LT300
High current loop testers

- **High current loop tester**
- **Single and 3 phase testing**
- **16 Hz to 400 Hz operation**
- **CATIV 300 V applications**
- **Two wire lead set or mains plug leads**
- **Tough armoured case**
- **Built-in cover**

DESCRIPTION

The LT300 offers high current loop testing over a wide range of frequencies and supply voltages with simple, fast, two wire operation.

It has a large clear display that aids visibility in poor conditions.

Two models are available:
LT300-EN-00   - with red/green leads
LT300-EN-BS - with BS1363 mains plug lead

The high current loop test provides fast accurate and stable results with a resolution to 0.01 Ω on the 20 Ω range.

Frequency range
Supply frequency is indicated upon connection to the supply. This will automatically set to the measured supply frequency either 16 Hz, 50/60 Hz or 400 Hz. Testing will commence automatically.

Loop Impedance measurement:
Two loop impedance ranges are provided.
20 Ω   -   Resolution to 0.01 Ω
200 Ω   -   Resolution to 0.1 Ω

Supply voltage:
Operational supply range extends from 50 V to 550 V (400 V @ 16 Hz), with a warning for voltages over 330 V highlighting accidental phase to phase connections on a nominal 230 V system.

Single Phase CATIV 300 V phase to earth, as well as 550 V phase to phase applications (400 V @ 16 Hz)

GENERAL

The instrument is housed in a rubber armoured case with a built-in cover to protect the display when not in use.

The IP54 weatherproof rating provides excellent protection in adverse conditions.

The instrument is supplied with either a two wire (red/green) lead set, or a mains plug test lead for access to wall sockets, a certificate of test and a hard carry case.

SPECIFICATION

Voltage measurement range

Voltage range:	0 V to 550 V (400 V @ 16 Hz)
Accuracy:	±5% ±2 V

Loop test operating frequencies

16 Hz	15 Hz to 18 Hz, 33 Hz, 29 Hz to 337 Hz
50/60 Hz	40 Hz to 70 Hz, 125 Hz, 100 Hz to 142 Hz
400 Hz	260 Hz to 498 Hz

Test currents

	20 Ω Range	200 Ω Range
550 V	27 A	2.7 A
230 V	12 A	1.2 A
115 V	6 A	0.6 A
50 V	3 A	0.3 A

Loop test accuracy

Loop resistance:

0 to 19.99 Ω (20 Ω range)	±5% ±0.03 Ω
0 to 199.9 Ω (200 Ω range)	±5% ±0.5 Ω

Environmental

Operating temperature:	-10°C to +60°C
Storage temperature:	-25°C to +70°C
Humidity:	90%RH @+40°C
Maximum altitude:	2,000 m
Dust and water:	IP54

Battery: 8 x AA (LR6) alkaline or NiMH rechargeable cells.

Safety
Meets the requirements of IEC61010-1 300 V CATIV phase to earth or 550 V Phase to Phase (400 V @ 16 Hz).

EN61557
Complies with the following parts of EN61557,Electrical safety in low voltage systems up to 1000 V a.c. and 1500 V d.c. Equipment for testing, measuring or monitoring of protective measures:
Part1 - General Requirements
Part3 - Loop resistance

EMC
In accordance with IEC61326-1

Weight:	980gms (2.16lb)
Dimensions:	203 x 148 x 78mm (8 x 5.8 x 3 in)

ORDERING INFORMATION

Item (Qty)	Order Code
High current loop tester with red/green lead set	LT300-EN-00
High current loop tester with BS1363 mains plug lead	LT300-EN-BS
High current loop tester complete with fused leads	LT300-EN-FS
Included Accessories	
Red/green 2 wire test lead set (LT300-EN-00)	6220-784
Mains plug test lead (BS1363) (LT300-EN-BS)	6220-810
Hard carry case	5410-409
Fused leads ONLY WITH LT300-EN-FS	6220-827
Optional Accessories	
Red/green 2 wire Lead set	6220-784
Mains plug test lead (BS1363)	6220-810

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