# **DEVAR Inc.**

- \* ALTERNATION, LEAD & LAG
- \* SIMPLE ROTARY SWITCH CONFIGURATION SELECT, SET & RESET
- \* 24 VDC POWER FOR TWO-WIRE TRANSMITTERS
- \*10 AMP SPDT RELAYS
- \* PANEL or WALL MOUNTING
- \* 117 VAC POWER





### **GENERAL DESCRIPTION**

The Model 332-AP is specifically designed for pump control applications. The 332-AP has two channels, one for each pump, and provides a 3.5 digit bright red LED readout of the measured variable. The readout may be 0/100% or in engineering units as specified.

#### **CONTROL ACTION**

Each channel provides independently adjustable trip (pump-on) and reset (pump-off) points. The trip action (high or low) is preset for each of the two channels by the positioning of a dip switch. For Pump On applications, both channels are set to trip low and conversely for Pump Down applications both channels are set to trip high. When the input level crosses the first trip point, one of the two output relays will energize and the normally open contact will close, turning the pump on.

When the input level crosses the first trip point, one of the two output relays will energize and the normally open contact will close, turning the pump on. A bright red LED indicates which pump has been activated. The output relays will alternate each time the trip level is crossed. This allows the work load to be shared between the two pumps, with only one pump working at a time. Should the input level cross the second trip point, then the pump that is not operating will be called into service and both pumps will operate simultaneously until the first reset point is reached.

To prevent the pumps from running dry the relay coils are energized while in the tripped (pump on) state. If the 332-AP loses power the relay contacts will go into the (pump-off) position.

#### **SPECIFICATIONS**

INPUT: 4 to 20 mA (into 50 Ohms)

24 VDC available to power field Transmitter

**OUTPUT:** (2) 10 Amp SPDT Relays UL/CUL Contact Rating

10 Amps, 240 VAC, 1 pH, Resistive

8 Amps, 24 VDC, Resistive 1/3 HP, 120 VAC, 7.2 FLA 1/2 HP, 240 VAC, 4.9 FLA

**MECHANICAL LIFE: 20 Million Operations** 

ELECTRICAL LIFE: 100,000 Operations, 8 Amps,

240 VAC, 24 VDC Resistive

MAX. SWITCHED POWER: 200 W DC, 2000 VA AC

**DISPLAY TYPE:** 7 Segment 3.5 Digit backlit LCD,

Red Digits on Black Character Height: 0.5 in. Range: -1999 to +1999 0 to 100% Standard Flashes when pumping Accuracy: ± 2 Counts

INDICATION: Level 0/100% Standard

Custom: -1999 to +1999 Specify Eng. Units

Set Point: -5 to 105% Reset Point: -5 to 105%

POWER: 115 VAC, 50/60 Hz, 6 VA

Option E71: 230 VAC, 50/60 Hz, 6 VA

Option E92: 24/28 VDC, 90 mA, non-isolated

#### **PERFORMANCE:**

Repeatability: 0.1% Span

Resolution Trip Adjust: 0.1% Span Operating Temp. Alarm: -10 to +70°C

Display: 0 to 60°C

Storage Temperature: -20 to +80°C Temperature Effect: 0.018%/°C Max.

APPROVALS: UL File E229432

#### **ENCLOSURE:**

Panel Mount - Specify 332P-AP Wall Mount - Specify 332W-AP

Gray Baked Enamel over Zinc Plated Steel

WEIGHT: 2.3 lbs.

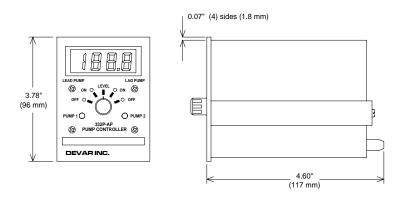
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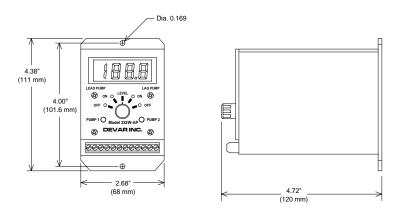
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TOLL FREE: (800) 566-6822

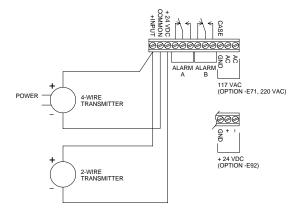
www.devarinc.com



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FIELD WIRING