KEWTECH

KT66DL

12 in 1 Multifunction Tester

PRODUCT DATA SHEET

KT66DL

- User interface: Easy to use single rotary dial with four function softkeys and colour LCD 3.5" dot matrix display.
- ATT Loop: Anti-Trip Technology (with 2 & 3 wire) for no trip LOOP L-PE testing on all RCDs. 2 wire only option is very useful in case of no neutral (i.e. 3-phase motor lines & testing at switch points for lighting circuits).
- Loop: High test current range of 2Ω with 0.001Ω resolution.
- Zs Limit: Compares the values required by Electrical Installations Standard (BS7671- 18th Edition) with measured results.
- 55V Loop: Low and high current loop test of 110V CTE circuits
- RCD: Type AC, A, F, B (General & Selective), EV and Variable RCDs. Single, auto, ramp and contact voltage options. All auto test results displayed on one screen.
- Earth: Earth resistance test 2 and 3 wires option.
- Insulation: Resistance test 100, 250, 500 & 1000V with auto discharge voltage.
- Continuity: Continuity test at 200mA or 15mA with selectable buzzer for fast judgment.
- Phase rotation: On 3-phase lines with clear indication of the sequence on the display.
- Volts: TRMS Voltage measurements 2-600V, Mains Frequency.
- SPD: Surge Protection Device test, for SPD that uses varistor.
- PAT: Portable Appliance Tester function, for insulation and protective conductor resistance test.
- Advanced memory: Assigns type of test (eg: R2 or R1+R2 for continuity), circuit number and DB to test results
- Touch voltage: Selectable
- Documentation: End of line calibration certificate and manual
- Help: Display shows how to connect the instrument according to the function selected.
- Protection: Supplied in heavy duty soft carry case and the instrument has a lid.
- SAFETY: IEC 61010-1 CAT IV 300 V, CAT III 600 V. IEC 61557-1,2,3,4,5,6,7,10

ACCESSORIES

- ACC064SP G7 Test probe with remote test button
- ACC065 G7 Test lead set
- Batteries
- Instruction Manual
- Calibration Certificate
- Software
- Kamp12 Mains lead
- Test lead pouch
- Soft carry case
- USB cable
- Padded strap

OPTIONAL

- ESKIT: Earth spike kit for earth resistance testing
- PATDAPTER1: For PAT testing
- ACC070: Fused probes
- FC2000: Check box
- KEWEVSE: EV charging point adapter

LOOP IMPEDANCE

Range	20.00/200.0/2000Ω (auto-ranging)
Display range	0.00 - 20.99Ω / 16.0 - 209.9Ω / 160 - 2099Ω
Measuring range	0 – 2000Ω
Accuracy	±2.0%rdg±8dgt
Open-circuit voltage	7 – 14V DC
Test current	200mA test: 200mA or more (2Ω or less) 15mA test: 15mA±3mA (short-circuit)

• Enabled if pre-set NULL value is 9Ω or less.• Buzzer: Buzzer sounds when measured resistance is 2Ω or less.

VOLTS

Range	300.0/600V (Auto-ranging)
Display range	Voltage: 2.0 – 314.9V, 240 – 629V Frequency: 40.0 – 70.0Hz (displayed at 2V or higher)
Measuring.range	Voltage: 2 – 600V, Frequency: 45 – 65Hz
Accuracy	Voltage: ±2%rdg±4dgt Frequency: ±0.5%rdg±2dgt

Uc (RCD)

Mains voltage range	100-260V
Range	100V
Display range	0.0 - 104.9V
Measuring range	0 - 100V
Accuracy	+5%to+15%rdg±8dgt 230V
Test current	50 % or less of IΔn

EARTH

	Precise measurement	Simplified measurement
Range	20.00 / 200.0 / 2000Ω (auto-ranging)	
Accuracy	20Ω range; ±2%rdg±0.08Ω The other ranges: ±2%rdg±3dgt (Aux. earth resistance: 100Ω)	±2%rdg±0.08Ω The other ranges: ±2%rdg±3dgt
Output current	20Ω range: approx. 3mA, 200v range: approx. 1.7mA 2000Ω range: approx. 0.7mA Frequency: 825Hz	

PHASE ROTATION

Measuring Range	48 – 600V / 45 - 65Hz
Criteria of judgement	Correct sequence: Clockwise symbol and "1, 2, 3" are displayed. Reversed sequence: Counter-clockwise symbol and "3, 2, 1" are displayed.

