## GENERAL

The Miniature Agastat time delay relay which you have received is a precision instrument which has been tested for performance before leaving the factory.

The information in this booklet is designed to help you obtain maximum efficiency in your application.

### WARRANTY

The AGASTAT time delay relay is warranted against mechanical and electrical defects for a period of one year from date of shipment from factory if it has been installed and used in accordance with factory recommendations. New parts will be furnished free of charge in exchange for parts which have proven defective. The furnishing of these parts shall constitute fulfillment of the Company's obligations and liabilities.



- Mounting Instructions
  - Timing Adjustment
- Terminal and Contact Arrangements
- Contact Capacity

Hermetically Sealed Solder Lug Terminal

# INSTALLATION INFORMATION



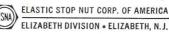
Unsealed Octal Plug



Hermetically Sealed

MINIATURE

time/delay/relay



SM-1

Printed in U.S.A.

## MOUNTING

## ADJUSTMENT



Fig. 1

All Miniature units will operate in any position. For orientation during environmental testing such as acceleration, etc. see Bulletin SM-2. Solder lug terminal and AN Connector Models are mounted by means of attached mounting plate. Octal Plug Models are secured in position by a mounting bracket.

All Miniature Agastat relays are adjustable in one of the following three methods:

- Hermetically sealed units are adjusted by removing the protecting cap nut from the top of the unit and with a screw driver, turning the exposed adjusting screw clockwise to increase the time, counter-clockwise to decrease. Adjustment should be gradual.
- 2. In the unsealed units the adjustment is made by removing the cover plate secured by four holding screws and turning the adjusting wire key (see
- Fig. 1) clockwise to increase time, counter-clockwise to decrease.

  3. An unsealed model is also available with an external knob adjustment. An indicating plate with the letters "O" through "E" is the guide to adjustment with zero time at "O" and maximum time at "E".

This unit is adjustable throughout one of the following timing ranges:
.030 sec. to \*3 sec. 2.0 sec to \*60 sec. 30 sec. to 180 sec.

.030 sec. to \*3 sec. 2.0 sec to \*60 sec. 75 sec. to \*10 sec. 10.0 sec. to \*120 sec.

\*This is minimum. Maximum may be as much as 50% higher.

## TERMINAL & CONTACT ARRANGEMENT

Miniature Agastat relays are available in two types of operation. 2112 Series provides time delay on energization and 2122 series provides time delay on de-energization.

## 2112 SERIES



Solder Lug Terminal



Octal Plus



"AN" Connector

Solder Lug



Octal Plug



"AN" Connector

## COIL DATA

	Nominal Operating Voltage	Current At Rated Voltage $\pm 10\%$	Resistance ±10%	TEMP. RISE	POWER INPUT
	12 VDC	.40 AMPS	30 OHMS	48°C	4.8 WATTS
	28 VDC	.21 AMPS	131 OHMS	55°C	6 WATTS
	48 VDC	.06 AMPS	765 OHMS	40°C	3 WATTS
	110 VDC	.023 AMPS	4945 OHMS	52°C	2.6 WATTS
	110 V 60 CPS	.080 AMPS	190 OHMS	51°C	4 WATTS
1	220 V 60 CPS	.045 AMPS	765 OHMS	45°C	4.5 WATTS

## CONTACT CAPACITY

	30 volts D.C.	110 volts D.C.	30 volts A.C. 400 CPS	110 volts A.C.	220 volts A.C.
†Inductive	2 Amps.	.75 Amps.	2 Amps.	3 Amps.	1.5 Amps.
Resistive	10 Amps.	1 Amp.	=	5 Amps.	2.5 Amps.

†Inductive and capactive loads should not have inrush currents that exceed 5 times normal operating load.