

Introduction

PEPL make Transducers are specifically designed for AC Power Line parameters, like Voltage, Current, Wattage, Var, Power Factor, Frequency and DC isolation. These Transducers give a Load Independent and isolated DC output directly proportional to the input parameters. These reliable and accurate Transducers are ideal for applications in all sectors of the Power and Process Industries.

These are widely used for Automation and Control of Power and Process Systems as well as for Local and Remote Monitoring of the electrical parameters at every stage of Electricity Generation, Transmission & Distribution. They are ideal for SCADA, Energy Management, Telemetry, Data-Logging as well as Central Monitoring Systems.



The Transducers are designed to comply the requirements of IEC 688 (second edition) and I.S. 12784 (Part 1). All Transducers pass through a stringent manufacturing and in-house quality control process consisting of vibration, burn-in and calibration tests to ensure complete reliability and accuracy during the continuous operation. For testing, we have Hsiang-Cheng make calibrator with accuracy better than 0.02%.

Types

- AC Current
 - AC Voltage
 - Frequency
 - DC Isolation (Optical)
 - Reactive Power / Var*
 - Power Factor*
 - Active Power / Watt*
- (*) 1Phase & 3Phase Balanced or Unbalanced System

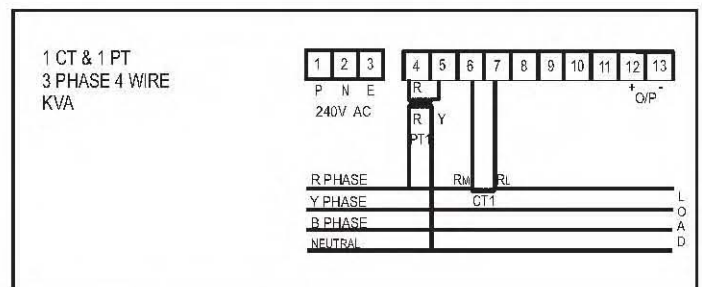
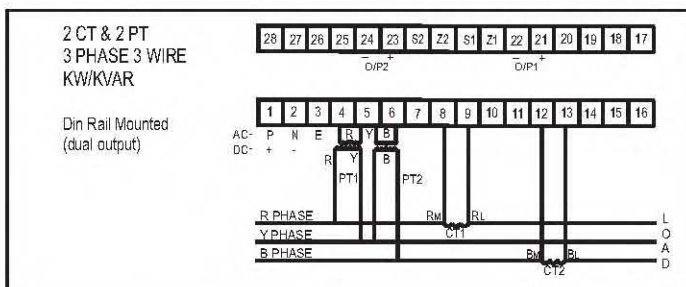
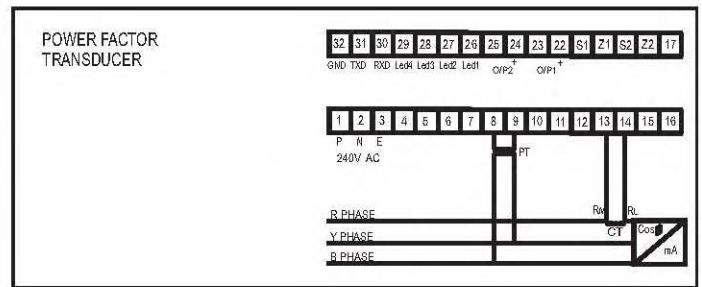
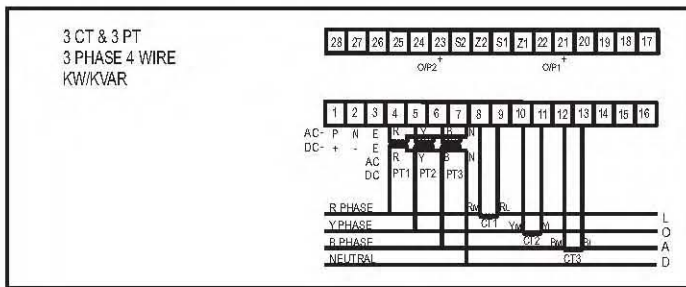
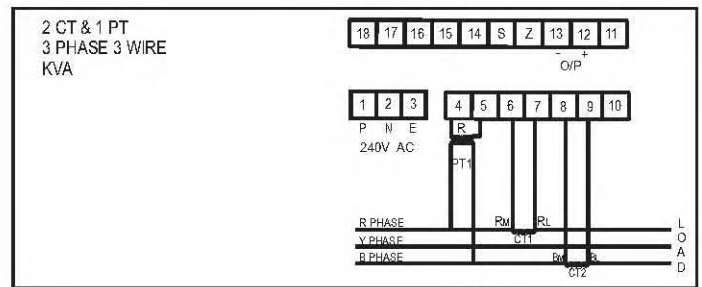
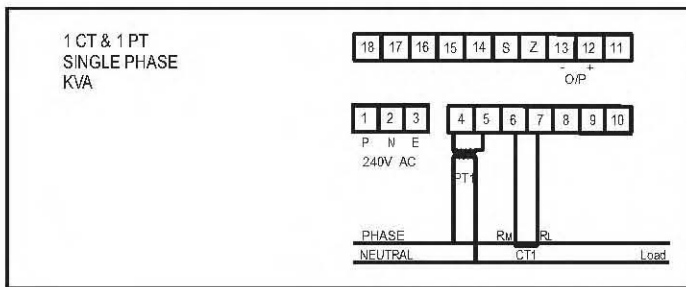
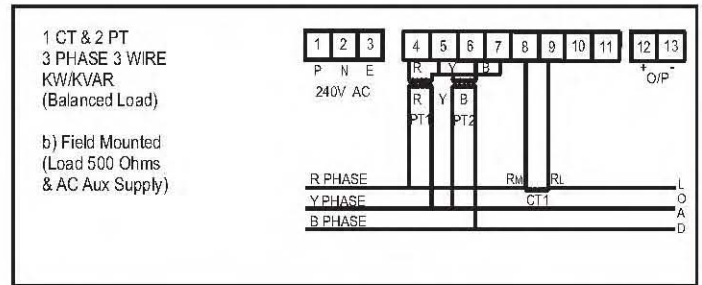
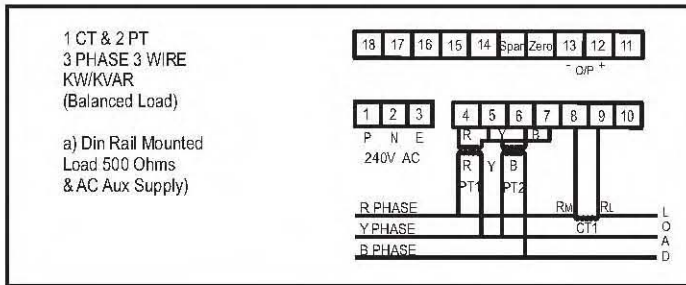
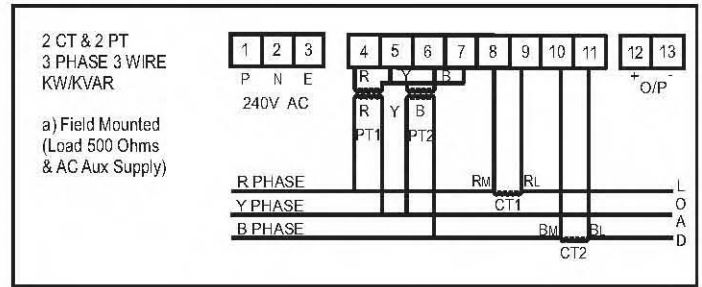
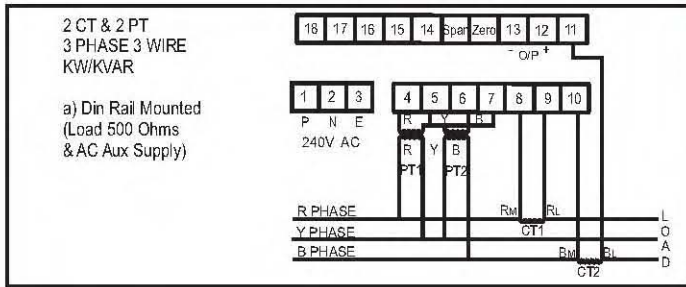
SPECIFICATIONS

