

# LA/LV AC Current / Voltage Transducer

## FEATURES

- 1 Phase (1 I/O) or 3 Phase (3 I/O)
- Precision measurement even for distorted waveforms with our True RMS option
- Self-powered or loop-powered models available
- Output signal programmable by dip-switch
- Low output ripple
- High impulse & surge protection
- High stability & low cost
- High accuracy (<0.5% of F.S.) and 3kV isolation



## SPECIFICATIONS

INPUT: Current or Voltage

	AC Input	Input Burden	Input Frequency	
Current	Aux. Powered & Loop Powered	0 ~ 1 A 0 ~ 5 A 0 ~ 10 A	$\leq 0.10VA$ 50 Hz $\pm$ 3 Hz 60 Hz $\pm$ 3 Hz	
	Self-Powered	20%~100% of input range	$\leq 1.50VA$ 50 Hz $\pm$ 1 Hz 60 Hz $\pm$ 1 Hz	
	Voltage	Aux. Powered & Loop Powered	0 ~ 150 V 0 ~ 300 V 0 ~ 500 V	$\leq 0.15VA$ 50 Hz $\pm$ 3 Hz 60 Hz $\pm$ 3 Hz
		Self-Powered	20%~100% of input range	$\leq 4.00VA$ 50 Hz $\pm$ 1 Hz 60 Hz $\pm$ 1 Hz

OUTPUT: Current or Voltage O/P Programming by Dip Switch inside

Output Range	Load Resistance	Output Resistance	Output Ripple	
0 ~ 1 V	$\geq 500\Omega$	$\leq 0.001\Omega$	$\leq 0.2\%$	Self-powered units can not be used for 4~20mA, 1~5V and 2~10V output.
0 ~ 5 V	$\geq 500\Omega$ ; Self Powered: $\geq 2K\Omega$			
0 ~ 10 V	$\geq 1000\Omega$ ; Self Powered: $\geq 2K\Omega$			
1 ~ 5 V	$\geq 500\Omega$			
0 ~ 1 mA	0 ~ 12K $\Omega$	$\geq 20M\Omega$	F.S.	
0 ~ 10 mA	0 ~ 1200 $\Omega$ ; Self Powered: $\geq 500$	$\geq 6M\Omega$		
0 ~ 20 mA	0 ~ 600 $\Omega$ ; Self Powered: $\geq 500$			
4 ~ 20 mA	0 ~ 600 $\Omega$			
Loop Powered 4 ~ 20 mA	Vs / (20 mA) - 900 $\Omega$			

**Accuracy:**  $\leq \pm 0.5\%$  of F.S.  
**Waveform effect**  $\leq 0.2\%$  of F.S. at 30% distortion  
**Max. input over capability:** Voltage: 1.5 x rated continuous  
 2 x rated for 10 seconds  
 4 x rated for 2 seconds  
 Current: 3 x rated continuous  
 10 x rated for 10 seconds  
 50 x rated for 1 second

**Response time:**  $\leq 250$  ms  
**Span adjustment:**  $\leq \pm 5\%$  of F.S.  
**Zero adjustment:**  $\leq \pm 2\%$  of F.S.  
**Output load effect:** Current output  $\leq 0.1\%$  of F.S.  
 Voltage output  $\leq 0.05\%$  of F.S.

**Power supply:** ADH : AC 85~264V · DC 100~300V  
 ADL : AC / DC 20~56V  
 Loop powered DC 18 ~ 32V

**Power effect:**  $\leq 0.05\%$  F.S.  
**Power consumption:**  $\leq 10$  VA(1P2W);  $\leq 12$  VA(3P3W)  
**Mutual interference effect:**  $\leq 0.1\%$  R.O. between each element  
**Magnetic field strength:** 400ATM  $\leq 0.2\%$  F.S.  
**Operating temperature:** 0~60°C  
**Operating relative Temperature coefficient:** 20~95 %RH, non-condensing  
**Storage temperature:**  $\leq 100$  PPM/°C  
**Dielectric Strength:** -10~70°C  
 IEC 414, IEC 688:1992, ANSI C37.90a  
 Between Input / Output / Power / Case

**Surge test:**

AC 3KV, 50/60Hz, 1 minute  
 IEC 255-4, ANSI C37.90a  
 6KV, 1.2 x 50  $\mu$ sec.

**Insulation resistance:**

Common mode & differential mode  
 $\geq 100M\Omega$ , DC 500V

**Safety:**

IEC 414, BS 5458

**Enclosure:**

IEC 529 (IP50)

**Certification Standards**

IEC 60688

**CE:**

EMC:EN61326:2003

**Safety(LVD):**

EN61010:2001

**Case material:**

ABS Non-flammable (UL 94V-0)

**Mounting:**

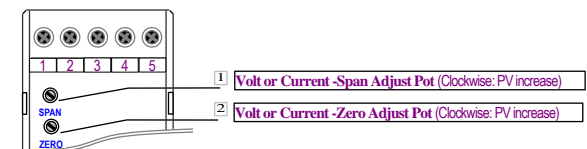
Wall or DIN rail (EN 50022)

