# **DEVAR Inc.**

# PUMP CONTROLLER MODEL 3020

- \* UP TO 4 PUMP CONTROLS
  WITH OR WITHOUT
  ALTERNATION
- \* 14 SEGMENT L.E.D. DISPLAY FOR TRUE ALPHANUMERICS
- \* 7.5 AMP S.P.D.T. CONTROL CONTACTS
- \* 4 TO 20mA, ANALOG RETRANSMISSION AVAILABLE
- \* 17 POINT STRAPPING TABLE





# \* LATCHING OR NON-LATCHING RELAYS

# **GENERAL DESCRIPTION**

Imagine with a simple touch of a button you'll have this controller doing what you want it to do. *Turn a pump on! Turn a pump off! Sound an alarm!* All easily done by following the "plain English " prompts.

The stand alone Model 3020 Pump Controller accepts all continuous analog level inputs. To control level, simply enter the input range, the units of measurement and the pump control points. If the well or tank is odd shaped, the response of the transducer can be corrected to fit the shape, using the 17 point linearization feature.

An isolated 24VDC power output is provided to power the external level trans-mitter.

# Other selectable features include:

- \* Up to 4 sets of on/off control points
- \* The ability to designate each control point as a pump or an alarm
- \* Alternation of pumps (lead/lag)
- \* Flashing of display or sounding of horn during pumping or alarm
- \* Security code lockout --
- \* Sensor failure detection
- \* 0/240 Second trip & reset delay

The 3020 is housed in an 1/8 DIN aluminum housing with a splash proof front panel. The six digit 0.54 inch high LED display provides easy viewing under all ambient light conditions and it's 14 segment alphanumeric display provides plain English prompting during configuration. Four active characters display process values between +9999 and -1999. The fourth and fifth characters display engineering units (e.g. FT., IN.).

### SPECIFICATIONS MODEL 3020

0/20mA, 4/20mA, 0/5V, 1/5V, 0/10V, or -10/10V selected from keypad

Open Input Indication:

Indication goes to zero input (Note: for 4/20 mA, zero

input will display -25% of span)

Impedance:

Voltage input: > 1 Megohms Current input: 10 Ohms

**PERFORMANCE** 

Accuracy: ±0.01% of input range

A/D Resolution: 20 bits

Display Resolution: +9999 to -1999 in one count steps

Common Mode Rejection: Greater than 120 dB at 50/60 Hz

Normal Mode Rejection: Greater than 64 dB at 50/60 Hz

Operating Temperature: 0 to 70°C

Temperature Effect Zero: ±0.01% of reading per °C

Temperature Effect Span: ±0.01% of reading per °C

**DISPLAY** 

Six bright red LED, 0.54 inch high, 14 segment alphanumeric characters. Four characters are used for process indication, and two characters for dummy zeros or process descriptors. Display range is +9999 to -1999 counts. Display provides plain English prompts during configuration.

**OPTIONS** 

-420 4 to 20mA Analog Retransmission -020 0 to 20mA Analog Retransmission -D232

RS-232 Retransmission **RS-485 Retransmission** -D485 -005 0 to 5 VDC Retransmission -010 0 to 10 VDC Retransmission 1 to 5 VDC Retransmission -105

-NE4C NEMA 4 Cover

-NE4S NEMA 4X Enclosure (1 Unit) -NE4D NEMA 4X Enclosure (2 Units) **Explosion Proof Housing** -NE7

-M36G 2" Pipe Mount Kit (NE4S, NE4D, NE7)

Note: Analog retransmission ranges can be recalibrated in the field.

#### **ENCLOSURE**

1/8 DIN, polycarbonate bezel, aluminum body splash proof front panel

#### **ALARMS**

Status Indication: Front panel LED's, flashing display, horn; flashing display and horn active or inactive, menu selectable

Points: 4 independently set, trip and reset points (100% hysteresis); Alarm action high or low determined by respective value of trip and reset points

Latching: All alarms can be latching or non latching, menu selectable, reset from keypad

Audible Alarm: An audible alarm can be enabled or disabled for each channel during configuration; Options include: 1. Always sound while in alarm, 2. Sounds while in alarm but can be reset from keypad, 3. Sounds during and continues after an alarm condition, must be reset from keypad, 4. Sounds going into or coming out of alarm, continues sounding until acknowledged

#### Contacts:

SPDT (form C) relays; 1 phase; 7.5 amps at 240 VAC / 24 VDC; 1/3HP at 120VAC 7.2FLA; 1/2HP at 240 VAC, 4.9FLA

#### **POWER / VOLTAGE**

Connections: 15 position, plug-in terminal block for power and relay contacts; 9 position, plug-in terminal block for input, output and excitation voltage; 24 to 14 AWG

Excitation Voltage: Isolated 24 VDC at 100mA (factory set);

Current limit 150mA; isolation strength: 150 VAC

Power Requirement: 90 to 140 VAC, 50/60 Hz, 10VA

## **SECURITY PASSWORD**

6 digit security password to enter configuration menu, user selectable, enabled or disabled by internal switch setting

**WARRANTY:** 2 YEARS

Made in USA

### ORDERING INFORMATION

MODEL NO.

3020-4 indicator / controller with 4 alarms

-XXX select desired options

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