## SIEMENS

## Data sheet

## 5SJ4104-7HG40



Miniature circuit breaker 240 V 14kA, 1-pole, C, 4A, D=70 mm according to UL 489, equal polarity

product brand name         SENTRON           product designation         Miniature circuit breakers           design of the product         Miniature circuit-breaker SSI4           Ceneral technical data         1           number of poles         1           1tipping characteristic class         C           mechanical service life (switching cycles) / typical         10 000           installation environment regarding EMC         Suitable for environment B (immunity to interference not applicable)           reference cod / according to DIN 40719 extended         3           according to EC 204-2/ according to IEC 750         3           overvoltage category         3           degree of pollution         3           Voltage         AC/DC           insulation voltage (UI) / at AC / rated value         440 V           Supply voltage         at C/C / according to UL 489 and CSA C22.2 No.5-C           02 / maximum         60 V           oct / according to UL 489 and CSA C22.2 No.5-C         120 V           22 / maximum         60 V           e at DC / rated value / maximum         60 V           e at DC / rated value         50 Hz           Protection class         P           protection class IP         IP20, with connected conductors, IP 40 in the handle range	Model			
design of the product     Miniature circuit-breaker 5SJ4       General technical data     1       number of poles     1       tripping characteristic class     C       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       according to IEC 204-27 according to IEC 750     3       overvoltage category     3       degree of pollution     3       Voltage     AC/DC       insulation voltage (U) / at AC / rated value     440 V       Supply voltage / at AC / rated value     440 V       Supply voltage / at AC / rated value     400 V       operating voltage     120 V       e at AC / according to UL 489 and CSA C22.2 No. 5-     120 V       02 / maximum     60 V       e at CC / single channel / according to UL 489 and CSA C22.2 No. 5-     120 V       02 / maximum     60 V       e at CC / single channel / according to UL 489 and CSA C22.2 No. 5-     120 V       02 / maximum     60 V       e at CO / single channel / according to UL 489 and CSA C22.2 No. 5-     120 V       02 / maximum     60 V       e at CO / single channel / according to UL 489 and CSA C22.2 No. 5-     120 V       02 / m	product brand name	SENTRON		
General technical data       1         Impiping characteristic class       0         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       Suitable for environment B (immunity to interference not applicable)         reference code / according to IEC 750       3         overvoltage category       3         degree of pollution       3         Voltage       440 V         supply voltage / of the operating voltage       AC/DC         insulation voltage (UI) / at AC / rated value       440 V         Supply voltage / at AC / rated value       400 V         operating voltage       • at AC / according to UL 489 and CSA C22.2 No. 5-02 / maximum         • at DC / rated value / maximum       60 V         • at DC / single 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 EN 60898 / rated value         • according to EN 60898 / rated value       10 kA       • according to the current / at AC / in         operational current </td <td>product designation</td> <td colspan="2">Miniature circuit breakers</td>	product designation	Miniature circuit breakers		
number of poles         1           tripping characteristic class         C           mechanical service life (switching cycles) / typical         0 000           installation environment regarding EMC         Suitable for environment B (immunity to interference not applicable)           reference code / according to DIN 40719 extended         F           according to IEC 204-2 / according to IEC 750         3           overvoltage category         3           type of voltage (10) / at AC / rated value         440 V           Supply voltage / of the operating voltage         AC/DC           insulation voltage (U) / at AC / rated value         440 V           Supply voltage / at AC / rated value         400 V           operating voltage         AC/DC           insulation voltage (U) / at AC / rated value         400 V           operating voltage         400 V           operating voltage         60 V           e at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum         60 V           e at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum         60 V           supply voltage frequency / rated value         50 Hz           Protection class IP         IP20, with connected conductors, IP 40 in the handle range           Switching capacity current         eaccording to EN 60987 rat	design of the product	Miniature circuit-breaker 5SJ4		
tripping characteristic class       C         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 EC 204-2 / according to IEC 750       Suitable for environment B (immunity to interference not applicable)         overvoltage category       3         degree of pollution       3         Votage       AC/DC         insulation voltage (UI) / at AC / rated value       440 V         Supply voltage       acc/according to UL 489 and CSA C22.2 No. 5- 02 / maximum         e at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum       120 V         e at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum       60 V         supply voltage frequency / rated value       50 Hz         Protection class IP       IP20, with connected conductors, IP 40 in the handle range         Switching capacity       sixthing capacity         switching capacity current       10 kA         e according to EN 60898 / rated value       10 kA         e according to EC 60947-2 / rated value       10 kA         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         Operational current       4A       <	General technical data			
Imply of the few the fe	number of poles	1		
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         AC/DC           insulation voltage (UI) / at AC / rated value         440 V           Supply voltage         AC/DC           insulation voltage (UI) / at AC / rated value         440 V           Supply voltage         at AC / rated value         400 V           operating voltage         et AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum         120 V           e at DC / rated value / maximum         60 V         60 V           e at DC / rated value / maximum         60 V         80 V           supply voltage frequency / rated value         50 Hz           Protection class IP         IP20, with connected conductors, IP 40 in the handle range           Switching capacity current         e according to IEC 60947-2 / rated value           is kA         Dissipation         1.8 W           power loss [W] / for rated value of the current / at AC / in hot operating state / per pole         1.8 W           Overational current         4 A         A	tripping characteristic class	С		
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 (Ui) / at AC / rated value       440 V         Supply voltage       AC/DC         supply voltage / at AC / rated value       400 V         Operating voltage       at AC / rated value         • at AC / according to UL 489 and CSA C22.2 No. 5-       120 V         of maximum       60 V         • at DC / rated value / maximum       60 V         • at DC / rated value / maximum       60 V         • at DC / rated value / maximum       50 Hz         Protection class       Protection class IP         protection class IP       IP20, with connected conductors, IP 40 in the handle range         Switching capacity current       • according to IE C 60947-2 / rated value         • according to IE C 60947-2 / rated value       10 kA         • according to IE C 60947-2 / rated value       1.8 W         Dissipation       1.8 W         operating state / per pole       4 A         • at 30 °C / rated value       4 A	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 (Ui) / at AC / rated value       440 V         Supply voltage       440 V         supply voltage / at AC / rated value       400 V         operating voltage / at AC / rated value       400 V         operating voltage / at AC / rated value       400 V         operating voltage / at AC / rated value       400 V         operating voltage / at AC / rated value       400 V         operating voltage / at AC / rated value       400 V         operating voltage / at AC / rated value       60 V         • at AC / according to UL 489 and CSA C22.2 No. 5-02 / maximum       60 V         • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum       60 V         supply voltage frequency / rated value       50 Hz         Protection class       IP20, with connected conductors, IP 40 in the handle range         Switching capacity       value       10 kA         • according to EN 60884 / rated value       10 kA         • according to EN 60884 / rated value       10 kA         • according to IEC 60947-2 / rated value       15 kA         Dissipation       1.8 W	installation environment regarding EMC	Suitable for environment B (immunity to interference not applicable)		