**Weight:**

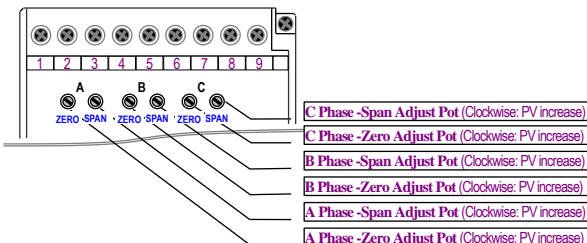
1P: approx. 500g, 3P: approx. 750g

## ADJUSTMENT

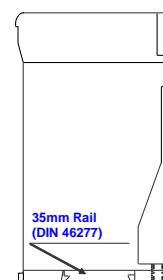
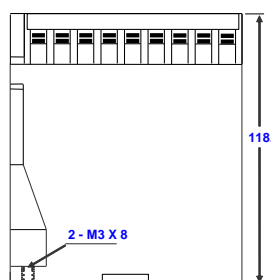
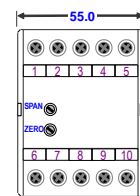
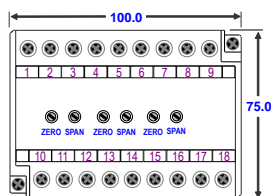
Volt or Current – 1 Phase



Volt or Current – 3 Phases



## DIMENSIONS



Unit: mm

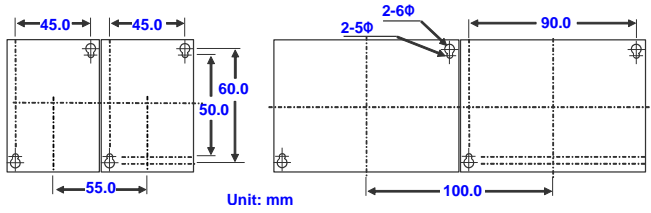


**University**  
 UNIVERSITY PATON INSTRUMENTS - THE EDUCATED CHOICE



LALV

## PANEL MOUNTING HOLES



## OUTPUT RANGE PROGRAMMING

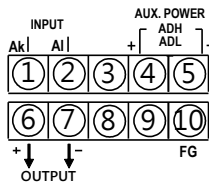
OUTPUT	Dip Switch							
	1	2	3	4	5	6	7	8
0 ~ 1 mA					on			
0 ~ 10 mA					on	on		
0 ~ 20 mA					on		on	
4 ~ 20 mA	on				on		on	
0 ~ 1 V		on	on	on				on
0 ~ 5 V			on	on				on
0 ~ 10 V				on				on
1 ~ 5 V	on		on	on				on

\* Pads: blank fields mean open.

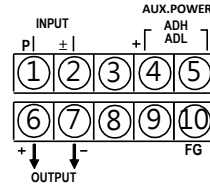
## CONNECTION DIAGRAM

### 1 Phase (Auxiliary Powered)

Current Input:

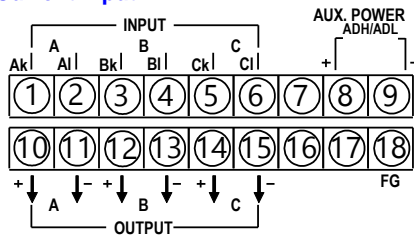


Voltage Input:

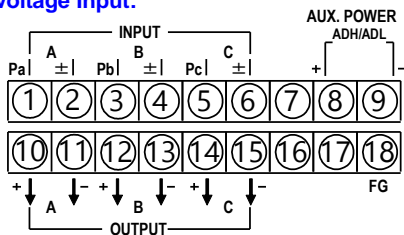


### 3 Phase (Auxiliary Powered)

Current Input:

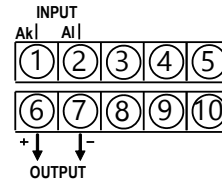


Voltage Input:

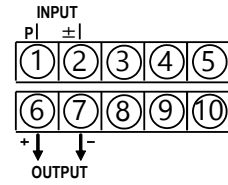


### 1 Phase (Self Powered)

Current Input:

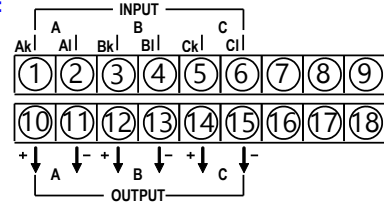


Voltage Input:

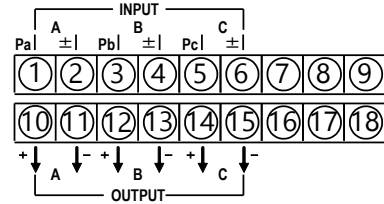


### 3 Phase (Self Powered)

Current Input:

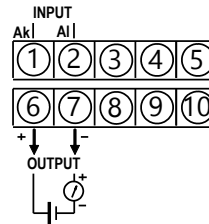


Voltage Input:

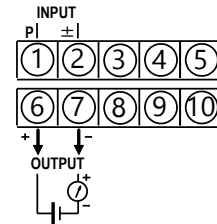


### 1 Phase (Loop Powered)

Current Input:



Voltage Input:



## ORDERING INFORMATION

