

DIN-RAIL MOUNTED

DESCRIPTION

The Model DWV-xxxx provides watt and VAR measurements with $\pm 0.5\%$ accuracy in single or three-phase power systems. Electrically isolated outputs are proportional to instantaneous measurements averaged over several cycles. DIN-Rail mountable packaging provides for easy installation.

Inputs of up to 5 amperes and 600 volts are directly connected to the DWV-xxxx. Current measurement range may be extended to 10 kiloamperes by using OSI metering class current transformers.

Industry standard output formats support interfacing with any data acquisition system from simple recorders or meters to computer, SCADA or PLC based systems.

FEATURES

- Accurate regardless of variations in voltage, current, power factor or load.
- Available in 1, 2 or 3-element configurations.
- Compact DIN-Rail package.
- CE and CSA approvals.

**5 YEAR
WARRANTY**

**ORDERING INFORMATION**

Example: Three-Phase, Three-Wire, 120V, 5A Input with $0\pm 1\text{mAdc}$ Output

Model Number = **DWV-004B**

APPLICATIONS

- Energy management systems.
- Sub-metering.
- Process control.
- Best applied to sinusoidal waveforms.

MODEL SELECTION**SINGLE AND THREE-PHASE MODELS WITH INTERNAL SENSOR**

INPUTS		F.S. WATT/VAR	PHASE	NO. OF ELEMENTS	STANDARD OUTPUTS MODEL DWV-			
AC VOLTS	AC AMPS				0±1mAdc	0±10Vdc	4-20mAdc	0±5Vdc
0 - 150	0 - 5	500	1P-2W	1	001B	001D	001E	001X5
0 - 300	0 - 5	1000	1P-2W	1	002B	002D	002E	002X5
0 - 600	0 - 5	2000	1P-2W	1	003B	003D	003E	003X5
0 - 150	0 - 5	1000	3P-3W	2	004B	004D	004E	004X5
0 - 300	0 - 5	2000	3P-3W	2	005B	005D	005E	005X5
0 - 600	0 - 5	4000	3P-3W	2	006B	006D	006E	006X5
0 - 150 L-N	0 - 5	1500	3P-4W	3	007B	007D	007E	007X5
0 - 300 L-N	0 - 5	3000	3P-4W	3	008B	008D	008E	008X5

SPECIFICATIONS**INPUT**

Voltage	See table
Current	See table
Frequency	Standard60Hz Optional (w/-"50" suffix).....50Hz
Power Factor.....	Any
Burden	
Voltage	400K Ω /phase
Current	0.01 Ω /phase
Overload	
Voltage	120% continuous
Current	120% continuous

OUTPUT

Loading	
"B" models.....(0±1mAdc)	0-15k Ω
"E" models.....(4-20mAdc)	0-750 Ω
"X5", "D" models.....(0±5, 0±10Vdc)	≥2.5K Ω , ≥5K Ω
Response Time	(to 99%) ≤500ms

INSTRUMENT POWER

Standard85-230V, dc or 50/60Hz, 7.0VA

DIELECTRIC TEST

Inputs to Outputs/Instrument Power/Case3700Vac
Input to Input2200Vac
Instrument Power to Outputs/Case3700Vac
Output to Output/Case490Vac

ACCURACY±0.5% F.S.

TEMPERATURE

Operating Range-10°C to 55°C
Effect±0.02%/°C

PHYSICAL

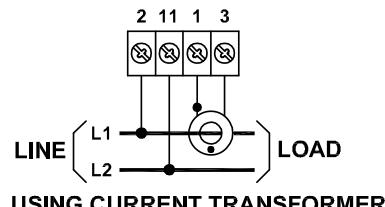
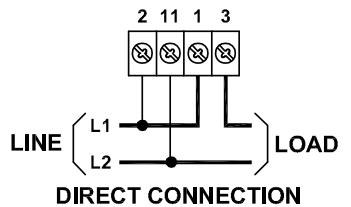
Mean Annual Humidity≤75%
Net Weight1lb.
Connectionscrew terminals, 10 AWG wire