degree of pollution       3         Voltage       AC/DC         insulation voltage (Ui) / at AC / rated value       440 V         Supply voltage       440 V         Supply voltage       440 V         Supply voltage       440 V         supply voltage       400 V         operating voltage       400 V         • at AC / raced value       400 V         operating voltage       120 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         supply voltage frequency / rated value       50 Hz         Protection class       IP20, with connected conductors, IP 40 in the handle range         Switching capacity       switching capacity         switching capacity current       10 kA         • according to IEC 60947-2 / rated value       10 kA         • according to IEC 60947-2 / rated value       15 kA         Dissipation       IPerole         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         operating acurent       4 A         • at 40 °C / rated value       4 A		F		
Voltage         Vype 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         • at AC / according to UL 489 and CSA C22.2 No. 5-       120 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       50 Hz         supply voltage frequency / rated value       50 Hz         Protection class       120 V         protection class IP       IP20, with connected conductors, IP 40 in the handle range         Switching capacity current       10 kA         • according to EC 60947-2 / rated value       10 kA         • according to IEC 60947-2 / rated value       15 kA         Dissipation       1.8 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         operational current       4 A         • at 30 °C / rated value       4 A	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         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         120 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           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 IEC 60947-2 / rated value           • according to EIC 60947-2 / rated value         10 kA           • according to IEC 60947-2 / rated value         15 kA           Dissipation         1.8 W           power loss [W] / for rated value of the current / at AC / in hot operating state / per pole         1.8 W           operational current         4 A           • at 30 °C / rated value         4 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       120 V         • at DC / rated value / maximum       60 V       0         • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum       60 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 current       10 kA         • according to EN 60898 / rated value       10 kA         • according to EN 60898 / rated value       15 kA         Dissipation       1.8 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         operational current       4 A         • at 30 °C / rated value       4 A	Voltage			
Supply voltage       400 V         operating voltage       400 V         operating voltage       400 V         operating voltage       120 V         • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum       120 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         supply voltage frequency / rated value       50 Hz         Protection class       1P20, 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       1.8 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         current       at 30 °C / rated value       4 A         • at 40 °C / rated value       4 A	type of voltage / of the operating voltage	AC/DC		
supply voltage / at AC / rated value       400 V         operating voltage       400 V         operating voltage       120 V         • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum       120 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         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       1.8 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         cturent       e at 30 °C / rated value       4 A         • at 40 °C / rated value       4 A	insulation voltage (Ui) / at AC / rated value	440 V		
operating voltage       i the formation of the second	Supply voltage			
• at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum         120 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           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         1.8 W           corrent         • at 30 °C / rated value         4 A           • at 0 °C / rated value         4 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 C22.2 No. 5-02 / maximum       60 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         Current         • at 30 °C / rated value       4 A         • at 40 °C / rated value       4 A	operating voltage			
• at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum       60 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       power loss [W] / for rated value of the current / at AC / in hot operating state / per pole         Current       • at 30 °C / rated value       4 A         • at 40 °C / rated value       4 A		120 V		
CSA C22.2 No. 5-02 / maximum       50 Hz         supply voltage frequency / rated value       50 Hz         Protection class       intervention         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       1.8 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         operational current       4 A         • at 30 °C / rated value       4 A	<ul> <li>at DC / rated value / maximum</li> </ul>	60 V		
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         • 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       4 A         • at 40 °C / rated value       4 A		60 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       4 A         • at 40 °C / rated value       4 A	supply voltage frequency / rated value	50 Hz		
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       1.8 W         Current       operational current         • at 30 °C / rated value       4 A         • at 40 °C / rated value       4 A	Protection class			
switching capacity current       10 kA         • according to EN 60898 / rated value       10 kA         • according to IEC 60947-2 / rated value       15 kA         Dissipation       15 kA         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         Current       operational current         • at 30 °C / rated value       4 A         • at 40 °C / rated value       4 A	protection class IP	IP20, with connected conductors, IP 40 in the handle range		
<ul> <li>according to EN 60898 / rated value</li> <li>according to IEC 60947-2 / rated value</li> <li>10 kA</li> <li>according to IEC 60947-2 / rated value</li> <li>15 kA</li> <li>Dissipation         <ul> <li>power loss [W] / for rated value of the current / at AC / in hot operating state / per pole</li> <li>Current</li></ul></li></ul>	Switching capacity			
eaccording 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     eat 30 °C / rated value     4 A     eat 40 °C / rated value     4 A	switching capacity current			
Dissipation         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         Current       operational current         • at 30 °C / rated value       4 A         • at 40 °C / rated value       4 A	<ul> <li>according to EN 60898 / rated value</li> </ul>	10 kA		
power loss [W] / for rated value of the current / at AC / in       1.8 W         hot operating state / per pole       1.8 W         Current       operational current         • at 30 °C / rated value       4 A         • at 40 °C / rated value       4 A	<ul> <li>according to IEC 60947-2 / rated value</li> </ul>	15 kA		
hot operating state / per pole          Current         operational current         • at 30 °C / rated value         • at 40 °C / rated value	Dissipation			
operational current     4 A       • at 30 °C / rated value     4 A       • at 40 °C / rated value     4 A	1 1 1	1.8 W		
at 30 °C / rated value     4 A     at 40 °C / rated value     4 A	Current			
• at 40 °C / rated value 4 A	operational current			
	• at 30 °C / rated value	4 A		
• at 45 °C / rated value 3.9 A	• at 40 °C / rated value	4 A		
	• at 45 °C / rated value	3.9 A		

