SIEMENS

Data sheet 5SJ4225-7HG42



Circuit breaker 10kA, 2-pole, C, 25A 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
tripping characteristic class	С
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	
 at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum 	277 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	2.9 W
Current	
operational current	
• at 30 °C / rated value	25 A
 at 40 °C / rated value 	25 A

 at 45 °C / rated value 	24.3 A
at 50 °C / rated value	23.8 A
 at 55 °C / rated value 	23.1 A
at 60 °C / rated value	22.5 A
at AC / rated value	25 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	
• tunnel terminals top	No
tunnel terminals bottom	No
 combined terminal top 	Yes
combined terminal bottom	Yes
product feature	
halogen-free	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	Terminal agricining torque for out, 50775 0, 5.5(4)175 115.111
	10 kA
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 minimum	0.75 mm ²
minimum maximum	0.75 mm² 25 mm²
minimum maximum tightening torque / with screw-type terminals / maximum	
minimum maximum tightening torque / with screw-type terminals / maximum position / of power supply cord	25 mm²
minimum maximum tightening torque / with screw-type terminals / maximum	25 mm ² 3.5 N·m
minimum maximum tightening torque / with screw-type terminals / maximum position / of power supply cord	25 mm ² 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
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 36 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 36 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 36 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 36 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 fastening method	25 mm² 3.5 N·m Any 121 mm 36 mm 70 mm 70 mm 2 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 36 mm 70 mm 70 mm 2 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 36 mm 70 mm 70 mm 2 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 36 mm 70 mm 70 mm 2 on standard mounting rail any 337 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 36 mm 70 mm 70 mm 2 on standard mounting rail any 337 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 36 mm 70 mm 70 mm 2 on standard mounting rail any 337 g 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec)
 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 minimum 	25 mm² 3.5 N·m Any 121 mm 36 mm 70 mm 70 mm 2 on standard mounting rail any 337 g 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec)
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 minimum maximum	25 mm² 3.5 N·m Any 121 mm 36 mm 70 mm 70 mm 2 on standard mounting rail any 337 g 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec)
 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 minimum maximum ambient temperature / during storage 	25 mm² 3.5 N·m Any 121 mm 36 mm 70 mm 70 mm 2 on standard mounting rail any 337 g 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) 55 °C -25 °C
 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 minimum maximum ambient temperature / during storage minimum 	25 mm² 3.5 N·m Any 121 mm 36 mm 70 mm 70 mm 2 on standard mounting rail any 337 g 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) 55 °C -25 °C -40 °C
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 maximum	25 mm² 3.5 N·m Any 121 mm 36 mm 70 mm 70 mm 2 on standard mounting rail any 337 g 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) 55 °C -25 °C -40 °C
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 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 minimum maximum ambient temperature / during storage minimum maximum Certificates 	25 mm² 3.5 N·m Any 121 mm 36 mm 70 mm 70 mm 2 on standard mounting rail any 337 g 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) 55 °C -25 °C -40 °C 75 °C
 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 minimum maximum ambient temperature / during storage minimum maximum Certificates reference code according to EN 61346-2 	25 mm² 3.5 N·m Any 121 mm 36 mm 70 mm 70 mm 2 on standard mounting rail any 337 g 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) 55 °C -25 °C -40 °C 75 °C

Confirmation











Test Certificates

other

Special Test Certific-

<u>ate</u>

Miscellaneous

Further information

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=5SJ4225-7HG42

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

https://support.industry.siemens.com/cs/ww/en/ps/5SJ4225-7HG42

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SJ4225-7HG42

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications