WARRANTY

Limited Warranty: The Seller warrants all Dwyer instruments and equipment to be free from defects in workmanship or material under normal use and service for a period of one year from date of shipment. Liability under this warranty is limited to repair or replacement F.O.B. factory of any parts which prove to be defective within that time or repayment of the purchase price at the Seller's option provided the instruments have been returned, transportation prepaid, within one year from date of purchase. All technical advice, recommendations and services are based on technical data and information which the Seller believes to be reliable and are intended for use by persons having skill and knowledge of the business, at their own discretion. In no case is Seller liable beyond replacement of equipment F.O.B. factory or the full purchase price. This warranty does not apply if the maximum ratings label is removed or if the instrument or equipment is abused, altered, used at ratings above the maximum specified, or otherwise misused in any way.

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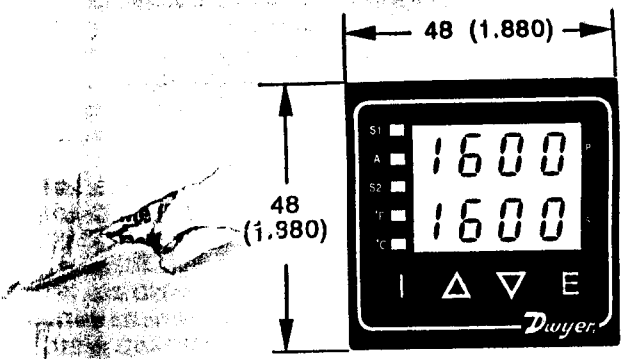
Buyer's Remedies: THE BUYER'S EXCLUSIVE AND SOLE REMEDY ON ACCOUNT OF OR IN RESPECT TO THE FURNISHING OF NON-CONFORMING OR DEFECTIVE MATERIAL SHALL BE TO SECURE REPLACEMENT THEREOF AS AFORESAID. THE SELLER SHALL NOT IN ANY EVENT BE LIABLE FOR THE COST OF ANY LABOR EXPENDED ON ANY SUCH MATERIAL OR FOR ANY SPECIAL DIRECT, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES TO ANYONE BY REASON OF THE FACT THAT IT SHALL HAVE BEEN NON-CONFORMING OF DEFECTIVE.

1557 / 1558

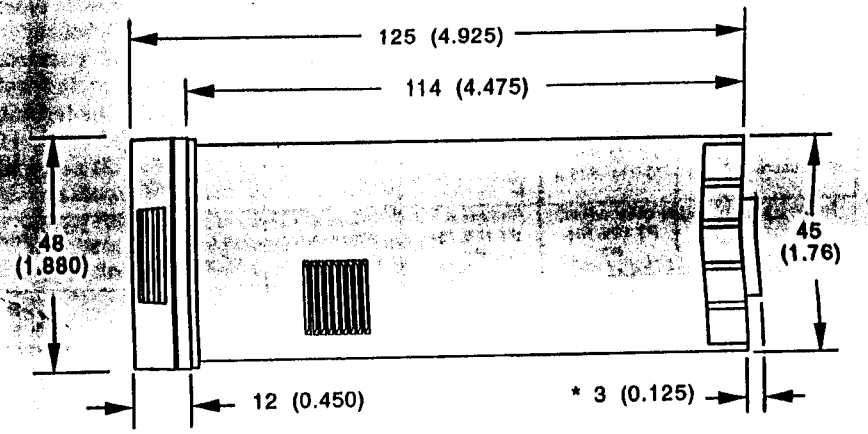
BULLETIN E-91

SERIES 1600 TEMPERATURE / PROCESS CONTROL

Specifications - Installation and Operating Instructions



MEETS NEMA 3R



PANEL CUTOUT FOR ALL MODELS 45 MM X 45 MM (1.77" X 1.77")
ALLOW FOR 13 MM (0.5") CLEARANCE AT THE REAR OF INSTRUMENT.
* PRESENT FOR ALL OUTPUTS OTHER THAN RELAY.

