

## INSTRUCTION MANUAL

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# AC AUTO PUMP TIMER

A TIMER TO LIMIT THE RUNNING TIME  
OF AC AUTO PUMPS



**MODEL # 091-150-115**

INPUT: 115 VOLTS, A.C.  
OUTPUT: 115 VOLTS AC, 5 AMPS AC

**3 YEAR WARRANTY**



**KUSSMAUL ELECTRONICS CO., INC.**

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# INTRODUCTION

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The Model 091-150-115 Auto Pump Timer limits the duty cycle of the Auto Pump to 1 hour “ON” and 1 hour “OFF”. In normal operation the pump runs for less than 1 hour so the timer is not called upon to perform the shutdown function. However, on vehicles with exceptionally large tanks or excessive leaks the pump running cycle is extended. At times, with larger leaks the pump will be forced to run continuously. This creates excessive heat in the pump cylinder and subsequently higher wear on the piston seal. The Pump Timer provides a 1 hour cool down time after 1 hour of operation to materially extend the life of the seal.

# TYPES OF INSTALLATION

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The motors used in the (2) different AC Auto Pumps are not identical. Therefore they have different starting and running characteristics. The Model 091-9HP contains a permanent split capacitor motor that has an inherently high starting torque. The Model 091-9B-1 utilizes a shaded pole motor with a lower starting torque. The 091-9B-1 thus requires that the cylinder head pressure must be relieved prior to starting. This pressure relief function is provided by the Auto Drain and therefore **the Auto Drain must be added to the Model 091-9B-1 when the A.C. Auto Pump timer is installed.** The 091-9HP will start without the Auto Drain.

## CAUTION

**DO NOT OPERATE THE MODEL 091-9B-1  
WITH AUTO PUMP TIMER WITHOUT  
AN AUTO DRAIN INSTALLED**

# INSTALLATION

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1. Mount the unit using the four holes provided (see Figure 3).
2. Open the Pressure Switch assembly (mounted on the Auto Pump). Move the black or brown wire( line wire) from the pressure switch to the first position of the terminal strip (see Figure 1 or 2).
3. Connect a 16AWG wire from the second position of the terminal strip to the open terminal on the pressure switch as seen in Figure 1 or 2.
4. Connect a white or blue wire (neutral wire) to the third position of the terminal strip and the pressure switch on the pump.
5. Check all wiring before proceeding.
6. Close the Pressure Switch assembly.