SPECIFICATIONS	AC AMP. TRANSDUCER	FREQUENCY TRANSDUCER	AC VOLTAGE TRANSDUCER
Transducer Type	2 PT - 2024	FT-100	2 PT- 2023
Measuring Span	0 - I in	45 - 55 Hz	0 - Vin
Rated I/p Current (I in)	0 - I in	Not Applicable	
Input Current Range	0 - 1 Amp. or 0 - 5 Amp.	Not Applicable	
Nominal Input Voltage (V in)	Not Applicable		0-Vin
Input Voltage Range (VAC)	Not Applicable	110V, 220V, 250V, 440V, 500V, others on request	0-110V, 0-220V, 0-250V, 0-440V, 0-500V, others on request
Frequency	50 Hz		
Power Factor Range	Not Applicable		
Internal Consumption at Input	< 0.5 VA for I path	Ein x 2 mA (Single output) Ein x 4 mA (Dual output)	
Continuous Overload Capacity	2 times I/P	1.2 times I/p	1.2 times
Momentary Overload Capacity	60 times I/P for 1 sec.	2 times for 1 sec	2 times I/p voltage for 1 sec
Output Range	4-20 mADC, Linear (Single & Dual)		
Output Load Resistance			
- For Current Output	0-500 (750 ohms on request)		
- For Voltage Output	> 10 K ohm		
Output Ripple Peak to Peak AC Voltage	< 0.25%		
Response Time	< 300 m sec.		
Accuracy / Accuracy Class *	± 0.25 % / 0.5	± 0.2 % / 0.5	± 0.25 % / 0.5
Auxilliary Supply	240 VAC ± 10% 50 Hz.(110VAC on request), 220 VDC, 110 VDC, 48 VDC, 24 VDC		
Auxilliary Supply Burden	< 10 VA		
Operating Temperature	0 - 60°C		
Effect Of Ambient Temp.	± 0.05% per°C		
a. Isolation Test Voltage Between Input/Output	4kv, 50 Hz : 1 Min. for current path and 3kv : 1 Min for voltage path		
b. Output / Aux.Supply	2kv, 50 Hz : 1Min.		
Terminals	Suitable for conductors upto 2.5 sq. mm.		
Mounting	Din rail / Back of panel on request		
Enclosure Type	ABS		
Size (Din rail)			
- Single O/P, Dual O/P (O/P to O/P unisolated) only for 110/240 VAC	70 (H) x 75 (W) x 112 (D) mm	70 (H) x 100 (W) x 112 (D) mm	70 (H) x 75 (W) x 112 (D) mm
- Dual O/P (O/P to O/P isolated) For all supplies	70 (H) x 100 (W) x 112 (D) mm		
Insulation Resistance	200 M ohm at 1000 VDC		
Impulse Voltage Test	5 kv, 1.2/50 micro sec., 0.5 Joules wave form as per IEC 688 (6.20)		
Zero, Span Adj. Potentiometer	Two individual trimpots on PCB for each output		
For Dual O/P,O/P to O/P Isolation of 500 V is provided	YES		

