


- \* DIRECT INDICATION OF PROCESS, SET POINT & RESET POINT
- \* LARGE BACKLIT DISPLAY
- \* 10 AMP SPDT CONTACTS
- \* 24 VDC POWER FOR 2 WIRE TRANSMITTERS

 **UL US LISTED 51JB**  
INDUSTRIAL CONTROL EQUIPMENT



### GENERAL:

Control of pumps, motors, solenoids, etc. is provided via DEVAR'S Model 332 Alarm/ Controller. This highly accurate, multi-purpose instrument provides a digital readout of the measured variable (0/100% or in engineering units), contains two separate alarm set and reset trip adjustments, has a highly rated 10 amp S.P.D.T. relay output plus simplicity of adjustment. The set and reset trip points are read directly via the digital display.

### ALARM ACTION:

Used as a simple alarm the 332 monitors a single voltage or current input signal and compares it to the trip point setting. When the input signal reaches this trip setting an alarm is initiated by action of the internal relay. This action is set in the fail safe mode, (relay normally energized, de-energizes on alarm or on loss of power).

Two independent output channels (S.P.D.T.) are provided, both rated at 10 amps. Each channel may be set to alarm as a high (signal increasing) or low (signal decreasing) alarm via internal DIP switch settings.

Upon exceeding the preset trip point, a bright red L.E.D. indicates channel A or B in alarm. At the same time the back-lit digital display begins to flash further alerting the observer to the alarm condition. The flashing display may be disabled.

A special feature of the 332 allows the user to set not only the trip point, but also the reset point (many alarm devices limit the user to a fixed 1-2% internal reset "deadband" setting). The 332's set and reset points may be set at any point between -5% and 105% of the calibrated input range. This feature allows use of the 332 as a simple on/off controller.

**SPECIFICATIONS:**

**INPUT:**

- 1 0/5mA (Ri=200 OHMS)
- 2 1/5mA (Ri=200 OHMS)
- 3 4/20 mA (Ri=50 OHMS)
- 4 10/50 mA (Ri=20 OHMS)
- 5 0/10 VDC (Ri>10 MEG)
- 6 0/5 VDC (Ri>10 MEG)
- 7 0/1 mA (Ri=1K OHMS)
- 8 0/1 VDC (Ri>10 MEG)
- 9 1/5 VDC (Ri>10 MEG)
- X OTHER

**OUTPUT:**

TWO INDEPENDENTLY SETTABLE  
SPDT, EPOXY SEALED RELAYS

**CONTACT RATING:**

10 AMPS, 240 VAC RESISTIVE, 1 PHASE  
8 AMPS, 24 VDC RESISTIVE  
1/3 HP, 120 VAC (7.2 full load amps)  
1/2 HP, 240 VAC (4.9 full load amps)  
MECHANICAL : 20 MILLION OPERATIONS  
ELECTRICAL : 100,000 OPERATIONS, 8 AMPS, 240 VAC RES.  
MAX SWITCHED POWER: 200 W DC, 2000 VA AC

**DISPLAY TYPE:**

7 SEGMENT 3.5 DIGIT BACK LIT LCD,  
RED DIGITS ON BLACK BACKGROUND  
CHARACTER HEIGHT: 0.5 IN  
RANGE DISPLAY: -1999 TO +1999

**INDICATION:**

INPUT: 0 TO 100% STANDARD  
SET POINT: -5 TO 105%  
RESET POINTS: -5 TO 105%  
NON-STD RANGE BETWEEN +/-1999 COUNTS  
FLASHES WHEN IN ALARM

**POWER:**

115 VAC, 50/60 HZ, 6 VA  
OPTION E71: 230 VAC, 50/60 HZ, 6 VA  
OPTION E92: 24/28 VDC, 90 mA (nonisolated)

**PERFORMANCE:**

REPEATABILITY: 0.1% SPAN  
RESOLUTION TRIP ADJUST: 0.1% SPAN  
DISPLAY ACCURACY: +/-2 COUNTS  
OPERATING TEMP. ALARM: -10 TO +70°C  
OPERATING TEMP DISPLAY: 0 TO 60°C  
STORAGE TEMPERATURE: -20 TO 80°C  
TEMPERATURE EFFECT: .018%/°C MAX

**ENCLOSURE:**

PANELMOUNT- SPECIFY 332-P  
WALL MOUNT- SPECIFY 332-W  
GRAY BAKED ENAMEL OVER ZINC PLATED STEEL

**WEIGHT:**

2.3 LBS.

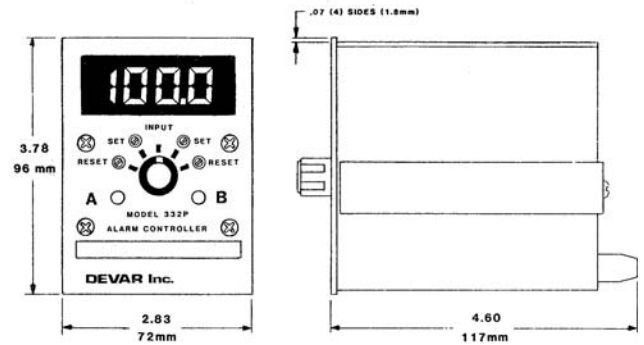
**OPTIONS:**

- E30 Single Channel
- R Reverse relay action (resets on loss of power)
- N4 NEMA 4X Enclosure (332 W only)

**APPLICATION NOTE: ON-OFF CONTROL**

Level control in a tank may be provided by the 332. Example: Set the 332 for "LOW" alarm action (via internal DIP switch). Adjust the low set trip point to 50% and the reset trip point to 75%. What will happen? The 332 will monitor the calibrated input signal, readable via the digital display. When this signal drops below 50%, the channel "A" contact will (change state), activating a pump motor, valve etc. to enable filling of the tank. As the level increases it is monitored by reading the display, however no output action occurs until the signal reaches the 75% reset point. Upon reaching this setting the relay will once again reset to its original state. Note: The channel "B" contact may be used as an alarm or to control a second device.

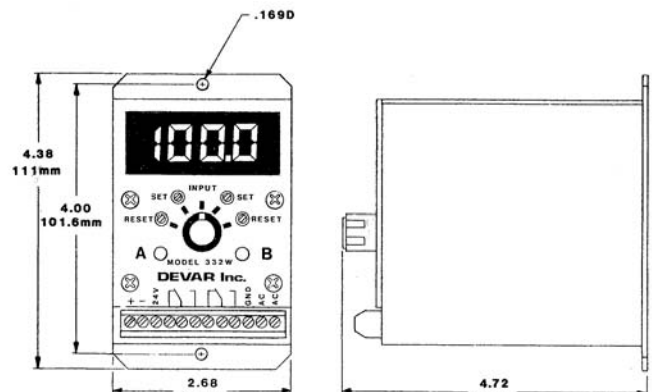
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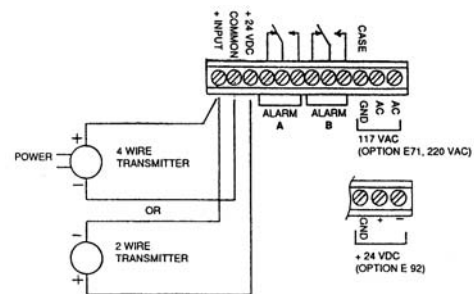
PANEL CUTOUT

3.67 (93.2mm) X 2.71 (68.6 mm)  
TOLERANCE ±.015 (±.38mm)

**GENERAL DIMENSIONS 332P**



**GENERAL DIMENSIONS 332W**



**FIELD WIRING**

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