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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	

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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
weight with packaging	481 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
Environmental footprint	
Environmental Product Declaration(EPD)	Yes
global warming potential [CO2 eq] total	13.9 kg
global warming potential [CO2 eq] during manufacturing	3.2 kg
global warming potential [CO2 eq] during operation	10.8 kg
global warming potential [CO2 eq] after end of life	-0.161 kg
Approvals Certificates	
General Product Approval	

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Confirmation

Miscellaneous

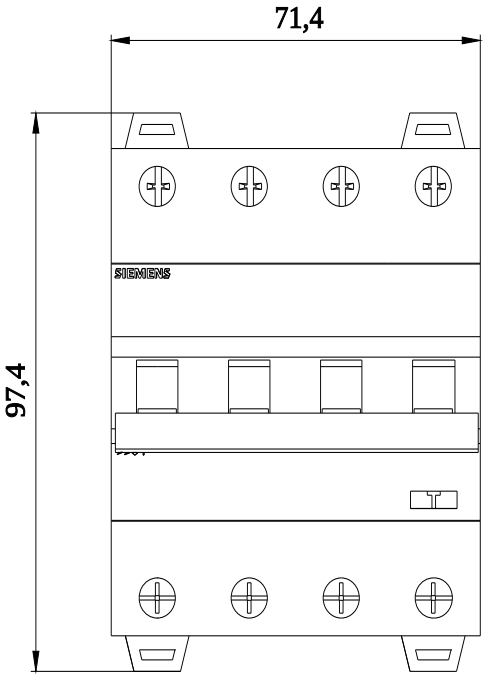
General Product Approval	other				Dangerous goods
		Miscellaneous	Confirmation	Miscellaneous	Transport Information

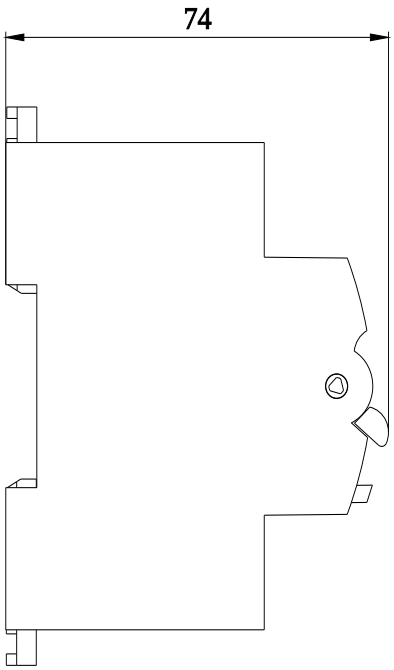
Environment		
	Environmental Confirmations	Environmental Confirmations

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

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