# UK Technical Data 02



DCT A-020, 035, 070 and 105 For the detection of Type AC and A residual currents for use with DRCM-1A





## Function

Residual current transformers for use with DRCM-1A residual current monitoring relays as per EN 62020.

The transformers are available in four sizes and selected based on the cross-section of the conductors and the rated currents (see maximum In value give in the data sheet. The current carrying conductors including the neutral if present, must be positioned centrally in the CT to ensure the accuracy of the detected residual current. The protective earth conductor and any protective screening (e.g. SWA) must be run separately i.e. they must not pass through the CT.

### Features

Suitable for detecting residual currents Type A and AC, monitored frequency range 50 Hz - 60 Hz (Type A), Detection of rated residual operating current and residual current of 30, 100, 300, 1000 and 3000 mA, available designs with internal diameters of 20, 35, 70 and 105 mm, Rated voltage of monitored circuit up to 690 V, for rated currents up to 400 A, compact, robust plastic housing, easy mounting

# Mounting

The devices must be mounted on stable back plate, using the mounting brackets supplied with the product.

## **Applications**

DCT A CT's are used in conjunction with residual current monitors from series DRCM type A.

#### 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.

# **Technical Data**

Technical Data	DCT A-***
Series	DCT A-***
Current transformer specification	Insulated, for use with insulated conductors
Current transformer suitable for	DRCM
Residual current detection characteristic	A, AC
Over voltage category	III
	Transformer primary
Rated voltage (AC)	o V 690 V
rated impulse withstand voltage	8 kV / Category IV
Rated current In	DCT A-020 = 50 A, 035 = 125 A, 070 = 200 A, 105 = 250A
Rated frequency	50 Hz 60 Hz
max. Overcurrent regarding non- tripping	6 x In

# Doepke

The experts in residual current protection technology

Technical Data	DCT A-o**
Thermal continuous residual current factor	1.5 x ln
Rated short-circuit residual current	10 kA
Rated short-time residual current factor	10 x ln (for 1 s)
Rated impulse residual current factor	25 x ln
	Plug-in terminal connector (Transformer output)
Connection design	female
Protective cover available	true
max. Connection C1 cable length	10 m (e. g. LiY 0.5 mm²)
max. Outer diameter Connection cable	13 mm
Cross section solid	1-wire: 0.22 mm <sup>2</sup> 1.5 mm <sup>2</sup>
Cross section flexible with ferrule	max. 0.6 mm <sup>2</sup>
Cross section stranded	1-wire: 0.22 mm <sup>2</sup> 1.5 mm <sup>2</sup>
Tightening torque	max. 0.25 Nm
	General data
Operating position	any
max. Operating altitude above MSL	2000 M
Storage temperature	-40 °C 85 °C
Ambient temperature	-25 °C 65 °C
Housing type	wall-mounted housing
Mounting type	Wall mounting
Housing material	Polycarbonate (PC)
Protection class	IP20
Width	70 mm
Height	84 mm
Depth	66 mm
Inside diameter	20 mm
Design requirements/Standards	EN 62020, EN 60947-2 when used with MRCD, EN 61869-2
Degree of pollution according to EN 60664	3

# Dimensions







105

# Wiring example

