



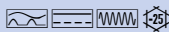
symbolic image

DATA SHEET

residual current transformer

DCT 105 B+

AC/DC sensitive type B
Article number 09340307


[Internetlink](#)


Function

Residual current transformers in combination with evaluation units are suitable for the protection or monitoring of electrical circuits. The transformers have a large selection of opening cross-sections (rated currents). For this reason is it possible to protect and monitor electrical systems with large conductor cross-sections, i.e. with high currents and high voltages. Series DCT transformers combine with DMRCD evaluation units to form modular residual current devices (MRCDs) as per EN 60947-2 or with DRCM evaluation units to form residual current monitors (RCMs) as per EN 62020. Only components of the same type of residual current (A or B+) can be combined. Residual current transformers with characteristic B+ detect pulsating and smooth DC residual currents as well as AC residual currents up to 100 kHz. The residual current transformer covers all of the active conductors leading to the consumers. It uses the conductor currents flowing through it (outgoing and returning) to illustrate the difference in the form of direct voltage. The direct voltage value depends on the residual current value, the set residual current range of the evaluation unit and the frequency range of the residual current.

Features

suitable for detecting type B+ residual currents, monitored frequency range DC up to 100 kHz, Detection of rated residual operating current and residual current of 30, 100, 300, 1000 and 3000 mA, available designs with internal diameter 35, 70 and 105 mm, Rated voltage of monitored circuit up to 690 V, rated currents up to 300 A, compact, robust plastic housing, easy mounting

Mounting

Mounting on stable substrata , any installation position

Applications

Transformers from series DCT B are used in conjunction with residual current monitors from series DRCM type B and modular residual current devices from series DMRCD type B.

Notes

The residual current transformers as bushing transformers are only permitted for operation with insulated cable and line systems. The internal diameter of the transformer must be set to at least 1.5 times the size of the external diameter of the cable(s) to be wired.

Accessories

cables DTCC, magnetic field centring sleeves DMBT, connecting plugs DTCC

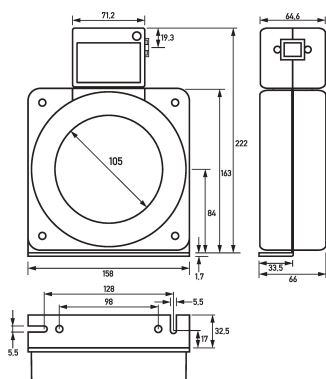
Technical Data

Technical Data	DCT 105 B+
Series	DCT 105 B+
Current transformer specification	residual current transformer
Current transformer suitable for	DMRCD/DRCM
Residual current detection characteristic	B+
	transformer, primary side
Rated voltage (AC)	0 V ... 690 V
rated impulse withstand voltage	8 kV / Kategorie IV
Rated current	300 A
Rated frequency	50 Hz ... 60 Hz

Subject to technical changes

Technical Data	DCT 105 B+
max. Overcurrent regarding non-tripping	6 x I _n
Thermal continuous residual current factor	150 A (50 Hz / 20 kHz)
Rated short-circuit residual current	10 kA
Rated short-time residual current factor	3 kA (für 1 s bei 50 Hz, für 1 s bei 20 kHz)
Rated impulse residual current factor	10 kA (50 Hz)
	RJ45 (transformer output)
Connection design	female
Protective cover available	true
max. Connection C1 cable length	10 m
max. Outer diameter Connection cable	70 mm
	General data
Operating position	optional
max. Operating altitude above MSL	2000 m
Storage temperature	-40 °C ... 85 °C
Ambient temperature	-25 °C ... 65 °C
Housing type	wall-mounted housing
Installation type	Wall mounting
Housing material	polycarbonate (PC)
Protection class	IP20
Width	66 mm
Height	220 mm
Depth	158 mm
Installation depth	220 mm
Inside diameter	105 mm
Design requirements/Standards	EN 62020, VDE 0663, EN 60044-1, VDE 0414, VDE 0664-400

Dimensions



Dimensional drawing Group view

Subject to technical changes