	0.0.4		
• at 50 °C / rated value	3.8 A		
• at 55 °C / rated value	3.7 A		
• at 60 °C / rated value	3.6 A		
at AC / rated value	4 A		
Main circuit			
type of voltage supply / at AC / according to UL 489 and CSA C22.2 No. 5-02	240/120		
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		
<ul> <li>combined terminal top</li> </ul>	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/	21lh in	
	Terminal lightening lorque for Cu, 60/75 C, 3.514m/	5110.111	
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 mm <sup>2</sup>		
maximum	25 mm²		
tightening torque / with screw-type terminals / maximum	3.5 N·m		
position / of power supply cord	Any		
Mechanical Design			
height	90 mm		
width	18 mm		
depth	70 mm		
installation depth	70 mm		
number of modular width units	1		
fastening method	on standard mounting rail		
mounting position	any		
net weight	161 g		
Environmental conditions			
vibration resistance	50 m/s <sup>2</sup> at 25 to 150Hz and 60m/s <sup>2</sup> 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		
		Declaration of	
General Product Approval		Conformity	



## 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=5SJ4104-7HG40 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/5SJ4104-7HG40 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SJ4104-7HG40 CAx-Online-Generator http://www.siemens.com/cax Tender specifications

http://www.siemens.com/specifications

