-02 maximum	60 V
• at DC 2-channel according to UL 489 and CSA C22.2 No. 5-02 maximum	125 V
supply voltage frequency rated value	50 Hz
Protection class	
protection class IP	IP20, with connected conductors, IP 40 in the handle range
Switching capacity	
switching capacity current	
• according to EN 60898 rated value	10 kA
• according to IEC 60947-2 rated value	15 kA
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	5.7 W
Current	
operational current	

<ul style="list-style-type: none"> • at 30 °C rated value • at 40 °C rated value • at 45 °C rated value • at 50 °C rated value • at 55 °C rated value • at 60 °C rated value • at AC rated value 	45 A 45 A 43.7 A 42.8 A 41.7 A 41 A 45 A
Main circuit	
type of voltage supply at AC according to UL 489 and CSA C22.2 No. 5-02	240
suitability for operation	Mechanical engineering / industry
Product details	
product component	
<ul style="list-style-type: none"> • tunnel terminals top • tunnel terminals bottom • combined terminal top • combined terminal bottom • neutral conductor switching 	No No Yes Yes No
product feature	
<ul style="list-style-type: none"> • halogen-free • sealable • silicon-free 	Yes Yes Yes
product extension installable supplementary devices	Yes
Product function	
product function note	Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in
Short circuit	
short-circuit current breaking capacity (I _{cn}) at AC according to UL 1077 and CSA C22.2 No.235	10 kA
Connections	
connectable conductor cross-section finely stranded with core end processing	
<ul style="list-style-type: none"> • minimum • maximum 	0.75 mm ² 25 mm ²
tightening torque with screw-type terminals maximum	3.5 N·m
position of power supply cord	Any
Mechanical Design	
height	110 mm
width	18 mm
depth	70 mm
installation depth	70 mm
number of modular width units	1
fastening method	on standard mounting rail
mounting position	any
net weight	155 g
Environmental conditions	
vibration resistance	50 m/s ² at 25 to 150Hz and 60m/s ² at 35Hz (4sec)
vibration resistance according to IEC 60068-2-6	±1 mm at 5 to 25 Hz; 50 m/s ² at 25 to 150 Hz
ambient temperature during operation	
<ul style="list-style-type: none"> • minimum • maximum 	55 °C -25 °C
ambient temperature during operation	max. 95% humidity
ambient temperature during storage	
<ul style="list-style-type: none"> • minimum • maximum 	-40 °C 75 °C
General Product Approval	
Declaration of Conformity	



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