SIEMENS

Data sheet

5SJ4210-8HG41



Miniature circuit breaker 240 V 14kA, 2-pole, D, 10A, D=70 mm according to UL 489 $\,$

product brand name SENTRON product designation Miniture circuit breakers design of the product Miniture circuit breaker 5SJ4 Ceneral technical data Immber of poles number of poles 2 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 overvoltage category 3 degree of pollution 3 Voltage Voltage supply voltage / aft AC / rated value 440 V supply voltage / aft AC / rated value 400 V operating voltage / aft AC / rated value 400 V operating voltage / aft AC / rated value 60 V c22 / No. 5-02 / maximum 60 V e at CC / zhead value / maximum 60 V c22 / No. 5-02 / maximum 50 Hz Protection class IP IP20, with connected conductors, IP 40 in the handle range switching capacity ourent according to IL 40 value	Model			
design of the product Miniature circuit-breaker 5SJ4 General technical data 1 number of poles 2 thipping 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 204-27 according to IEC 750 overvoltage category 3 degree of pollution 3 Voltage Voltage supply voltage / of the operating voltage AC/DC insulation voltage (Ui) / at AC / rated value 440 V Supply voltage at AC / rated value supply voltage / at AC / rated value 400 V operating voltage at CC / according to UL 489 and CSA 522 2 No. 5-02 / maximum e at DC / single channel / according to UL 489 and CSA 222 No. 5-02 / maximum e at DC / ingle channel / according to UL 489 and CSA 125 V c222 No. 5-02 / maximum 50 Hz Protection class IP IP20, with connected conductors, IP 40 in the handle range Switching capacity current 10 kA e according to EK 60894 / rated value 10 kA e according to EK 60894 / rated value 15 kA Dissipation 13 W	product brand name	SENTRON		
General technical data number of poles 2 Iripping 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 1EC 204-2 / according to 1EC 750 overvoltage category 3 degree of pollution 3 Vottage AC/DC insulation voltage (U) / at AC / rated value 440 V Supply voltage / at AC / rated value 400 V operating voltage AC/DC • at AC / according to UL 489 and CSA C22.2 No. 5- 240 V 02 / maximum 60 V • at DC / rated value / maximum 60 V • at DC / rated value / according to UL 489 and CSA C22.2 No. 5-02 / maximum 125 V • at DC / rated value / according to UL 489 and CSA C22.2 No. 5-02 / maximum 50 Hz Protection class IP IP20, with connected conductors, IP 40 in the handle range Switching capacity succording to EC 60947-2 / rated value 10 kA • according to EN 6098/ rated value 10 kA 1.3 W	product designation	Miniature circuit breakers		
number of poles 2 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 3 overvoltage category 3 degree of pollution 3 Voltage ////////////////////////////////////	design of the product	Miniature circuit-breaker 5SJ4		
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 F overvoltage category 3 degree of pollution 3 Voltage AC/DC insulation voltage (UI) / at AC / rated value 440 V Supply voltage at AC / rated value exply voltage at AC / rated value / maximum exply voltage at AC / rated value / maximum exply voltage channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum 240 V exply voltage frequency / rated value 50 V c22.2 No. 5-02 / maximum 60 V exply voltage frequency / rated value 50 Hz Protection class P protection class IP IP20, with connected conductors, IP 40 in the handle range Switching capacity switching capacity current	General technical data			
In Construction 10 000 Installation environment regarding EMC Suitable for environment B (immunity to interference not applicable) reference code / according to DIN 40719 extended Suitable for environment B (immunity to interference not applicable) reference code / according to IEC 204-2 / according to IEC 750 S overvoltage category 3 degree of pollution 3 Voltage type of voltage / of the operating voltage type of voltage / at AC / rated value 440 V Supply voltage 4 AC / rated value operating voltage 420 V e at AC / according to UL 489 and CSA C22.2 No. 5- 240 V c22 / no. 5-02 / maximum 60 V e at DC / rated value / maximum 60 V e at DC / and the / according to UL 489 and CSA C22.2 No. 5-02 / maximum 125 V supply voltage frequency / rated value 50 Hz Protection class IP20, with connected conductors, IP 40 in the handle range switching capacity current 10 kA e according to IEC 60947-2 / rated value 10 kA Dissipation 1.3 W poreating state / per pole 1.3 W	number of poles	2		
Installation environment regarding EMC Suitable for environment B (immunity to interference not applicable) reference code / according to DIN 40719 extended according to EC 204-2 / according to IEC 750 overvoltage category 3 degree of pollution 3 Votage AC/DC insulation voltage (UI) / at AC / rated value 440 V Supply voltage / at AC / rated value 440 V Supply voltage / at AC / rated value 400 V operating voltage (DI) / at AC / rated value 400 V operating voltage (DI) / at AC / rated value 400 V operating voltage (DI) / at AC / rated value 60 V e at AC / according to UL 489 and CSA C22.2 No. 5-0 / maximum 60 V e at DC / rated value / maximum 60 V e at DC / z-channel / according to UL 489 and CSA C22.2 No. 5-0 / maximum 125 V supply voltage frequency / rated value 50 Hz Protection class IP IP20, with connected conductors, IP 40 in the handle range Switching capacity 10 kA e according to EN 60898 / rated value 10 kA e according to IC 60947-2 / rated value 1.3 W Dissipation 1.3 W	tripping characteristic class	D		
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 AC/DC insulation voltage / of the operating voltage AC/DC insulation voltage / of the operating voltage AC/DC isupply voltage 440 V Supply voltage 4C/DC operating voltage 400 V operating voltage 60 V c.at BC / rated value / maximum 60 V c.at BC / single channel / according to UL 489 and CSA c.22.2 No. 5-02 / maximum 125 V supply voltage frequency / rated value 50 Hz Protection class IP IP20, with connected conductors, IP 40 in the handle range </td <td>mechanical service life (switching cycles) / typical</td> <td>10 000</td>	mechanical service life (switching cycles) / typical	10 000		
according to IEC 204-2 / according to IEC 750 overvoltage category 3 degree of pollution 3 Voltage AC/DC Insulation voltage / of the operating voltage AC/DC Insulation voltage / of the operating voltage 440 V Supply voltage / at AC / rated value 440 V Supply voltage / at AC / rated value 400 V operating voltage 400 V • at AC / according to UL 489 and CSA C22.2 No. 5- 240 V 02 / maximum 60 V • at DC / rated value / maximum 60 V • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum • at DC / 2-channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum • at DC / 2-channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum • at DC / z-channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum • at DC / actaenter I / according to UL 489 and CSA C22.2 No. 5-02 / maximum • according to IC / channel / according to UL 489 and CSA C • according to IC / channel / according to UL 489 and CSA C • according to IC / channel / according to UL 489 and CSA C • according to IC / channel / according to UL 489 and CSA	installation environment regarding EMC	Suitable for environment B (immunity to interference not applicable)		
degree of pollution 3 Voltage AC/DC insulation voltage / of the operating voltage AC/DC insulation voltage (U) / at AC / rated value 440 V Supply voltage 440 V supply voltage 400 V operating voltage 400 V • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum 240 V • at DC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum 60 V • at DC / 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 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 IP20, with connected conductors, IP 40 in the handle range Switching capacity current • according to EC 60947-2 / rated value 10 kA • according to EC 60947-2 / rated value 15 kA IS kA Dissipation I.3 W 1.3 W operating state / per pole 1.3 W operational current • at 30 °C / rated value 10 A 10 A		F		
