

FEATURES

- Accuracy $\pm 0.25\%$ RO.
- Precision measurement even for distorted wave
- Measuring both watthour & reverse watthour is available
- High impulse & surge protection (5KV)
- The case can be mounted on a 35mm rail which complies with DIN 46277



OUTPUT

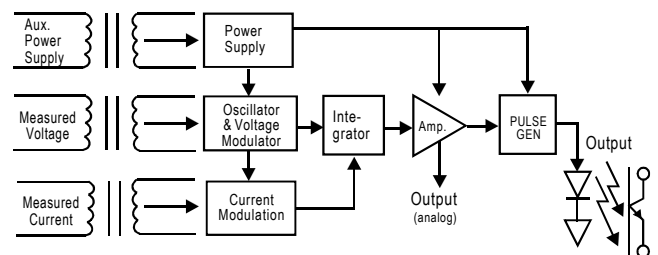
DC Output Range		Output Mode		
per 1KWH	100 counts	Pulse DC 15V, 10mA	Open Collect DC 30V, 100mA	Relay Contacts SPDT, AC 110V, 0.5A DC 24V, 1A
	1000 counts			
	10000 counts			
	100000 counts			

Accuracy: $\pm 0.25\%$ Rated of Output
 Input frequency: 50HZ $\pm 3\text{HZ}$ or 60HZ $\pm 3\text{HZ}$
 Input burden: $\leq 0.2\text{VA}$ (ampere input)
 $\leq 0.1\text{VA}$ (voltage input)
 Aux. power supply: AC 110V $\pm 15\%$, 50/60HZ
 AC 220V $\pm 15\%$, 50/60HZ
 DC 24V, 48V, 110V, $+15\%$, -10%
 Power effect: $\leq 0.1\%$ RO.
 Power consumption: $\leq 4.5\text{VA}$, $\leq \text{DC } 3\text{W}$
 Waveform effect: $\leq 0.01\%$ RO. at distortion factor 15%
 Electromagnetic balance effect: $\leq 0.1\%$ RO.
 Mutual interference effect: $\leq 0.1\%$ RO. between element.
 Magnetic field strength: 400A/M, 0.2% RO.
 Span adjustment range: $\geq 5\%$ RO.
 Zero adjustment range: $\geq 2\%$ RO.
 Operating temperature range: 0~60°C
 Storage temperature range: -10~70°C
 Temperature coefficient: $\leq 100\text{PPM}$ from 0 to 60°C
 Max. relative humidity: 95%
 Isolation: Input/output/power/case
 $\geq 100\text{M}\Omega$, DC 500V
 Dielectric withstand voltage: Between input/output/power/case
 (IEC 414, 688, ANSI, C37)
 Impulse withstand test: 5KV, 1.2 X 50us
 (IEC 255-4, ANSI C37 90a)
 Performance: Common mode & differential mode
 Designed to comply with IEC688
 Safety requirements: IEC 414, BS5458

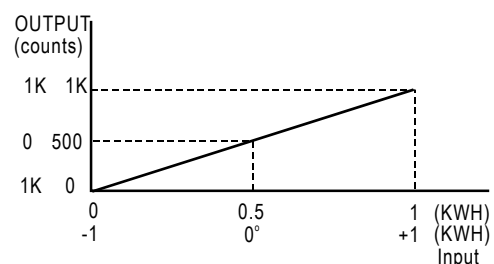
DESCRIPTION

Model: AWH-1 for 1 ϕ 2W, watthour
 AWH-3 for 3 ϕ 3W, watthour
 AWH-3A for 3 ϕ 4W, watthour

For kilowatt-hour measurement, we build in another Linear integrator Circuit. This circuit accepts signal from Watts portion and integrates with respect to time, to produce a pulsed output via volt free contacts, result in pulses proportional to kilowatt-hours.



