

AUTO-TROL

Model 091-36

A CONTROL TO PROTECT ALTERNATING CURRENT
LOADS FROM LOW FREQUENCY POWER INPUT

3 YEAR WARRANTY



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INTRODUCTION :

The AUTO-TROL Low Frequency cutout relay is intended to protect A.C. loads by disconnecting them from the power source when the frequency of that power source drops below 60 Hz. This prevents excessive current draw and motor burnouts.

The AUTO-TROL is a solid state control operated from the vehicle's +12 volt system. It detects the input A.C. voltage and whenever the frequency of that voltage is below 60 Hz. deenergizes it's power output relay. The AUTO-TROL is wired to the vehicle's battery and is continually energized. It's current drain is negligible and will have no effect on the battery.

INSTALLATION :

1.0 Mount the AUTO-TROL in a suitable location and wire as illustrated in figure 1.

NOTE:

The "neutral" of the A.C. generator must be connected to the vehicle ground and battery "negative". If this does not exist, contact Kussmaul Electronics Co. for special instructions.

2.0 Wire the White/Red wire to the +12 Volts D.C.

3.0 Wire the Black wire to the vehicle ground.

4.0 Wire the A.C. power source to terminal 87 on the relay. Note that this terminal already contains an orange colored wire. The orange wire is the "sense" wire, it must remain on terminal 87 with the power input.

5.0 Wire the load that is being protected to terminal 30.

THIS COMPLETES THE INSTALLATION. PLEASE CHECK ALL WIRING

TEST:

1.0 Start the engine and operate the generator at its normal speed and frequency (60 Hz). The Green LED indicator on the side of the AUTO-TROL should be lit. The relay is closed and the load energized.

2.0 Set the engine to low idle to produce a generator frequency less than 50 Hz. The Green LED indicator will be "off" and the load disconnected.

SPECIFICATIONS:

Relay energize frequency: 58 +/-2 Hz

Relay deenergize frequency: 55 +/-2 Hz

Relay Current Rating: 75 Amp. resistive 60 Amp. inductive 250 Amp. (1 sec.)

Wire Size: #6 AWG

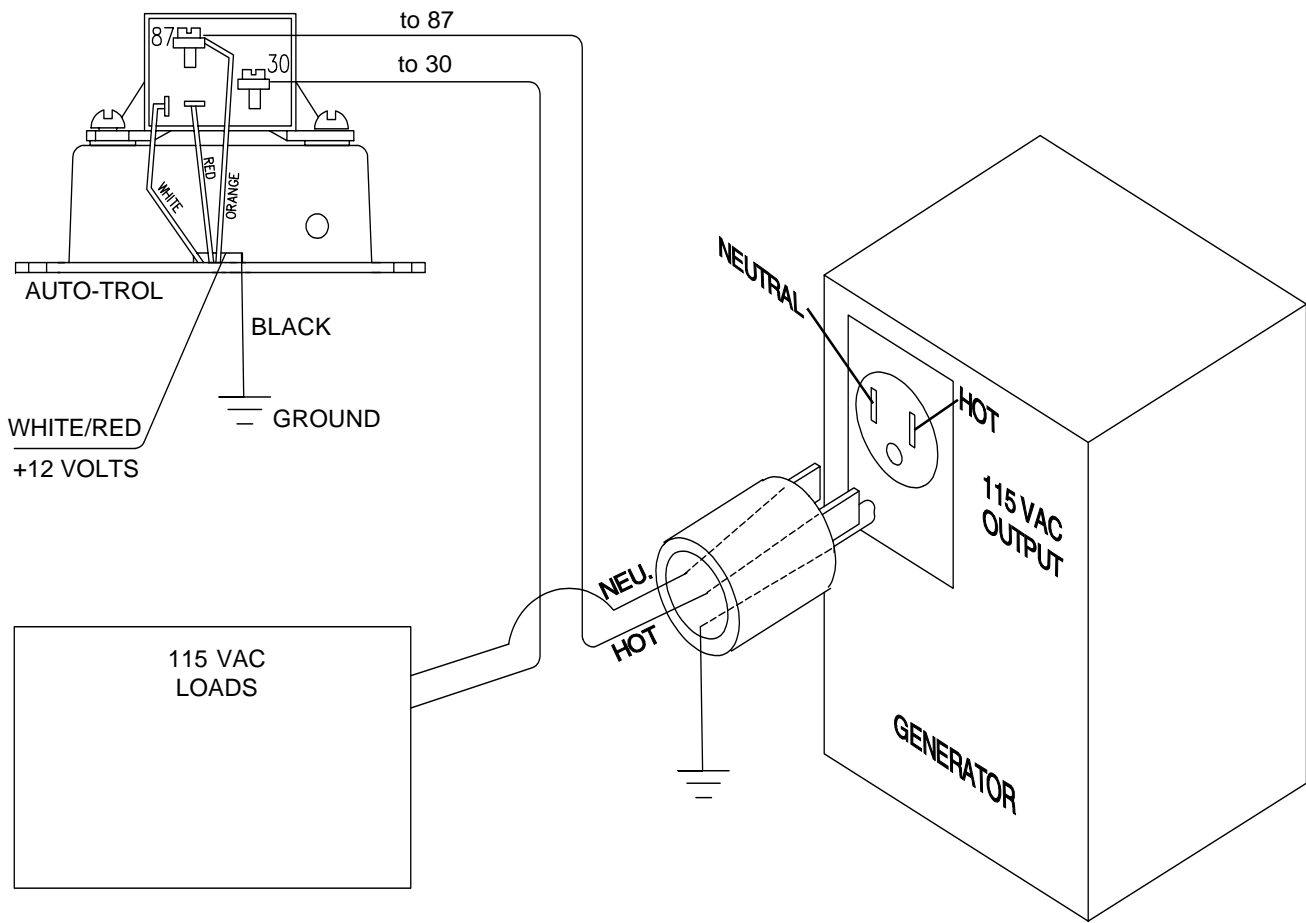


Figure 1 AUTO-TROL 091-36 WIRING

INSTALLATION RECORD & WARRANTY

Date Installed _____

Installed By _____

Vehicle Identification _____

Vehicle Owner _____

WARRANTY

All product of Kussmal Electronics Company Inc. are warranted to be free of defects of material or workmanship. Liability is limited to repairing or replacing at our factory, without charge, any material or defects which become apparent in normal use within 3 years from the date the equipment was shipped.

Kussmal Electronics Company, Inc. shall have no liability for damages of any kind to associated equipment arising from the installation and /or use of the Kussmal Electronics Company, Inc. products. The purchaser, by the acceptance of the equipment, assumes all liability for any damages which may result from its installation, use or misuse, by the purchaser, his or its