

SIGNAL CONDITIONERS

DIN Rail Mount AC Voltage/Current Signal Conditioners 2-Wire Loop Powered Design



DRA-ACT-2 Series



- ✓ ± 0.1% Accuracy
- ✓ Isolated
- ✓ High Noise Immunity
- ✓ Low Profile Enclosure

DRA-ACT-2 Series signal conditioner shown smaller than actual size.



The DRA-ACT-2I and DRA-ACT-2V Series are isolated 2-wire loop-powered ac current and ac voltage input DIN rail mount signal conditioners that convert the measured input into a proportional, linear and highly accurate 4 to 20 mA output current. The DRA-ACT-2I Series of ac current input models includes models for 0 to 1 Aac and 0 to 5 Aac inputs with 4 to 20 mA output. The DRA-ACT-2V Series of ac voltage input models includes models for 0 to 150 Vac, 0 to 250 Vac and 0 to 400 Vac inputs again with 4 to 20 mA output.

For complete safety, an internal transformer isolates the signal conditioner input from the output thus enabling these units to withstand large momentary inputs. Complete input to output isolation, high surge current capacity and high output signal-to-noise ratio make these signal conditioners highly immune to ground loop signals and RFI. These transmitters are also equipped with a "test" terminal which facilitates monitoring of the output current by measuring the voltage drop across an internal 10 Ω resistor without disturbing the 4 to 20 mA process loop.

Specifications

GENERAL

Accuracy: ±0.1% of span typical (2-100% of span) for pure sinusoidal input

Temperature Stability: ±0.015% of span /1°C

CMR: 122 dB typical; 117 dB min

Response Time: 220 msec (0-98%)

Power Supply: 10 to 32 Vdc

Loop Resistance: $R_{max} (\Omega) = (V_{supply} / 10) / 0.02$

SUPPLY AND LOAD

Variation Effect: <0.03% for full change

Test Terminal: 40 to 200 mV represents 4 to 20 mA

Output Ripple: Better than 0.1% of span RMS

Frequency: 40 to 500 Hz

Output: 4 to 20 mA

Zero Adjust: ±35% min

Span Adjust: ±25% min

Operating Ambient: 0 to 70°C (32 to 158°F); 5 to 95% RH, non-condensing

Storage Temperature: -25 to 85°C (-13 to 185°F)

Enclosure: Polycarbonate

Mounting: Standard 35 mm DIN rail or wall mount

Dimensions: 73 x 32.5 x 114 mm (2.87 x 1.28 x 4.49")

Weight: 0.5 lb (0.2 kg)

DRA-ACT-2I SERIES (AC CURRENT INPUT)

Input: 0 to 1 Aac, 0 to 5 Aac

Input Power Consumption: 0.26 VA at 5 Aac input

Inrush Current: 40 Aac RMS max for 8 sec every 10 min; 75 Aac RMS max for 1 sec every 10 min

DRA-ACT-2V (AC VOLTAGE INPUT)

Input: 0 to 150 Vac, 0 to 250 Vac, 0 to 400 Vac

Input Power Consumption: 0.3 VA at 120 Vac input; 1.4 VA at 230 Vac input

Isolation: 2.5 KV RMS for one minute

To Order

Model No.	Description
DRA-ACT-2I-1	ac current, 0 to 1 Aac input, 4 to 20 mA output
DRA-ACT-2I-2	ac current, 0 to 5 Aac input, 4 to 20 mA output
DRA-ACT-2V-1	ac voltage, 0 to 150 Vac input, 4 to 20 mA output
DRA-ACT-2V-2	ac voltage, 0 to 250 Vac input, 4 to 20 mA output
DRA-ACT-2V-3	ac voltage, 0 to 400 Vac input, 4 to 20 mA output
DRN-PS-1000	Power supply, 95 to 240 Vac input, 24 Vdc @ 1 A output