



Programmable Power Transducer

Instrument
Division

3 Phase Transducer Watt / Var / VA

DESCRIPTION

AE Transducers convert various electrical power line parameters Active power, Reactive power, Apparent power, into DC current output. The output of transducer is independent of load impedance. These are used in various electrical, thermal, chemical & other power plants to monitor processed data either locally or from remote using various devices such as indicating meters, data loggers, recorders, PLC systems.

These transducers can also be used as external units in connection with analog or digital indicators.

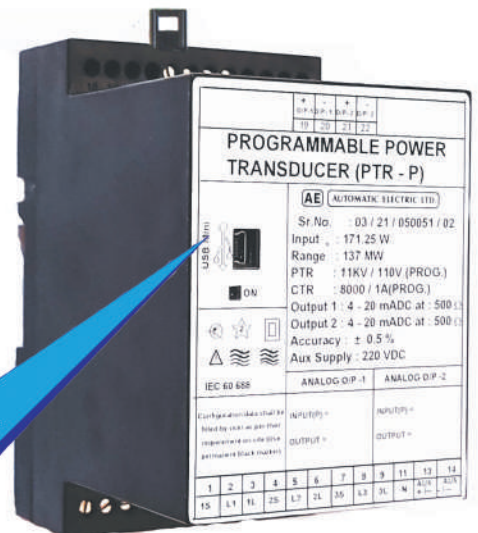
FEATURES

- ◆ Front USB port for programming.
- ◆ Password protection provided.
- ◆ Open & short circuit protected.
- ◆ Current output is independent of load impedance.
- ◆ Suitable for wall as well as DIN-RAIL mounting.

ELECTRICAL SPECIFICATIONS

- ◆ MODEL : PTR - P
- ◆ TYPE : AC : 3Ph - 2EL - 3W / 3Ph - 3EL - 4W.
- ◆ INPUT PARAMETER : AC : Watt, Var, VA.
 - ◆ VOLTAGE : AC : 500V.
 - ◆ CURRENT : AC : 1A / 5A.
- ◆ OUTPUT RANGE : 4-20mA , 4 - 12 - 20 mA.
- ◆ ACCURACY : $\pm 0.5\%$ of full scale value.
- ◆ AUX.SUPPLY : 85 - 285V AC/DC.
- ◆ VA BURDEN : For VOLTAGE < 2, For CURRENT < 0.5, For AUX. SUPPLY < 4
- ◆ RIPPLE : < 0.5% peak to peak at full load.
- ◆ OVERLOAD CAPACITY
 - ◆ VOLTAGE cont. : 120% of nominal value.
 - ◆ CURRENT cont. : 120% of nominal value.
- ◆ RESPONSE TIME : 300 m. sec.
- ◆ OPEN CKT. VOLTAGE : 24 VDC($\pm 2V$).
- ◆ IMPULSE VOLTAGE : 5kV, 1.2 / 50 usec. (0.5j)
- ◆ INSUL^N RESISTANCE : $\geq 20M$ ohms at 500V DC.
- ◆ DIELECTRIC TEST : 2kV RMS for 1 minute.
- ◆ OPERATING TEMP. : 0°C to 55°C.
- ◆ STORAGE TEMP. : -10°C to 70°C.
- ◆ HUMIDITY : Up to 95% RH.
- ◆ CONFORMS TO : IEC 60688.
- ◆ RATED BURDEN : Maximum load resistance 500 Ω @ 20mA current output.

Programmable
New 3Phase Power
Transducer with
USB Port.



USB (Transducer Configuration)

- USB DETAILS : Data communication to PC via USB Mini Type B at IRS 200 baud rate for configuration of PTR-P.



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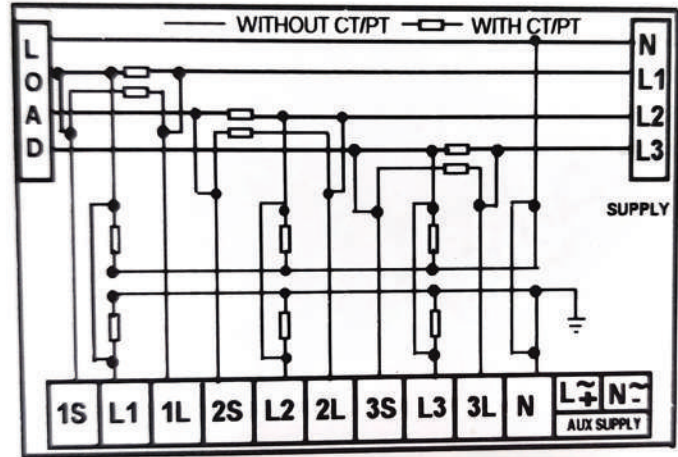
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Electrical connections

Connection	Terminal No.	Connection	Terminal No.
V _R	2	(ANALOG O/P)1+	19
V _Y	5	(ANALOG O/P)1-	20
V _B	8	(ANALOG O/P)2+	21
N	11	(ANALOG O/P)2-	22
IR	1		
IR'	3		
IY	4		
IY'	6		
IB	7		
IB'	9		
AUX	13		
AUX	14		

Wiring Diagram



INPUT OVERLOAD CAPACITY

Measured Quantity	No. of Applications	Duration of Applications	Interval between Two successive Applications
2 x I _N	Continues	-----	-----
10 x I _N	5	15 sec.	5 minute
40 x I _N	1	1 sec.	-----
1.5 x I _N	Continues	-----	-----
2 x U _N	10	10 sec.	10 sec.
4 x U _N	1	2 sec.	-----

INSTALLATION DATA

- MECHANICAL DESIGN : 130 X 80 X 100.8(h) mm
- MATERIAL OF HOUSING : Engineering Plastic.
- MOUNTING : DIN Rail channel 35X7.5mm / Wall Mount with 2 Screw.
- WEIGHT : 360gm.
- CROSS SECTION OF WIRE : 2.5 sq.mm with rectangular Pin type copper terminal lug (Insulated).
- Enclosure Protection : Case IP50/ Terminal IP30.

ENVIRONMENTAL CONDITIONS.

- OPERATING TEMP : 0° TO 55°C
- STORAGE TEMP : -20° TO +70°C
- HUMIDITY : Up to 95% RH non condensing

Mechanical Dimensions