INSULATION

Rated voltage	100V	250V	500V	1000V	SPD (Varistor) 1000V
Range	2.000/20.00/200.0MΩ auto-ranging		20.00/200.0/1000MΩ auto-ranging	20.00/200.0/2000MΩ	0 -1000V (increases in 1V steps)
Display range	0.000 - 2.099MΩ 1.60 - 20.99MΩ 16.0 - 209.9MΩ		0.00 - 20.99MΩ 16.0 - 209.9MΩ 160 - 1049MΩ	0.00 - 20.99MΩ 16.0 - 209.9MΩ 160 - 2099MΩ	1049V
Measuring range	0 - 200MΩ		0 - 1000MΩ	0 - 2000MΩ	0 - 1049V
Accuracy	2.000MΩ range: ±2%rdg±6dgt 20.00MΩ range: ±2%rdg±6dgt 200MΩ range: ±5%rdg±6dgt		20.00MΩ range: ±(2%rdg+6dgt), 200.0MΩ range: ±(2%rdg+6dgt)		±5%rdg±5dgt
			1000MΩ range: ±(5%rdg+6dgt)	2000MΩ range: ±(5%rdg+6dgt)	
Rated meas. current	1.0 - 1.2mA at 100kΩ	1.0 - 1.2mA at 250kΩ	1.0 - 1.2mA at 500kΩ	1.0 - 1.2mA at 1MΩ	1.0 mA

LOOP

Function		LOOP ATT		LOOP HIGH		
		3-Wire L-PE	2-Wire L-PE	L-PE0.01ΩRes	L-PE0.001ΩRes	L-N/L-L
Mains input voltage range		100 – 260V 50/60Hz (L-N < 20Ω)		48 – 260V 50/60Hz	100 - 260V 50/60Hz	48 - 260V 50/60Hz
Range	LOOP	20.00/200.0/2000Ω (auto-ranging)		20.00/200.0/2000Ω	2.000Ω	20.00Ω
	PFC/PSC	2000A/20kA	2000A/20kA (PFC only)	2000A/50kA (PFC only)	2000A/20kA (PSC only)	2000A/20kA (PSC only)
Display range	LOOP	0.00 – 20.99Ω 21.0 – 209.9Ω 210 – 2099Ω	0.00 –20.99Ω 21.0 –209.9Ω 210 –2099Ω	0.00 - 20.99Ω 21.0 - 209.9Ω 210 –2099Ω	0.000 - 2.099Ω	0.00-20.99Ω
	PFC/PSC	0 – 2099A 2.10 – 20.99kA	0 – 2099A 2.10 – 20.99kA (PFC only)	0 – 2099A 2.10 – 50.49kA (PFC only)	0 – 2099A 2.10 – 20.99kA (PFC only)	0 – 2099A 2.10 – 20.99kA (PSC only)
Meas. range	LOOP	0 – 2000Ω	0 – 2000Ω	0 – 2000Ω	0 – 2Ω	0 – 20Ω
Accuracy	LOOP	±(3%rdg+6dgt)	±(3%rdg+10dgt)	±(3%rdg+4dgt)	±(3%rdg+25mΩ)	±(3%rdg+4dgt)
	PFC/PSC	Depending on the accuracies of voltage and LOOP measurements				
Test current @ 230V		L-N:6A/60ms N-PE:10mA (5.3Hz)	L-PE: 15mA	20Ω: 6A/20ms, 200Ω: 0.5A/20ms 2000Ω: 15mA/500ms	25A/20ms	6A/20ms

RCD

(1) Mains input voltage range: 100V – 260V 50/ 60Hz. For Type AC and A RCDs rated at 100mA or higher: 190 – 260V

Mode	Rated residual operating current (mA)(IΔn)		Test current		Duration	
			Current (mA) rms	Accuracy @230V	Meas. time	Accuracy
x 1/2	AC	G: 10/30/100/300/500/1000 S: 100/300/500	IΔn×1/2	-8% to-2% VAR:-10% to 0%	2000ms	Trip Time ±(1%+2ms)
	A/F	G: 10/30/100/300/500 AS:100/300/500	IΔn×0.35	-10% to 0%		
	B	G: 10/30/100/300 S:100/300	IΔn×1/2	-10% to 0%		
x 1	AC	G: 10/30/100/300/500/1000 S: 100/300/500	IΔn	+2% to +8% VAR:0% to +10%	G:550ms S:1000ms	Measuring time ±3% of FS
	A/F	G: 10/30/100/300/500 AS:100/300/500	IΔn×1.4 (10mA: IΔn×2)	0% to +10%		
	B	G: 10/30/100/300 S:100/300	IΔn×2	0% to +10%		
	6 mA DC		IΔn	0% to +10%	10.5s	
x 5	AC	G: 10/30/100 S: 100	IΔn×5	+2% to +8% VAR:0% to +10%	410ms	
	A/F	G: 10/30/100 AS: 100	IΔn×5×1.4	0% to +10%		
	B	10/30	IΔn×2×5	0% to +10%		
Ramp 20 to 110%	AC	10/30/100/300/500 S: 100/300/500	IΔn	-4% to +4%	by 10% G: 300ms S: 500ms	Measuring time ±3% of FS
	A/F	G: 10/30/100/300/500 AS:100/300/500	IΔn×1.4 (10mA:IΔn×2)	-10% to +10%		
	B	G: 10/30/100/300 S: 100/300	IΔn×2	-10% to +10%	by 2% /150ms	
Ramp EV 30 to 100%	6 mA DC		IΔn	-10% to +10%	by 2% / 500ms	

Applicable Standards	IEC 61010-1 CATIII (600V) CATIV (300V) pollution degree 2, IEC 61010 -Tester , -2-030, -2-034, IEC61557-1,2,3,4,5,6,7,10, IEC 60529 IP40, EN 61326-2-2 (EMC)
Dimensions & Weight	136 (L) x 235(W) x 114 (D) mm, 1300g including batteries (8 x AA / LR6)