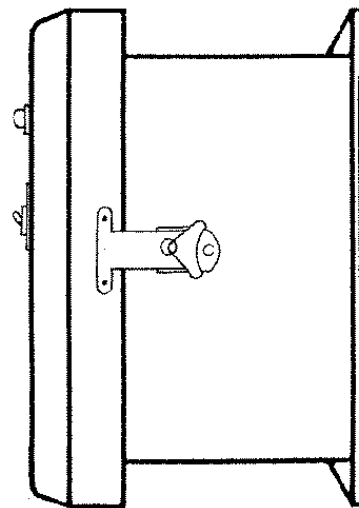
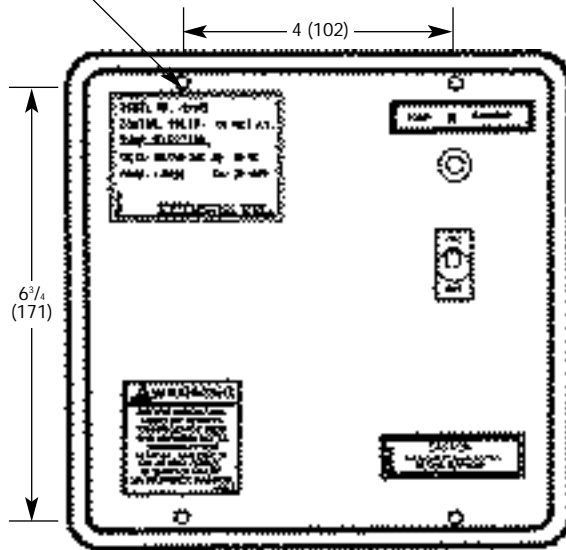


$\frac{5}{16}$  (8) Mounting Hole  
(4 Places)



NEMA 4 ENCLOSURE  
6x6x4.03  
(152x152x110)

Dimensions in Inches (mm)

# Hoffman Single Phase Simplex Control Panel

## Installation, Operation, & Service Instructions

INSTALLER: PLEASE LEAVE THIS MANUAL FOR THE OWNER'S USE.



### SAFETY INSTRUCTIONS

This safety alert symbol will be used in this manual and on the unit safety instruction decals to draw attention to safety related instructions. When used, the safety alert symbol means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!** FAILURE TO FOLLOW THE INSTRUCTIONS MAY RESULT IN A SAFETY HAZARD.

If the decals as noted to the right are missing or are illegible contact your local Hoffman Pump representative for a replacement.

1. Electrical connections to be made by a qualified Electrician in accordance with National, State or Local codes.
2. Motor must be sized in accordance with contactor rating and have internal overload and undervoltage protection.

MODEL NO. 161029  
CONTROL VOLTS: 120 VOLT A.C.  
**PUMP SELECTION**  
VOLTS: 120/240 VAC HZ: 60 HZ  
PHASE: 1 PHASE FLA: 20 AMPS

DN0444

**ITT** HOFFMAN PUMP  
Morton Grove, IL, U.S.A.

**WARNING**  
BEFORE INSTALLING, USING OR SERVICING THIS PRODUCT, READ THE WARNING NOTES AND INSTRUCTIONS IN INSTRUCTION MANUAL. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR PROPERTY DAMAGE.

V56846

**PUMP \* RUNNING**

**CAUTION:**  
DISCONNECT MAIN POWER BEFORE SERVICING

**USE COPPER WIRE ONLY**  
60°C INSULATION RATING FOR AMPACITIES LESS THAN 100A  
75°C INSULATION RATING FOR AMPACITIES GREATER THAN 100A

DN0442

**G R D**

DN0443

**CAUTION**  
USE TYPE \_\_\_\_\_ FUSE  
\_\_\_\_\_ AMP

## DESCRIPTION

The Hoffman Single Phase Simplex Electrical Control Panel is designed to provide a reliable means of controlling one 120 volt or 230 volt (3 wire) single phase pump installation that **does not exceed a FLA of 20 amps.**

## PRELIMINARY INSPECTION

Assure that there is no shipping damage.

Assure that the nameplate ratings agree with the job specifications and actual conditions.

Assure all connections are secure and made per NEC requirements.

