## **MODEL 409**

# Liquid Level Controller

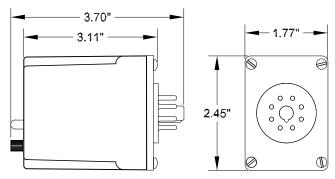
- Automatic control of liquid level
- Solid-state sensing circuit
- Adjustable sensitivity
- 5-Year Unconditional Warranty



#### **DESCRIPTION**

The Model 409 is a compact, socket-mount device for level control of conductive liquids. The internal relay is energized when operating power is applied. When the liquid level reaches the probe, the relay de-energizes. When the level drops below the probe, the relay will reset. A fixed, two second time delay prevents oscillation due to wave action. Probe cables may be shielded or unshielded. If the liquid container is made of a nonconductive material, a common electrode is required. Other features include an LED indicator to show the output relay status and an adjustable sensitivity setting. Requires standard 8-pin octal socket (socket number 51X00120-01).

#### **DIMENSIONS**



(dimensions have a tolerance of ±0.06)

#### **SPECIFICATIONS**

Model	409
Operating voltages	24VAC: 20-30VAC, 50-400Hz 120VAC: 90-140VAC, 50-400Hz 230VAC: 200-250VAC, 50-400Hz
Power consumption	2.5W
Transient Protection	2500VRMS for 10ms
Probe voltage (open circuit)	15VRMS
Probe current	5mA maximum
Sensitivity adjust	1K ohms-100K ohms
Contacts	SPDT
Contact Rating	10A @ 240VAC resistive
Expected Relay Life	Mech: 10,000,000 operations Elec: 100,000 at rated load
Response Time	2 seconds
Reset Time	<1 second
Reset Method	Automatic
Time delay accuracy	±5%
Operating Temp	-13° to +140° F
Humidity Tolerance	0-97% w/o condensation
Case Material	ABS plastic
Weight	6.2 oz. Max.

Telephone: Main - (918) 438-1220

Fax:

Sales - (800) 862-2875 (918) 437-7584

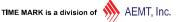
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## MODEL 409

# Liquid Level Controller

READ ALL INSTRUCTIONS BEFORE INSTALLING, OPERATING OR SERVICING THIS DEVICE.

KEEP THIS DATA SHEET FOR FUTURE REFERENCE.

#### **GENERAL SAFETY**

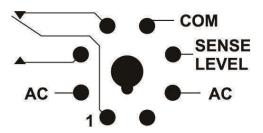
POTENTIALLY HAZARDOUS VOLTAGES ARE PRESENT AT THE TERMINALS OF THE MODEL 409.
ALL ELECTRICAL POWER SHOULD BE REMOVED WHEN CONNECTING OR DISCONNECTING WIRING.
THIS DEVICE SHOULD BE INSTALLED AND SERVICED BY QUALIFIED PERSONNEL.

## Installation Instructions

#### **INSTALLATION**

Mount the 8-pin socket in a suitable enclosure. A NEMA-1 rated enclosure, designed for socket-mounted relays, is available from Time Mark (part no. 98A498).

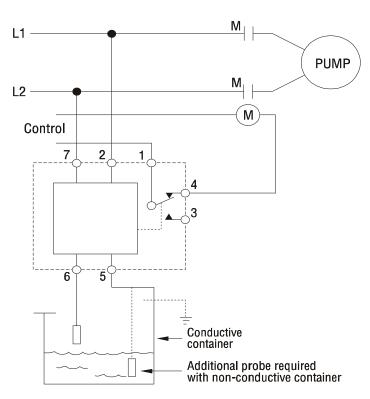
Referring to the pin diagram on this page or on the unit connect appropriate AC operating power. Connect the probes as needed, and connect the output relay as appropriate.



#### **ADJUSTMENT**

Adjust the sensitivity as needed.

### TYPICAL APPLICATION



#### WARRANTY

This product is warranted to be free from defects in materials and workmanship, and is covered by our exclusive **5-year Unconditional Warranty**. Should this device fail to operate for any reason, we will repair it for five years from the date of manufacture. For complete warranty details, see the *Terms and Conditions of Sales* page in the front section of the Time Mark catalog or contact Time Mark at 1-800-862-2875.

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