

# ANSI Standard 250 Deg Rugged Panel Instruments

Amptron offers a complete line of switchboard instruments to meet your every of your electrical needs.

Models are available 110mm square size 250° to measure all electrical quantities, ie, CT Operated Ammeter, Direct Ammeter, Voltmeter, Freq, Power, PF & DC measurement.

All switchboard instruments in KLY-1101 series feature rugged, friction free and shock resistant taut-band suspension elements.

All model of AC instruments are self-contained transducer needless external transducer boxes.

The built-in transducer system offer many advantages including low cost, linear scales, greatly reduced volt-ampere loss.

Amptron switchboard instruments offer a variety models, such as from single phase to three phase four wire instruments, as well as model for balanced and unbalanced circuit. All instruments except synchroscope are complied with ANSI C39.1.

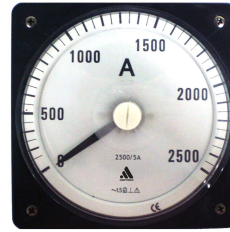
## Features

- RMS rectifier type AC instruments
- Platform scale - No shadow on scale and readable, even from sharp angles
- Interchangeable scales save time
- Easy to read linear scales and wide deflection angles
- Taut-Band suspension - eliminate friction and protects against shock
- Fire retardant ABS Plastic case and terminal board
- Provide terminal protect cover for safety

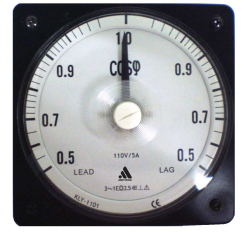
## Specifications

In accordance with ANSI Industrial Standard C39.1 (1981)

- Accuracy See below table
- Full Scale Deflection Angle 250°
- Full Scale Length Approx. 196mm for 110mm SQ
- Position of use Vertical (Scale)
- Pointer Lance type Pointer, Black
- Operating Temperature Range 0 to 40°C
- Operating Humidity Range 25 to 80% RH
- Storage Temperature Range -10 to 50°C
- Storage Humidity Range 25 to 80% RH
- Dielectric Strength Between electrical circuit and the case : 3.3kV AC for 5 seconds. (for KLY-1101-ACV, KLY-1101-Hz)  
Between current circuit and voltage circuit: 2.5kV AC for 5 seconds. ( for KLY-1101-PF, KLY-1101-W, KLY-1101-B)
- Insulation Resistance More than 10MΩ/500V DC between electrical circuit and the case, current circuit and voltage circuit.  
More than 5MΩ/500V DC between current circuit and voltage circuit.
- Safety Requirements Structural requirements are in accordance with ANSI C39.1 for safety of voltage test, insulation and other.  
Reinforced insulation, between electrical circuit and case indoors, Altitudes up to 2000m, Pollution degree 2  
Measurement category III



