



# FLUID CONTROLS ELECTRONIC TRAP PRIMERS

## FIGURE NUMBERS 270, 271 AND 272

### INSTALLATION AND OPERATIONAL INSTRUCTIONS



ASSE-1044



UL 1951 CSA C22.2 No 68  
CSA C22.2 No 14 File No. E10084



File 3253

## MODELS: 270, 271 and 272

### DESCRIPTION:

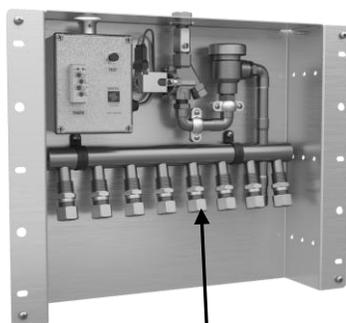
The Fluid Controls 270, 271 and 272 is 24VAC, 120VAC, or 240VAC hardwired trap priming device. When activated, the trap primer delivers water through a manifold to multiple traps. **CAUTION:** This unit is not a pressure feed trap priming system. The device must always be located at a higher elevation than the drain(s) it serves. Trap primer feeder line(s) connecting the trap primer to the trap or drain shall be sloped to discharge point.

### OPERATION:

A factory programmed timer energizes a normally closed solenoid valve. When energized, water will flow across the air gap for a preset period of time and is distributed via trap primer feeder line(s) (by others). The timer then de-energizes the solenoid valve and keeps it closed for 24 hours, until the next operational cycle occurs.

### INSTALLATION:

- 1) Mount the Control Box to stud or wall surface using screws or other appropriate anchors (by others). **Device must be installed a minimum of 12" above flood level of drain or trap being primed. Piping from the trap primer outlet must have a minimum 12" vertical drop from the bottom of the trap primer outlet, before turning horizontal. The maximum length of horizontal piping from the trap primer to the drain or trap being primed is 20 feet. If the horizontal piping from the trap primer to the drain or trap being primed exceeds 20 feet, an additional 12" of vertical drop is required for every additional 20 feet of horizontal piping.**
- 2) The trap primer unit must be installed with the inlet/outlet vertical and plumb.
- 3) Connect the **1/2" NPTF Trap Primer Valve Inlet** to the water supply line selected for the trap primer using an appropriate adapter fitting (by others). Seal threads with Teflon tape only. Use of thread sealant will void the warranty.
- 4) Connect **3/8" (1/2" OD) or 1/2" (5/8" OD) Discharge Connection** to trap feeder line, using two wrenches (by others) Be careful not to bend the copper manifold tubing. For **(-CTS) Push-In Fittings**, connect as shown on page (3) of these instructions. Plug all outlets that are not used with Smith 1/2" Dia. or 5/8" Dia. plugs as required, before connecting to the water supply.
- 5) Connect primer feeder line to trap, making sure line is properly sloped for gravity feed (consult local code authority).
- 6) If the unit is a hardwired model, install wiring as per the diagram on Page 2 and in accordance with local electrical code. To access the electrical control box on the (-B) unit, remove the (4) screws holding the cover on the 10" x 10" enclosure. Replace cover once the electrical connections have been completed and tested.
- 7) Once connected to power, the Timer will perform a discharge cycle for the preset period of time.
- 8) Pressing the TEST button on the Timer will open the solenoid valve and it will remain open until the button is released.

