

RDT 300C

TECHNICAL CHARACTERISTICS

Current detector control and monitoring consist of a Current Relay and associated Summation Toroidal Current Transformer which are used in LV networks with alternating current in TT, IT, and TNS systems. They provide the protection required against indirect contacts, (complementary protection against direct contacts) and against the risk of fire (as the low currents through the earth are not enough for to let the magnetothermic device intervene). The standard CEI 64.8 says that the current detector is considered as **additional protection** therefore not an unique device for protection against the direct contacts. All cables of a single or three phase system, including the neutral where present, must cross the toroid which is the point of residual current, the device activates when it detects defective insulation which is indicated when the vectorial sum of the current carrying cables results in a differential figure. Referring standards: CEI EN 61010-1.



Current detector intervenes also after a loss of connection with the toroidal current transformer
It is possible to effect the remote reset simply by removing and apply again the auxiliary voltage supply.

CURRENT DETECTOR



RDT300C - A type

- AUXILIARY POWER SUPPLY

- RANGE OF NETWORK FREQUENCY
- BURDEN
- TRIP CURRENT ADJUSTMENT ($I_{\Delta N}$)

- TIME DELAY ADJUSTMENT
- OUTPUT, one change-over contact
- TEMPERATURES
- INSULATION TEST
- PROTECTION CLASS
- INSULATION CLASS
- SIGNALLING LED

- STANDARDS
- AMMETRIC CIRCUIT
- DIMENSIONS

230VAC $\pm 10\%$ - 40 / 60 Hz - model **RDT300C**
 110VAC $\pm 10\%$ - 40 / 60 Hz - models **RDT300C-110**
 22....36VAC and 19....70VDC - models **RDT300C -PD1**
 44....130VAC and 70....240VDC - models **RDT300C-PD2**
 40 / 60 Hz
 $<1W$ (EuP)
 30 - 100 - 300 mA
 0,5 - 1 - 1,5 - 2 - 3 - 5 - 10 - 20 - 30 A
 0 - 0,25 - 0,5 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 10 sec
 NC - C - NO 10A, 250V
 operating $-10^{\circ}C \div +55^{\circ}C$ / storage: $-20^{\circ}C \div 80^{\circ}C$
 2 kV a 50 Hz for 1 min (1 kV for the measurement circuit)
 IP 20 on terminals - IP40 on front
 II
 FAULT (RED led): working relay, over-limits after the time delay
 ON (GREEN led): device correctly supplied
 RESET (push): reset of anomaly
 TEST (push): test for the control of the correct functions
 CEI EN 61010-1
 Wires: lenght max 20 m, section min. 1 mm²
 3 DIN modules



The Test and Reset buttons are accessible from the front with sealed front window also

CONNECTION DIAGRAM