(ALL DIMENSIONS IN MM WITH INCHES IN PARENTHESIS)

Leverancier: Hifma

DWYER INSTRUMENTS, INC.
P.O. BOX 373 • MICHIGAN CITY, INDIANA 46360, U.S.A.

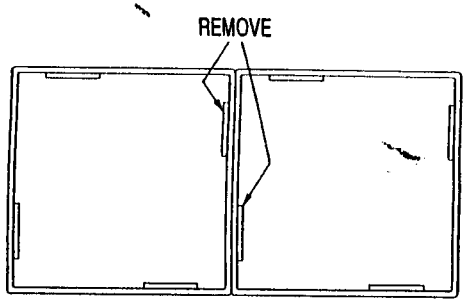
SPECIFICATIONS, Continued

Panel Cutout: 45 mm x 45 mm (1.775" x 1.775").
Depth Behind Mounting Surface: 115.3 mm (4.54").
Weight: 227 g (8 oz).
Warranty: 5 years.
Agency Approvals: UL and CSA pending.
Front Panel Rating (non-hazardous locations): Meets NEMA 2, 3R, and 12 ratings.

INSTALLATION

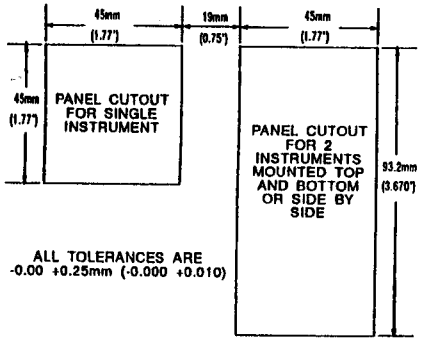
Mount the instrument in a location that will not be subject to excessive temperature, shock, or vibration. All models are designed for mounting in an enclosed panel.

Select the position desired for the instrument on the panel. If more than one instrument is required, only two units can be mounted closely together, either one above the other or side by side. When mounted together, the mounting collar will require modification by removing the inside tab from each collar.

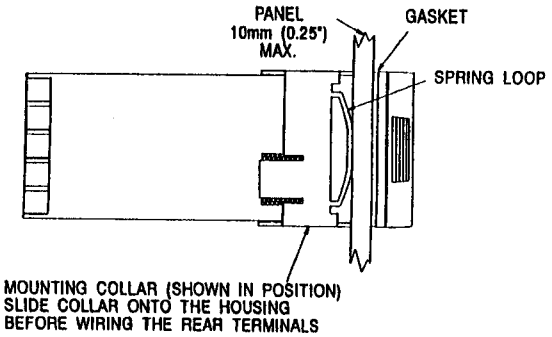


Prepare the panel by cutting and deburring the required opening.

From the front of the panel, slide the housing through the cut out. The housing gasket should be against the housing flange before installing.



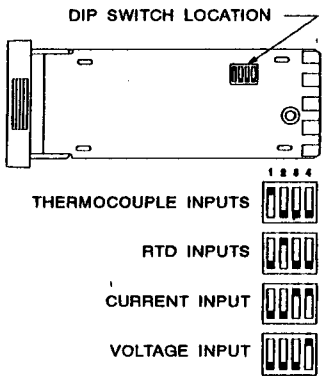
From the rear of the panel slide the mounting collar over the housing. Hold the housing with one hand and using the other hand, push the collar evenly against the panel until the spring loops are slightly compressed. The ratchets will hold the mounting collar and housing in place.



INPUT SELECTION

To change the input type, remove the instrument from its housing. Grasp the front bezel sides and pull forward to release it from the housing lock. Locate the dip switch on the right pcb. Determine the input type desired and change the dip switch setting as shown below.

After changing input selection with the DIP switches, be sure to change the InP menu item (page 13) in the Secure Menu or change the CnF1 menu item in the Configuration Menu (page 20).