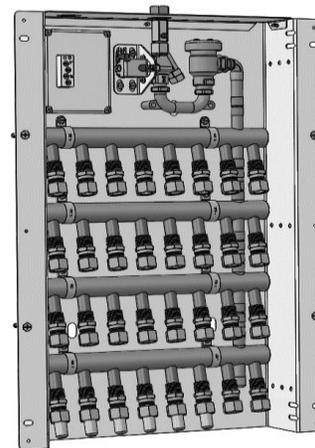


270FM-8

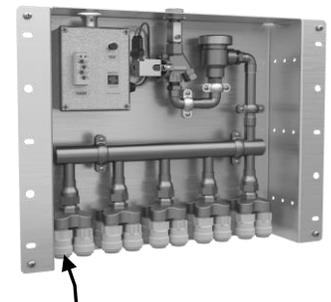


270SM-8

3/8" (0.50" O.D.) or 1/2" (0.50" O.D.)  
(TYP) COMPRESSION



272FM-32



1/2" (0.50" O.D.) (TYP)  
-CTS PUSH-IN FITTING

271FM-CTS



**WARNING:** Cancer and Reproductive Harm [WWW.P65WARNINGS.CA.GOV](http://WWW.P65WARNINGS.CA.GOV)



# HARDWIRE INSTALLATION

MUST BE PERFORMED IN ACCORDANCE WITH LOCAL ELECTRICAL CODE

Remove the (4) screws and cover on the electrical control box. Locate the grommeted hole on the top of the box . Connect the (3) electrical supply wires (by others) to the (3) terminals, as shown below.

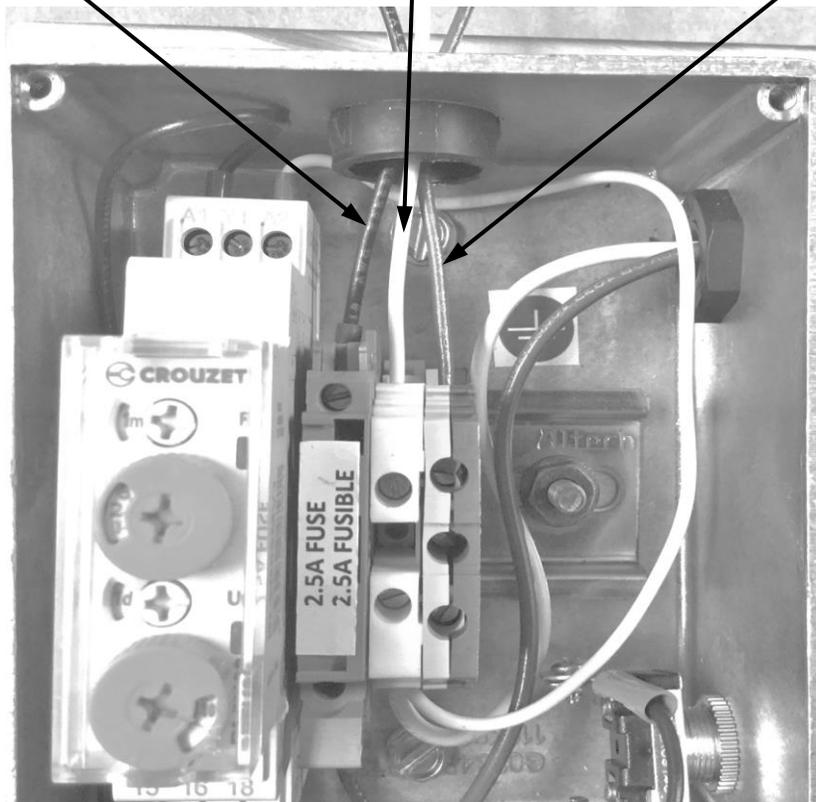
CAUTION: For proper electrical safety and to prevent electrocution, the green ground wire must be connected to the ground terminal.

CAUTION: Replace the electrical control box cover and screws before opening the water supply shut-off valve on the trap primer inlet.

**ELECTRICAL HOT CONNECTION. ATTACH THE BLACK HOT WIRE TO THE FUSE BLOCK INSIDE.**

**ELECTRICAL NEUTRAL CONNECTION. ATTACH THE WHITE WIRE TO THE WHITE TERMINAL.**

**ELECTRICAL GROUND CONNECTION. ATTACH THE GREEN WIRE TO THE GREEN/YELLOW TERMINAL BLOCK**



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# -CTS (COPPER TUBE SIZE) INSTALLATION

The -CTS (Copper Tube Size), Push-in Fittings are sized for Metal or Plastic tubes that are 5/8" (0.625) Outside Diameter.

## To Install:

1. Using the Proper Tool, Cut the End of the Tube, Square as shown below.
2. Measure and Place a Mark 1.25" from the End of the Tube.
3. Push the Tube Into The -CTS Fitting to this Mark.

