

# SIGNAL CONDITIONERS

## Combined Watt/Var Transducers

### DRA-WVT-3 Series



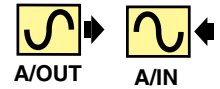
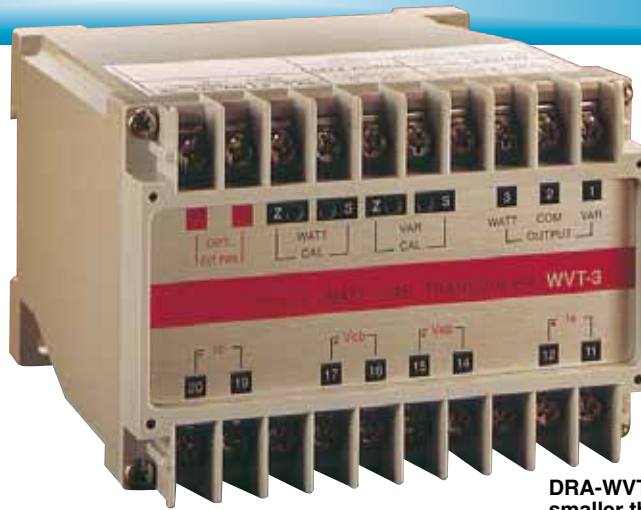
- ✓ **± 0.1% Accuracy**
- ✓ **Galvanically Isolated**
- ✓ **Two Simultaneous Outputs for Watt and VAR**
- ✓ **Single Phase and Three Phase Models**

The DRA-WVT-3 Series combines watt and VAR transducers in one compact housing. Two simultaneous proportional dc current outputs are provided for watt and VAR parameters. The polarity of the watt output is positive for unity power factor (PF); polarity for the VAR output is positive for lagging power factor.

### Specifications

#### GENERAL

**Accuracy:** ±0.1% of span typical for watt in 5-140% range  
**Temperature Stability:** < ±0.01%/°C  
**Response Time:** < 200 millisecond (10-90% of span)  
**Power Supply:** 115 Vac -15/+25%, 230 Vac -15/+25%, 60 Hz  
**Power Overload:** withstands 1.45 x nominal rating continuous  
**Input Current Consumption:** 0.26 VA @ 5 Aac  
**Input Voltage Consumption:** 0.15 VA @ 150 Vac, 0.3 VA @ 300 Vac  
**Frequency:** 60 Hz  
**Frequency Variation Effect:** < ±0.02%/Hz (for watt output)  
**Operating Ambient:** -5 to 65°C (23 to 149°F); 5 to 95% RH, noncondensing  
**Storage Temperature:** -35 to 85°C (-31 to 185°F)  
**Enclosure:** polycarbonate  
**Mounting:** standard 35 mm DIN rail or wall mount  
**Dimensions:** 73 x 100 x 112 mm (2.87 x 3.94 x 4.41")  
**Weight:** 0.6 kg (1.3 lb)



DRA-WVT-3 shown smaller than actual size.

#### INPUTS

**Connection:** single phase or 3-phase, 3-wire  
**Power Factor:** unity-to, lead or lag, zero  
**Power Calibration Span:** ±170 to ±10,000 watt/var  
**Overrange:** +42% (at full accuracy)  
**Isolation:** 2 KV RMS/1 minute for voltage and power inputs; 4 KV for current inputs

#### CURRENT INPUTS

**Current Span:** 5 Aac  
**Current Overrange:** +20% (at full accuracy)  
**Peak Overload:** 40 Aac RMS for 5 seconds every 10 minutes

#### VOLTAGE INPUTS

**Voltage Span:** 115 Vac, 230 Vac  
**Voltage Overrange:** +20% (at full accuracy)  
**Voltage Overload:** 1.6 x nominal rating continuous, 600 Vac max

#### OUTPUTS (WATT and VAR)

**Output Configuration:** unipolar or bipolar current  
**Output Span:** 4-20 mA, 12 ± 8 mA  
**Maximum Output Load:** Rmax (KOhms) = 16/Iout (mA)  
**Output Impedance:** Z (KΩ) = 0.1 x Vo (Vdc)  
**Load Variation Effect:** < ±0.03% (for full change)

### To Order

Model No.	Input	Input Freq*	Output Watt**	Output VAR**	Power Required
<b>ac Watt/Var (Single Phase)</b>					
DRA-WVT-3-1A	115 Vac/5A	60 Hz	4-20 mA	4-20 mA	115 Vac
DRA-WVT-3-1B	230 Vac/5A	60 Hz	4-20 mA	4-20 mA	115 Vac
DRA-WVT-3-1C	115 Vac/5A	60 Hz	4-20 mA	4-20 mA	230 Vac
DRA-WVT-3-1D	230 Vac/5A	60 Hz	4-20 mA	4-20 mA	230 Vac
DRA-WVT-3-1E	115 Vac/5A	60 Hz	12±8 mA	12±8 mA	115 Vac
DRA-WVT-3-1F	230 Vac/5A	60 Hz	12±8 mA	12±8 mA	115 Vac
DRA-WVT-3-1G	115 Vac/5A	60 Hz	12±8 mA	12±8 mA	230 Vac
DRA-WVT-3-1H	230 Vac/5A	60 Hz	12±8 mA	12±8 mA	230 Vac
<b>ac Watt/Var (3-Phase 3-Wire)</b>					
DRA-WVT-3-3A	115 Vac/5A	60 Hz	4-20 mA	4-20 mA	115 Vac
DRA-WVT-3-3B	230 Vac/5A	60 Hz	4-20 mA	4-20 mA	115 Vac
DRA-WVT-3-3C	115 Vac/5A	60 Hz	4-20 mA	4-20 mA	230 Vac
DRA-WVT-3-3D	230 Vac/5A	60 Hz	4-20 mA	4-20 mA	230 Vac
DRA-WVT-3-3E	115 Vac/5A	60 Hz	12±8 mA	12±8 mA	115 Vac
DRA-WVT-3-3F	230 Vac/5A	60 Hz	12±8 mA	12±8 mA	115 Vac
DRA-WVT-3-3G	115 Vac/5A	60 Hz	12±8 mA	12±8 mA	230 Vac
DRA-WVT-3-3H	230 Vac/5A	60 Hz	12±8 mA	12±8 mA	230 Vac

\* Consult engineering for 50 Hz and 400 Hz models. Comes with complete operator's manual.

\*\* Models with ±1mA or ±20mA outputs are also available. Consult engineering.