SIEMENS

Data sheet 5SM2645-6

RC unit, 4-pole, type A, In: 63 A, 300 mA, Un AC: 400 V, for 5SY



Figure similar

Model	
product brand name	SENTRON
product designation	RCD-unit
design of the product	Instantaneous
product type designation	5SM2
product version	for 5SY
General technical data	
number of poles	4
design of pole	4 poles
size of installation devices according to DIN 43880	1
touch protection against electrical shock according to EN 50274	Finger and back-of-hand safe
mechanical service life (operating cycles) typical	10 000
overvoltage category	III
degree of pollution	2
Voltage	
type of voltage of the operating voltage	AC
insulation voltage (Ui) rated value	460 V
surge voltage resistance rated value	4 000 V
tripping fault current rated value	300 mA
• operational current	
— at 40 °C rated value	58.6 A
— at 45 °C rated value	58.59 A
— at 50 °C rated value	56.7 A
— at 55 °C rated value	54.81 A
— at 60 °C rated value	53.55 A
— at 65 °C rated value	52.29 A
— at 70 °C rated value	50.4 A
• operational current at AC rated value	63 A
residual current type	A
surge current resistance rated value	3 kA
supply voltage	
• at AC	400 V
• for testing equipment minimum	195 V
value range of the supply voltage frequency	50 Hz
value range of the operating frequency	50 Hz
Protection class	

Subject to change without notice
© Copyright Siemens

protection class IP	IP20, if the distribution board is installed, with connected conductors
protection function false tripping	Yes
Dissipation	
power loss [W]	
• for rated value of the current at AC in hot operating state per pole	3 W
• maximum	9 W
Product details	
product feature OFF-delay time adjustable	No
product feature rated fault current adjustable	No
product feature sealable	No
Connections	
connectable conductor cross-section solid	
• minimum	1.5 mm²
• maximum	25 mm²
connectable conductor cross-section stranded	
• minimum	1.5 mm²
• maximum	25 mm²
tightening torque with screw-type terminals	
• minimum	2.5 N·m
• maximum	3 N·m
position of power supply cord	top or bottom
Mechanical Design	
height	90 mm
width	54 mm
depth	77 mm
installation depth	70 mm
number of modular width units	3
fastening method	DIN-rail mounting
mounting position	any
Net Weight	308 g
Environmental conditions	
ambient temperature during operation	
• minimum	-25 °C
• maximum	45 °C
ambient temperature during storage	
• minimum	-40 °C
• maximum	75 °C
number of test cycles for environmental testing according to IEC 60068-2-30	28
Certificates	
reference code according to IEC 81346-2	F

Approvals Certificates

Environment		General Product Approval			
Environmental Confirmations	Environmental Confirmations		Miscellaneous		Miscellaneous

General Product Approval				other	
	Confirmation				Confirmation

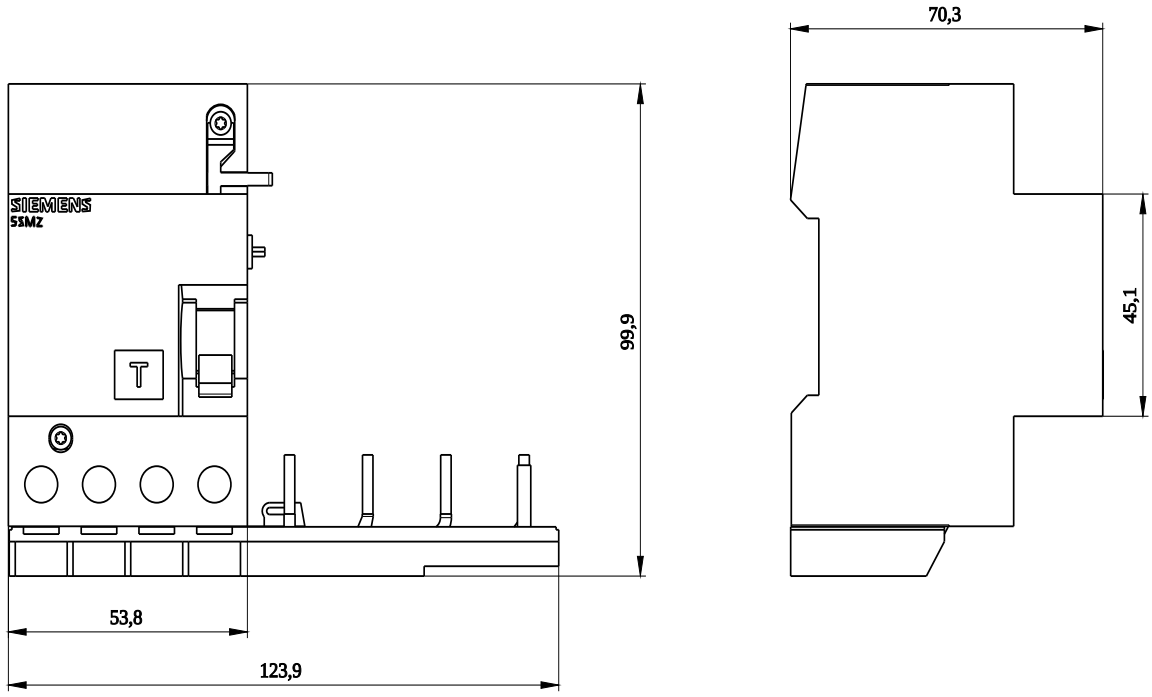
Dangerous goods

Subject to change without notice
© Copyright Siemens

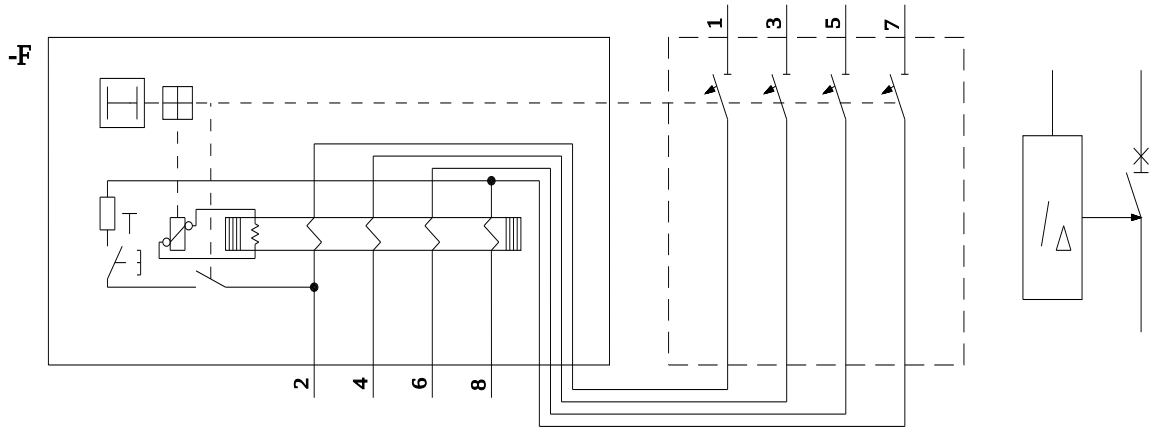
Transport Information

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=5SM2645-6
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/5SM2645-6
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SM2645-6
CAx-Online-Generator
https://www.siemens.com/cax
Tender specifications
https://www.siemens.com/specifications
Kennlinien
https://curves.simaris.siemens.com/curves/5SM2645-6



Subject to change without notice
© Copyright Siemens



last modified: 10/22/2026

Subject to change without notice
© Copyright Siemens

Subject to change without notice
© Copyright Siemens