* Refer for better accuracy/accuracy class

WATT TRANSDUCER	VAR TRANSDUCER	DC VOLTAGE / DC mV TRANSDUCER	POWER FACTOR TRANSDUCER
KW	KVAR	-	PFT
0- lin and 0-Vin, as per requirement	0-lin and 0-Vin, as per requirement	0 - V in	-
0 - I in	0 - I in	-	0 - I in
0 - 1 Amp. or 0 - 5 Amp.	0 - 1 Amp. or 0 - 5 Amp.	Not Applicable	1A / 5 A
0 - V in			
0-110 VAC/ 240 VAC/ 440 VAC		0 - 800 VDC / 0-75 mV Shunt	110 VAC/ 240 VAC/ 440 VAC
50 Hz		D.C.	50 Hz
.5 lead to 1 to .5 lag	.5 lead to 1 to .5 lag	Not Applicable	.5 lead to 1 to .5 lag
<.5 VA for I, Ein x 2 mA for voltage path (Single output) <.5 VA for I, Ein x 4 mA for voltage path (Dual output)		Not Applicable	<.5 VA for I, Ein x 2 mA for voltage path (Single output) <.5 VA for I, Ein x 4 mA for voltage path (Dual output)
2 times current, 1.2 times voltage		1.2 times Input	2 times current, 1.2 times voltage
40 times current for .5 sec, 4 times voltage for 1 sec.		2 times for 1 sec	40 times current for .5 sec, 4 times voltage for 1 sec.
4-20 mADC, Linear (Single & Dual) (Bipolar on request)		4-20 mADC, Linear (Single & Dual)	
0-500 (750 ohms on request)			
> 10 K ohm			
< 0.25%			
< 300 m sec.			
± 0.5 % / 0.5		± 0.25 % / 0.5	± 0.5 % / 0.5
240 VAC ± 10%, 50Hz (110 VAC on request), 220 VDC, 110 VDC, 48 VDC, 24 VDC			
<10 VA			
0-60°C			
± 0.05% per°C			
4kv, 50 Hz : 1 Min.for Current, 3kv, 50Hz 1 Min for Voltage		1kv, 50 Hz : 1 Min. (3kv/4kv on request)	4kv, 50 Hz : 1 Min.for Current, 3kv, 50Hz : 1 Min for Voltage
2kv, 50 Hz : 1Min.		1kv, 50 Hz : 1Min. (3kv/4kv on request)	2kv, 50 Hz: 1Min.
Suitable for conductors upto 2.5 sq. mm.			
Din rail			
ABS			
70 (H) x 150 (W) x 112 (D) mm			
		70 (H) x 45 (W) x 112 (D) mm	70 (H) x 150 (W) x 112 (D) mm
		70 (H) x 100 (W) x 112 (D) mm	Not Available
200 M ohm at 1000 VDC			
5 kv, 1.2/50 micro sec., 0.5 Joules waveform as per IEC 688 (6.20)		Not Applicable	5 kv, 1.2/50 micro sec., 0.5 Joules waveform as per IEC 688 (6.20)
Two individual trimpots on PCB for each output			
YES			

CONNECTION DIAGRAMS



Note : Connection Diagrams of Field Mounting versions on request.

Manufacturing facilities :
Pyrotech Electronics Pvt. Ltd. (Unit - I)
 F-16 A, Road No. 3, MIA, Udaipur-313003
 Rajasthan, (India)
 Ph. : 91-294-2492123-25, Fax : 2492126
 Email : pyrotech@peplelectronics.com
 peplcpt@sancharnet.in
 Web: www.peplelectronics.com

Delhi office :
Pyrotech Electronics Pvt. Ltd.
 405-406, 4th Floor
 53-54, Goverdhan House,
 Nehru Place, New Delhi - 110019
 Ph. : 011 - 46866400 / 26444930
 Fax : 011 - 26443694
 Email : pmppl@pyrotechindia.com

Branch Offices :
 Bangalore-09342530078
 Baroda-09327226863
 Hyderabad-09391385939
 Kolkata-09331019888
 Raipur-09301446050

Our Associates :
 Kolkatta-09339199881
 Korba-09425532765
 Mumbai-09322676597
 Vizag-09848048639
 Rourkela-09937373434