SIEMENS

Data sheet 5SV1616-6KK06

RCBO compact 1P+N 6 kA type A 300 mA B6

Siemens EcoTech



Figure similar

Model	
product brand name	SENTRON
product designation	RCBO
design of the product	Instantaneous
General technical data	
number of poles	2
number of poles with protection	1
design of pole	1P+N
tripping characteristic class	B
mechanical service life (operating cycles) typical	10 000
overvoltage category	3
degree of pollution	2
Voltage	
type of voltage of the operating voltage	AC
insulation voltage (Ui) rated value	253 V
surge voltage resistance rated value	4 000 V
surge current resistance at (8/20) µs	1 kA
tripping fault current rated value	300 mA
• operational current	
— at 30 °C rated value	6 A
— at 40 °C rated value	5.64 A
— at 45 °C rated value	5.46 A
— at 50 °C rated value	5.28 A
— at 55 °C rated value	5.04 A
— at 60 °C rated value	4.86 A
— at 65 °C rated value	4.62 A
— at 70 °C rated value	4.44 A
• operational current at AC rated value	6 A
residual current type	A
Supply voltage	
supply voltage	
• at AC rated value	230 V
• for testing equipment minimum	195 V
operating frequency	50/60 Hz

Subject to change without notice
© Copyright Siemens

supply voltage frequency rated value	50 Hz
Protection class	
protection class IP	IP20, if the distribution board is installed, with connected conductors
Breaking Capacity	
switching capacity current	
● according to EN 60898 rated value	6 kA
● according to IEC 60947-2 rated value	35 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	1.4 W
Product details	
product feature touch protection	Yes
product component neutral conductor switching	Yes
product feature halogen-free	Yes
product feature silicon-free	Yes
Connections	
connectable conductor cross-section solid	
● minimum	0.75 mm²
● maximum	16 mm²
connectable conductor cross-section stranded	
● minimum	0.75 mm²
● maximum	16 mm²
connectable conductor cross-section finely stranded with core end processing	
● minimum	0.75 mm²
● maximum	10 mm²
tightening torque with screw-type terminals	
● minimum	1.2 N·m
● maximum	2 N·m
position of power supply cord	Either top or bottom
Mechanical Design	
height	90 mm
width	18 mm
depth	77 mm
installation depth	70 mm
number of modular width units	1
mounting position	any
Net Weight	129 g
weight with packaging	133 g
Environmental conditions	
influence of the surrounding temperature	Max. 95% humidity
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
Environmental footprint	
Environmental Product Declaration(EPD)	Yes
global warming potential [CO2 eq] total	17.95026 kg
global warming potential [CO2 eq] during manufacturing	1.32 kg
global warming potential [CO2 eq] during operation	16.6 kg
global warming potential [CO2 eq] after end of life	0.0016 kg

© Copyright Siemens

Siemens Eco Profile (SEP)	Siemens EcoTech

Approvals Certificates

General Product Approval					Test Certificates
					Special Test Certificate

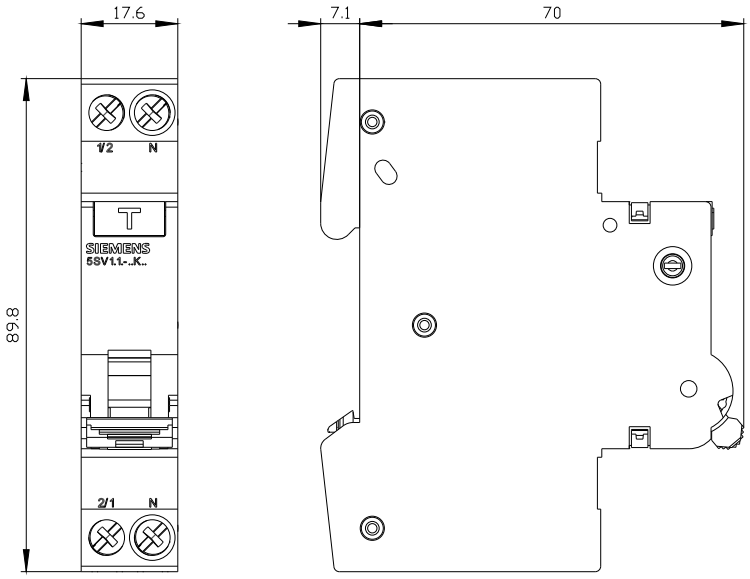
Test Certificates	other				Dangerous goods
Miscellaneous		Confirmation	Miscellaneous	Miscellaneous	Transport Information

Environment

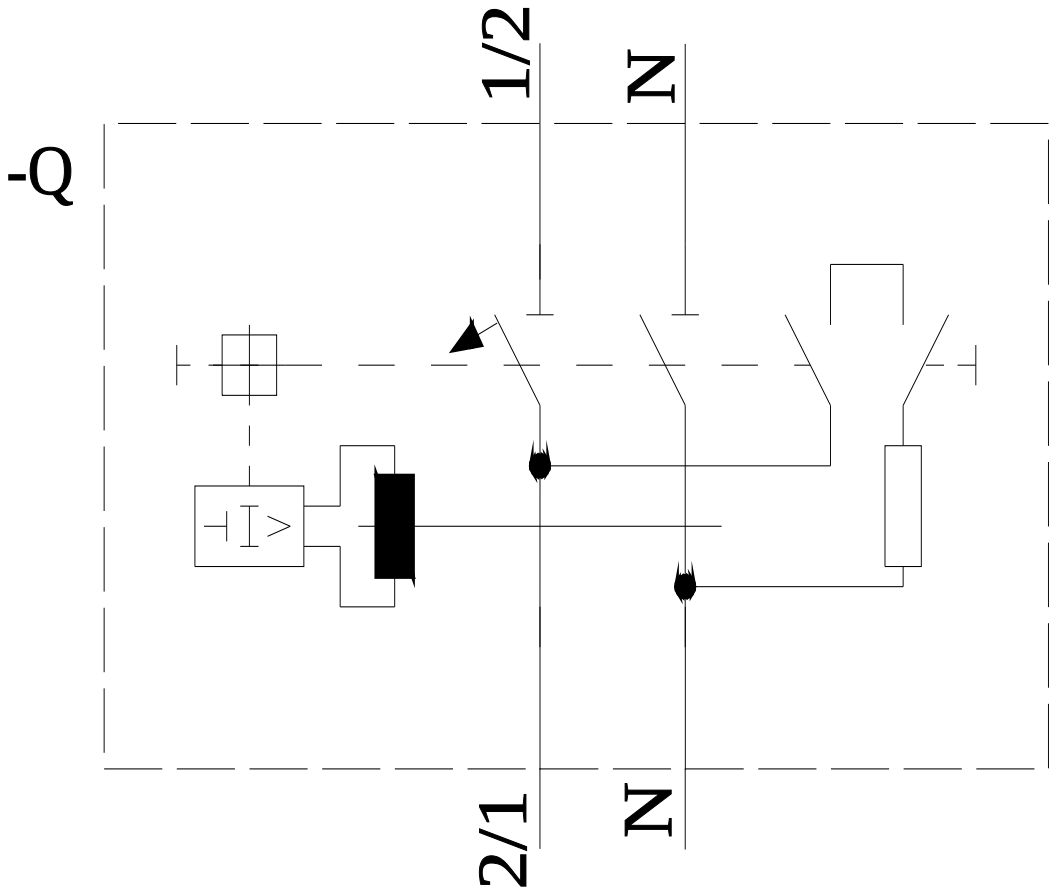
	Environmental Confirmations	Environmental Confirmations	

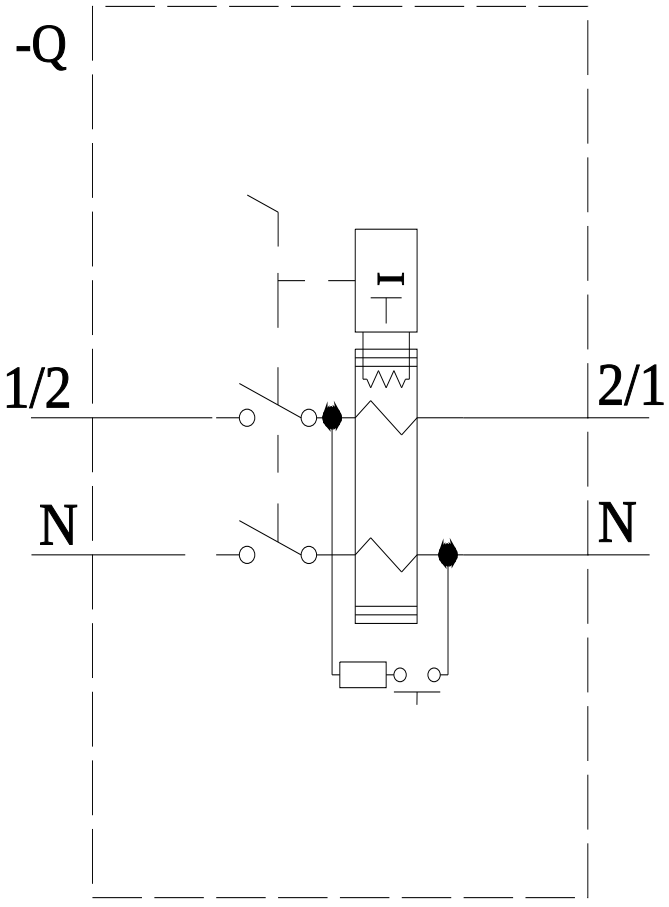
Further information

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=5SV1616-6KK06
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/5SV1616-6KK06
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SV1616-6KK06
CAx-Online-Generator
https://www.siemens.com/cax
Tender specifications
https://www.siemens.com/specifications



Subject to change without notice
© Copyright Siemens





last modified: 7/22/2025

Subject to change without notice
© Copyright Siemens

Subject to change without notice
© Copyright Siemens