# **SIEMENS**

Product data sheet 5SY7140-7



CIRCUIT BREAKER 230/400V 15KA, 1-POLE, C, 40A, D=70MM

Similar to image

Technical data:				
product brand name		SENTRON		
Product designation		5SY miniature circuit breaker		
Mounting type		Quick assembly system		
Type of voltage		AC/DC		
Height	mm	90		
Width	mm	18		
Depth	mm	76		
Net weight	g	161		
mounting position		any		
Mounting depth	mm	70		
Current / for AC / rated value	Α	40		
Tripping characteristic class		С		
Supply voltage				
• for AC / rated value	V	400		
Supply voltage / for DC / rated value				
• with single-phase operation / with AC / rated value	V	230		
• with multi-phase operation / with AC / rated value	V	400		
Number of poles /note		1P		

Switching capacity current  in accordance with IEC 60947-2 / rated value  with DC / in accordance with IEC 60947-2 / rated value  sac. to EN 60898 / rated value  with DC / in accordance with EN 60898-2  with AC / in accordance with EN 60898-2  with AC / in accordance with EN 60898-2  with AC / in accordance with UL 1077 and CSA CZ2 2 No.235  kA 15  Active power loss / af rated value current / with AC / in warm operating state / per pole  Number of width units  Product oxtension / can be installed / supplementary device  Product feature / sealable  Degree of poliution  Influence of the surrounding temperature  Ambient temperature  - during storage  Position / of power supply cord  Product property / properties for main switches in accordance with EN 60204-1  Mechanical operating cycles as operating time / typical  Resistance against vibration / according to IEC 60068-2-6  Overvoltage class  Product equipment / touch-protection  Resistance against shock / according to IEC 60068-2-7  Insulation voltage  with single-phase operation / with AC / rated value  with multi-phase operation / with AC / rated value  with multi-phase operation / with AC / rated value  * with multi-phase operation / with AC / rated value  * with wive end processing  Product component  - can insulation  * inclip standed  * with wive end processing  Product component  - combined terminal top  * combined terminal top  * combined terminal top  * combined terminal top  * with wive end processing  Product component  - combined terminal top  * with wive end processing  Product component  * with wive end processing  Product component  * with wive end processing  * with surveype terminals  N m 25 3			
with DC / in accordance with IEC 60947-2 / rated value  acc. to EN 80898 / rated value  Breaking capacity short-circuit current (lon)  with DC / in accordance with IEN 80989-2  with AC / in accordance with UL 1077 and CSA C22.2 No.235  Active power loss / at rated value current / with AC / in warm operating state / per pole  Number of width units  Product extension / can be installed / supplementary device  Product feature / sealable  Degree of pollution  Influence of the surrounding temperature  Ambient temperature  - during storage  - "C - 40 +75  Position / of power supply cord  Product property / properties for main switches in accordance with EN 80294-1  Mechanical operating cycles as operating time / typical  Resistance against vibration / according to IEC 60068-2-6  Overvoltage class  - with single-phase operation / with AC / rated value  - with single-phase operation / with AC / rated value  - with single-phase operation / with AC / rated value  - with multi-phase operation / with AC / rated value  - with multi-phase operation / with AC / rated value  - with single-phase operation / with AC / rated value  - with with end processing  - mm² 0.75 35  - multibrin  - mm² 0.75 35	Switching capacity current		
* acc. to EN 6898 / rated value  Breaking capacity short-circuit current (lon)  *with DC / in accordance with EN 60989-2  *with AC / in accordance with UL 1077 and CSA C22.2 No.235  *with AC / in accordance with UL 1077 and CSA C22.2 No.235  *with AC / in accordance with UL 1077 and CSA C22.2 No.235  *with AC / in accordance with UL 1077 and CSA C22.2 No.235  *with AC / in accordance with UL 1077 and CSA C22.2 No.235  *with AC / in accordance with UL 1077 and CSA C22.2 No.235  *with AC / in accordance with UL 1077 and CSA C22.2 No.235  *with AC / in accordance with UL 1077 and CSA C22.2 No.235  *with AC / in accordance with UL 1077 and CSA C22.2 No.235  *with Single Phase operation / with AC / in warn  **solid condition of the surrounding temperature  **solid condition of power supply cord  **Product feature for main switches in accordance with EN 60204-1  **With Single-Phase operation / with AC / rated value  **with single-phase operation / with AC / rated value  **with single-phase operation / with AC / rated value  **with mildi-phase operation / with AC / rated value  **with mildi-phase operation / with AC / rated value  **with mildi-phase operation / with AC / rated value  **with mildi-phase operation / with AC / rated value  **with mildi-phase operation / with AC / rated value  **with with with end processing  **mm**	• in accordance with IEC 60947-2 / rated value	kA	20
