SIEMENS

Data sheet 5SY5163-6



Circuit breaker Universal current 220 V DC 230/400 V AC 10kA, 1-pole, B, 63A

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	1
design of pole	1P
tripping characteristic class	B
mechanical service life (operating cycles) typical	5 000
overvoltage category	3
degree of pollution	3
Voltage	
type of voltage of the operating voltage	AC/DC
insulation voltage (Ui)	
• at DC rated value	250 V
• with single-phase operation at AC rated value	440 V
• with multi-phase operation at AC rated value	440 V
supply voltage with single-phase operation at AC rated value	230 V
• operational current	
— at 40 °C rated value	59.16 A
— at 50 °C rated value	55.06 A
— at 55 °C rated value	52.92 A
— at 60 °C rated value	50.65 A
• operational current at AC rated value	63 A
Supply voltage	
supply voltage	
• at AC	400 V
• at DC rated value	220 V
value range of the supply voltage frequency	50/60 Hz
operating voltage at DC rated value maximum	250 V
Protection class	
protection class IP	IP20, with connected conductors
Breaking Capacity	
switching capacity current	
• at DC according to IEC 60947-2 rated value	15 kA
• according to EN 60898 rated value	10 kA
energy limitation class	3
Dissipation	

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power loss [W] for rated value of the current at AC in hot operating state per pole	6 W
suitability for operation	Infrastructure / Industry / Mobility
Product details	
product feature touch protection	Yes
product component	
● combined terminal top	Yes
● combined terminal bottom	Yes
● neutral conductor switching	No
product feature properties for main switches in accordance with EN 60204-1	Yes
product feature halogen-free	Yes
product feature sealable	Yes
product feature silicon-free	Yes
product extension installable supplementary devices	Yes
Short circuit	
short-circuit current breaking capacity (Icn)	
● at DC according to EN 60898-2	10 kA
Connections	
connectable conductor cross-section solid	
● minimum	0.75 mm²
● maximum	35 mm²
connectable conductor cross-section stranded	
● minimum	0.75 mm²
● maximum	35 mm²
connectable conductor cross-section finely stranded with core end processing	
● minimum	0.75 mm²
● maximum	25 mm²
AWG number as coded connectable conductor cross section	
● minimum	18
● maximum	4
tightening torque [lbf·in] with screw-type terminals	
● minimum	22 lbf·in
● maximum	31 lbf·in
tightening torque with screw-type terminals	
● minimum	2.5 N·m
● maximum	3.5 N·m
position of power supply cord	AC as required, observe DC polarity
Mechanical Design	
height	90 mm
width	18 mm
depth	76 mm
installation depth	70 mm
number of modular width units	1
fastening method	DIN rail
mounting position	any
Net Weight	181 g
Environmental conditions	
influence of the surrounding temperature	max. 95% RH up to 55°C, max. 55% RH up to 70°C, max. 35% RH up to 75°C
standard	IEC / EN 60898-2, UL1077
vibration resistance according to IEC 60068-2-6	±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz
ambient temperature during operation	
● minimum	-40 °C
● maximum	70 °C
ambient temperature during storage	
● minimum	-40 °C
● maximum	75 °C
number of test cycles for environmental testing according	6

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to IEC 60068-2-30	

Environmental footprint

Environmental Product Declaration(EPD)	Yes
global warming potential [CO2 eq] total	13.3 kg
global warming potential [CO2 eq] during manufacturing	0.73 kg
global warming potential [CO2 eq] during operation	12.7 kg
global warming potential [CO2 eq] after end of life	-0.069 kg

Approvals Certificates

General Product Approval

CCC UKCA CE EG-Konf. UR VDE

Miscellaneous

General Product Approval	Test Certificates	Maritime application	other
EAC AR	Special Test Certific-ate	LRS	产品合格 QC PASS	Confirmation

Railway		Dangerous goods	Environment		
Special Test Certific-ate	Confirmation	Transport Information	EPD	EPD	Environmental Con-firmations

