8. Specification

Voltage test	
Voltage range	12…690V AC/DC
Peak current	Is<3.5mA (at 690V)
Measurement Duty	30s ON (operation time) 240s OFF (recovery time)
Internal battery consumption	Approx. 80 mA (battery 3V, measuring 690V AC)
Battery life	Approx. 1000 operations (30s ON / 240s OFF duty)
LED (KT170 / KT171)	
Nominal voltage	12/24/50/120/230/400/690V AC (16…400Hz), DC(±)
Tolerance (Threshold voltage)	Light on at more than : 7±3V (12V LED) : 18±3V (24V LED) : 37.5±4V (50V LED) : 75%±5% of nominal voltage (120/230/400/690V LED)
Response time	< 0.6s at 100% of each nominal voltage
LCD (only KT171)	
Range / Resolution (Auto-range)	300V (6.0…299.9) / 0.1V 690V (270…759ac/710dc) / 1V
Accuracy (23±5°C)	±1.5V (7…100V) ±1%±5dgt (100…690V) AC(16…400Hz), DC(±)
Over limit indication	"OL"
Response time	Approx. 1s at 90%-110% of each voltage
Single-pole phase test	
Voltage range	100…690V AC (50/60Hz)
Phase rotation test	
System	Three-phase 4-wire system 200…690V phase-to-phase (100…400V earth-to-phase) AC 50/60Hz
Phase range	120±5 degree
Continuity test	
Detection range	0…400kΩ + 50% (23±5°C)
Test current	Approx.1.5μA (battery 3V, 0Ω)
Internal battery consumption	Approx. 80 mA (battery 3V, 0Ω)
Reference condition	
Battery	3V (IEC LR03 1.5V x 2)
Temperature	-15…55°C operation -20…70°C storage (KT170) -20…60°C storage (KT171) No condensation
Humidity	Max 85% RH
Used Location	Altitude up to 2000m
Safety	
Standard	IEC(EN)61010-1:2010(2010) IEC(EN)61243-3:2009(2010) IEC(EN)61010-031:2008(2008) IEC(EN)61557-7:2007(2007)
Category	CAT.III 690V, CAT.IV 600V
Pollution degree	2
IP code	IP65 (IEC60529)