

# TYPE W11 AC MOLDED SOLENOID COIL & ENCLOSURE INFORMATION

## INSTALLATION

Refer to drawing on reverse side

PLAST-O-MATIC solenoid coils are molded with corrosion resistant polyester and are manufactured to meet NEMA 4X standards. These coils are water and dust tight and are supplied standard with a 1/2" NPT female nylon connector assembly. A connector assembly with an optional indicator light and other choices can be found in the PLAST-O-MATIC catalog. The coil is intended for indoor or outdoor use in general purpose applications as well as those where conditions such as dust, blowing dirt or splashing water are likely to be found. They must never be submerged in water.

These coils are equipped with a DIN standard connector assembly (DIN 43650 and ISO 4400). The standard external connection is 1/2" NPT. This type of connector allows internal electrical connections to be made easily while disconnected from the coil. The external cable connection to the housing may be arranged at any one of 4 angles (90° increments) to facilitate valve installation. The coil can be rotated to any position in relation to the valve by loosening the cap nut on top of the coil. Rotate the coil to the desired position. Retighten the cap nut snugly to be sure the O-rings and gasket seal properly. Hand tight is sufficient.

## WIRING INSTALLATION

Three wires (one is ground) are recommended. To connect the wires loosen screw and pull connector assembly away from coil. Use a small screwdriver and carefully pry the inside connector from housing using the visible slot at the corner of the connector. Screw your conduit or cable fitting into the housing. Pass the wires through your fitting and the housing and then connect them to the terminals on the connector. One terminal is marked with the ground symbol () and the other two

are hot leads. Coil is not polarity sensitive. Reassemble, paying attention to the desired orientation of the conduit connection. Tighten the conduit fitting to secure the conduit. Make sure the two gaskets are properly seated before tightening the connector assembly to the coil. Do not overtighten. For three-phase power systems the terminals can be connected to any two of the three phases. All local wiring codes should be followed when wiring the coil. DC coil is 17 watts cold, 11 watts hot; AC coil has 17 watts inrush, 11 watts holding.

## IMPORTANT MOUNTING INFORMATION

Solenoid valves with 11 watt molded coils will operate in any position, however, it is recommended that they be mounted in an up-right position for maximum cycle life, and never with the coil below the valve body.

## OPERATION

PLAST-O-MATIC molded solenoid coils are rated for continuous duty up to 104°F (40°C) ambient. Above this temperature they are rated intermittent duty requiring a cool down period before re-energizing. A general rule-of-thumb for ambient temperatures between 104°F (40°C) and 122°F (50°C) is to allow an equal amount of cool-down time as compared to energized time with a maximum time of 1/2 hour. At higher temperatures more cool-down time is needed. Coils can be operated up to 10% below their listed nominal voltages, however, the inlet pressure rating of the valve will be about 30% lower. Also, coils exposed to voltages in excess of their rated nominal voltage will operate hotter than intended which could lead to coil and valve failure. Consult factory for specific information.



### TYPE W11 AC MOLDED SOLENOID COIL & ENCLOSURE INFORMATION 17 WATT INRUSH / 11 WATT HOLDING

<b>STYLE W11</b> 17 WATT CLASS "F" COILS Continuous Duty		<ul style="list-style-type: none"> <li>• CORROSION RESISTANT</li> <li>• CONTINUOUS DUTY</li> <li>• SAFE OPERATING TEMP.</li> <li>• NEMA 4 WATER AND DUST TIGHT ENCLOSURE</li> <li>• MOISTURE PROOF</li> <li>• FUNGUS PROOF</li> </ul>	INSTALLATION CLASS	F
			COIL SURFACE TEMPERATURE	185°F 85°C
			MAX. ALLOWABLE AMBIENT TEMP. *	104°F 40°C
			VA = 24 HOLDING VA = 66 INRUSH	

#### CURRENT CONSUMPTION

The current may be determined from the watts rating in the above table. To determine the current, divide the voltage into the watts rating.

$$\text{Current (Amps)} = \frac{\text{VA}}{\text{Voltage}}$$

\* WITH POWER ON CONTINUOUSLY

