## SIEMENS

## Data sheet

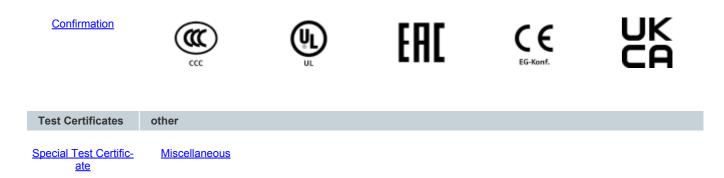
## 5SJ4116-8HG42



Circuit breaker 10kA, 1-pole, D, 16A according to UL 489-277V

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	
tripping characteristic class	D	
mechanical service life (switching 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		
type of voltage / of the operating voltage	AC/DC	
insulation voltage (Ui) / at AC / rated value	440 V	
Supply voltage		
supply voltage / at AC / rated value	400 V	
operating voltage		
<ul> <li>at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum</li> </ul>	277 V	
<ul> <li>at DC / rated value / maximum</li> </ul>	60 V	
<ul> <li>at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum</li> </ul>	60 V	
<ul> <li>at DC / 2-channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum</li> </ul>	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		
<ul> <li>according to EN 60898 / rated value</li> </ul>	10 kA	
<ul> <li>according to IEC 60947-2 / rated value</li> </ul>	15 kA	
Dissipation		
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	2.1 W	
Current		
operational current		
• at 30 °C / rated value	16 A	
<ul> <li>at 40 °C / rated value</li> </ul>	16 A	