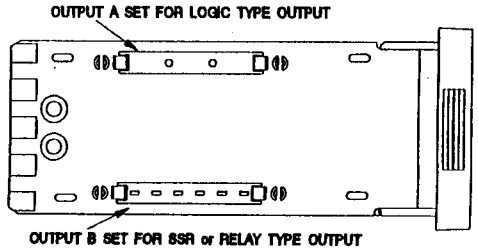


LOGIC JUMPER SELECTION

Instruments with **SSR** or **RELAY** type outputs can be changed to and from a **LOGIC** output in the field.

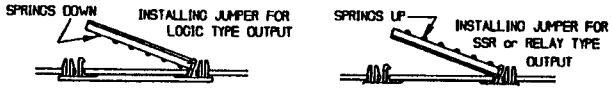
CAUTION: Damage to the instrument may result from an incorrectly installed jumper strip. Follow the instructions carefully.

1. Remove the instrument from its housing. Grasp the front bezel sides and pull forward to release it from the housing lock.
2. Locate the desired logic jumper strip on the left printed circuit board. The **OUTPUT A** jumper strip is always located near the top edge.



3. To remove the logic jumper strip, carefully insert a small flat blade screwdriver between the retaining clip and the jumper at one end of the jumper strip. Apply slight pressure to move the clip away from the jumper end until it is released, then lift it up and out of the clip.

4. To re-install the jumper strip, hold it with the spring contacts in the desired position. Face springs **up** for **SSR** or **RELAY** outputs, or face springs **down** for **LOGIC** outputs. Insert one end of the jumper strip under the retaining clip and press the other end down until the remaining clip engages the jumper.



5. To avoid any damage, recheck the jumper installation and the housing rear terminal panel output wiring.
6. Replace the instrument into its housing.

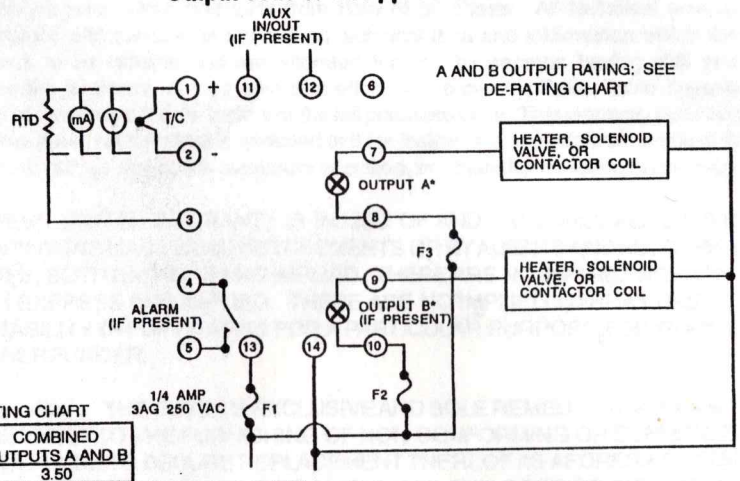
INPUT WIRING

Do not run thermocouple or other input wiring in the same conduit as power leads. Use only the type of thermocouple or RTD probe for which the control has been programmed. See the "Secure Menu" for input selection.

For thermocouple input always use extension leads of the same type designated for your thermocouple.

SOLID STATE RELAY OUTPUT WIRING

Output code 1. See pp. 19 & 20.



