

The Miniature Agastat time/delay/relay is a precision instrument which has been tested for performance before leaving the factory. A few minutes' study of the information in this booklet will help you obtain maximum efficiency from the unit in your own 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.

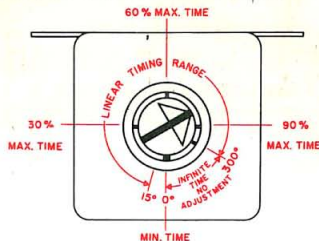


ELASTIC STOP NUT CORP. OF AMERICA
ELIZABETH DIVISION • ELIZABETH, N. J.

NEW

TIMING ADJUSTMENT INSTRUCTIONS for HERMETICALLY SEALED MINIATURE AGASTAT MODELS

The collar under the cap nut on these models is marked around the periphery as shown (in black) below:



The adjusting screw slot is marked with an arrowhead pointer which should be lined up with the timing marks as follows:

- The 0° mark at the front of the unit indicates absolute minimum time. The linear timing range begins at a point approximately 15° clockwise from this mark.
- Marks at 90°, 180°, and 270° indicate approximately 30%, 60% and 90% of the maximum time available. Maximum time will be obtained with the pointer at the 300° mark.
- The area between the 300° and the 0° mark is a "dead zone," where no timing adjustment is possible. ANY SETTING IN THIS AREA WILL RESULT IN INFINITE TIME DELAY.



Hermetically Sealed
Solder Lug Terminal

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

INSTALLATION INFORMATION



Unsealed
Octal Plug



Hermetically Sealed
"AN" Connector

MINIATURE
AGASTAT®

time/delay/relay

MOUNTING

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 by a mounting bracket.

ADJUSTMENT

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

1. Hermetically sealed units are adjusted by removing the protecting cap nut from the top of the unit and with a screwdriver, turning the exposed adjusting screw clockwise to increase the time, counter-clockwise to decrease. Adjustment should be gradual.



Fig. 1

2. In the unsealed units the adjustment is made by removing the cover plate secured by four holding screws and turning the adjusting 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".

All standard units are adjustable throughout one of the following linear timing ranges:

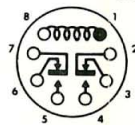
TIMING RANGES

.03 to	.1	1.0	to 30.0
.1	to .3	2.0	to 60.0
.15	to 1.0	5.0	to 120.0
.375	to 3.0	5.0	to 180.0
.750	to 10.0		

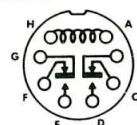
All units also provide non-linear low-time settings through the first 15° of adjustment. In addition, individual units may have maximum delays at 300° up to double those listed, maintaining linear adjustment throughout.

TERMINAL & CONTACT ARRANGEMENT

2112 SERIES Delay on Energization

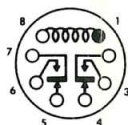


Solder Lug or Octal Plug

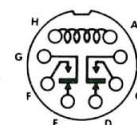


"AN" Connector

2122 SERIES Delay on Deenergization



Solder Lug or Octal Plug



"AN" Connector

COIL DATA

Nominal Operating Voltage	Current at Rated Voltage $\pm 10\%$	Resistance Ohms $\pm 10\%$	Temp. Rise $^{\circ}\text{C}$ $\pm 10\%$	Power Input Watts $\pm 10\%$	Pull-in Voltage†	Drop-out Voltage††
12 vdc	.400	30	48	4.8	10	1.2
28 vdc	.210	131	55	6.0	18	1.5
48 vdc	.063	765	28	2.9	38	3.8
110 vdc	.035	3200	37	3.8	88	7
115 v 400 cy	.038	2600	35	4.2	97	5
120 v 60 cy*	.088	190	51	3.7	102	45
120 v 60 cy**	.045	358	30	2.5	102	45
240 v 60 cy	.049	765	40	4.1	204	90

*2112 SERIES **2122 SERIES

†Maximum voltages required to operate specific units throughout the ambient range.

††Minimum voltages at which an energized unit returns to its deenergized position.

CONTACT CAPACITY

	30 Volts D.C.	110 volts D.C.	120 volts 400 cy	120 volts 60 cy	240 volts 60 cy
Inductive	2 Amps.	.75 Amps.	2 Amps.	3 Amps.	1.5 Amps.
Resistive	10 Amps.	1 Amp.	10 Amps.	10 Amps.	5 Amps.

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