<ul> <li>at 45 °C / rated value</li> </ul>	15.5 A
<ul> <li>at 50 °C / rated value</li> </ul>	15 A
<ul> <li>at 55 °C / rated value</li> </ul>	14.5 A
• at 60 °C / rated value	14.1 A
at AC / rated value	16 A
Main circuit	
type of voltage supply / at AC / according to UL 489 and CSA C22.2 No. 5-02	480/277
suitability for operation	Mechanical engineering / industry
Product details	
product component / neutral conductor switching	No
product feature / touch protection	Yes
product component	
<ul> <li>tunnel terminals top</li> </ul>	No
<ul> <li>tunnel terminals bottom</li> </ul>	No
<ul> <li>combined terminal top</li> </ul>	Yes
<ul> <li>combined terminal bottom</li> </ul>	Yes
product feature	
<ul> <li>halogen-free</li> </ul>	Yes
• sealable	Yes
silicon-free	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	
breaking capacity short-circuit current (Icn) / 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	
with core end processing     o minimum	0.75 mm²
·	0.75 mm² 25 mm²
• minimum	
<ul><li>minimum</li><li>maximum</li></ul>	25 mm <sup>2</sup>
minimum     maximum tightening torque / with screw-type terminals / maximum	25 mm² 3.5 N·m
minimum     maximum     tightening torque / with screw-type terminals / maximum     position / of power supply cord	25 mm² 3.5 N·m
minimum     maximum     tightening torque / with screw-type terminals / maximum     position / of power supply cord     Mechanical Design	25 mm² 3.5 N·m Any
minimum     maximum     tightening torque / with screw-type terminals / maximum     position / of power supply cord     Mechanical Design     height	25 mm² 3.5 N·m Any 121 mm
minimum     maximum     tightening torque / with screw-type terminals / maximum     position / of power supply cord     Mechanical Design     height     width	25 mm² 3.5 N·m Any 121 mm 18 mm
minimum     maximum     tightening torque / with screw-type terminals / maximum     position / of power supply cord     Mechanical Design     height     width     depth	25 mm² 3.5 N·m Any 121 mm 18 mm 70 mm
minimum     maximum     tightening torque / with screw-type terminals / maximum     position / of power supply cord     Mechanical Design     height     width     depth     installation depth	25 mm² 3.5 N·m Any 121 mm 18 mm 70 mm 70 mm
minimum     maximum     tightening torque / with screw-type terminals / maximum     position / of power supply cord     Mechanical Design     height     width     depth     installation depth     number of modular width units	25 mm² 3.5 N·m Any 121 mm 18 mm 70 mm 70 mm 1
minimum     maximum     tightening torque / with screw-type terminals / maximum     position / of power supply cord     Mechanical Design     height     width     depth     installation depth     number of modular width units     fastening method	25 mm² 3.5 N·m Any 121 mm 18 mm 70 mm 70 mm 1 1 on standard mounting rail
minimum     maximum     tightening torque / with screw-type terminals / maximum     position / of power supply cord     Mechanical Design     height     width     depth     installation depth     number of modular width units     fastening method     mounting position	25 mm² 3.5 N·m Any 121 mm 18 mm 70 mm 70 mm 1 1 on standard mounting rail any
minimum     maximum     tightening torque / with screw-type terminals / maximum     position / of power supply cord     Mechanical Design     height     width     depth     installation depth     number of modular width units     fastening method     mounting position     net weight	25 mm² 3.5 N·m Any 121 mm 18 mm 70 mm 70 mm 1 1 on standard mounting rail any
minimum     maximum     tightening torque / with screw-type terminals / maximum     position / of power supply cord     Mechanical Design     height     width     depth     installation depth     number of modular width units     fastening method     mounting position     net weight     Environmental conditions	25 mm² 3.5 N·m Any 121 mm 18 mm 70 mm 70 mm 1 on standard mounting rail any 173 g
minimum     maximum     tightening torque / with screw-type terminals / maximum     position / of power supply cord     Mechanical Design     height     width     depth     installation depth     number of modular width units     fastening method     mounting position     net weight     Environmental conditions     vibration resistance	25 mm² 3.5 N·m Any 121 mm 18 mm 70 mm 70 mm 1 on standard mounting rail any 173 g
minimum     maximum     tightening torque / with screw-type terminals / maximum     position / of power supply cord     Mechanical Design     height     width     depth     installation depth     number of modular width units     fastening method     mounting position     net weight     Environmental conditions     vibration resistance     ambient temperature / during operation	25 mm² 3.5 N·m Any 121 mm 18 mm 70 mm 70 mm 1 on standard mounting rail any 173 g 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec)
<ul> <li>minimum</li> <li>maximum</li> <li>tightening torque / with screw-type terminals / maximum</li> <li>position / of power supply cord</li> <li>Mechanical Design</li> <li>height</li> <li>width</li> <li>depth</li> <li>installation depth</li> <li>number of modular width units</li> <li>fastening method</li> <li>mounting position</li> <li>net weight</li> <li>Environmental conditions</li> <li>vibration resistance</li> <li>ambient temperature / during operation</li> <li>minimum</li> </ul>	25 mm² 3.5 N·m Any 121 mm 18 mm 70 mm 70 mm 1 on standard mounting rail any 173 g 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) 55 °C
