

TECHNICAL SPECS OF ECT-752

FUNCTIONS

Protective Earth Bond/Continuity (housing and cable)	
Test voltage	6 VAC approx.
Test current	>200 mA
Display range	0.00 ... 10.00 Ω
Accuracy	$\pm (3 \% + 3 \text{ D})$
Limit value	Adjustable 0.00 ... 10.00 Ω
Compliance	IEC 61557-4:2019
Insulation Resistance (Input, Output, Input-Output, Housing)	
Test voltage (UN)	250 VDC or 500 VDC
Test current	>1 mA @ 250 k Ω for UN = 250 V >1 mA @ 500 k Ω for UN = 500 V
Short-circuit test current	< 2.0 mA
Display range	0.00 ... 20.00 M Ω
Accuracy	$\pm (5 \% + 3 \text{ D})$
Limit value	Adjustable 0.00 ... 20.00 M Ω
Test voltage display range	30 ... 600 V
Test voltage accuracy	$\pm (3 \% + 3 \text{ D})$
Test voltage tolerance	-0 ... 25 % of UN
Compliance	IEC 61557-2:2019
RCD (Trip out time (t) and ramp current (IA))	
RCD types	AC, A
Nominal current (I Δ N)	10 mA, 30 mA
IDN multiplier (MUL)	1/2 $\times$ I Δ N, 1 $\times$ I Δ N, 5 $\times$ I Δ N
Polarity	POSITIVE or NEGATIVE
Display range trip out time	0 ... 550 ms
Accuracy trip out time	$\pm (2 \% + 3 \text{ ms})$
Display range ramp current	20 % ... 120 % of I Δ N (AC - sine wave) – 21 steps 0 % ... 140 % of I Δ N (A - half wave) – 29 steps
Resolution ramp current	0.1 mA
Accuracy ramp current	$\pm (5 \% \text{ of } I\Delta N + 1 \text{ step})$
Compliance	IEC 61557-6:2019
RDC-DD t (Trip out time (t) and ramp current (IA))	
Nominal current (I Δ N)	6 mA
I Δ N multiplier (MUL)	3 mA (1/2 $\times$ I Δ N), 6 mA (1 $\times$ I Δ N), 60 mA (10 $\times$ I Δ N), 200 mA (50 $\times$ I Δ N)
Polarity	POSITIVE or NEGATIVE
Display range trip out time	0.000 ... 11.000 s (MUL = 1/2 $\times$ IDN, 1 $\times$ IDN) 0 ... 350 ms (MUL = 10 $\times$ I Δ N) 0 ... 90 ms (MUL = 50 $\times$ I Δ N)
Accuracy trip out time	$\pm (2 \% + 3 \text{ ms})$
Display range ramp current	0 % ... 100 % of I Δ N – 86 steps
Resolution ramp current	0.1 mA
Accuracy ramp current	$\pm (10 \% \text{ of } I\Delta N + 1 \text{ step})$
Compliance	IEC 61557-6:2019

CP resistor verification	
Display range	800 ... 1200 Ω
Accuracy	$\pm$ (3 % of rdg. + 3 D)
CP Voltage	
Display range	-15.00 ... 15.00 V
Accuracy	0.5 % (Duty cycle = 5 .. 96 % and DC) 1 % (Duty cycle = other)
Limit values	Based on Table A.10, IEC 61851-1
CP Duty cycle	
Display range	2.0 % ... 98.0 %
Accuracy	$\pm$ 5 D
CP Frequency	
Display range	900 Hz ... 1100 Hz
Accuracy	$\pm$ 0.1 %
Touch current	
Display range	0.00 ... 2.00 mA
Probe resistance	1 k Ω $\pm$ 1%
Accuracy	$\pm$ (3 % + 3 D)
Limit value	0.5 mA standard, 0.00 ... 2.00 mA adjustable
Leakage current	
Display range	0.0 ... 20.0 mA
Shunt resistance	1 k Ω $\pm$ 1%
Accuracy	$\pm$ (3 % + 3 D)
Limit value	3.5 mA standard, 0.0 ... 20.0 mA adjustable
Miswiring	
L/PE reversed at DUT's input	YES
N open at DUT's input	YES
PE open at DUT's input	YES
Control Pilot Error	
CP error (CP signal short circuited)	YES
Diode error (diode short circuited)	YES
PE error (PE conductor interrupted)	YES
D error (simulation of D state)	

GENERAL TECHNICAL SPECIFICATIONS

Mains supply	207 ... 253 V, 50 Hz, 1 A max. detachable mains cable
Connectivity	Bluetooth, USB C
Ingress protection	IP 65 (closed case) IP 20 (open case)
Mass	8,5 kg
Overall size (W $\times$ D $\times$ H)	405 $\times$ 330 $\times$ 180 mm
Protection classification	Class I
Pollution degree	2
Referential temp./humidity range	+23 $^{\circ}$ C $\pm$ 5 $^{\circ}$ C
Working temp. range	-10 ... 40 $^{\circ}$ C
Storage temp. range	-20 ... 50 $^{\circ}$ C
Referential humidity range	30 ... 50 %
Working humidity range	5 ... 85 % (w/o condensation)
Storage humidity range	< 85 % (w/o condensation)
Max. altitude	2000 m