## **SIEMENS**

Data sheet 5SJ4202-7HG42



Circuit breaker 10kA, 2-pole, C, 2A according to UL 489-480Y/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	2		
design of pole	2P		
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			
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		
value range of the supply voltage frequency	50/60 Hz		
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	1.8 W		
Current			
operational current			
<ul> <li>at 30 °C rated value</li> </ul>	2 A		

and 40 °C rated value and 50 °C rated value			
of 150 °C rated value     of 150 °C rat			
e at 55 °C rated value     at 80 °C rated valu			
• at 60 °C rated value • at AC rated value • at AC rated value • at AC rated value  480/277  SAC 922 2 No. 5-02  suitability for operation  Product dotalis  product component • funnel terminals top • funnel terminals top • funnel terminals bottom • combined terminal bottom • combined terminal bottom • neutral conductor switching product facture • halogen-free • halogen-free • sailable • minimum • maximum  postion of power supply cord  Mechanical engineering / industry  No  No  No  **Ves  **Sailable **Yes  **Pes  **Product function  Terminal tightening torque for Cu. 80/75°C; 3.5Nm/31lb.in  **Short-circuit  **Sho			
e at AC rated value  Abid in directif  type of violage supply at AC according to UL 489 and CSA C22.2 No. 5-02 suitability for operation  Mechanical engineering / industry  Product details  product component  - tunnel terminals top  • tunnel terminals bottom  • combined terminal bottom  • combined terminal bottom  • neutral conductor switching  product feature  • hatagen-free  • sealable  • sealable  • sealable  • sealable  • sealable  • sealable  • product extension installable supplementary devices  Product function  Product function note  Terminal lightening torque for Cu, 60/75°C; 3.5Nm/31b.in  Short circuit  Short circuit current breaking capacity (Icn) at AC according to UL 1077 and CSA C2.2 No. 235  Connectable conductor cross-section finely stranded with cone end processing  • minimum  • maximum  • maximum  position of power supply cord  Mechanical engineering / industry  121 mm  youth to the conductor cross-section finely stranded with cone end processing  • minimum  • minimum  • minimum  • minimum  • minimum  position of power supply cord  Mechanical engineering / industry  Position of power supply cord  Mechanical engineering / industry  ### Application of power supply cord  ### A			
Mechanical engineering / industry  ype of voltage supply at AC according to UL 489 and CSA C22.2 No. 5-02 suitability for operation  Product details  product component  • turnel terminals bottom • combined terminal top • neutral conductor switching product feature • halogen-free • sealable • sealabl			
Type of voltage supply at AC according to UL 489 and CSA C22 2 No. 5-02 suitability for operation  Product oteraits  Product component  • tunnel terminals top  • tunnel terminals top  • combined terminal bottom  • neutral conductor switching  product conductor switching  product teather  • halogen-free  • sealable  • sillicon-free  • sealable  • sillicon-free  • sealable  • sillicon-free  • solicon-free  • minum  • maximum  • maximum  tightening torque with screw-type terminals maximum  position of power supply cord  Mechanical Design  height  viation epistion  vibration resistance  vibration resistance  vibration resistance  vibration resistance  • minimum  • maximum  • ma		2 A	
SSA C22 2 No. 5-02 suitability to peration  Product details  product component  • tunnel terminals top  • tunnel terminals bottom  • combined terminal bottom  • neutral conductor switching product feature  • halogen-free  • sealable  • silicon-free  • sealable  • silicon-free  • product function note  Product function note  Product function note  Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31ib in  Short circuit  short-circuit current breaking capacity (cn) at AC according to UL 1077 and CSA C22.2 No.235  Connections  Connecti			
Product details  product component  • tunnel terminals top  • tunnel terminals bottom  • combined terminal bottom  • combined terminal bottom  • combined terminal bottom  • neutral conductor switching  product feature  • halogen-free  • halogen-free  • sealable  • silicon-free  Product function  product function note  Short circuit  Short circuit current breaking capacity (Icn) at AC according to Ut. 1077 and CSA C22.2 No.235  Connectable conductor cross-section finely stranded with core end processing  • minimum  • maximum  tightening torque with screw-type terminals maximum  position of power supply cord  Machanical Design  Height  No  Product function  121 mm  width  36 mm  depth  installation depth  number of modular width units  2 at satening method  mounting position  net weight  Environmental conditions  wibration resistance  maximum  • maximum  • maximum  • maximum  • minimum  • 25 ° C  max. 95% humidity  mambient temperature during operation  • minimum  • maximum  •		480/277	
