DATA SHEET

Article number: 09421501

Residual current circuit-breakers
DRCCB 5 ST 025-2/0,03-A

sensitive to pulsating and alternating currents Type A, short-time delayed, with self test

Function

Residual current circuit-breakers (RCCBs) are components for implementing protective measure "Automatic disconnection of the power supply" as per IEC 60364-4-41 or corresponding national installation regulations. Series DRCCB 5 devices are compact two or four-pole residual current circuit-breakers with self-test function. Type A residual current circuit-breakers are sensitive to pulsating and alternating currents. This function is independent of the mains voltage. DRCCB 5 in Selftest design provide an uninterruptible, automatic and regular function test of the residual current circuit-breaker. The power supply is integrated in the device and does not require additional units via the supply lines from above. The automatic function can be switched on and off by a slider button.

Features

monthly self-test, signalling the operating status by LEDs, configurable auxiliary contact

Mounting

quick fastening to mounting rail, any installation position, supply from top

Applications

The devices can be used anywhere where electrical systems must not be shut down or are difficult to access. These may be, for example, IT and telecommunications systems, agricultural facilities, small wind power stations or sewage treatment plants, Using an optional Modbus interface module, the switching status of the RCCB can be transmitted for remote monitoring.

Accessories

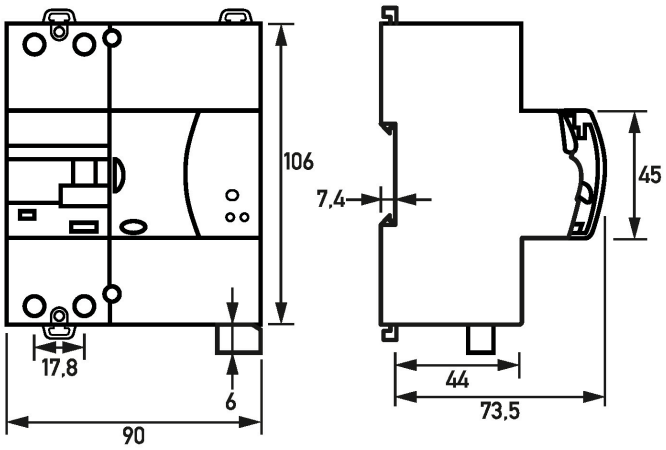
interfaces DRCCB 5 CM RS-485/Modbus

Technical Data

Series	DRCCB 5
Number of poles	2
Residual current type	A
Rated current (AC)	25 A
Rated residual current IΔn	0.03 A
Short-time delayed	true
Selective	false
min. Operating voltage range of test circuit	196 V
max. Operating voltage range of test circuit	253 V
	Auxiliary device Selftest
suitable for network configuration	IT, TN, TT
max. selftest duration	7 s
	Auxiliary device mains disconnection
Specification drive mechanism	Motor drive
Remote release	false
Current consumption (AC)	0.017 A ... 0.178 A
	Auxiliary device (Self-test and auxiliary switches)
	load circuit
Specification	load disconnect contact
Rated voltage (AC)	230 V
Rated current (AC)	25 A
Rated short-circuit current	10 kA
Surge current strength	3 kA
max. Total rated switching capacity	630 A
Rated insulation voltage	500 V
Rated impulse withstand voltage	4 kV
Rated frequency	50 Hz

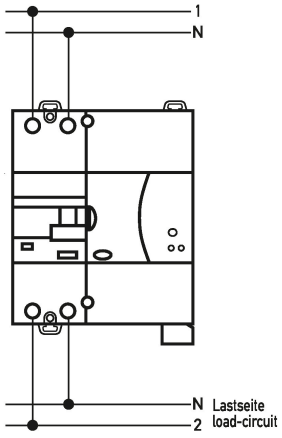
Current heat loss per current path	1.1 W
Thermal Backup-fuse OCPD	25 A
Short-circuit backup-fuse SCPD	63 A
Back-up fuse type	gL
	auxiliary switches
Specification	semiconductor
Contact properties	configurable as NO, NC, NC with impulse
Rated voltage (AC)	5 V ... 230 V
Rated voltage (DC)	5 V ... 230 V
Rated current (AC)	0.001 A ... 0.1 A
Rated current (DC)	0.001 A ... 0.1 A
Rated frequency	50 Hz
Allowed utilization category	AC-12
	Screw-type terminal top and bottom (load circuit)
Neutral conductor position	right
Cross section solid	1-wire: max. 35 mm²
Connecting capacity flexible	1-wire: max. 35 mm²
Tightening torque	max. 2 Nm
	Screw-type terminal bottom (auxiliary switches)
Clamping area	max. 2.5 mm²
Tightening torque	max. 0.4 Nm
	General data
mechanical endurance	min. 4000 switching cycles
Ambient temperature	-25 °C ... 60 °C
Climate resistance	55 °C - RH 95 %
Housing type	distribution board housing
Installation type	Mounting rail (35 mm)
Protection class	IP20 (installed: IP40)
Width	90 mm
Height	106 mm
Depth	73.5 mm
Installation depth	66.1 mm
Module widths	5
Weight	0.689 kg
Design requirements/Standards	DIN EN 61008-1, VDE 0664-120 (Annex M)
Certifications	VDE

Dimensions



Dimensional drawing DRCCB 5 ST, 2-pole (Group view)

Wiring example



Wiring diagram DRCCB 5 ST, 2-pole