Voltage AC/DC insulation voltage (Ui) / at AC / rated value 440 V Supply voltage 440 V supply voltage / at AC / rated value 400 V operating voltage 400 V • 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 / rated value / maximum 60 V • at DC / rated value / maximum 60 V • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum 125 V • at DC / 2-channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum 50 Hz Protection class IP20, with connected conductors, IP 40 in the handle range Switching capacity current 10 kA • according to EN 60898 / rated value 10 kA • according to IEC 60947-2 / rated value 1.3 W power loss [M] / for rated value of the current / at AC / in hot operating state / per pole 1.3 W	overvoltage category	3		
type of voltage / of the operating voltage AC/DC insulation voltage (Ui) / at AC / rated value 440 V Supply voltage 440 V supply voltage 400 V operating voltage 400 V • at AC / rated value 400 V 0perating voltage 400 V • 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 IP20, with connected conductors, IP 40 in the handle range Switching capacity current 10 kA • according to EN 60898 / rated value 10 kA • according to EC 60947-2 / rated value 15 kA Dissipation 1.3 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 1.3 W current • at 30 °C / rated value 10 A	degree of pollution	3		
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 240 V • at DC / rated value / maximum 60 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 IP IP20, with connected conductors, IP 40 in the handle range switching capacity current • according to EC 60947-2 / rated value switching capacity (urrent 10 kA • according to IEC 60947-2 / rated value 1.3 W protection acting state / per pole 1.3 W current • at 30 °C / rated value 10 A	Voltage			
Supply voltage 400 V operating voltage 400 V • 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 / rated value / maximum 60 V • at DC / rated value / maximum 60 V • at DC / 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 50 Hz Protection class IP IP20, with connected conductors, IP 40 in the handle range Switching capacity switching capacity current • according to IEC 60947-2 / rated value 10 kA • according to IEC 60947-2 / rated value 1.3 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 1.3 W current • at 30 °C / rated value 10 A	type of voltage / of the operating voltage	AC/DC		
supply voltage / at AC / rated value 400 V operating voltage e at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum 240 V e at DC / rated value / maximum 60 V e at DC / rated value / maximum 60 V e at DC / z-channel / according to UL 489 and CSA 25 V C22.2 No. 5-02 / maximum 125 V supply voltage frequency / rated value 50 Hz Protection class IP IP20, with connected conductors, IP 40 in the handle range switching capacity switching capacity current e according to EN 60898 / rated value 10 kA e according to IEC 60947-2 / rated value 15 kA Dissipation 1.3 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 1.3 W current e at 30 °C / rated value 10 A	insulation voltage (Ui) / at AC / rated value	440 V		
operating voltage at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum at DC / rated value / maximum at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum at DC / 2-channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum at DC / 2-channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum at DC / 2-channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum by voltage frequency / rated value 50 Hz Protection class IP IP20, with connected conductors, IP 40 in the handle range Switching capacity current according to EN 60898 / rated value to KA according to IEC 60947-2 / rated value to KA power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current at 30 °C / rated value to A 	Supply voltage			
 at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum at DC / rated value / maximum at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum at DC / 2-channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum at DC / 2-channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum supply voltage frequency / rated value 50 Hz Protection class protection class IP IP20, with connected conductors, IP 40 in the handle range Switching capacity current according to EN 60898 / rated value to KA according to IEC 60947-2 / rated value to KA power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 1.3 W Current at 30 °C / rated value to A 	supply voltage / at AC / rated value	400 V		
02 / maximum 60 V • at DC / rated value / maximum 60 V • at DC / single channel / according to UL 489 and CSA 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 • at DC / 2-channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum 50 Hz supply voltage frequency / rated value 50 Hz 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 10 kA • according to IEC 60947-2 / rated value 1.3 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 1.3 W current • at 30 °C / rated value 10 A	operating voltage			
• 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 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 1.3 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 1.3 W Current • at 30 °C / rated value 10 A	8	240 V		
CSA C22.2 No. 5-02 / maximum 125 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 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 1.3 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 1.3 W Current • at 30 °C / rated value 10 A	 at DC / rated value / maximum 	60 V		
C22.2 No. 5-02 / maximum 50 Hz supply voltage frequency / rated value 50 Hz Protection class IP20, with connected conductors, IP 40 in the handle range Switching capacity IP20, with connected conductors, IP 40 in the handle range Switching capacity current • according to EN 60898 / rated value • according to IEC 60947-2 / rated value 10 kA • according to IEC 60947-2 / rated value 15 kA Dissipation 1.3 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 1.3 W operational current • at 30 °C / rated value 10 A		60 V		
Protection class IP20, with connected conductors, IP 40 in the handle range Switching capacity 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 Image: state / per pole current 0 erational current • at 30 °C / rated value 10 A		125 V		
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 Current • at 30 °C / rated value • at 30 °C / rated value 10 A	supply voltage frequency / rated value	50 Hz		
Switching capacity switching capacity current • according to EN 60898 / rated value • according to IEC 60947-2 / 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 Current operational current • at 30 °C / rated value 10 A	Protection class			
switching capacity current according to EN 60898 / rated value 10 kA • according to IEC 60947-2 / rated value 15 kA Dissipation 1.3 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 1.3 W Current operational current 10 A	protection class IP	IP20, with connected conductors, IP 40 in the handle range		
	Switching capacity			
	switching capacity current			
Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current • at 30 °C / rated value 10 A	 according to EN 60898 / rated value 	10 kA		
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 1.3 W Current operational current • at 30 °C / rated value 10 A	 according to IEC 60947-2 / rated value 	15 kA		
hot operating state / per pole Current operational current o at 30 °C / rated value 10 A	Dissipation			
operational current • at 30 °C / rated value 10 A		1.3 W		
• at 30 °C / rated value 10 A	Current			
	operational current			
• at 40 °C / rated value 10 A	• at 30 °C / rated value	10 A		
	• at 40 °C / rated value	10 A		

