



Miniature Circuit Breaker Measuring RCM / EM Communication AC 230V 6kA, 1+N pole, C, 10A Please consider Radio approval! List of countries: see Certificates

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
design of the product	Miniature circuit breaker COM compact
product variations	Notice! This is NOT a device with a residual-current protection function. This device must never be used instead of an RCD.
type of measured value detection	completely
General technical data	
design of pole	1P+N
apparent power consumption of the power supply	1.4 VA
tripping characteristic class	C
mechanical service life (operating cycles) typical	10 000
electrical endurance (operating cycles) at AC load in the mean value	7 500
measurable line frequency initial value	45 Hz
measurable line frequency full-scale value	65 Hz
overvoltage category	III
degree of pollution	2
frequency with radio transmission minimum	2 400 MHz
frequency with radio transmission maximum	2 483.5 MHz
status display of the measured data	voltage, current, residual current, active power, apparent power, reactive power, active energy, line frequency, power factor, temperature, switching cycles, operating hours, tripping, warnings
Voltage	
type of voltage of the operating voltage	AC
insulation voltage (Ui) at AC rated value	285 V
supply voltage with single-phase operation at AC rated value	230 V
operational current	
• at 30 °C rated value	10 A
• at 40 °C rated value	9.26 A
• at 50 °C rated value	8.02 A
• at 55 °C rated value	8.45 A
• at 60 °C rated value	7.56 A
• at AC rated value	10 A
measurable current at AC	
• initial value	0.04 A
• full-scale value	33 A

reference current (Iref) 1 at AC rated value	10 A
Supply voltage	
supply voltage	
• at AC	230 V
value range of the supply voltage frequency	50/60 Hz
operating voltage	
• minimum	120 V
• with single-phase operation at AC maximum	400 V
Protection class	
protection class IP	IP20, with connected conductors
protection class IP	
• on the front	IP40
• rear side	IP20
Breaking Capacity	
switching capacity current	
• according to EN 60898 rated value	6 kA
grid spacing	35 mm
energy limitation class	3
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	1.3 W
Residual current	
monitoring function of residual currents according to standard	DIN EN IEC 62020-1 (VDE 0663-1)
type of residual current monitoring	Type F
measuring channels with residual current	Base Frequency, Harmonics, Lowpass AC, Lowpass RMS, Bandpass, Highpass
measuring precision of the residual current	3mA...5mA: +/-30%; 5mA...1000mA: +/-15%
residual current at measuring range lower limit	0.003 A
residual current at measuring range upper limit	1 A
prewarning threshold of the residual current in factory setting	50 %
prewarning threshold of the residual current at setting range lower limit	50 %
prewarning threshold of the residual current at setting range upper limit	100 %
residual current alarm threshold in factory setting	0.015 A
residual current alarm threshold at setting range upper limit	0.3 A
residual current alarm threshold at setting range lower limit	0.007 A
frequency measuring range with residual current	<= 100kHz
Suitability	
suitability for use ammeter	Yes
suitability for use reactive power meter	Yes
suitability for use frequency meter	Yes
suitability for use voltmeter	Yes
suitability for use wattmeter	Yes
Product details	
product feature touch protection	Yes
product component	
• combined terminal top	No
• combined terminal bottom	No
• neutral conductor switching	Yes
product feature	
• properties for main switches in accordance with EN 60204-1	No
• halogen-free	Yes
• sealable	Yes
• silicon-free	Yes
product extension installable supplementary devices	Yes
Communication	
guideline via radio-controlled system	2014/53/EU
protocol is supported	Wireless protocol
Fault limits	
standards for error limits	based on IEC61557-12, IEC62053-22, IEC62053-23