product component  • tunnel terminals top • tunnel terminals bottom • combined terminal top • combined terminal bottom • combined terminal bottom • neutral conductor switching • neutral conductor switching • halogen-free • sealable • silicon-free • sealable • silicon-free • product tunction  product function  product function  product function  product function  product function note  Short circuit  short-circuit current breaking capacity ((cn) at AC according to IU. 1077 and CSA C22 2 No 235  Connections  connectable conductor cross-section finely stranded with one end processing • minimum • maximum tightening torque with screw-type terminals maximum position of power supply cord  May  Mechanical Design  height viotan  installation depth number of modular width units fastening method mounting position et welght 121 mm viotan depth number of modular width units fastening method mounting position et welght 345 g  Environmental conditions  vibration resistance wibration resistance wibration resistance exacting to the Ce0068-2-6 ambient temperature during operation • minimum • maximum  amaximum  55 °C  max. 95% humidity  Declaration of  Declaration of	suitability for operation	Mechanical engineering / industry	
• tunnel terminals topt • tunnel terminals bottom • combined terminal top • combined terminal bottom • neutral conductor switching product feature • halogen-free • sealable • silicon-free • yes • silicon-free • yes • silicon-free • 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  short-circuit current breaking capacity ((on) at AC according to Ut. 1077 and CSA C22.2 No.235  Connections  connectable conductor cross-section finely stranded with core end processing • minimum • maximum • maximum position of power supply cord  Mochanical Design  height 121 mm width 36 mm depth 170 mm installation position 170 mm installation resistance 170 mm installation resistance 170 mm 170	Product details		
tunnel terminals bottom combined terminal top combined terminal bottom neutral conductor switching roduct feature halogen-free salable yes salable salicon-free yes product extension installable supplementary devices  Product function roduct function roduct function note Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in  Short circuit short-circuit current breaking capacity (Icn) at AC according to IU, 1077 and CSA C22.2 No.235  Connectable conductor cross-section finely stranded with core end processing minimum maximum yes	product component		
combined terminal tootom     combined terminal bottom     neutral conductor switching     product feature     halogen-free     sealable     silicon-free     sealable     silicon-free     product function     product function     product function note  Short circuit  Short circuit current breaking capacity (Icn) at AC according to IL. 1077 and CSA C22.2 No.235  Connectable conductor cross-section finely stranded with core end processing     minimum     maximum     ightening torque with screw-type terminals maximum position of power supply cord  Mechanical Design  Neight     installation depth     number of modular width units     fastening method     nounting position     net weight     internal position     internal position     internal position  No  No m's at 25 to 150Hz and 60m/s² at 35Hz (4sec)     intimum     intimum     internal position of maximum     internal conditions  vibration resistance according to IEC 60088-2-6     ambient temperature during operation     iminimum     intimum	<ul> <li>tunnel terminals top</li> </ul>	No	
combined terminal bottom     neutral conductor switching     product feature	<ul> <li>tunnel terminals bottom</li> </ul>	No	
neutral conductor switching product feature     halogen-free     sealable     silicon-free     product extension installable supplementary devices     Yes     product stunction     product function     product function note     Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in    No	<ul> <li>combined terminal top</li> </ul>	Yes	
product feature	<ul> <li>combined terminal bottom</li> </ul>	Yes	
Nalogen-free     sealable	<ul> <li>neutral conductor switching</li> </ul>	No	
* sealable     * silicon-free     * yes     product resision installable supplementary devices     Product function  product function note  Short circuit  Short circuit  Short circuit current breaking capacity (Icn) at AC according to UL 1077 and CSA C22.2 No.235  Connections  connectable conductor cross-section finely stranded with core end processing     * minimum     * maximum     position of power supply cord  height width     38 mm depth     number of modular width units     fastening method     mounting position     net weight     Environmental conditions  vibration resistance vibration resistance vibration resistance vibration resistance vibration resistance e minimum     * maximum     * minimum	product feature		
Silicon-free product function product function note  Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in  Short circuit  short-circuit current breaking capacity (Icn) at AC according to UL 1077 and CSA C22.2 No.235  Connections  connectable conductor cross-section finely stranded with core end processing  • minimum  • maximum fightening torque with screw-type terminals maximum position of power supply cord  Any  Mechanical Design  height 121 mm width 36 mm depth 70 mm installation depth 70 mm installation depth 70 mm installation depth 70 mm number of modular width units 2 fastening method on standard mounting rail any net weight 345 g  Environmental conditions  vibration resistance vibration resistance according to IEC 60068-2-6 ambient temperature during operation  • minimum 55 °C  • maximum 340 °C  Feneral Product Approval	<ul><li>halogen-free</li></ul>	Yes	
Product extension installable supplementary devices  Product function product function note  Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in  Short circuit  short-circuit current breaking capacity (Icn) at AC according to UL. 1077 and CSA C22.2 No.235  Connectable conductor cross-section finely stranded with core end processing  • minimum • maximum ightening torque with screw-type terminals maximum position of power supply cord  Mechanical Design  height width depth 70 mm number of modular width units 2 astening method mounting position net weight  Invironmental conditions  vibration resistance vibration resistance vibration resistance according to IEC 60068-2-6 ambient temperature during operation ambient temperature during operation ambient temperature during operation ambient temperature during operation e minimum • maximum  75°C  Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in  It AA  To KA  25 mm² 3.5 N·m 3.5 N	• sealable	Yes	
Product function product function note  Short circuit  short-circuit current breaking capacity (Icn) at AC according to UL 1077 and CSA C22.2 No.235  Connectable conductor cross-section finely stranded with core end processing  • minimum • maximum tightening torque with screw-type terminals maximum position of power supply cord  Mechanical Design  height 121 mm width 36 mm depth 70 mm installation depth 70 mm installation depth 70 mm number of modular width units 2 fastening method mounting position any net weight 345 g  Environmental conditions  vibration resistance vibration resistance vibration resistance vibration resistance vibration resistance • minimum • minimum • miximum ambient temperature during operation ambient temperature during operation ambient temperature during operation amaximum • miximum • Miximu	• silicon-free	Yes	
product function note  Short circuit  short-circuit current breaking capacity (Icn) at AC according to IU. 1077 and CSA C22.2 No.235  Connections  connectable conductor cross-section finely stranded with core end processing  • minimum • maximum ightening torque with screw-type terminals maximum position of power supply cord  Mechanical Design  height width depth 70 mm installation depth number of modular width units 2 fastening method mounting position net weight  ibration resistance vibration resistance vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum • Declaration of  Declaration of  I to kA  10 k	product extension installable supplementary devices	Yes	
Short circuit short-circuit current breaking capacity (Icn) at AC according to UL 1077 and CSA C22.2 No.235  Connectable conductor cross-section finely stranded with core end processing  • minimum • maximum ightening lorque with screw-type terminals maximum position of power supply cord  Mechanical Design  height width depth installation depth number of modular width units 2 fastening method mounting position net weight  Environmental conditions  vibration resistance vibration resistance • minimum • maximum • maximum • maximum • maximum • minimum • m	Product function		
Short circuit short-circuit current breaking capacity (Icn) at AC according to UL 1077 and CSA C22.2 No.235  Connectable conductor cross-section finely stranded with core end processing  • minimum • maximum ightening lorque with screw-type terminals maximum position of power supply cord  Mechanical Design  height width depth installation depth number of modular width units 2 fastening method mounting position net weight  Environmental conditions  vibration resistance vibration resistance • minimum • maximum • maximum • maximum • maximum • minimum • m	product function note	Terminal tightening torque for Cu, 60/75°C; 3.5Nm/	31lb.in
