



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

Figure similar

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	C
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 (U <sub>i</sub> ) at AC rated value	440 V
<ul style="list-style-type: none"> <li>● operational current                             <ul style="list-style-type: none"> <li>— at 30 °C rated value</li> <li>— at 40 °C rated value</li> <li>— at 50 °C rated value</li> <li>— at 55 °C rated value</li> <li>— at 60 °C rated value</li> </ul> </li> <li>● operational current at AC rated value</li> </ul>	45 A 45 A 42.8 A 41.7 A 41 A 45 A
Supply voltage	
supply voltage <ul style="list-style-type: none"> <li>● at AC</li> <li>● at DC rated value</li> </ul>	400 V 60 V
value range of the supply voltage frequency	50/60 Hz
operating voltage <ul style="list-style-type: none"> <li>● at AC according to UL 489 and CSA C22.2 No. 5-02 maximum</li> <li>● at DC rated value maximum</li> <li>● at DC 1-channel according to UL 489 and CSA C22.2 No. 5-02 maximum</li> <li>● at DC 2-channel according to UL 489 and CSA C22.2 No. 5-02 maximum</li> </ul>	240 V 60 V 60 V 125 V
supply voltage frequency rated value	50 Hz
Protection class	

<b>protection class IP</b>	IP20, with connected conductors, IP 40 in the handle range
<b>Breaking Capacity</b>	
<b>switching capacity current</b>	
• according to EN 60898 rated value	10 kA
• according to IEC 60947-2 rated value	15 kA
<b>Dissipation</b>	
power loss [W] for rated value of the current at AC in hot operating state per pole	6.1 W
<b>Main circuit</b>	
<b>type of voltage supply at AC according to UL 489 and CSA C22.2 No. 5-02</b>	240
<b>suitability for operation</b>	Infrastructure / Industry
<b>Product details</b>	
<b>product feature touch protection</b>	Yes
<b>product component</b>	
• <b>tunnel terminals top</b>	No
• <b>tunnel terminals bottom</b>	No
• combined terminal top	Yes
• combined terminal bottom	Yes
• neutral conductor switching	No
<b>product feature halogen-free</b>	Yes
<b>product feature sealable</b>	Yes
<b>product feature silicon-free</b>	Yes
<b>product extension installable supplementary devices</b>	Yes
<b>Product function</b>	
<b>set values setting current (Ii) for I-tripping</b>	7,5
<b>reference value setting current (Ii) for I-tripping</b>	x In
product function note	Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in
<b>Short circuit</b>	
short-circuit current breaking capacity (Icn) at AC according to UL 1077 and CSA C22.2 No.235	10 kA
<b>Connections</b>	
<b>connectable conductor cross-section finely stranded with core end processing</b>	
• minimum	0.75 mm <sup>2</sup>
• maximum	25 mm <sup>2</sup>
tightening torque with screw-type terminals maximum	3.5 N·m
<b>position of power supply cord</b>	Any
<b>Mechanical Design</b>	
<b>height</b>	110 mm
<b>width</b>	18 mm
<b>depth</b>	70 mm
<b>installation depth</b>	70 mm
<b>number of modular width units</b>	1
<b>fastening method</b>	on standard mounting rail
<b>mounting position</b>	any
<b>Net Weight</b>	178 g
<b>Environmental conditions</b>	
<b>standard</b>	IEC / EN 60947-2 / UL 489
<b>vibration resistance</b>	50 m/s <sup>2</sup> at 25 to 150Hz and 60m/s <sup>2</sup> at 35Hz (4sec)
<b>vibration resistance according to IEC 60068-2-6</b>	±1 mm at 5 to 25 Hz; 50 m/s <sup>2</sup> at 25 to 150 Hz
<b>ambient temperature during operation</b>	
• minimum	-25 °C
• maximum	55 °C
<b>ambient temperature during operation</b>	max. 95% humidity
<b>ambient temperature during storage</b>	
• minimum	-40 °C
• maximum	75 °C
<b>Approvals Certificates</b>	

## General Product Approval



### Test Certificates

### other

### Environment

[Special Test Certificate](#)



[Confirmation](#)

[Environmental Confirmations](#)

[Environmental Confirmations](#)

## Further information

### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

### Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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

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

### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SJ4145-7HG41>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SJ4145-7HG41>

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

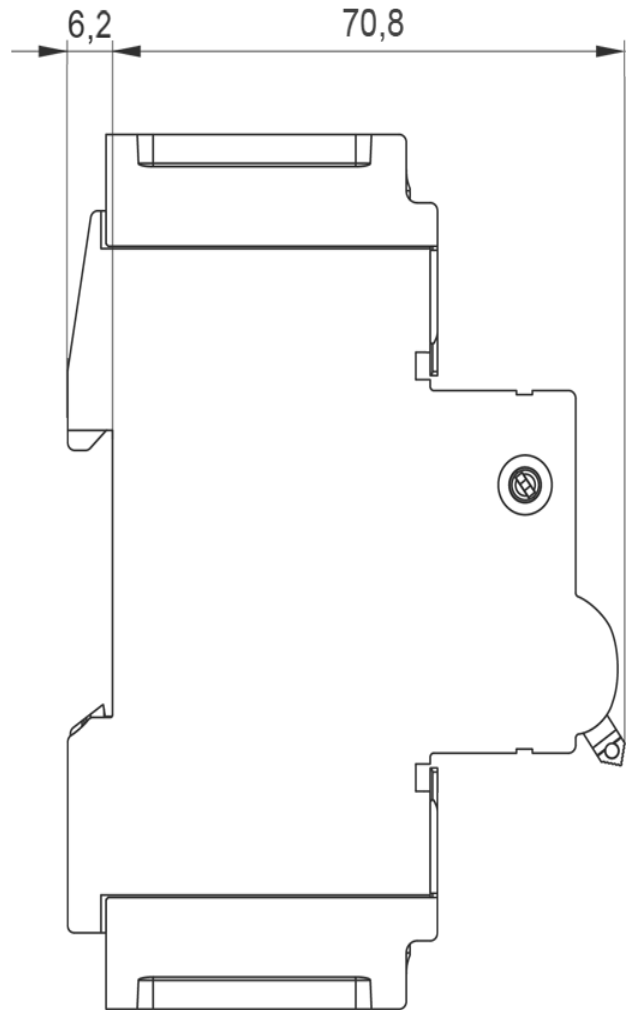
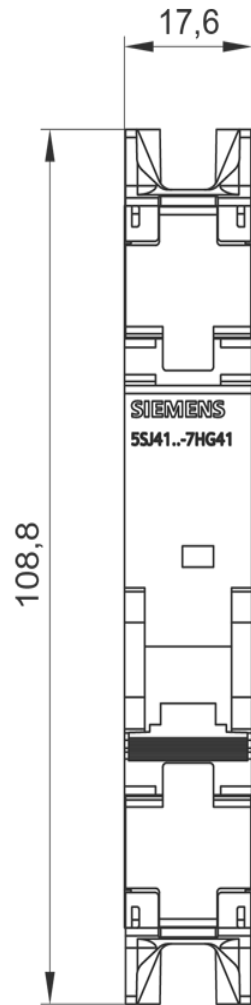
[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SJ4145-7HG41](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SJ4145-7HG41)

### CAX-Online-Generator

<https://www.siemens.com/cax>

### Tender specifications

<https://www.siemens.com/specifications>



last modified:

7/19/2025 