relative symmetrical measurement uncertainty [%]		
• for measured variable current	0.5 %	
• for measured variable electrical energy	1 %	
Measuring inputs		
measurable supply voltage between (PE)N and L at AC		
• minimum	100 V	
• maximum	400 V	
measuring category for voltage measurement	CATIII according IEC 61010-2-030	
measuring procedure for current measurement	TRMS	
measuring procedure for voltage measurement	TRMS	
Connections		
connectable conductor cross-section solid		
• minimum	0.75 mm ²	
• maximum	16 mm ²	
connectable conductor cross-section stranded		
• minimum	0.75 mm ²	
• maximum	16 mm ²	
connectable conductor cross-section finely stranded with core end processing		
• minimum	0.75 mm ²	
• maximum	10 mm ²	
tightening torque [lbf-in] with screw-type terminals		
• minimum	10.6 lbf-in	
• maximum	17.7 lbf-in	
tightening torque with screw-type terminals		
• minimum	1.2 N·m	
• maximum	2 N·m	
position of power supply cord	Any	
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	135 g	
Environmental conditions		
standard	IEC/EN60898-1, GB/T10963.1	
• for shocks	IEC 61373	
• for environmental sinusoidal oscillation check	IEC 60068-2-6	
vibration resistance according to IEC 60068-2-6	Yes	
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 to IEC 60068-2-30	28	
Environmental footprint		
Global Warming Potential [CO2 eq] total	11.7 kg	
Global Warming Potential [CO2 eq] during manufacturing	0.916 kg	
Global Warming Potential [CO2 eq] during operation	10.8 kg	
Global Warming Potential [CO2 eq] after end of life	-0.102 kg	
Siemens Eco Profile (SEP)	Siemens EcoTech	
Approvals Certificates		
General Product Approval	Radio Equipment Type Approval Certificate	Test Certificates
		other

other

Environment



Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SL6010-7MF>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/5SL6010-7MF>

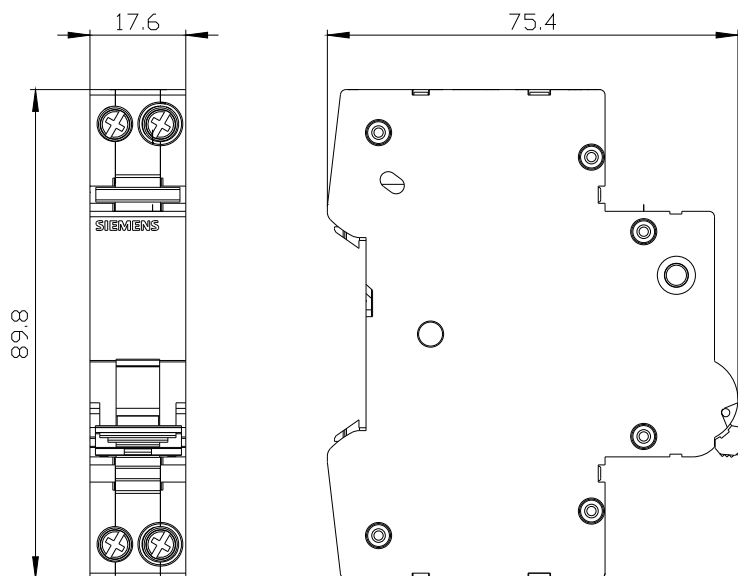
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

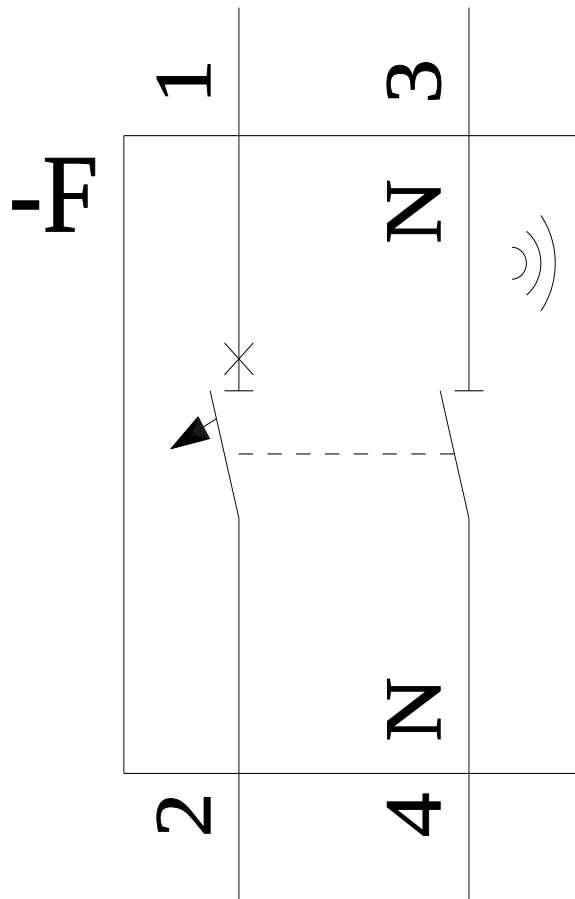
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SL6010-7MF

CAx-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>



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