



WATTHOUR TRANSDUCER

S3-WHD
SERIES

FEATURES

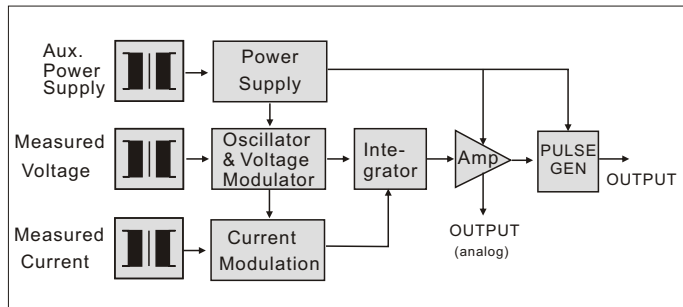
- Accuracy: $\pm 0.2\%$ RO.
- Precision measurement for unbalance system
- Precision measurement even for distorted wave
- Measuring reverse watthour is available
- High impulse & surge protection (5KV)
- The case can be mounted on a 35mm rail which complies with DIN 46277



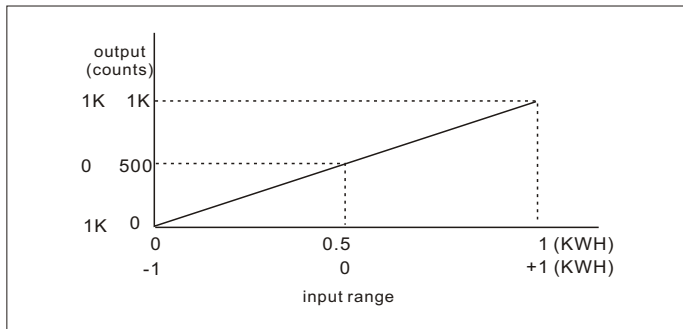
DESCRIPTION

Model: S3-WHD-1 1 ϕ 2W, WATTHOUR
 S3-WHD-3 3 ϕ 3W, WATTHOUR
 S3-WHD-3A 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 pulse output via volt free contacts, result in pulse proportional to kilowatt-hours.



INPUT - OUTPUT CURVE



SPECIFICATION

INPUT

Circuit	Input Range			Max. Input Over Capability
	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: 2 x rated continuous
		220V (240V)	0~1KWH	
3-Phase 3-Wire	5A	110V (120V)	0~1KWH	
		220V (240V)	0~2KWH	
3-Phase 4-Wire	5A	190V/110V (208/120V)	0~1.5KWH	
		380V/220V (416/240V)	0~3KWH	

OUTPUT

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

- Accuracy $\pm 0.2\%$ RD.
- Input frequency 50HZ $\pm 3\%$ or 60HZ $\pm 3\%$
- Input burden $\leq 0.1VA$ (ampere input)
 $\leq 0.2VA$ (voltage input)
- Aux. power supply AC 110V $\pm 15\%$, 50/60HZ
AC 220V $\pm 15\%$, 50/60HZ
DC24V, 48V, 110V, $\pm 15\%$,
- Power effect $\leq 0.1\%$ RO.
- Power consumption $\leq 4VA$, $\leq DC 3W$
- Waveform effect $\leq 0.2\%$ RD. at distortion factor 15%
- Electromagnetic balance effect $\leq 0.1\%$ RO.
- Mutual interference effect $\leq 0.1\%$ RO. between element
- Magnetic field strength 0.2%RO., 400A/M
- Span adjustment range $\geq 5\%$ RO.
- Zero adjustment range $\geq 1\%$ RO.
- Operating temperature range 0 ~ 60°C
- Storage temperature range -10 ~ 70°C
- Temperature coefficient ≤ 100 PPM, 25°C ± 10 °C
- Max. relative humidity 95%
- Isolation Input/output/power/case
- Insulation resistance $\geq 100M \Omega$, DC 500V
- Dielectric withstand voltage Between input/output/power/case
AC 2.6KV, 60HZ, 1 min.
- Impulse withstand test 5KV, 1.2 X 50 μ S
(IEC 255-4, ANSI C37 90a) Common mode & differential mode
- Performance Designed to comply with IEC 688
- Safety requirements IEC 414, BS5458

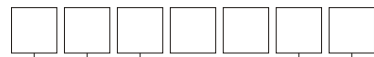


WATTHOUR TRANSDUCER

S3-WHD
SERIES

ORDERING INFORMATION

S3-WHD-1
S3-WHD-3
S3-WHD-3A



Model:

- S3-WHD-1 for 1 ϕ 2W
- S3-WHD-3 for 3 ϕ 3W
- S3-WHD-3A for 3 ϕ 4W

Input Current

- 5: 5A
- 0: Option

Input Voltage

- 1: 110V (120V)
- 2: 220V (240V)
- 3: 190V/110V (208V/120V)
- 4: 380V/220V (416V/240V)
- 0: Option

