

AC WATT-Hour / VAR-Hour TRANSDUCER

CWH/CQH

FEATURES

- Measures Watt-Hr, Var-Hr or Watt-Hr & Var-Hr
1P2W, 3P3W, 3P4W Balanced or Unbalanced systems
- 0.2% Accuracy
- Output range programmable by dip-switch
- 4kV Isolation
- High stability & low cost



SPECIFICATION

INPUT: Watt / Var.

Connection	AC Input		Basic Ref. Value Watt or Var	Input Burden
	Voltage	Current		
1P2W	110V or 120V	5A (1A)	$\pm 0.5\text{ K } (\pm 0.1\text{K})$	<0.10VA or <0.15VA
	220V or 240V		$\pm 1.0\text{ K } (\pm 0.2\text{K})$	
3P3W	110V or 120V		$\pm 1.0\text{ K } (\pm 0.2\text{K})$	
	220V or 240V		$\pm 2.0\text{ K } (\pm 0.4\text{K})$	
3P4W	380V or 416V	$\pm 3.0\text{ K } (\pm 0.6\text{K})$		
	$190V_{\ell\ell} - 110V_{\ell n}$ or $208V_{\ell\ell} - 120V_{\ell n}$	$\pm 1.5\text{ K } (\pm 0.3\text{K})$		
	$380V_{\ell\ell} - 220V_{\ell n}$ or $416V_{\ell\ell} - 240V_{\ell n}$	$\pm 3.0\text{ K } (\pm 0.6\text{K})$		

* The maximum input are 450V and 5A. If the input over the level please connects with CT or PT to the transducer.
* $V_{\ell\ell}$ means Voltage of line to line; $V_{\ell n}$ means Voltage of line to neutral.
* The basic ref. value are base on second of PT & CT, and versus the high range of output.

OUTPUT: Programming by Dip Switch inside

Output Range		Output Mode		
Per KWH or Per KVARH	1 count	V Pulse	Open Collect	Relay Contact
	10 counts	DC 15V	DC 30V, 100mA	AC 110V, 0.5A
	100 counts	10mA	(DC 60V)	DC 24V, 1A
	1000 counts			
	10000 counts			

Accuracy :	< $\pm 0.2\%$ R.O.
Waveform effect:	< 0.01% R.O. at 15% 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
Input Frequency :	50 Hz ± 3 Hz, 60 Hz ± 3 Hz
Response time:	< 250 msec.
Span adjustment:	< $\pm 5\%$ of R.O. (or $\pm 20\%$ of R.O. specify)
Zero adjustment:	< $\pm 2\%$ of R.O. (or $\pm 20\%$ of R.O. specify)
Output load effect:	Current output < 0.1% R.O. Voltage output < 0.05% R.O.
Power supply:	AC 115/230V $\pm 15\%$, 50/60 Hz AC 380 or 415V $\pm 15\%$, 50/60 Hz Option: DC 24V, 48V, 110V, 220V $\pm 10\%$ Self Powered: Interior connection from input volt Working Volt: $\pm 15\%$ rated of input voltage
Power effect:	< 0.05% R.O.
Power consumption:	< 4VA
Mutual interference effect:	< 0.1% R.O. between each element
Magnetic field strength:	400ATM < 0.2% R.O.
Operating temperature:	0-60 °C
Operating relative humidity:	20-95 %RH, non-condensing
Temperature coefficient:	< 100 PPM/°C
Storage temperature:	-10-70 °C
Dielectric Strength:	IEC 414, IEC 688:1992, ANSI C37.90a Between Input / Output / Power / Case AC 4KV, 50/60Hz, 1 min.
Surge test:	IEC 255-4, ANSI C37.90a 6KV, 1.2 x 50 μ sec.

Safety:

Enclosure:

Isolation:

Insulation resistance:

Performance:

Mounting:

Weight:

Common mode & differential mode

IEC 414, BS 5458

IEC 529 (IP50)

Input / Output / Power / Case

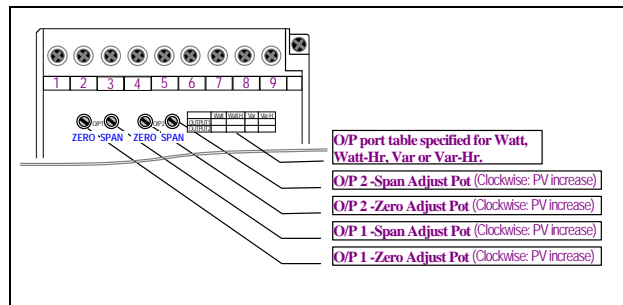
> 100M ohm, DC 500V

Designed it comply with IEC 688

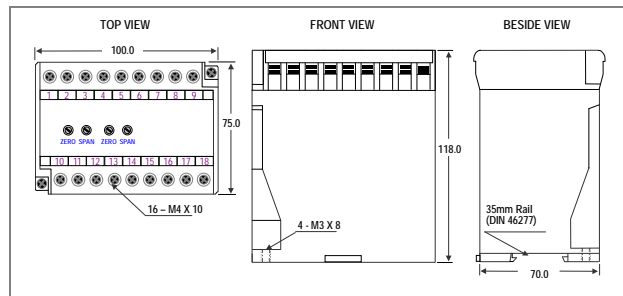
Wall or DIN rail (EN 50022)

Under 650g

ADJUSTMENT



DIMENSIONS



PANEL MOUNTING HOLES