	0.7.4	
• at 45 °C / rated value	9.7 A	
• at 50 °C / rated value	9.4 A	
• at 55 °C / rated value	9.1 A	
• at 60 °C / rated value	0.88 A	
at AC / rated value	10 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 / 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		
breaking capacity short-circuit current (Icn) / at AC /	14 kA	
according to UL 1077 and CSA C22.2 No.235		
Connections		
connectable conductor cross-section / finely stranded /		
with core end processing		
• minimum	0.75 mm²	
• maximum	25 mm²	
tightening torque / with screw-type terminals / maximum	3.5 N·m	
position / of power supply cord	Any	
Mechanical Design		
height	110 mm	
width	36 mm	
depth	70 mm	
installation depth	70 mm	
number of modular width units	2	
fastening method	on standard mounting rail	
mounting position	any	
net weight	331 g	
Environmental conditions		
vibration resistance	50 m/s ² at 25 to 150Hz and 60m/s ² at 35Hz (4sec)	
ambient temperature / during operation		
• minimum	55 °C	
• maximum	-25 °C	
ambient temperature / during storage		
• minimum	-40 °C	
• maximum	75 °C	
Certificates		
reference code		
according to EN 61346-2	F	
according to IEC 81346-2	F	
General Product Approval		Declaration of Conformity

	<u>Confirmation</u>		DE	EHC	UK CA
Declaration of Conformity	Test Certificates		other		
CE EG-Konf.	<u>Miscellaneous</u>	<u>Special Test Certific-</u> <u>ate</u>	<u>Miscellaneous</u>		

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=5SJ4210-8HG41 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/5SJ4210-8HG41 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SJ4210-8HG41 CAx-Online-Generator http://www.siemens.com/cax Tender specifications http://www.siemens.com/specifications

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