## HANDLING

Use care in installing unit.

## LOCATION

Place unit for easy access.

Allow adequate space for servicing. Check ambient conditions.

Notice: Insulation temperature limits. Ventilate as required.

## ELECTRICAL WIRING AND CONTROLS

Connect power wiring per NEC. Recheck nameplate vs. specifications and conditions.



### **WARNING: HIGH VOLTAGE ELECTRICITY**

Disconnect and lock out power before connecting or servicing unit. Failure to follow these instructions could result in serious injury or death.

## PUTTING THE UNIT INTO SERVICE

Assure that the main power has been disconnected.



### **WARNING: HIGH VOLTAGE ELECTRICITY**

Disconnect and lock out power before connecting or servicing unit. Failure to follow these instructions could result in serious injury or death.

Wire unit per National Electrical Code. See representative wiring diagrams.

Observe operation of unit through several cycles.

## OPERATION AND MAINTENANCE

Operators must be familiar with all sections of this manual to understand the operation of the unit.

Hot Water, steam and electricity can be hazardous.



### **SAFETY INSTRUCTIONS**

See Cover of this Manual.



### **WARNING: HIGH VOLTAGE ELECTRICITY**

Disconnect and lock out power before connecting or servicing unit. Failure to follow these instructions could result in serious injury or death.

## NOTICE / AUTO RESTART

Single phase motors will restart automatically after thermal overload protector trips.

A properly installed unit should function unattended for long periods of time. Periodic checks to assure proper operation are highly recommended. Refer to trouble shooting section when necessary.

Refer to wiring diagrams to determine control switch settings.



### **CAUTION: SUBSEQUENT DAMAGE**

A unit showing symptoms of possible problems must be corrected immediately. Failure to follow these instructions could result in full liability for subsequent injury or property damage.

## UNIT WIRING



### **WARNING: HIGH VOLTAGE ELECTRICITY**

Disconnect and lock out power before connecting or servicing unit. Failure to follow these instructions could result in serious injury or death.

Select the required configuration for the control panel to fit the application. **CAUTION:** Verify that the incoming voltage and the motor voltage correspond to the configuration of the panel. Rewire jumper terminals if necessary.

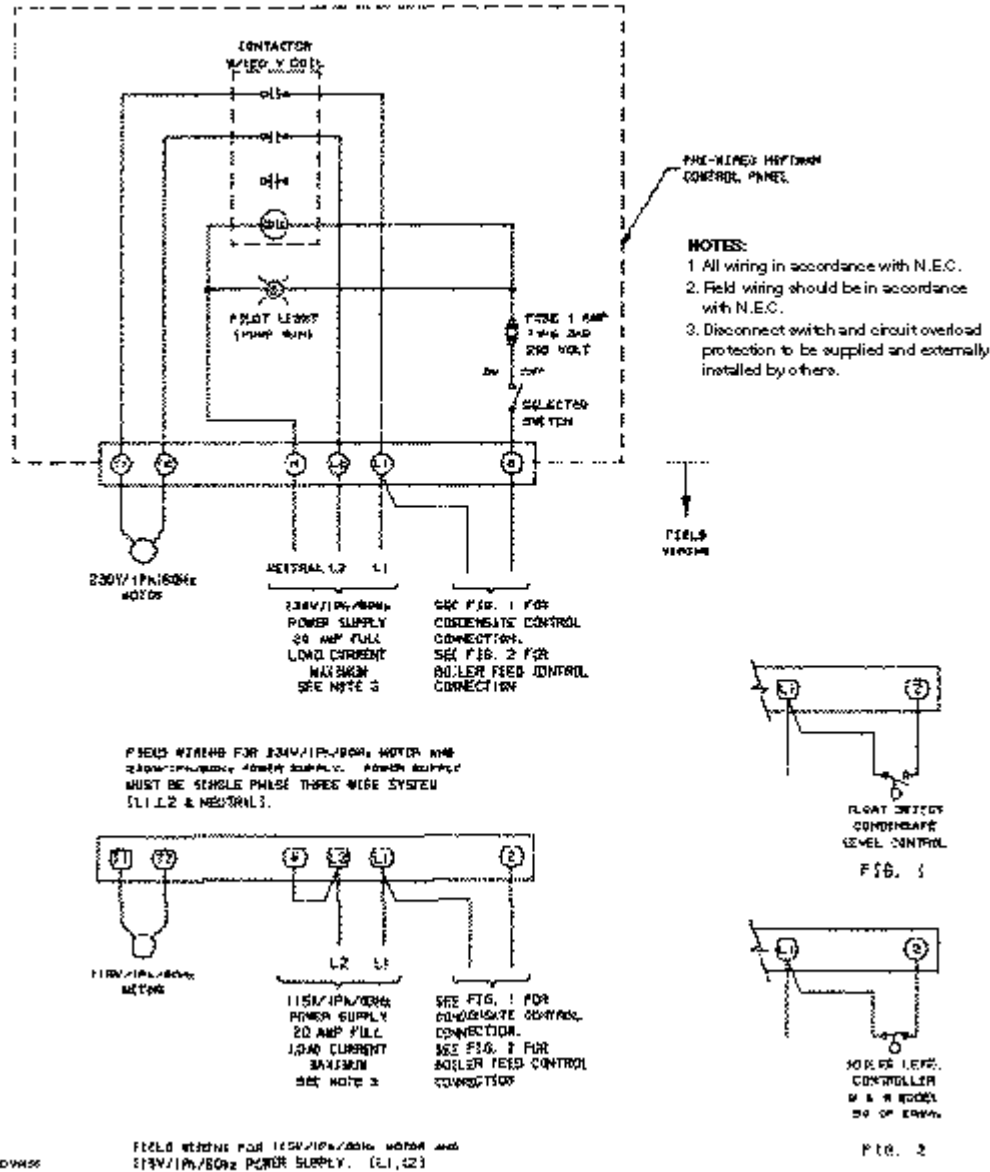
Disconnect all power.

