

Digital Arrester Clamp Tester

Leakage & Harmonics Current Measurements For Arrester

Model ALCL-40L



GENERAL

Lightning arresters are designed to protect a power distribution system by shunting to ground the high voltage surges caused by lightning. ALCL-40L measures to warn that an arrester is damaged or deteriorated and should not be energized.

FEATURES

- ALCL-40 is designed to test the diagnostic of **OXIDE SURGE ARRESTER**
- The least influence from the external magnetic field and noise by triple shielding for CT
- Compliant with IEC6099-5
- Enabled the measurement for 100nA resolution and harmonics current
- Motor operation for opening/closing of the jaw with extensional ABS glass fiber insulation rod

SPECIFICATIONS

CT Sensor

CT : ϕ 40mm
 Opening/closing of the jaw : Motor operation
 Withstanding voltage : AC 2300V,1 minute(Between the core of CT and CT outer case)

Measuring and display unit

Measuring function : Leakage current, Harmonic current (Fundamental & third harmonics)
 Measuring method : Dual slope integration mode
 Measuring range : AC 0-300 μ A/3mA/30mA(3range manual)
 Input frequency : 45-60Hz(Fundamental frequency)
 AC conversion : AC coupled true rms responding
 Display : LCD Max. 3200 count
 Sampling : 2 times/sec.
 Over indication : "OL"mark on LCD
 Low battery indication : "Low" mark on LCD
 Data hold indication : "DH" mark on LCD
 Auto power off function : Approx.10 minutes later after power on
 Power supply : AA size alkaline battery x 4
 Limitation of circuit voltage : Less than 500V AC
 Operating temperature : 0-40°C, less than 80%RH, w/o condensation
 Storage temperature : -10~60°C, less than 70%RH, w/o condensation
 Dimensions : 160(W) \times 950(L) \times 84(D)(When retracted)
 : 160(W) \times 3680(L) \times 84(D)(When stretched)
 Weight : Approx.2.6kgs

AC Current

Accuracy (23°C \pm 5°C, less than 80%RH)

Range	Resolution	Accuracy(45~65Hz)	Max. input Current
300 μ A	100nA(0.1 μ A)	* \pm 1.2% \pm 8digit	40A rms
3mA	1 μ A(0.001mA)		
30mA	10 μ A(0.01mA)		

Crest factor : <3 (0-50% of the range)
 <2 (50-100% of the range)

Harmonic Current Measurement (Fundamental & third harmonics)

Measuring method : PLL method
 Minimum fundamental input : More than 3% of full scale in each range
 Accuracy : (1% \pm 5digit) \pm (Basic accuracy of ACA)
 – (error by neighboring harmonics)

*Accuracy specified : More than 4% harmonics are necessary against fundamental harmonics

Accessories : CT cover case.....1
 Instruction manual..... 1