KLY-1101-ACA



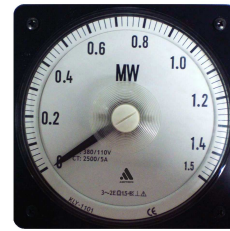
KLY-1101-PF



KLY-1101-Hz



KLY-1101-DCV



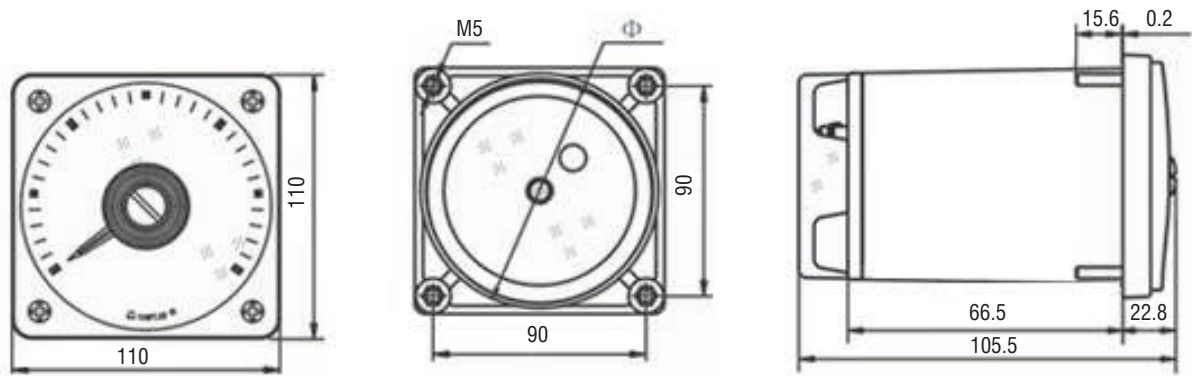
KLY-1101-W



KLY-1101-ACV

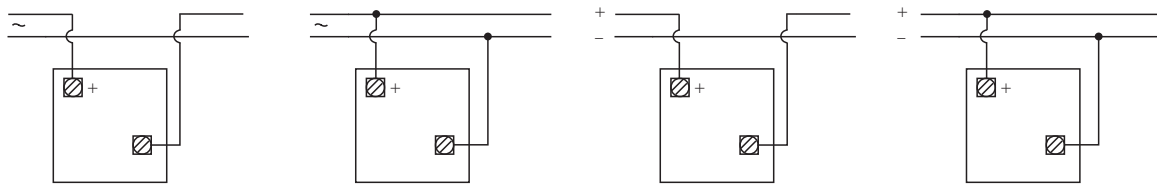
Types	AC Ammeter	AC Voltmeter	DC Ammeter	DC Voltmeter	Frequency Meter	Power Factor Meter	Power Factor (Active/Reactive)
Input Range	Direct 100mA-20A	Direct AC 10-600V	Direct 150μA-20A	Direct 500mV-600VDC	55-65Hz, 45-55Hz 100-440VAC	0.5 lead-1.0-0.5 100-400VAC 1A & 5A CT	3P3W Unbal.load 3P4W Unbal.load 100-440VDC 1A & 5A CT
	1A&5A with CT	100V&110V with VT	60mV&75mV with ext. shunt		45-65Hz 100-440V (Option)		
Accuracy	1.5%	1.5%	1.5%	1.5%	0.5%	2.5%	1.5%
Model	KLY-1101-ACA	KLY-1101-ACV KLY-1101-PTV (V-T)	KLY-1101-DCA	KLY-1101-DCV	KLY-1101-Hz	KLY-1101-PF	KLY-1101-W (Watt) KLY-1101-B (Var)
Enclosure Protection Class	IP 54	IP 54	IP 54	IP 54	IP 54	IP 54	IP 54

## Dimension



Unit in mm

## Connection Diagram

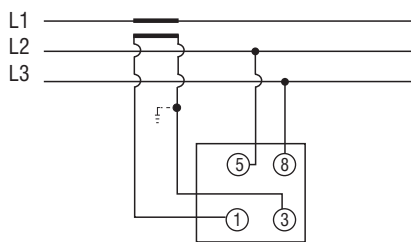


KLY-1101-ACA

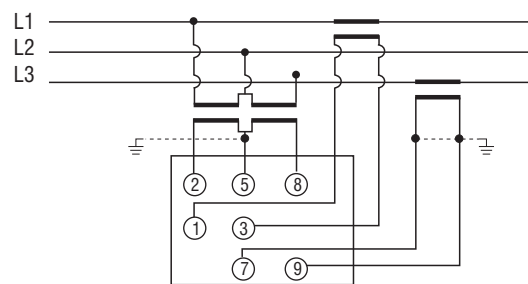
KLY-1101-Hz  
KLY-1101-ACV

KLY-1101-DCA

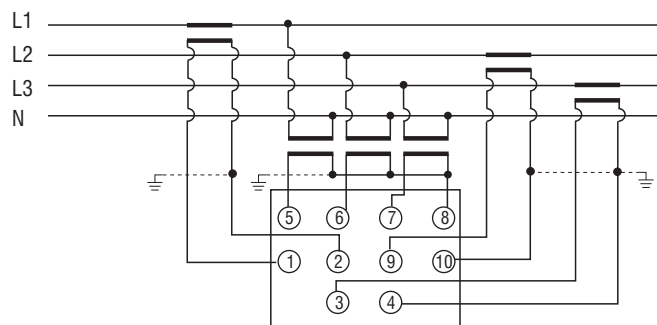
KLY-1101-DCV



KLY-1101-PF



3P3W  
KLY-1101-W & KLY-1101-B



3P4W  
KLY-1101-W & KLY-1101-B