

ConLAB

ACT-4I-3P & ACT-4V-3P

AC Input, Four-Wire Transducer

Operator's Manual

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1. CALIBRATION INSTRUCTIONS

- 1.1 The ACT-4x-3P ranging and supply voltage are factory set. The "Zero" and "Span" potentiometers located inside the unit are used for fine tuning.
- 1.2 Calibration instrumentation:
 1. Mains connection
 2. AC voltage/current calibrator
 3. High accuracy DVM
 4. Small screwdriver

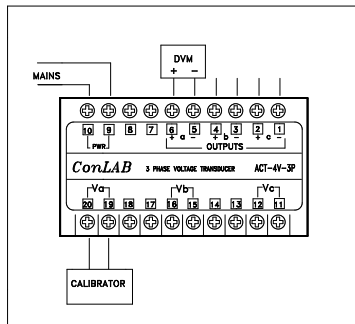


Fig. 1

Connect the transmitter to be calibrated according to fig. 1.

- a. Set calibrator to 0 output
- b. Adjust with the Zero potentiometer to obtain an output current of 4.000mA
- c. Set the calibrator to I/V maximum.
- d. Adjust with the Span potentiometer to obtain an output current of 20.000mA

- e. Repeat steps a to d until satisfactory results are achieved
- f. Repeat steps a-d for the other two channels

2. CONNECTION DIAGRAMS

2.1 ACT-4I-3P

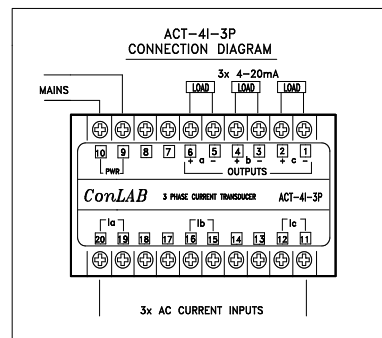


Fig 2

2.2 ACT-4V-3P

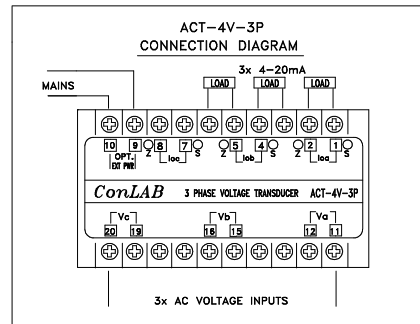


Fig 3

3. DIMENSIONS mm

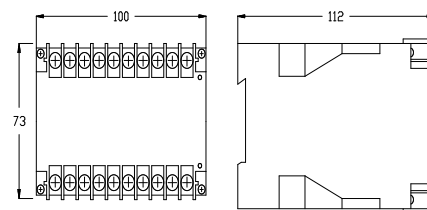


Fig 4

ACT-4I-3P & ACT-4V-3P

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4. SPECIFICATIONS

ACT-4I-3P

Input: AC current
Input Span: 0-1Aac, 0-12Aac (RMS)
Input Burden: 0.26VA at 5Aac
Inrush Current: 40Aac (RMS) maximum, for 8 seconds every 10 minutes
75Aac (RMS) maximum, for 1 second every 10 minutes

Isolation:
Current Input 2.5KV (RMS)/1 minute
Power Input: 4KV RMS/1 minute

ACT-4V-3P

Input: AC Voltage
Input Span: 0-600 Vac (RMS)
Input Burden: 0.25VA at 230Vac RMS
Isolation:
Signal and Power Inputs: 4KV (RMS)/1 minute

GENERAL SPECIFICATIONS

Output Current 4-20mA
Power Supply: 115 Vac \pm 15%, 50/60 Hz or
(factory set) 230 Vac \pm 15%, 50/60 Hz

Power Consumption: 3.5 VA
Supply And Load Variation Effect:
 $< \pm 0.03\%$ of span for full change
Load Resistance: 600 Ω for nominal AC supply
0 Ω for minimum AC supply
Response Time: 220msec. (0-98% of span)
Output Ripple: Better than 0.1% of span RMS

Accuracy (2-100% of input span):
 $\pm 0.1\%$ of span for pure sinusoidal input (typ.)
 $\pm 0.2\%$ of span max.

Input Frequency: 40-60 Hz

Fine Adjustability:

Zero: $\pm 35\%$ of span (minimum)

Span: $\pm 25\%$ of span (minimum)

CMR: 122 dB typical, 117 dB minimum
Temperature Stability: $\pm 0.02\%$ of span/ 1°C
Operating Ambient: -20 to 70°C
Storage Temperature: -25 to $+85^{\circ}\text{C}$
Humidity: 5-95% relative, non-condensed
Housing: Plastic Polycarbonate
Protection Level:

Box: According to IP-40 DIN 40050

Terminals: According to IP-20 DIN 40050

Mounting: Standard 35mm DIN rail

Weight: 0.9Kg