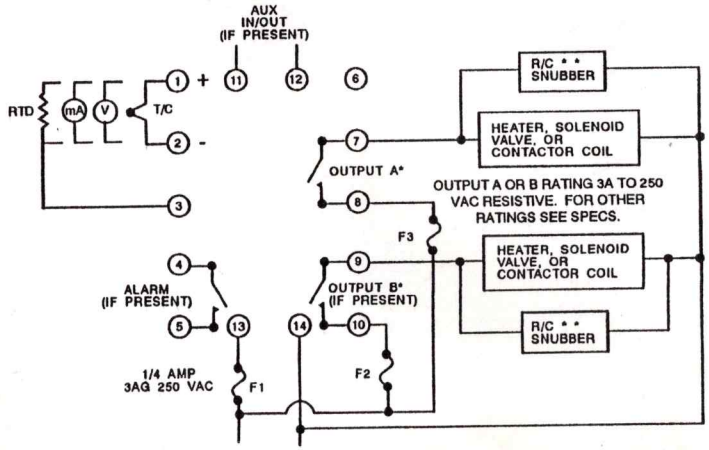
DERATING CHART

°C	°F	COMBINED OUTPUTS A AND B
25	77	3.50
35	95	2.75
45	113	2.00
55	131	1.25

F2 AND F3: TYPE AGC OR 3AG 4A MAX. LOW LAG FUSE RECOMMENDED

RELAY OUTPUT WIRING

Output code 3. See pp. 19 & 20.

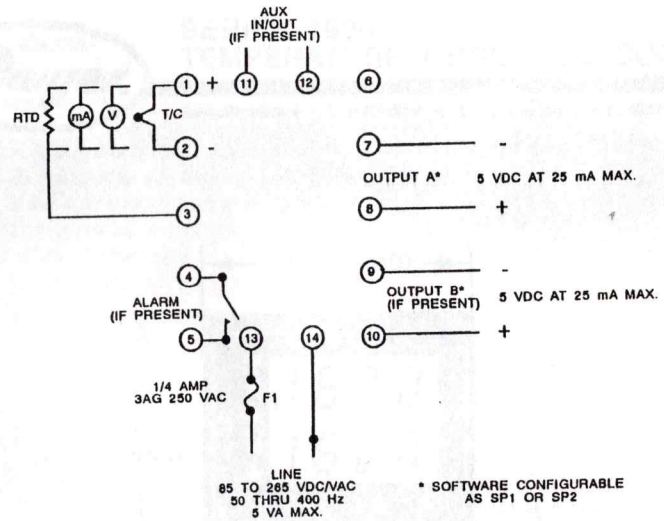


F2 AND F3: TYPE MDA OR 3AB 3.5A MEDIUM LAG FUSE RECOMMENDED

** R/C SNUBBER (DWYER P/N A-600) RECOMMENDED FOR SOLENOID OR CONTACTOR LOADS

LOGIC OUTPUT WIRING

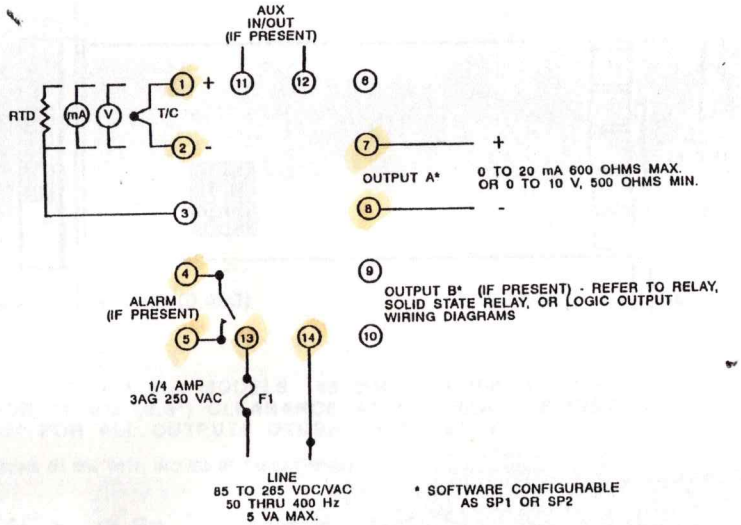
Output code 2 or 4. See pp. 19 & 20.



CAUTION: OUTPUT MUST NOT SHARE A COMMON GROUND WITH INPUT.

CURRENT OR VOLTAGE OUTPUT WIRING

Output code 5 or 6. See pp. 19 & 20.



CAUTION: OUTPUT MUST NOT SHARE A COMMON GROUND WITH INPUT.