short-circuit current breaking capacity (Icn) at AC according to UL 1077 and CSA C22.2 No.235  Connections  connectable conductor cross-section finely stranded with core end processing  • minimum  • maximum  tightening torque with screw-type terminals maximum position of power supply cord  Mechanical Design  height  width  depth  121 mm width  depth  70 mm number of modular width units  2 fastening method  mounting position net weight  vibration resistance vibration resistance according to IEC 60068-2-6 ambient temperature during operation  • minimum  • maximum  method  moment temperature during operation  ambient temperature during operation  minimum  • maximum  • Declaration of	Short circuit		
according to UL 1077 and CSA C22.2 No.235  Connectables conductor cross-section finely stranded with core end processing  • minimum  • maximum  tightening torque with screw-type terminals maximum position of power supply cord  Mechanical Design  height width depth for mm installation depth number of modular width units 2 astening method mounting position net weight  To mm installation resistance vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum • Ceneral Product Approval		10 kA	
connectable conductor cross-section finely stranded with core end processing  • 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  vibration resistance according to IEC 60068-2-6  ambient temperature during operation  • minimum  • maximum  • maximum  • maximum  • maximum  • minimum  • minim	according to UL 1077 and CSA C22.2 No.235	10.104	
ore end processing of minimum of maximum tightening torque with screw-type terminals maximum position of power supply cord Any  Mechanical Design height width depth installation depth number of modular width units fastening method mounting position met weight  Environmental conditions  vibration resistance according to IEC 60068-2-6 ambient temperature during operation of minimum of maximum o			
maximum     tightening torque with screw-type terminals maximum     position of power supply cord  Mechanical Design  height width depth round installation depth number of modular width units fastening method mounting position net weight vibration resistance vibration resistance vibration resistance vibration resistance mounting operation  minimum min			
tightening torque with screw-type terminals maximum position of power supply cord  Mechanical Design  height	• minimum		
position of power supply cord  Mechanical Design  height width 36 mm depth 70 mm installation depth 70 mm number of modular width units 2 fastening method on standard mounting rail any autority and standard mounting position any autority at 25 to 150Hz and 60m/s² at 35Hz (4sec) vibration resistance 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) vibration resistance according to IEC 60068-2-6 ambient temperature during operation  • minimum 55 °C • maximum 55 °C ambient temperature during operation ambient temperature during operation ambient temperature during storage • minimum -40 °C • maximum 75 °C  General Product Approval	<ul><li>maximum</li></ul>		
height width 36 mm depth 70 mm installation depth 70 mm number of modular width units 2 fastening method on standard mounting rail any net weight 345 g  Environmental conditions  vibration resistance vibration resistance according to IEC 60068-2-6 ambient temperature during operation  • minimum 55 °C ambient temperature during operation ambient temperature during operation ambient temperature during storage  • minimum -25 °C minimum -40 °C maximum -40 °C maximum -75 °C  General Product Approval		3.5 N·m	
height width 36 mm  depth 70 mm installation depth 70 mm number of modular width units 2 fastening method on standard mounting rail any 345 g  Environmental conditions  vibration resistance vibration resistance according to IEC 60068-2-6 ambient temperature during operation  • minimum 55 °C  • maximum ambient temperature during operation ambient temperature during operation ambient temperature during storage  • minimum -40 °C  • maximum -40 °C  • maximum -75 °C  General Product Approval		Any	
width depth 70 mm installation depth 70 mm number of modular width units 2 fastening method on standard mounting rail any 345 g  Environmental conditions  vibration resistance vibration resistance according to IEC 60068-2-6 ambient temperature during operation  • minimum 655 °C  • maximum ambient temperature during operation ambient temperature during operation ambient temperature during storage  • minimum -40 °C  • maximum Traduct Approval	Mechanical Design		
