

Miniature circuit breaker 230/400 V 10kA, 1-pole, C, 80 A, D=70 mm



Figure similar

Model	
Product brand name	SETRON
Product designation	Miniature circuit breaker
Design of the product	5SP Miniature circuit breakers
General technical data	
Number of poles	1
Number of poles / Note	1P
Tripping characteristic class	C
circuit-breaker / Design	5SP4
Mechanical service life (switching cycles) / typical	10 000
Overvoltage category	3
Voltage	
Type of voltage	AC
Insulation voltage	
<ul style="list-style-type: none"> • at AC / rated value • with single-phase operation / at AC / rated value 	<p>440 V</p> <p>250 V</p>

- with multi-phase operation / at AC / rated value 440 V

Supply voltage

Supply voltage / at AC / rated value	400 V
Supply voltage frequency / rated value	50 Hz

Protection class

Protection class IP	IP20 with connected conductors, IP40 in the area of the handle with distribution cover
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Switching capacity

Switching capacity current	
<ul style="list-style-type: none"> • acc. to EN 60898 / rated value 	10 kA

Dissipation

Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	7 W
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Electricity

Tripping residual / rated value / derated current / at 40 Cel	75.2 A
Current / at AC / rated value	80 A

Product details

Product feature / Touch protection	Yes
Product component	
<ul style="list-style-type: none"> • Tunnel terminals top • Tunnel terminals bottom 	Yes Yes
Product feature	
<ul style="list-style-type: none"> • Properties for main switches in accordance with EN 60204-1 • halogen-free • sealable • silicon-free 	Yes Yes Yes Yes
Product extension / can be installed / supplementary devices	Yes

Product function

Product function / neutral conductor switching	No
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Number

Number of test cycles / for environmental testing / acc. to IEC 60068-2-30	6
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Connections

Connectable conductor cross-section / stranded	
<ul style="list-style-type: none"> • minimum • maximum 	25 mm ² 50 mm ²

Connectable conductor cross-section

<ul style="list-style-type: none"> • solid <ul style="list-style-type: none"> — minimum — maximum • finely stranded / with core end processing <ul style="list-style-type: none"> — minimum — maximum 	25 mm ² 50 mm ² 25 mm ² 35 mm ²
AWG number / as coded connectable conductor cross section <ul style="list-style-type: none"> • minimum • maximum 	3 1
Tightening torque [lbf·in] / with screw-type terminals <ul style="list-style-type: none"> • minimum • maximum 	22.1 lbf·in 31 lbf·in
Tightening torque / with screw-type terminals <ul style="list-style-type: none"> • minimum • maximum 	2.5 N·m 3.5 N·m
Position / of power supply cord	Any

Mechanical Design






Height	90 mm
Width	27 mm
Depth	76 mm
Mounting position	any
Installation depth	70 mm
Number of width units	1.5
Net weight	256 g

Environmental conditions

Degree of pollution	3
Influence of the surrounding temperature	Max. 95% rel. humidity
Shock resistance / acc. to IEC 60068-2-27	150m/s ² at 11ms half-sine
Vibration resistance / acc. to IEC 60068-2-6	50m/s ² at 25 to 150Hz and 60m/s ² at 35Hz (4sec)
Ambient temperature <ul style="list-style-type: none"> • minimum • maximum • during storage / minimum • during storage / maximum 	-25 °C 55 °C -40 °C 75 °C

Certificates

Reference code <ul style="list-style-type: none"> • acc. to DIN EN 61346-2 • acc. to DIN EN 81346-2 	F FC
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General Product Approval				Declaration of Conformity	Test Certificates
 CEBEC	 CCC	 UR	 VDE	 EG-Konf.	Special Test Certificate

Railway

[Confirmation](#)

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=5SP4180-7>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SP4180-7>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SP4180-7

CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>

