

MODEL 4093

Liquid Level Controller

- 120VAC and 240VAC versions
- Adjustable sensitivity
- Pump-Up or Pump-Down
- Five year unconditional warranty

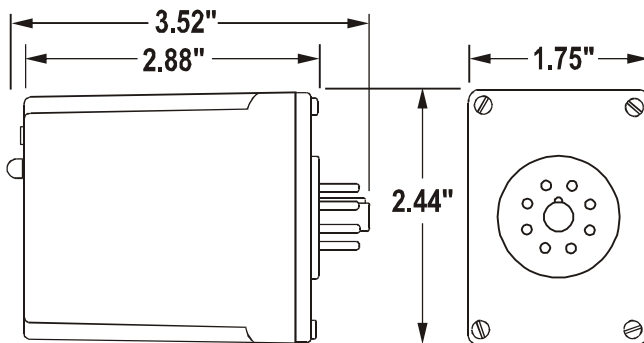


DESCRIPTION

The **Model 4093** is a compact, socket mounted **Liquid Level Controller** that operates by monitoring the conductive liquid resistance between probes.

The unit monitors two liquid levels and responds as a pump-up or pump-down control as determined by the switch setting on the top of the unit.. The green LED indicates pump operation while the potentiometer allows the user to adjust probe sensitivity.

DIMENSIONS



(dimensions have tolerance of ± 0.06)

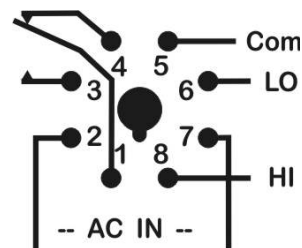
ORDERING INFORMATION		
Order by:	MODEL	VOLTS
Options:	4093	120VAC
		240VAC

SPECIFICATIONS

MODEL	4093-120	4093-240
Supply voltage	120VAC 50/60Hz	240VAC 50/60Hz
Power consumption	1.5W	
Probe voltage	9VDC	
Sensitivity	10K ohm - 25K ohm	
Response time	15ms	
Reset time	15ms	
Output contacts	1 SPDT Form C	
Contact rating	10A @ 240VAC resistive	
Expected relay life	Mechanical: 50 million operations Electrical: 100,000 oper at rated load	
Operating temperature	-13° to +140° F	
Humidity tolerance	0 to 97% w/o condensation	
Enclosure material	ABS plastic	
Mounting	8-pin socket (*order separately)	
Weight	6.7 oz.	

* Order 8-pin socket number **51X120**

PIN DIAGRAM



Telephone: Main - (918) 438-1220
Sales - (800) 862-2875
Fax: (918) 437-7584

E-mail: sales@time-mark.com
Internet: http://www.time-mark.com



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MODEL 4093

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 4093.
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 approved enclosure, designed for socket-mounted relays, is available from Time Mark Corporation.(Model 98A498)

Connect the supply voltage to Terminals 2 and 7 on the socket.

Connect the load control wiring to the appropriate terminals on the socket, refer to the Pin Diagram and Typical Application drawing.

Insert the Model 4093 into the socket and apply power.

Set the SENSITIVITY control as described below.

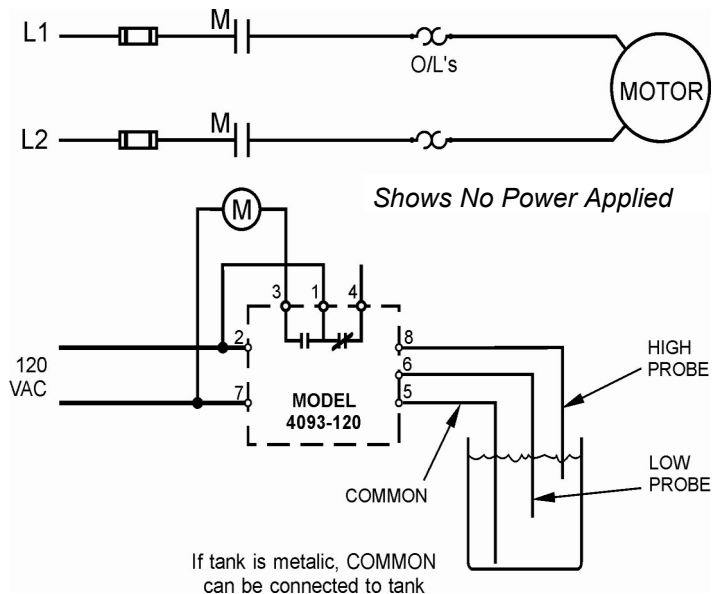
Connections to the probe are the same for Pump-Up or Pump-Down. Connect pin 8 to a probe set at the highest level of liquid in the tank. Connect pin 6 to a probe set at the lowest level of the liquid in the tank. Connect pin 5 to a probe that is set to a point lower than the low probe. If the tank is made of a conductive metal, pin 5 (common) can be connected to the tank.

NOTE: When installing the Model 4093 Failure Detector in areas of high humidity or contamination, it is recommended that the base area and all exposed metal parts of the socket be coated liberally with a good quality silicone grease, such as Dow Corning DC-4 or DC-4X. Insert the unit into the socket and wipe off excess grease around the base. This will prevent the entrance of moisture and other contaminants into the base and socket areas.

ADJUSTMENT SETTINGS

Set the SENSITIVITY control knob to the maximum counter-clockwise position. Do not use excessive force. Adjust SENSITIVITY as needed.

TYPICAL APPLICATION



TROUBLESHOOTING

Should the Model 4093 Monitor fail to operate properly, check wiring to insure proper connections. Measure the supply voltage. Repeat the SENSITIVITY Control adjustment procedure. If problems persist, contact your local Time Mark Distributor, or the factory, for assistance (Monday-Friday, 8 a.m. to 5 p.m. CST).

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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