<ul> <li>minimum</li> <li>maximum</li> <li>tightening torque / with screw-type terminals / maximum</li> <li>position / of power supply cord</li> <li>Mechanical Design</li> <li>height</li> <li>width</li> <li>depth</li> <li>installation depth</li> <li>number of modular width units</li> <li>fastening method</li> <li>mounting position</li> <li>net weight</li> <li>Environmental conditions</li> <li>vibration resistance</li> <li>ambient temperature / during operation</li> <li>minimum</li> <li>maximum</li> </ul>	25 mm² 3.5 N·m Any 121 mm 18 mm 70 mm 70 mm 1 on standard mounting rail any 173 g 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) 55 °C
<ul> <li>minimum</li> <li>maximum</li> <li>tightening torque / with screw-type terminals / maximum</li> <li>position / of power supply cord</li> <li>Mechanical Design</li> <li>height</li> <li>width</li> <li>depth</li> <li>installation depth</li> <li>number of modular width units</li> <li>fastening method</li> <li>mounting position</li> <li>net weight</li> <li>Environmental conditions</li> <li>vibration resistance</li> <li>ambient temperature / during operation</li> <li>maximum</li> <li>ambient temperature / during storage</li> </ul>	25 mm² 3.5 N·m Any 121 mm 18 mm 70 mm 70 mm 1 on standard mounting rail any 173 g 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) 55 °C -25 °C
<ul> <li>minimum</li> <li>maximum</li> <li>tightening torque / with screw-type terminals / maximum</li> <li>position / of power supply cord</li> <li>Mechanical Design</li> <li>height</li> <li>width</li> <li>depth</li> <li>installation depth</li> <li>number of modular width units</li> <li>fastening method</li> <li>mounting position</li> <li>net weight</li> <li>Environmental conditions</li> <li>vibration resistance</li> <li>ambient temperature / during operation</li> <li>minimum</li> <li>maximum</li> <li>ambient temperature / during storage</li> <li>minimum</li> </ul>	25 mm² 3.5 N·m Any 121 mm 18 mm 70 mm 70 mm 70 mm 1 on standard mounting rail any 173 g 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) 55 °C -25 °C -25 °C
<ul> <li>minimum</li> <li>maximum</li> <li>tightening torque / with screw-type terminals / maximum</li> <li>position / of power supply cord</li> <li>Mechanical Design</li> <li>height</li> <li>width</li> <li>depth</li> <li>installation depth</li> <li>number of modular width units</li> <li>fastening method</li> <li>mounting position</li> <li>net weight</li> <li>Environmental conditions</li> <li>vibration resistance</li> <li>ambient temperature / during operation</li> <li>minimum</li> <li>maximum</li> <li>ambient temperature / during storage</li> <li>minimum</li> <li>maximum</li> </ul>	25 mm² 3.5 N·m Any 121 mm 18 mm 70 mm 70 mm 70 mm 1 on standard mounting rail any 173 g 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) 55 °C -25 °C -25 °C
<ul> <li>minimum</li> <li>maximum</li> <li>tightening torque / with screw-type terminals / maximum</li> <li>position / of power supply cord</li> <li>Mechanical Design</li> <li>height</li> <li>width</li> <li>depth</li> <li>installation depth</li> <li>number of modular width units</li> <li>fastening method</li> <li>mounting position</li> <li>net weight</li> <li>Environmental conditions</li> <li>vibration resistance</li> <li>ambient temperature / during operation</li> <li>minimum</li> <li>maximum</li> <li>ambient temperature / during storage</li> <li>minimum</li> <li>maximum</li> </ul>	25 mm² 3.5 N·m Any 121 mm 18 mm 70 mm 70 mm 70 mm 1 on standard mounting rail any 173 g 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) 55 °C -25 °C -25 °C
<ul> <li>minimum</li> <li>maximum</li> <li>tightening torque / with screw-type terminals / maximum</li> <li>position / of power supply cord</li> <li>Mechanical Design</li> <li>height</li> <li>width</li> <li>depth</li> <li>installation depth</li> <li>number of modular width units</li> <li>fastening method</li> <li>mounting position</li> <li>net weight</li> <li>Environmental conditions</li> <li>vibration resistance</li> <li>ambient temperature / during operation</li> <li>minimum</li> <li>maximum</li> <li>ambient temperature / during storage</li> <li>minimum</li> <li>maximum</li> </ul>	25 mm² 3.5 N·m Any 121 mm 18 mm 70 mm 70 mm 1 on standard mounting rail any 173 g 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) 55 °C -25 °C -25 °C -40 °C 75 °C
<ul> <li>minimum</li> <li>maximum</li> <li>tightening torque / with screw-type terminals / maximum</li> <li>position / of power supply cord</li> <li>Mechanical Design</li> <li>height</li> <li>width</li> <li>depth</li> <li>installation depth</li> <li>number of modular width units</li> <li>fastening method</li> <li>mounting position</li> <li>net weight</li> <li>Environmental conditions</li> <li>vibration resistance</li> <li>ambient temperature / during operation</li> <li>minimum</li> <li>maximum</li> <li>ambient temperature / during storage</li> <li>minimum</li> <li>maximum</li> <li>Certificates</li> <li>reference code</li> <li>according to EN 61346-2</li> </ul>	25 mm² 3.5 N·m Any 121 mm 18 mm 70 mm 70 mm 1 on standard mounting rail any 173 g 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) 55 °C -25 °C -40 °C 75 °C F



## Further information

ormation- and Downloadcenter (Catalogs, Brochures,…) p://www.siemens.com/lowvoltage/catalogs	
ustry Mall (Online ordering system) ps://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SJ4116-8HG42	
rvice&Support (Manuals, Certificates, Characteristics, FAQs,) ps://support.industry.siemens.com/cs/ww/en/ps/5SJ4116-8HG42	
age database (product images, 2D dimension drawings, 3D models, device circuit diagues) p://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SJ4116-8HG42	rams,)
Ax-Online-Generator p://www.siemens.com/cax	
nder specifications p://www.siemens.com/specifications	