Input Frequency

- 5: 50HZ \pm 3HZ
- 6: 60HZ \pm 3HZ
- 0: Option

Output Range(per KWH)

- 1: 100 counts
- 2: 1000 counts
- 3: 10000 counts
- 4: 100000 counts
- 5: Option

Output Mode

- P: Pulse
- C: Open collect
- R: Relay contact

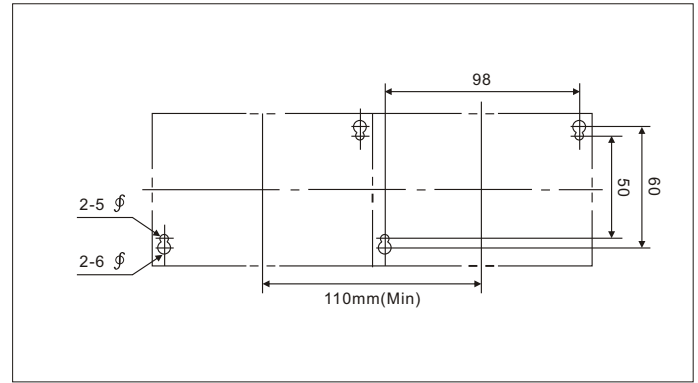
Aux. Power Supply

- A: AC 110V
- B: AC 220V
- 0: Option
- C: DC 24V
- D: DC 48V
- E: DC 110V

Reverse Required

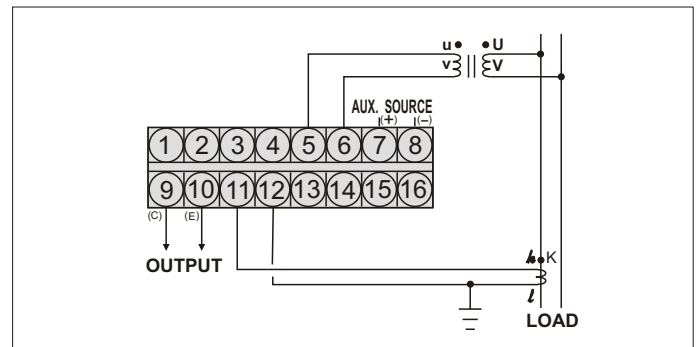
- Y: Yes
- N: No

PANEL MOUNTING HOLES (UNIT:mm)

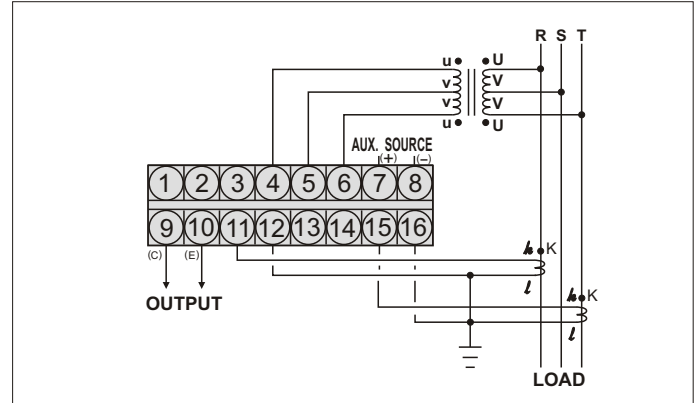


CONNECTION DIAGRAM

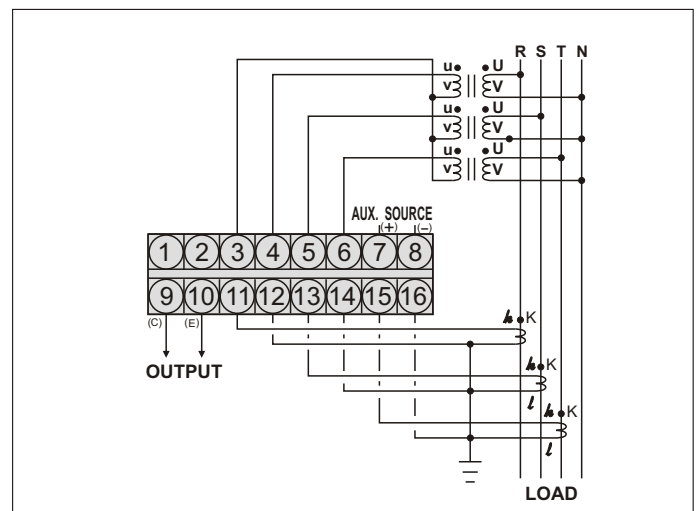
S3-WHD-1 (1 ϕ 2W)



S3-WHD-3 (3 ϕ 3W)



S3-WHD-3A (3 ϕ 4W)



THE OUTSIDE DIMENSION (UNIT:mm)