# INSTALLATION WIRING DIAGRAM FOR 091-9B-1-AD

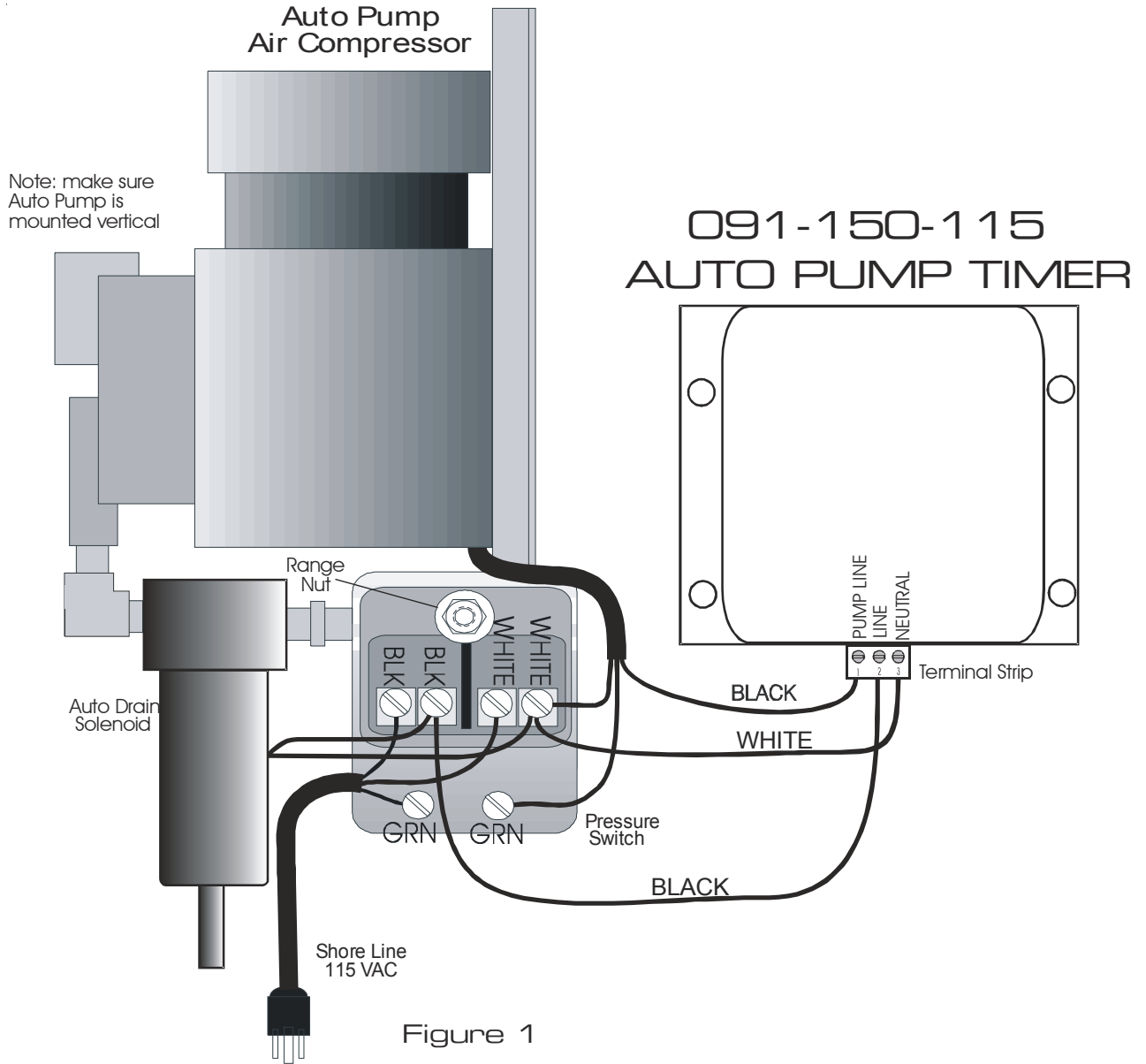


Figure 1  
Installation Wiring

# INSTALLATION WIRING DIAGRAM FOR 091-9HP AND 091-HP-AD

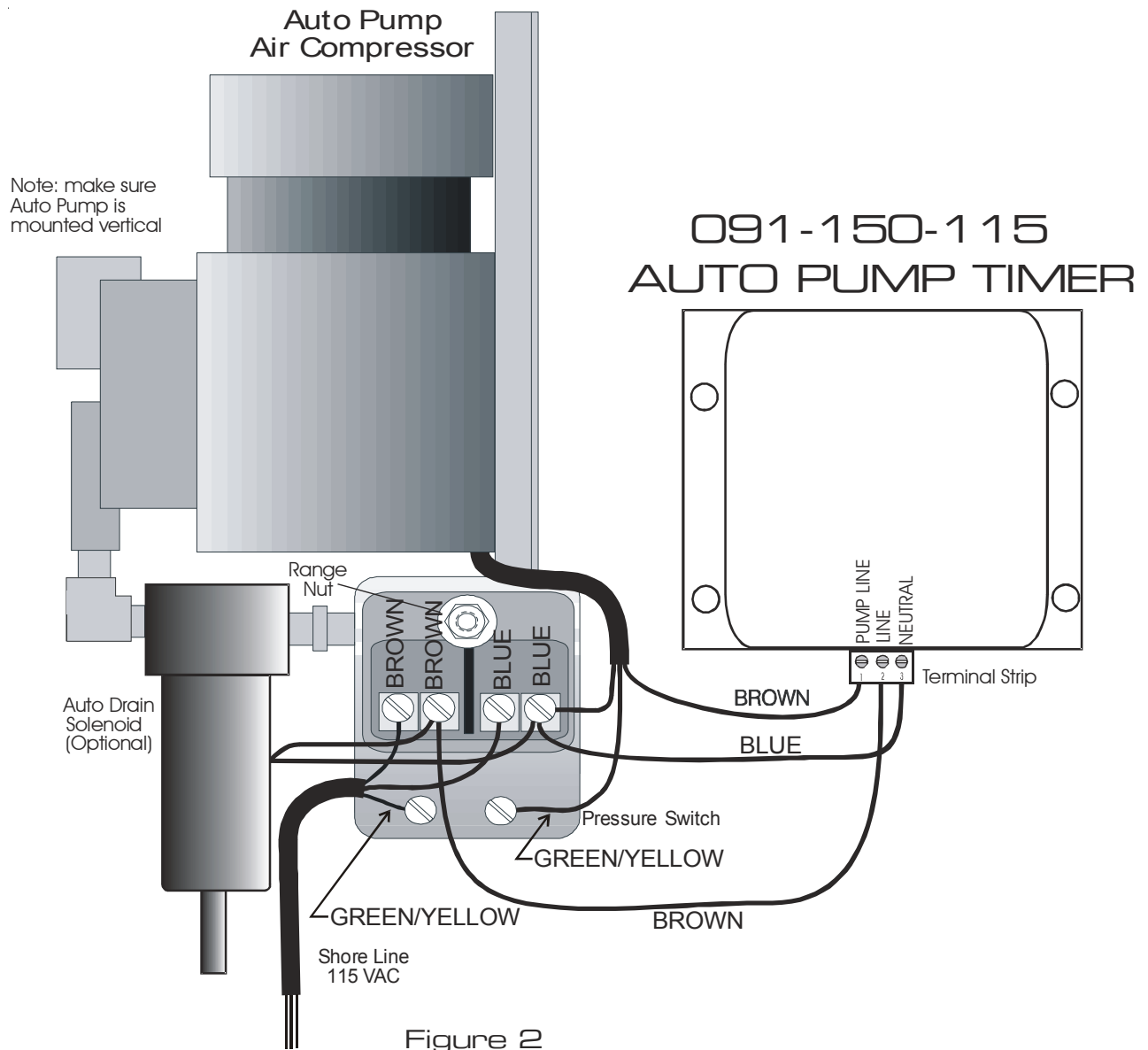


Figure 2  
Installation Wiring

**Note: The Auto Pump HP uses CE rated line cords.**

**Wire the pump as followed: Brown wire -Line**

**Blue wire- Neutral**

**Green/Yellow wire-Ground**

# OUTLINE

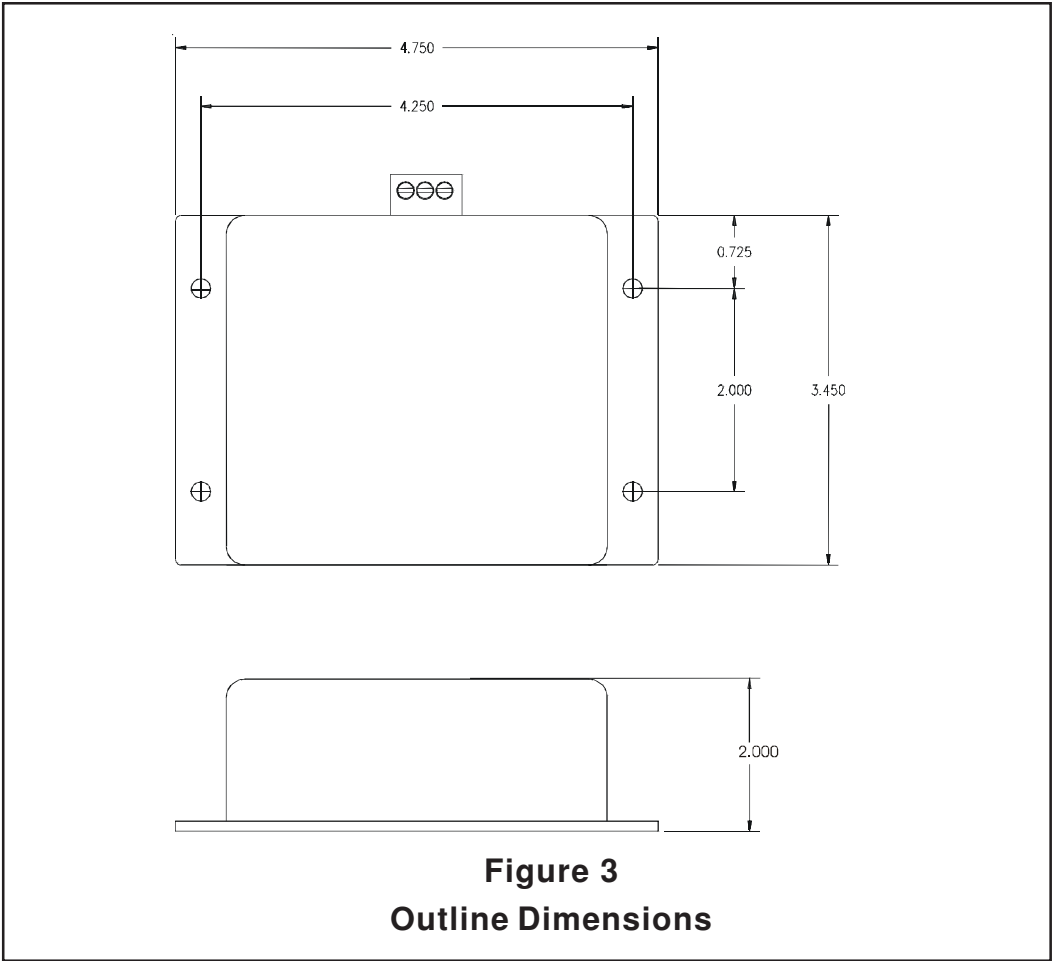
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Input Power: 115 VAC

Input Current Draw: 20 ma. with pump running, 5 ma. with pump resting.

Relay Contact Rating: 5 amps @ 115 VAC

Weight: 10 ounces



# **INSTALLATION RECORD & WARRANTY**

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**Date Installed** \_\_\_\_\_

**Installed By** \_\_\_\_\_

**Vehicle Identification** \_\_\_\_\_

**Vehicle Owner** \_\_\_\_\_

## ***WARRANTY***

All product of Kussmaul 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.

Kussmaul Electronics Company, Inc. shall have no liability for damages of any kind to associated equipment arising from the installation and /or use of the Kussmaul 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 employees or others.