



FEATURES

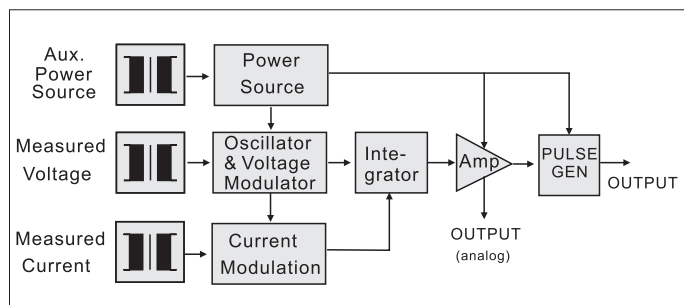
- Accuracy $\pm 0.2\%$ R.O.
- Precision measurement even for unbalance system
- Precision measurement even for distorted wave
- Measuring reverse watt is available
- High impulse & surge protection (5KV)
- The case can be mounted on a 35mm rail which complies with DIN 46277



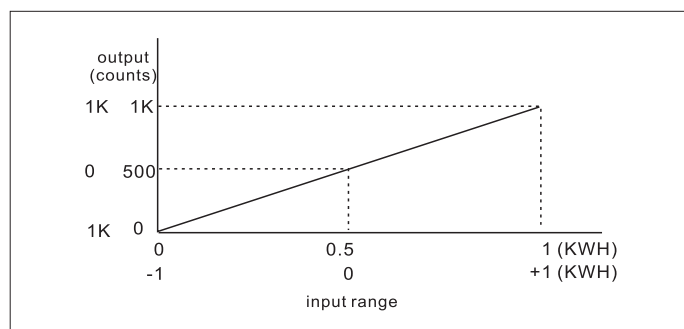
DESCRIPTION

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 pulses proportional to kilowatt-hours.



INPUT - OUTPUT CURVE



SPECIFICATION

INPUT

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

OUTPUT

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

Accuracy $\pm 0.2\%$ Rated of Output
Input frequency 50HZ $\pm 3\text{HZ}$ or 60HZ $\pm 3\text{HZ}$
Input burden $\leq 0.1\text{VA}$ (ampere input)
..... $\leq 0.2\text{VA}$ (voltage input)
Aux. power source AC 110V $\pm 15\%$, 50/60HZ
..... AC 220V $\pm 15\%$, 50/60HZ
..... DC 24V, 48V, 110V $\pm 10\%$
Power effect $\leq 0.1\%$ R.O.
Power consumption AC $\leq 8\text{VA}$, DC $\leq 6\text{W}$
Waveform effect $\leq 0.2\%$ R.O. at distortion factor 15%
Electromagnetic balance effect $\leq 0.1\%$ R.O.
Mutual interference effect $\leq 0.1\%$ R.O. between element
Magnetic field strength $\leq 0.2\%$ R.O. 400A/M
Span adjustment range $\geq 5\%$ R.O.
Zero adjustment range $\geq 1\%$ R.O.
Operating temperature range 0 ~ 60 °C
Storage temperature range -10 ~ 70 °C
Temperature coefficient $\leq 100\text{PPM}$, 25 °C ± 10 °C
Max. relative humidity 95%
Isolation Input/output/power/case
Isolation resistance $\geq 100\text{M}\Omega$, DC 500 V
Dielectric withstand voltage Between input/output/power/case
IEC 60688 AC 2.6 KV, 60 HZ, 1 minute
Impulse withstand test 5KV, 1.2 x 50 μs
IEC 61000-4-5 Common mode & differential mode
Performance Designed to comply with IEC 60688



ORDER INFORMATION

Model _____

S3-WHD-1 for 1Φ2W
S3-WHD-3 for 3Φ3W
S3-WHD-3A for 3Φ4W

Input Current _____

1: 1A
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 ± 3HZ
6: 60HZ ± 3HZ
0: Option

Output Range (per KWH) _____

1: 100 counts
2: 1000 counts
3: 10000 counts
0: Option

Output Model _____

P: Pulse
C: Open collect
R: Relay contact

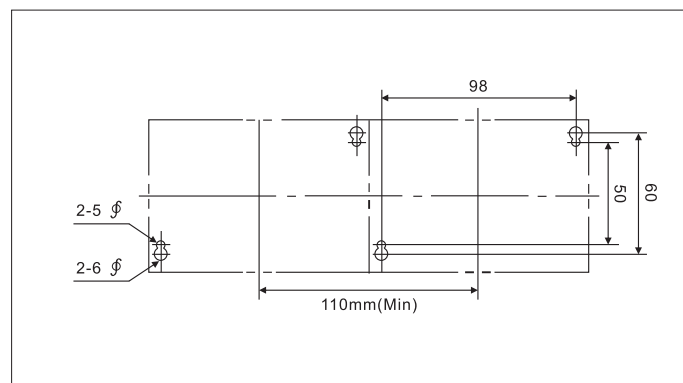
Aux. Power Source _____

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

Reverse Required _____

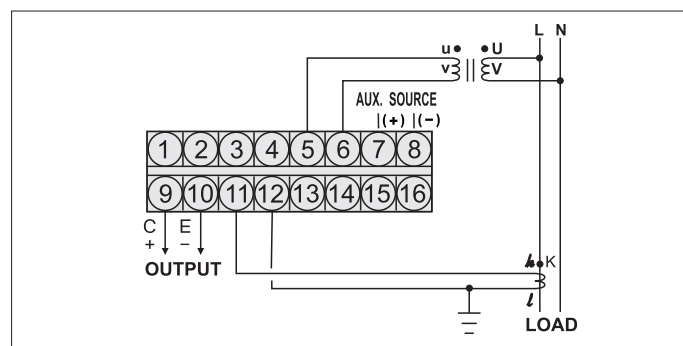
Y: Yes
N: No

• PANEL MOUNTING HOLES (UNIT:mm)

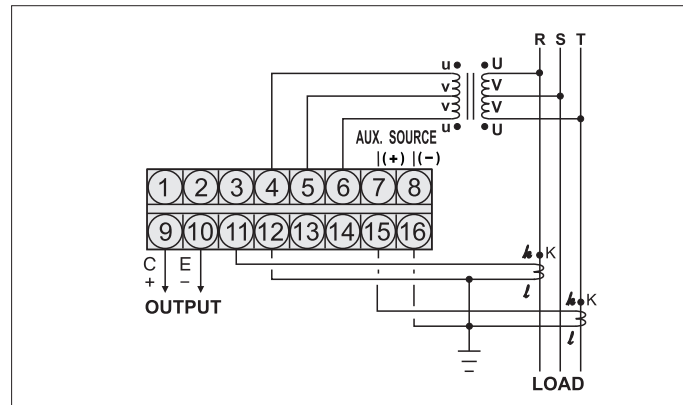


CONNECTION DIAGRAM

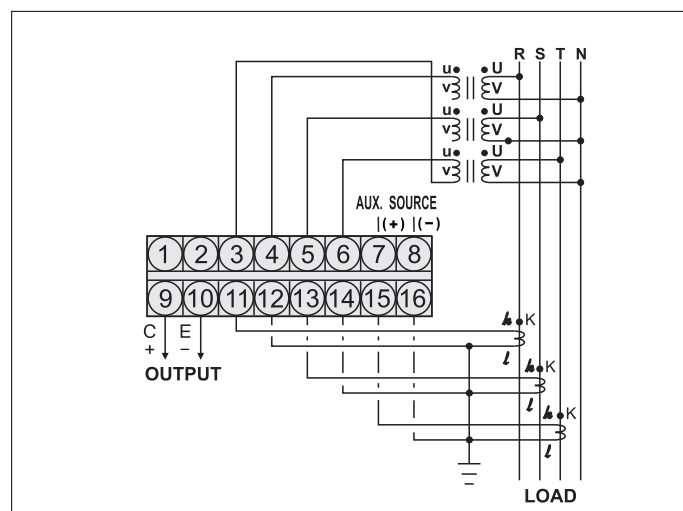
S3-WHD-1 (1Φ2W)



S3-WHD-3 (3Φ3W)



S3-WHD-3A (3Φ4W)



THE OUTSIDE DIMENSION (UNIT:mm)

