

AC Watt / Var Transducer

SPWK201


- ⊙ Standard output with 0 to 1 mA_{dc}
- ⊙ Accuracy of reading base 0.25% reading + 0.02% ro
- ⊙ Dual isolated output watt / var eliminating ground loops effect
- ⊙ High magnetic field immunity
- ⊙ Meets IEEE SWC test

MODEL...SPWK

201 - 3 phase 3 wires / 2 elements

Description

HC model SPWK watt / var transducer is compact, designed to be a very accurate mode with DC 1mA output directly proportional to an AC rated input. output of watt & var are isolated each other to eliminate ground effect. For utility, the unit are useful including industry, laboratories & process control requiring accurate power or energy measurements.

Specification

1.Accuracy 0.25% RD + 0.02%RO / 23 ± 3°C

2.Input (each element)

Range Effective voltage 85-150V; Current 0-6A
Nominal voltage 120V current 5A

Over capability Voltage 200V continuous ; 250V ... 10sec / hour; 500V ... 2sec / hour
Current 15A continuous ; 50A ... 10sec / hour; 250A...1sec / hour ;
400A ... 0.5sec / hour

Burden Voltage < 0.1VA at 120V input; Current < 0.2VA at 5A input

Frequency Watt 57-63Hz; Var 60Hz only

Protection Full protection for SURGE, EMI & RFI

3.Output (isolated with input)

Dual outputs watt & var isolated each other (600 Vdc)

Range Standard DC 0 to ±1mA; option ± (0 - 1 / 0 - 5 / 0 - 10) Vdc

DC 0 to ±1mA calibration vs 0 to ± 1000W / ± 1000Var ... 3ø3W / 2 elements

Output load Maximum 10K ohm for 0 to ±1mA output

Output impedance > 30 Mega ohm

Response time < 400 ms from 0 to 99% RO at operating

Ripple < 0.5% P-P RO

Long term stability < 0.1% RO per year (typically)

Temperature stability < 0.01% per degree C, from 0 to 55°C

Adjustment Span ± 5% / 10%; zero ± 2.5% / 5% on request

Protection No damage ... open or short; full protection ... SURGE, EMI, RFI

Magnetic effecton < 0.04% at center 400 A-T / M

4.Power supply AC115 ± 20%, 50-70Hz, < 3VA

5.Operation condition

Environment

Temperature -5 to 60°C

Humidity 20 to 99% RH non condensed

Elevation Under 3000 meters

Magnetic field 500 A-T / M

Waveform Watt - fundamental with 20% 3rd harmonics

Var - sinusoidal

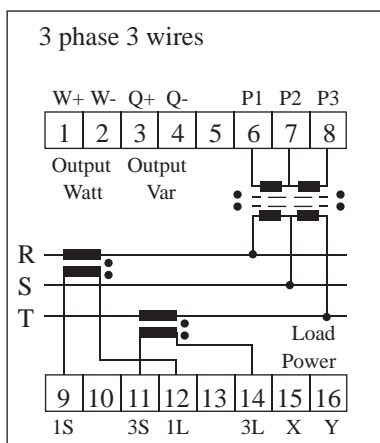
Power factor Any

Dielectric strength 4KV AC rms 1 minute between input / output / power / case IEC 688

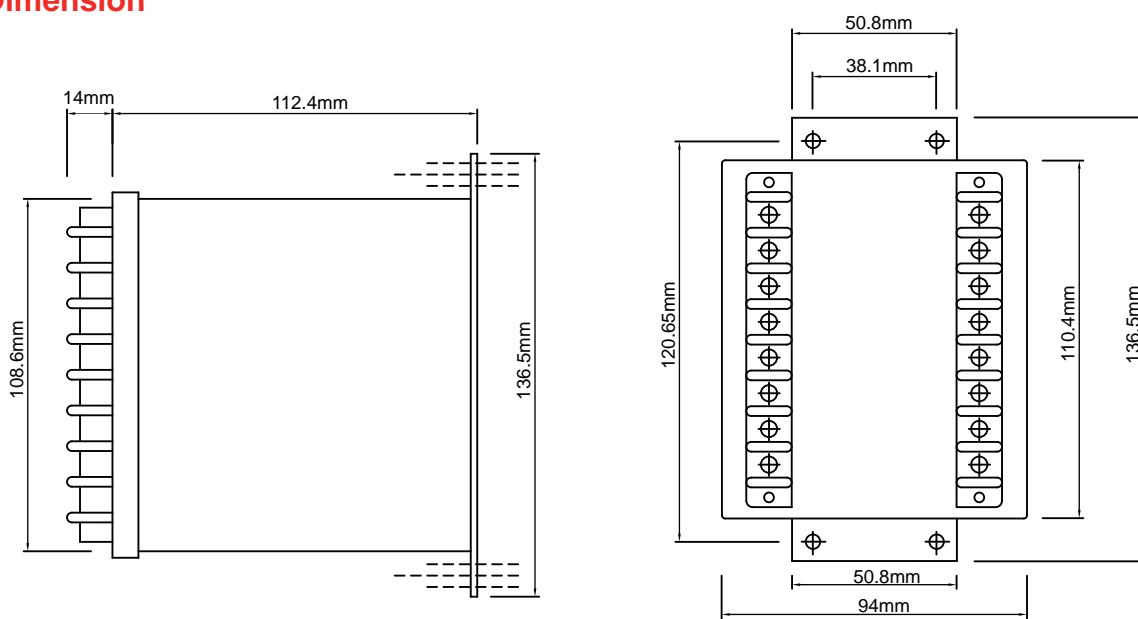
Impulse test ANSI C37.90/1989, IEEE 587/1983, IEC 255-3, 6KV (1.2 x 50 us),
3KA (8 x 20 us) current only

Surge test (ring wave) IEEE587/1983 (3KV - 0.5us / 100KHz)
IEC 255-3 (2.5KV - 0.25ms / 1MHz)

Terminal Connection



Dimension



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