



# DIN Rail Mount AC Voltage/Current Signal Conditioners

## DRA-ACT-SI Series AC Current Input DRA-ACT-SV Series AC Voltage Input

- ✓ Self-Powered
- ✓ ±0.1% Accuracy
- ✓ Isolated
- ✓ Low Profile Enclosure

The DRA-ACT-SI AND DRA-ACT-SV Series are self-powered ac current and ac voltage input DIN rail mount signal conditioners that use the measured input to produce an accurate and linear output current. These signal conditioners have excellent accuracy, linearity and stability which make them unique.

The DRA-ACT-SI Series of ac current input models includes models for 0-1 Aac and 0-5 Aac inputs with a choice of either 0-1 mA or 0-20 mA output. The DRA-ACT-SV Series of ac voltage input models includes models for 0-150 Vac and 0-300 Vac inputs again with a choice of either 0-1 mA or 0-20 mA output. The output current from all of these self-powered models always starts at 0 mA since these units are powered from the measured signal. Therefore, when the ac current or voltage input is zero, the output is zero.

For complete safety, an internal transformer isolates the signal conditioner input from the output thus enabling these units to withstand large momentary inputs. The input to output isolation provides high output signal-to-noise ratio which makes these signal conditioners highly immune to ground loop signals and RFI.

### Specifications

#### GENERAL

- Accuracy:** ±0.1% (for 5-120% of span) typical; ±0.15% max  
**Linearity:** < ±0.1% (for 5-120% of span) typical; ±0.15% max  
**Temperature Stability:** < 0.01%/°C  
**Power Supply:** self-powered from measured input  
**Isolation:** 4 KV RMS/1 minute  
**Output:** 0-1 mA, 0-20 mA



**Output Ripple:** < ± 0.1% of span  
**Response Time:** < 240 msec (10-90%)

**Frequency:** 40-400 Hz

**Frequency Variation Effect:** < ± 0.02%/Hz

**Max Output Loop Impedance:** Rmax (ohms) = 16/.02 = 800 ohms max @ 20 mA

**Operating Ambient:** -4 to 158°F (-20 to 70°C); 5 to 95% Rh, noncondensing

**Storage Temperature:** -40 to 194°F (-40 to 90°C)

**Enclosure:** polycarbonate

**Mounting:** standard 35 mm DIN rail or wall mount

**Dimensions:** 2.87"H x 1.28"W x 4.49"D (73 x 32.5 x 114 mm)

**Weight:** 0.7 lb (0.3 kg)

#### DRA-ACT-SI SERIES (AC CURRENT INPUT)

**Input:** 0-1 Aac, 0-5 Aac

**Overrange:** 6 Aac (for full accuracy)

**Overload:** 10 Aac continuous

**Peak Overload:** 40 Aac for 5 seconds every 10 minutes

**Input Power Consumption:** 0.6 VA @ 5A input

**Load Variation Effect:** < ±0.02% for full load change

#### DRA-ACT-SV (AC VOLTAGE INPUT)

**Input:** 0-150 Vac, 0-300 Vac

**Overrange:** +20% of span (for full accuracy)

**Overload:** +40% of span continuous

**Input Power Consumption:** 0.9 VA @ 300 Vac input

### To Order (Specify Model Number)

Model No.	Price	Description
DRA-ACT-SI-1	\$130	ac current, 0-1 A ac input, 0-1 mA output
DRA-ACT-SI-2	130	ac current, 0-5 A ac input, 0-1 mA output
DRA-ACT-SI-3	130	ac current, 0-1 A ac input, 0-20 mA output
DRA-ACT-SI-4	130	ac current, 0-5 A ac input, 0-20 mA output
DRA-ACT-SV-1	130	ac voltage, 0-150 Vac input, 0-1 mA output
DRA-ACT-SV-2	130	ac voltage, 0-300 Vac input, 0-1 mA output
DRA-ACT-SV-3	130	ac voltage, 0-150 Vac input, 0-20 mA output
DRA-ACT-SV-4	130	ac voltage, 0-300 Vac input, 0-20 mA output

Comes with complete operator's manual.

**Ordering Example:** DRA-ACT-SI-4, AC current signal conditioner, 0-5 Aac input, 0-20 mA output, \$130.



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