Identify incoming power and motor voltage configuration from the Selection Chart below.

## SELECTION CHART

Incoming Voltage	Motor Voltage	Connect Power to Terminals	Connect Pump Motor to Terminals	Jumper Terminals	Connect Float Control to Terminals
230/1/60	230/1/60	N, L2, L1	T1, T2	—	L1, 2
115/1/60	115/1/60	L2, L1	T1, T2	N, L2	L1, 2

## ELEMENTARY DIAGRAM SINGLE PHASE SIMPLEX CONTROL PANEL



## WIRING / CONNECTIONS



### WARNING: HIGH VOLTAGE ELECTRICITY

Panel remains fully energized at all times, unless incoming power is disconnected. Disconnect and lock out power before connecting or servicing unit. Failure to follow these instructions could result in serious injury or death.

Wire incoming power to the terminals identified in the Selection Chart on page 2.

Connect electrical ground wire to ground lug.

Wire the float switch.

Wire pump motor to the terminals identified in the Selection Chart. Connect all necessary ground wires to the ground lug. Connect ground lug to a good earth ground.

Check pump motor before installation for proper rotation. Re-wire motor is necessary. Re-connect incoming power.

## TYPICAL SEQUENCE OF OPERATION

1. When the float control "makes," incoming electrical power is supplied to the pump "ON-OFF" selector switch.
2. With the selector switch in the "ON" position the contactor coil and the "Pump Run" pilot light will be energized.
3. When the contactor coil is energized, electrical power is fed to the pump motor.

## TROUBLE SHOOTING

SYMPTOM	PROBLEM	SOLUTION
Pump will not start	Incoming power not connected.	Connect incoming Power.
	Float control not "Made".	Operate system to "Make" Float Control.
	Pump "ON-OFF" Switch not ON.	Turn ON switch.
	Fuse Blown.	Replace fuse per label in enclosure.
Pump runs but light doesn't light	Blown pilot light.	Replace pilot light.

## DEALER SERVICING

If trouble occurs that cannot be rectified, contact your local B&G representative. He will need the following information in order to give you assistance.

1. Complete nameplate data of panel.
2. Voltage, phase, and FLA of motor.
3. Actual ampere draw of motor.

For further information, contact ITT Hoffman Pump, 8200 N. Austin Avenue, Morton Grove, IL 60053,  
Phone (847) 966-3700 — Facsimile (847) 966-9052.