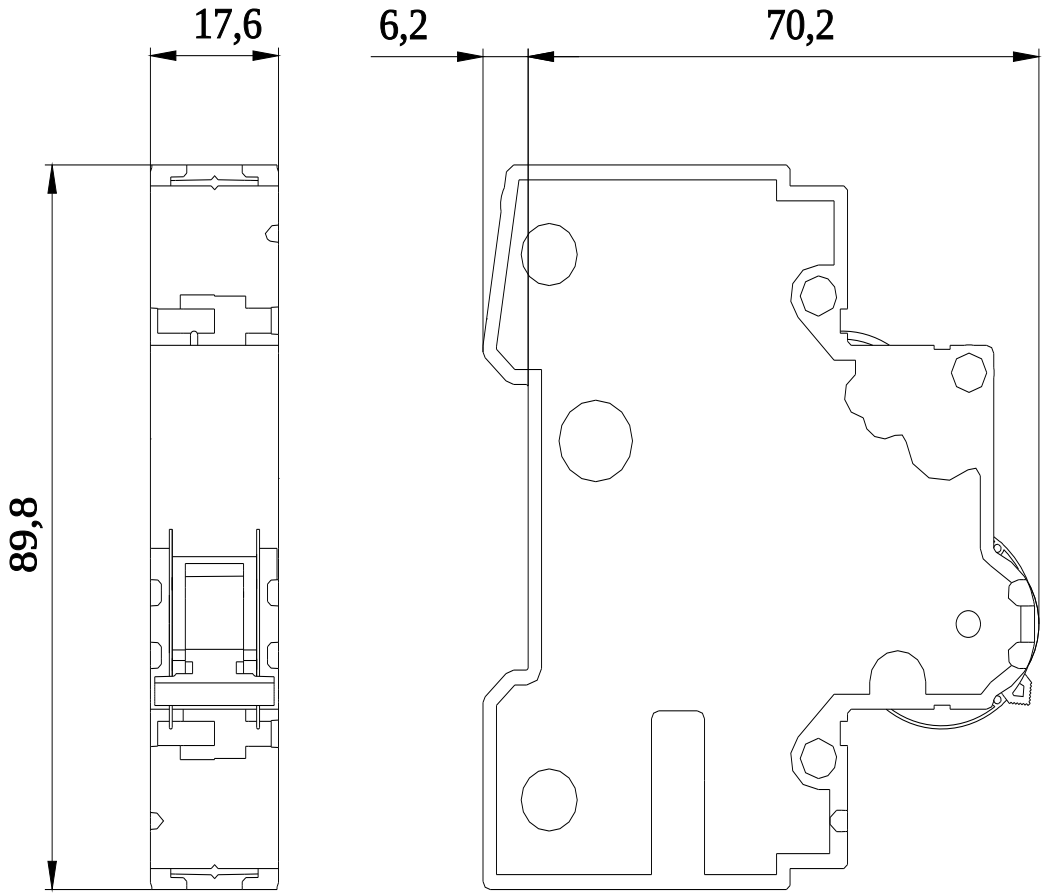
Environment

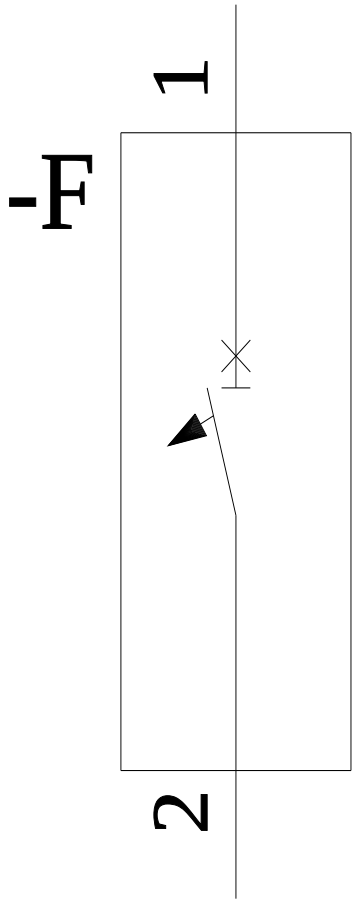
Environmental Con-firmations

Further information

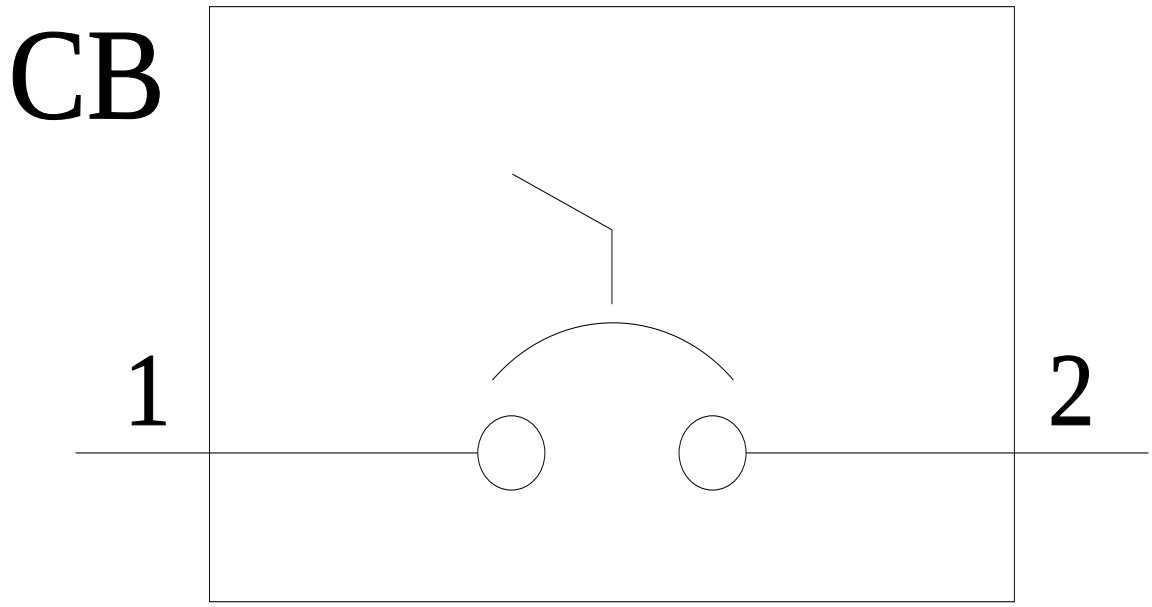
Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
Information for data generation and storage
https://support.industry.siemens.com/cs/ww/en/view/109995012
Information- and Downloadcenter (Catalogs, Brochures,…)
https://www.siemens.com/lowvoltage/catalogs
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SY5163-6
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/5SY5163-6
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY5163-6
CAx-Online-Generator
https://www.siemens.com/cax
Tender specifications
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