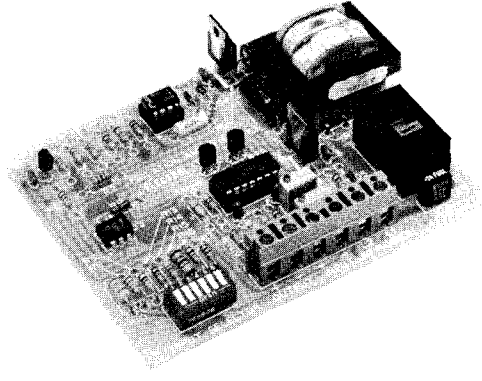
ELECTROL

ISOLATION AMPLIFIER

INSTALLATION AND OPERATING INSTRUCTIONS

OPTION A-55

- Accepts voltage or current inputs
- Operates on 115 VAC or 230 VAC 50/60 HZ
- Multi-turn Trim pots for OFFSET & GAIN



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ISOLATION AMPLIFIER

The Isolation Amplifier (IA) is used to isolate and condition DC voltage and current signals from any source (computers, tach, transducers, motors) which will drive all Electrol variable speed motor controls with a voltage following input. The maximum output voltage of the IA is 13 volts, which is a linear function of the input signal.

The Electrol Isolation Amplifier is versatile since it can accommodate a wide range of input voltages (0-13VDC, 0-25VDC, 0-120VDC, 0-550VDC) and, in addition, a wide range of current signals (1-5 MA, 4-20 MA, 10-50 MA). The built in Dip Switch allows any one of these inputs with a simple switch selection.

The unit is factory set for 230 VAC Power Supply and is supplied with a 115/230 VAC selector switch for field selection.

The control is supplied with two multi-turn trim pots. ("OFFSET" and "GAIN") which are used to scale the input and output to any desired levels.

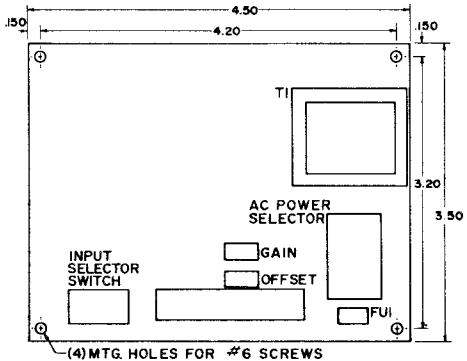
SPECIFICATIONS AND RATINGS

Power Supply	115 or 230 VAC 50/60 HZ
Input Voltage	.0-13, 0-25, 0-120, 0-550 VDC
Input Current	1-5, 4-20, 10-50 MA
Max Output Voltage	.13 volts at 10 MA
Range of "OFFSET" trim pot	± 4 volts
Range of "GAIN" trim pot	± 4 volts with max of 13 volts
Linearity	± .1% or less
Temperature Range	.0-50 °C

INSTALLATION

A. MOUNTING

Mount the Isolation Amplifier using (4) 6-32 Screws. Use the outline drawing to locate holes. The design of the unit allows the board to be mounted in any direction. Space board ¼" or higher off panel to eliminate electrical contact with grounded or live wiring.



WARNING! Do not bundle AC power leads with either input or output leads because induced voltages may cause erratic operation. Use shielded cables on output leads longer than 18".

B. WIRING

A.C. Power: The IA is powered with either 115 or 230 VAC - 50/60 HZ. Position voltage selector switch on the IA for your incoming power. Connect incoming power to terminals L1 and L2.

Input Terminals: A signal voltage or current from transducer, Tachometer, microprocessor, and other equipment outputs is to be connected to the input terminals in the correct polarity.

Current Input Signal: Select the proper current input desired by closing or opening the correct Dip Switch sections; 1-5 MA Section 4 ON
1, 2, 3, 5 & OFF

4-20 MA Section 4 & 5 ON
1, 2, 3, & 6 OFF

10-50 MA Section 4, 5 & 6
1, 2 & 3 OFF

Connect the incoming signal with the negative and positive to the correct terminals.

VOLTAGE INPUT SIGNAL: Select the proper voltage desired by closing or opening the correct DIP Switch selections:

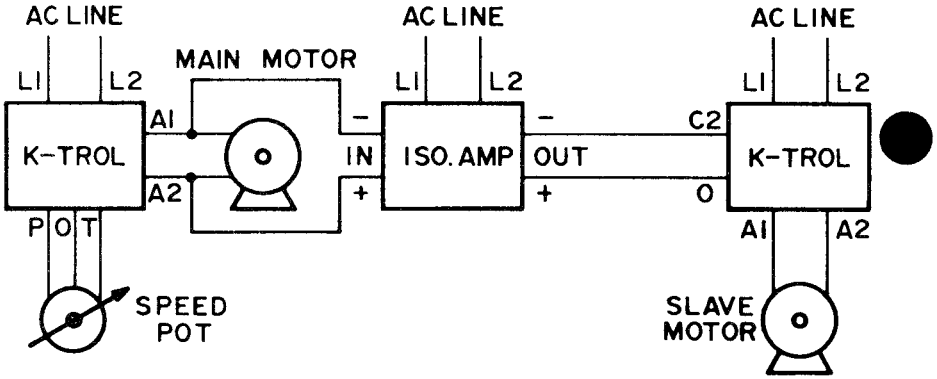
0-13 VDC Section 1, 2 & 3 ON 4, 5 & 6 OFF
0-25 VDC Sections 1 & 2 ON 3, 4, 5 & 6 OFF
0-120 VDC Section 1 ON 2, 3, 4, 5, 6 OFF
0-550 VDC Sections 1, 2, 3, 4, 5 & 6 OFF

Connect the incoming voltage signal with the positive and negative to the correct terminals.

OUTPUT VOLTAGE CALBRATION:

1. Turn GAIN pot full clockwise.
2. Apply minimum input signal.
3. Adjust OFFSET pot to obtain desired output voltage.
4. Increase input signal to maximum.
5. Adjust GAIN pot to obtain desired output voltage.
6. Repeat step 2, 3, 4 & 5 if extreme accuracy is required.

BLOCK WIRING DIAGRAM FOR A MASTER/SLAVE VOLTAGE FOLLOWING SYSTEM



To Request Schematic
Please call or write:

Electrol Co. Inc.
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York, PA 17404

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WARRANTY

ELECTROL controls are warranted by ELECTROL CO., INC. to the original user against defects in workmanship or materials under normal use (rental excluded) for one (1) year after purchase.

Any part which is determined to be defective in material or workmanship must be returned to ELECTROL headquarters, or an authorized service center, as ELECTROL designates, shipping costs prepaid. Contact factory for RMA (Return Material Authorization) number. The control will be repaired or replaced at ELECTROL's option. Expenses incurred by buyer in repairing or replacing any defective product will not be allowed except where authorized in writing and signed by an officer of the company.

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