SIEMENS

Data sheet 5SU1646-7FP10



Figure similar

RCBO, 6 kA, 4P Type A, 300mA, C-Char, In: 10A Un: 400V

Model	
product brand name	SENTRON
product designation	RCBO
design of the product	Instantaneous
General technical data	
number of poles	4
number of poles with protection	4
design of pole	4P
tripping characteristic class	C
mechanical service life (operating cycles) typical	10 000
overvoltage category	3
degree of pollution	3
Voltage	
type of voltage of the operating voltage	AC
insulation voltage (Ui) rated value	500 V
surge voltage resistance rated value	4 000 V
surge current resistance at (8/20) µs	0.25 kA
tripping fault current rated value	300 mA
● operational current	
— at 30 °C rated value	10 A
— at 40 °C rated value	9.6 A
— at 45 °C rated value	9.4 A
— at 50 °C rated value	9.1 A
— at 55 °C rated value	8.9 A
— at 60 °C rated value	8.6 A
— at 70 °C rated value	8.2 A
● operational current at AC rated value	10 A
residual current type	A
Supply voltage	
supply voltage	
● at AC rated value	400 V
● for testing equipment minimum	195 V
operating frequency	50 Hz
supply voltage frequency rated value	50 Hz
Protection class	
protection class IP	IP20, if the distribution board is installed, with connected conductors
Breaking Capacity	

Subject to change without notice
© Copyright Siemens

switching capacity current	
● according to EN 60898 rated value	6 kA
● according to IEC 60947-2 rated value	6 kA
short-circuit current breaking capacity (Icn) according to EN 61009-1 rated value	6 kA
rated residual switching capacity (IΔm) according to IEC 61009-1	4.5 kA
energy limitation class	3
Dissipation	
power loss [W]	
● **maximum**	2.1 W
Product details	
product feature touch protection	Yes
product component neutral conductor switching	Yes
product feature halogen-free	No
Connections	
connectable conductor cross-section solid	
● minimum	1 mm²
● maximum	35 mm²
connectable conductor cross-section stranded	
● minimum	1 mm²
● maximum	35 mm²
connectable conductor cross-section finely stranded with core end processing	
● minimum	1 mm²
● maximum	35 mm²
tightening torque with screw-type terminals	
● minimum	2 N·m
● maximum	2 N·m
position of power supply cord	Either top or bottom
Mechanical Design	
height	85 mm
width	72 mm
depth	72 mm
installation depth	70 mm
number of modular width units	4
mounting position	any
Net Weight	439 g
Environmental conditions	
influence of the surrounding temperature	Max. 95% humidity
ambient temperature during operation	
● minimum	-25 °C
● maximum	40 °C
ambient temperature during storage	
● minimum	-40 °C
● maximum	70 °C
number of test cycles for environmental testing according to IEC 60068-2-30	28

Approvals Certificates

Environment			**General Product Approval**		
Environmental Confirmations	Environmental Confirmations	EPD	CCC	Miscellaneous	EAC

General Product Approval	**other**

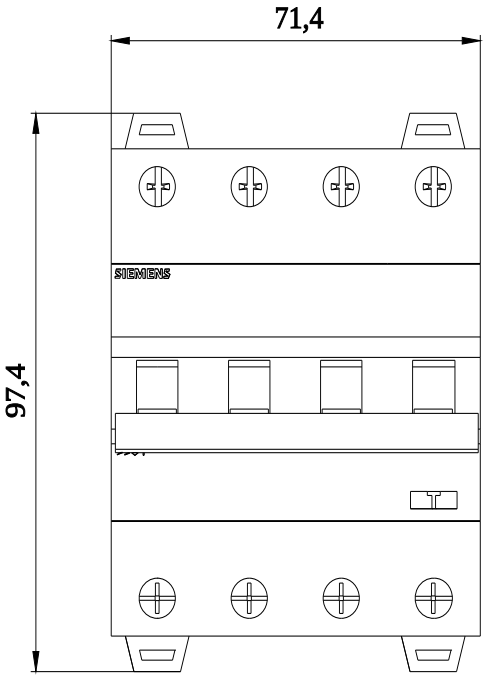
Subject to change without notice
© Copyright Siemens

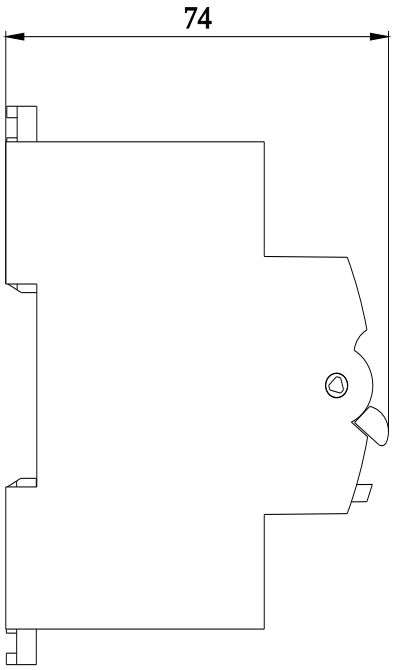
Confirmation		Miscellaneous		Confirmation

other	Dangerous goods
Miscellaneous	Transport Information

Further information

Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
Information for data generation and storage
https://support.industry.siemens.com/cs/ww/en/view/109995012
Information- and Downloadcenter (Catalogs, Brochures,…)
https://www.siemens.com/lowvoltage/catalogs
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SU1646-7FP10
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/5SU1646-7FP10
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SU1646-7FP10
CAx-Online-Generator
https://www.siemens.com/cax
Tender specifications
https://www.siemens.com/specifications
Kennlinien
https://curves.simaris.siemens.com/curves/5SU1646-7FP10





Subject to change without notice
© Copyright Siemens

Subject to change without notice
© Copyright Siemens

last modified:	7/22/2025

Subject to change without notice
© Copyright Siemens