INPUT-OUTPUT CURVE



SPECIFICATION

INPUT

Input Range				Max. Input Over Capability
Circuit	Amp	Voltage	Basic KWH	
Single Phase	5A	110V(120V)	0~0.5KWH	Ampere: 3 X rated continuous 10 X rated 10 sec. 50 X rated 1 sec. Voltage: 1.5 X rated continuous 2X rated 10 sec. 4X rated 2 sec.
		220V(240V)	0~1KWH	
3-Phase 3-Wire	5A	110V(120V)	0~1KWH	
		220V(240V)	0~2KWH	
3-Phase 4-Wire	5A	190V/120V (208/120V)	0~1.5KWH	
		380V/220V (416/240V)	0~3KWH	

WATTHOUR TRANSDUCER

ORDERING MODEL MAKE UP

AWH-1
AWH-3
AWH-3A

Model

AWH-1 for 1 ϕ 2W

AWH-3 for 3 ϕ 3W

AWH-3A for 3 ϕ 4W

Input Current

5 : 5A

O : Option

Input voltage

1 : 110V (120V)

2 : 220V (240V)

3 : 190V/110V (208V/120V)

4 : 380V/220V (416V/240V)

O : Option

Input Frequency

5 : 50HZ $\pm$ 3HZ

6 : 60HZ $\pm$ 3HZ

O : Option

Output Range (per KWH)

1.100 counts

3.10000 counts

2.1000 counts

4.100000 counts

5 : Option

Output Mode

P : Pulse

C : Open collect

R : Relay contact

Aux. Power Supply

A : AC 110V

C : DC 24V

B : AC 220V

D : DC 48V

O : Option

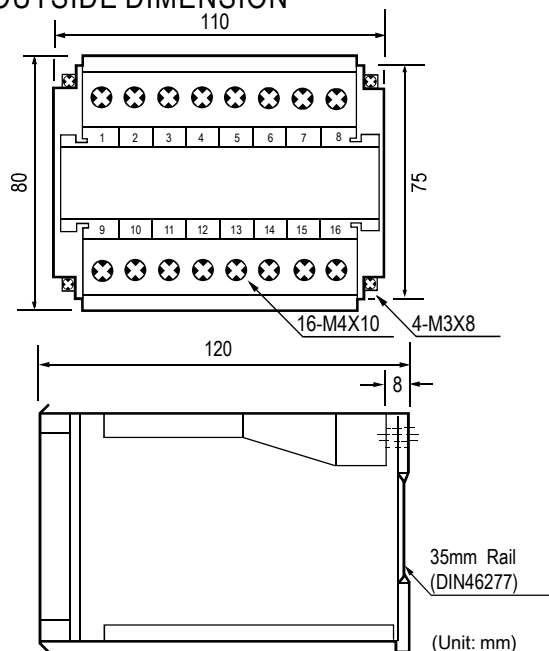
E : DC 110V

Reverse Required

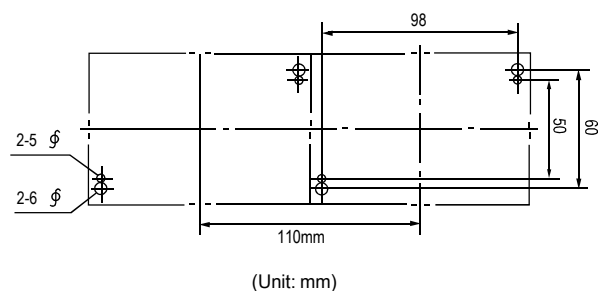
Y : Yes

N : No

THE OUTSIDE DIMENSION

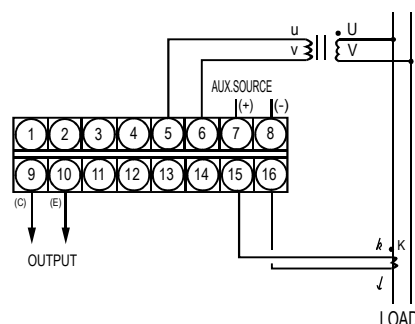


PANEL MOUNTING HOLES

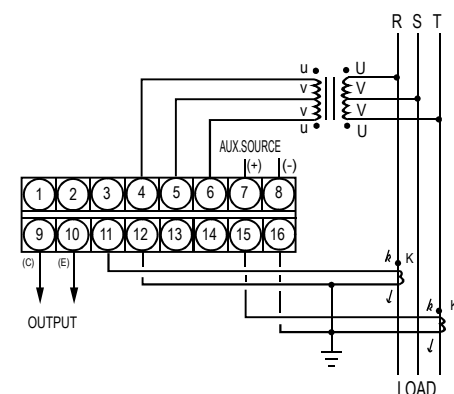


CONNECTION DIAGRAM

AWH-1 (1 ϕ 2W)



AWH-3 (3 ϕ 3W)



AWH-3A (3 ϕ 4W)