Breaking capacity short-circuit current (Icn)  with DC / in accordance with EN 60898-2  with AC / in accordance with UL 1077 and CSA C22.2 No.235  Active power lose's at rated value current / with AC / in warm operating state / per pole  Number of width units  Product extension / can be installed / supplementary device  Product texture / sealable  Degree of pollution  Rifluence of the surrounding temperature  - during storage  - during storage  Position / of power supply cord  Product property / properties for main switches in accordance with EN 6020-1  Mechanical operating cycles as operating time / typical  Resistance against vibration / according to IEC 60068-2-6  Overvoltage class  Product equipment / touch-protection  Resistance against shock / according to IEC 60068-2-27  Insulation voltage  - with single-phase operation / with AC / rated value  - with multi-phase operation / with AC / rated value  - with multi-phase operation / with AC / rated value  - with multi-phase operation / with AC / rated value  - sociid  - multibrin  - inelly stranded  - with wire end processing  Product extension / Can device with accordable  - with wire end processing  Tightening torque  W 1.3  1.3  1.4  1.5  1.5  1.5  1.5  1.5  1.5  1.5	• with DC / in accordance with IEC 60947-2 / rated value	kA	15
with DC / in accordance with EN 60898-2 with AC / in accordance with UL 1077 and CSA C22.2 No.235 Active power loss / at rated value current / with AC / in warm operating state / per pole Number of width units Product extension / can be installed / supplementary device Product feature / sealable Degree of pollution Influence of the surrounding temperature Ambient temperature Ambient temperature Ambient temperature Ambient temperature Ambient temperature - during storage Product property / properties for main switches in accordance with EN 60204-1 Resistance against vibration / according to IEC 60068-2-6 Overvoltage class Product equipment / touch-protection Resistance against shock / according to IEC 60068-2-27 Insulation voltage - with single-phase operation / with AC / rated value - with multi-phase operation / with AC / rated value - with wire snel processing - insulation -	• acc. to EN 60898 / rated value	kA	15
* with AC / in accordance with UL 1077 and CSA C22.2 No.235  Active power loss / at rated value current / with AC / in warm operating state / per pole  Number of width units  Product extension / can be installed / supplementary device  Product feature / sealable  Degree of pollution  Influence of the surrounding temperature  Ambient temperature  Ambient temperature  **C	Breaking capacity short-circuit current (lcn)		
Active power loss / at rated value current / with AC / in warm operating state / per pole  Number of width units  Product extension / can be installed / supplementary device Product feature / sealable  Product feature / sealable  Degree of pollution  Influence of the surrounding temperature  Ambient temperature  - during storage  Position / of power supply cord  Product property / properties for main switches in accordance with EM 6204-1  Mechanical operating cycles as operating time / typical  Resistance against vibration / according to IEC 60068-2-6  Overvoltage class  Product equipment / touch-protection  Resistance against shock / according to IEC 60068-2-27  Insulation voltage  - with single-phase operation / with AC / rated value  - with multi-phase operation / with AC / rated value  - with multi-phase operation / with AC / rated value  - solid  - multibrin  - invultibrin  - finely stranded  - with wire end processing  Product component  - combined terminal top  - combined terminal top  - combined terminal bottom  Tightening torque  1	• with DC / in accordance with EN 60898-2	kA	15
operating state / per pole         I           Number of width units         1           Product extension / can be installed / supplementary device         Yes           Product feature / sealable         Yes           Degree of pollution         3           Influence of the surrounding temperature         "C         25 455           Ambient temperature         -during storage         "C         -40 +75           Position / of power supply cord         Yes         Any           Product property / properties for main switches in accordance with EN 6020-41         Yes           Mechanical operating cycles as operating time / typical         2         20,000           Resistance against vibration / according to IEC 60068-2-6         50m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec)           Overvoltage class         Yes         150m/s² at 11ms half-sine           Insulation voltage         Yes         250           with multi-phase operation / with AC / rated value         Yes         250           with multi-phase operation / with AC / rated value         Yes         440           AWG number         4         4         4           * saild         mm*         0.75 35         4           * saild         mm*         0.75 35         4	• with AC / in accordance with UL 1077 and CSA C22.2 No.235	kA	5
Product extension / can be installed / supplementary device         Yes           Product feature / sealable         Yes           Degree of pollution         3           Influence of the surrounding temperature         max. 95% humidity           Ambient temperature         °C         -25 +55           Ambient temperature         °C         -40 +75           • during storage         °C         -40 +75           Position / of power supply cord         Any           Product property / properties for main switches in accordance with EN 60204-1         Yes           Mechanical operating cycles as operating time / typical         20,000           Resistance against vibration / according to IEC 60068-2-6         50m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec)           Overvoltage class         3         150m/s² at 11ms half-sine           Resistance against shock / according to IEC 60068-2-27         Yes           Insulation voltage         V         250           • with single-phase operation / with AC / rated value         V         250           • with multi-phase operation / with AC / rated value         V         40           • as encoded connectable conductor cross-section         Insulation         Insulation         Insulation         Insulation         Insulation         Insulation         Insulatio		W	1.3
Product feature / sealable         Yes           Degree of pollution         3           Influence of the surrounding temperature         max. 95% humidity           Ambient temperature         °C -25+55           Ambient temperature         -during storage           • during storage         °C -40+75           Position / of power supply cord         Any           Product property / properties for main switches in accordance with EN 80204-1         Yes           Mechanical operating cycles as operating time / typical         20,000           Resistance against vibration / according to IEC 60068-2-6         50m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec)           Overvoltage class         3           Product equipment / touch-protection         Yes           Resistance against shock / according to IEC 60068-2-27         150m/s² at 11ms half-sine           Insulation voltage         vith single-phase operation / with AC / rated value         V         250           • with multi-phase operation / with AC / rated value         V         40           • with multi-phase operation / with AC / rated value         m         44 4           • solid         mm²         0.75 35           • multibrin         mm²         0.75 35           • multibrin         mm²         0.75 25	Number of width units		1
Degree of pollution   Influence of the surrounding temperature   "C -25 +55     Ambient temperature   "C -40 +75     Ambient temperature   "C -40 +75     Position / of power supply cord   Any     Product property / properties for main switches in accordance with EN 60204-1     Mechanical operating cycles as operating time / typical   20,000     Resistance against vibration / according to IEC 60068-2-6   50m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec)     Overvoltage class   150m/s² at 11ms half-sine     Product equipment / touch-protection   Yes     Resistance against shock / according to IEC 60068-2-27   150m/s² at 11ms half-sine     Insulation voltage   V   250     with single-phase operation / with AC / rated value   V   440     AWG number   440     • as encoded connectable conductor cross-section   14 4     Section de conducteur raccordable   with wire end processing   mm²   0.75 35     mmlibrin   finely stranded   with wire end processing   mm²   0.75 35     Product component   with wire end processing   mm²   0.75 25     Product component   combined terminal top   Yes     Combined terminal top   Yes	Product extension / can be installed / supplementary device		Yes
Influence of the surrounding temperature  Ambient temperature  during storage  **C	Product feature / sealable		Yes
Ambient temperature  Ambient temperature  • during storage  Product property / properties for main switches in accordance with EN 60204-1  Mechanical operating cycles as operating time / typical  Resistance against vibration / according to IEC 60068-2-6  Overvoltage class  Product equipment / touch-protection  Resistance against shock / according to IEC 60068-2-7  Insulation voltage  • with single-phase operation / with AC / rated value  • with multi-phase operation / with AC / rated value  • with multi-phase operation / with AC / rated value  • solid  • multibrin  • solid  • multibrin  • finely stranded  • with wire end processing  Product component  • combined terminal top  • combined terminal bottom  Tightening torque	Degree of pollution		3
Ambient temperature  • during storage  Position / of power supply cord  Product property / properties for main switches in accordance with EN 60204-1  Mechanical operating cycles as operating time / typical  Resistance against vibration / according to IEC 60068-2-6  Overvoltage class  Product equipment / touch-protection  Resistance against shock / according to IEC 60068-2-7  Insulation voltage  • with single-phase operation / with AC / rated value  • with multi-phase operation / with AC / rated value  • with multi-phase operation / with AC / rated value  • solid  • multibrin  • solid  • multibrin  • finely stranded  • with wire end processing  Product component  • combined terminal top  • combined terminal bottom  Tightening torque	Influence of the surrounding temperature		max. 95% humidity
• during storage  Position / of power supply cord  Product property / properties for main switches in accordance with EN 60204-1  Mechanical operating cycles as operating time / typical  Resistance against vibration / according to IEC 60068-2-6  Overvoltage class  Product equipment / touch-protection  Resistance against shock / according to IEC 60068-2-7  Insulation voltage  • with single-phase operation / with AC / rated value  • with multi-phase operation / with AC / rated value  • with multi-phase operation / with AC / rated value  • solid  • mm²  • as encoded connectable conductor cross-section  Section de conducteur raccordable  • solid  • multibrin  • finely stranded  • with wire end processing  Product component  • combined terminal top  • combined terminal bottom  Tightening torque	Ambient temperature	°C	-25 +55
Position / of power supply cord Product property / properties for main switches in accordance with EN 60204-1  Mechanical operating cycles as operating time / typical Resistance against vibration / according to IEC 60068-2-6  Overvoltage class Product equipment / touch-protection Resistance against shock / according to IEC 60068-2-27  Insulation voltage  • with single-phase operation / with AC / rated value  • with multi-phase operation / with AC / rated value  • with multi-phase operation / with AC / rated value  • value  • with multi-phase operation / with AC / rated value  • val	Ambient temperature		
Product property / properties for main switches in accordance with EN 60204-1  Mechanical operating cycles as operating time / typical  Resistance against vibration / according to IEC 60068-2-6  Overvoltage class  Product equipment / touch-protection  Resistance against shock / according to IEC 60068-2-27  Insulation voltage  • with single-phase operation / with AC / rated value  • with multi-phase operation / with AC / rated value  • with multi-phase operation / with AC / rated value  • solid  • multibrin  • finely stranded  • with wire end processing  Product component  • combined terminal bottom  Tightening torque  Yes  Ves  Ves  Yes  Yes  Yes  Yes  Ye	during storage	°C	-40 <b>+</b> 75
with EN 60204-1  Mechanical operating cycles as operating time / typical  Resistance against vibration / according to IEC 60068-2-6  Overvoltage class  Product equipment / touch-protection  Resistance against shock / according to IEC 60068-2-27  Insulation voltage  • with single-phase operation / with AC / rated value  • with multi-phase operation / with AC / rated value  • as encoded connectable conductor cross-section  • solid  • multibrin  • mm²  0.75 35  • multibrin  • finely stranded  • with wire end processing  Product component  • combined terminal top  • combined terminal bottom  Tightening torque	Position / of power supply cord		Any
Resistance against vibration / according to IEC 60068-2-6  Overvoltage class  Product equipment / touch-protection  Resistance against shock / according to IEC 60068-2-27  Insulation voltage  • with single-phase operation / with AC / rated value  • with multi-phase operation / with AC / rated value  • as encoded connectable conductor cross-section  Section de conducteur raccordable  • solid  • multibrin  • mm²  0.75 35  • multibrin  • finely stranded  • with wire end processing  Product component  • combined terminal bottom  Tightening torque			Yes
Overvoltage class  Product equipment / touch-protection  Resistance against shock / according to IEC 60068-2-27  Insulation voltage  • with single-phase operation / with AC / rated value • with multi-phase operation / with AC / rated value  • with multi-phase operation / with AC / rated value  • with multi-phase operation / with AC / rated value  • as encoded connectable conductor cross-section  14 4  Section de conducteur raccordable  • solid • mm² 0.75 35  • multibrin • mm² 0.75 35  • finely stranded • with wire end processing  mm² 0.75 25  Product component • combined terminal top • combined terminal bottom  Tightening torque	Mechanical operating cycles as operating time / typical		20,000
Product equipment / touch-protection  Resistance against shock / according to IEC 60068-2-27  Insulation voltage  • with single-phase operation / with AC / rated value • with multi-phase operation / with AC / rated value  V 250  • with multi-phase operation / with AC / rated value  V 440  AWG number  • as encoded connectable conductor cross-section  14 4  Section de conducteur raccordable  • solid • mm² 0.75 35  • multibrin • finely stranded • with wire end processing  mm² 0.75 35  Product component • combined terminal top • combined terminal bottom  Tightening torque	Resistance against vibration / according to IEC 60068-2-6		50m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec)
Resistance against shock / according to IEC 60068-2-27  Insulation voltage  • with single-phase operation / with AC / rated value • with multi-phase operation / with AC / rated value  • with multi-phase operation / with AC / rated value  AWG number • as encoded connectable conductor cross-section  14 4  Section de conducteur raccordable • solid • mm² 0.75 35 • multibrin • finely stranded • with wire end processing  Product component • combined terminal top • combined terminal bottom  Tightening torque	Overvoltage class		3
Insulation voltage  • with single-phase operation / with AC / rated value  • with multi-phase operation / with AC / rated value  V 440  AWG number  • as encoded connectable conductor cross-section  Section de conducteur raccordable  • solid  • mm² 0.75 35  • multibrin  • mm² 0.75 35  • finely stranded  • with wire end processing  Product component  • combined terminal top  • combined terminal bottom  Tightening torque	Product equipment / touch-protection		Yes
<ul> <li>with single-phase operation / with AC / rated value</li> <li>with multi-phase operation / with AC / rated value</li> <li>440</li> <li>AWG number  <ul> <li>as encoded connectable conductor cross-section</li> <li>solid</li> <li>mm² 0.75 35</li> <li>multibrin</li> <li>finely stranded</li> <li>with wire end processing</li> <li>with wire end processing</li> <li>combined terminal top</li> <li>combined terminal bottom</li> </ul> </li> <li>Tightening torque</li> </ul> <li>with single-phase operation / with AC / rated value</li> <li>V 250</li> <li>440</li> <li>440</li>	Resistance against shock / according to IEC 60068-2-27		150m/s² at 11ms half-sine
with multi-phase operation / with AC / rated value  AWG number     • as encoded connectable conductor cross-section  Section de conducteur raccordable     • solid     • mm²	Insulation voltage		
AWG number  • as encoded connectable conductor cross-section  14 4  Section de conducteur raccordable  • solid  • mm² 0.75 35  • multibrin  mm² 0.75 35  • finely stranded  • with wire end processing  mm² 0.75 25  Product component  • combined terminal top  • combined terminal bottom  Tightening torque	• with single-phase operation / with AC / rated value	V	250
as encoded connectable conductor cross-section  Section de conducteur raccordable  solid mm² 0.75 35 mm² 0.75 35  finely stranded with wire end processing mm² 0.75 25  Product component combined terminal top combined terminal bottom  Tightening torque  14 4   14 4  15 4  16 4  17 4  18 4  19 4	• with multi-phase operation / with AC / rated value	V	440
Section de conducteur raccordable  • solid  • multibrin  • finely stranded  • with wire end processing  Product component  • combined terminal top  • combined terminal bottom  Tightening torque   mm²  0.75 35  mm²  0.75 25   yes  Yes	AWG number		
<ul> <li>solid</li> <li>mm²</li> <li>0.75 35</li> <li>mm²</li> <li>0.75 35</li> <li>finely stranded</li> <li>with wire end processing</li> <li>mm²</li> <li>0.75 25</li> </ul> Product component <ul> <li>combined terminal top</li> <li>combined terminal bottom</li> <li>Tightening torque</li> </ul> Tightening torque <ul> <li>mm²</li> <li>0.75 25</li> </ul> Yes <ul> <li>Yes</li> </ul>	as encoded connectable conductor cross-section		14 4
<ul> <li>multibrin</li> <li>finely stranded</li> <li>with wire end processing</li> <li>mm²</li> <li>0.75 25</li> </ul> Product component <ul> <li>combined terminal top</li> <li>combined terminal bottom</li> <li>Tightening torque</li> </ul> Tightening torque <ul> <li>mm²</li> <li>0.75 25</li> </ul> Yes <ul> <li>Yes</li> </ul>	Section de conducteur raccordable		
• finely stranded     • with wire end processing  Product component     • combined terminal top     • combined terminal bottom  Tightening torque	• solid	mm²	0.75 35
<ul> <li>with wire end processing</li> <li>Product component</li> <li>combined terminal top</li> <li>combined terminal bottom</li> <li>Tightening torque</li> </ul>	• multibrin	mm²	0.75 35
Product component	finely stranded		
• combined terminal top • combined terminal bottom  Yes  Yes  Tightening torque	with wire end processing	mm²	0.75 25
• combined terminal bottom Yes  Tightening torque	Product component		
Tightening torque	combined terminal top		Yes
	combined terminal bottom		Yes
• with screw-type terminals N·m 2.5 3	Tightening torque		
	with screw-type terminals	N⋅m	2.5 3

Tightening torque (lbf-in)		
• with screw connection	lbf∙in	22 26
Product feature		
• silicon-free		Yes
• halogen-free		Yes
Number of test cycles / for environmental testing / in accordance with IEC 60068-2-30		6
Reference ID / according to DIN EN 61346-2		F

## Certificates/approvals:

#### **General Product Approval**

**Declaration of** Conformity













## **Shipping Approval**















other other

## **Further information:**

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

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

Industry Mall (Online ordering system)

 $\underline{\text{https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/5SY7140-7}}$ 

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

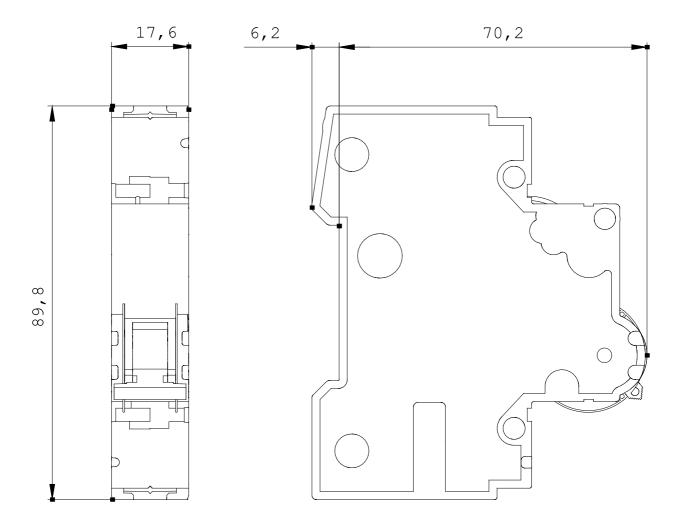
http://support.automation.siemens.com/WW/view/en/5SY7140-7/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SY7140-7

#### **CAx-Online-Generator**

http://www.siemens.com/cax



last change: Mar 24, 2014