depth installation depth 70 mm  number of modular width units 2  fastening method on standard mounting rail any 345 g  Environmental conditions  vibration resistance vibration resistance according to IEC 60068-2-6 ambient temperature during operation  • minimum	height		
installation depth number of modular width units  fastening method mounting position net weight   installation depth number of modular width units  fastening method mounting position net weight  installation depth number of modular width units  fastening method mounting position any 345 g  installation depth number of modular width units  any any any any at 25 to 150Hz and 60m/s² at 35Hz (4sec)  ### 1 mm at 5 to 25 Hz; 50 m/s² at 25 to 150 Hz  ### 25 °C ### 25 °	width	36 mm	
number of modular width units  fastening method mounting position net weight  Servironmental conditions  vibration resistance vibration resistance according to IEC 60068-2-6 ambient temperature during operation  minimum mi	depth	70 mm	
fastening method mounting position net weight  Substitution resistance vibration resistance according to IEC 60068-2-6 ambient temperature during operation  maximum  maximum  maximum  minimum	installation depth	70 mm	
mounting position net weight  345 g  Environmental conditions  vibration resistance vibration resistance according to IEC 60068-2-6 ambient temperature during operation  • minimum • maximum ambient temperature during operation ambient temperature during operation ambient temperature during operation ambient temperature during storage • minimum • maximum  -40 °C maximum  -40 °C  Feneral Product Approval	number of modular width units	2	
net weight  Brovironmental conditions  vibration resistance vibration resistance according to IEC 60068-2-6 ambient temperature during operation  In maximum In maxim	fastening method	on standard mounting rail	
vibration resistance vibration resistance according to IEC 60068-2-6 ambient temperature during operation  • minimum  • maximum  • maximum  ambient temperature during operation  ambient temperature during operation  ambient temperature during operation  ambient temperature during storage  • minimum  -40 °C  • maximum  The control of t	= -		
vibration resistance vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum ambient temperature during operation ambient temperature during operation ambient temperature during operation ambient temperature during storage • minimum -40 °C maximum -40 °C  Ceneral Product Approval	net weight	345 g	
vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum • maximum -25 °C ambient temperature during operation ambient temperature during operation ambient temperature during storage • minimum -40 °C • maximum  To concrat Product Approval	Environmental conditions		
ambient temperature during operation  • minimum  • maximum  • maximum  -25 °C  ambient temperature during operation  ambient temperature during storage  • minimum  • maximum  -40 °C  • maximum  75 °C   Declaration of	vibration resistance	50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec)	
<ul> <li>minimum</li> <li>maximum</li> <li>maximum</li> <li>max. 95 °C</li> <li>ambient temperature during operation</li> <li>ambient temperature during storage</li> <li>minimum</li> <li>maximum</li> <li>maximum</li> <li>maximum</li> <li>maximum</li> <li>maximum</li> <li>T5 °C</li> </ul> Declaration of		±1 mm at 5 to 25 Hz; 50 m/s <sup>2</sup> at 25 to 150 Hz	
<ul> <li>maximum</li></ul>	ambient temperature during operation		
ambient temperature during operation max. 95% humidity ambient temperature during storage	• minimum	55 °C	
ambient temperature during storage	• maximum	-25 °C	
<ul> <li>minimum</li> <li>maximum</li> <li>75 °C</li> </ul> General Product Approval Declaration of	ambient temperature during operation	max. 95% humidity	
• maximum 75 °C  General Product Approval  Declaration of	ambient temperature during storage		
General Product Approval	• minimum		
Canaral Product Annroyal	• maximum	75 °C	
	General Product Approval		



Confirmation











Special Test Certific-<u>ate</u>

**Environmental Con**firmations

**Miscellaneous** 

## **Further information**

Information on the packaging

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

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

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SJ4202-7HG42

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

https://support.industry.siemens.com/cs/ww/en/ps/5SJ4202-7HG42

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SJ4202-7HG42">http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SJ4202-7HG42</a>

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications