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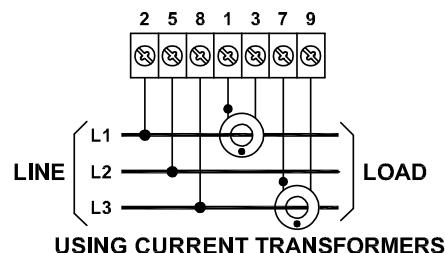
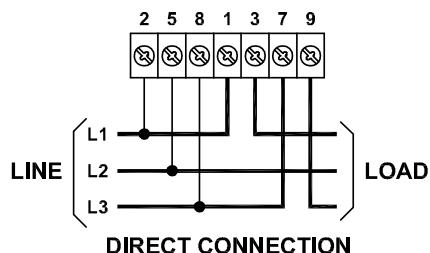
4242 REYNOLDS DRIVE * HILLIARD, OHIO * 43026-1264
PHONE: (614) 777-1005 * FAX: (614) 777-4511
WWW.OHIOSEMITRONICS.COM * 1-800-537-6732

CONNECTIONS

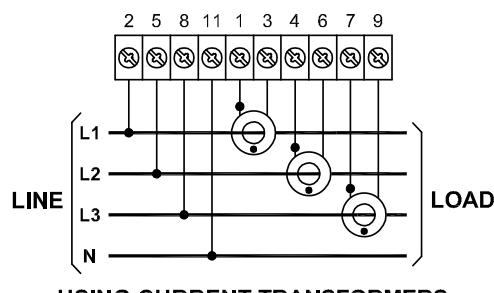
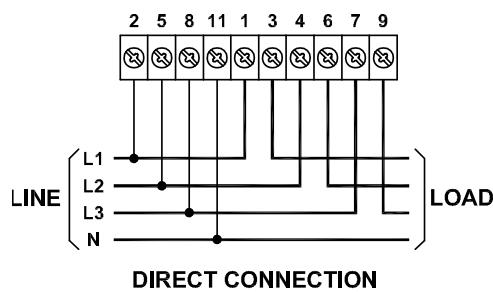
SINGLE-PHASE CONNECTIONS (ONE-ELEMENT)



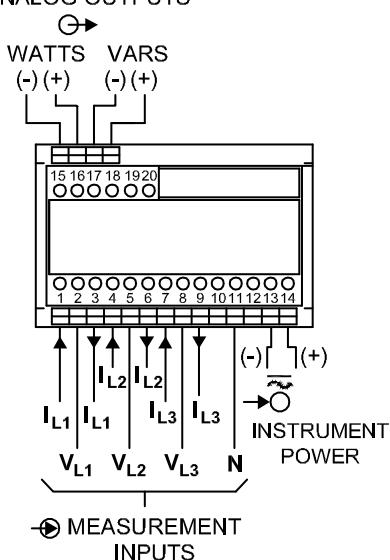
THREE-PHASE, THREE-WIRE CONNECTIONS (TWO-ELEMENT)



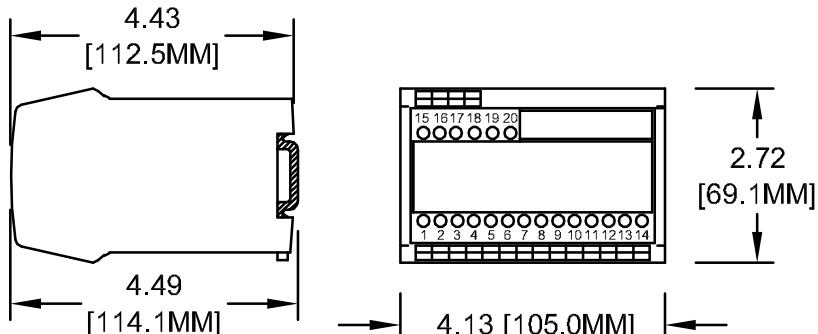
THREE-PHASE, FOUR-WIRE CONNECTIONS (THREE-ELEMENT)



ANALOG OUTPUTS



DIMENSIONS



1. DIMENSIONS ARE IN INCHES [MM].
2. MOUNTED ON 35MM TOP-HAT DIN-RAIL.

Dwg # 0902-00875-B

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