

# **ESSEX** ENGINEERING CORPORATION

## MODEL 2402 PUMP STATUS MODULE

.... Provides status indication and control of pumps, blowers and other types of motors.

## **FEATURES**

- Bright, long life LED'S give reliable indication of status and monitoring of control functions.
- HAND-OFF-AUTOMATIC selector switches provide automatic and manual override capability.
- Provides visual indication of actual motor start or stop.
- 120VAC/24VD/12VDC power source.
- Auxiliary output contacts on all front panel switches provide remote monitoring or special "system" interlocks.

### DESCRIPTION

The Essex 2402 Pump Status Module operates in the following manner:

Assuming the pump is in the off condition, the green OFF indicator is lit. If the HAND-OFF-AUTO pushbuttons are indexed to AUTO, and an external contact closure occurs which enables the pump or motor to start, an amber CALL indicator will light. Once the pump starts, an auxiliary contact on the motor starter, pressure switch, flow switch, etc. sends a "report back" signal to the 2402 causing the red RUN light to come on and the green OFF indicator and amber CALL indicator to go out.

If the pump fails to start, or fails to stop within a 0.2 to 60 second field adjustable time, the red FAIL lamp will flash, indicating trouble and an optional external horn will sound. Depressing the ALM/ SIL button will silence the horn and cause the FAIL indicator to light steadily.

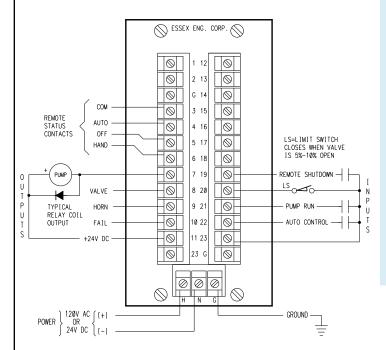
If the HAND-OFF-AUTO pushbuttons are indexed to HAND, an amber CALL indicator will light and the unit will operate as described above.



Auxiliary contacts are included on the HAND-OFF-AUTO pushbuttons to provide remote monitoring of these switches, or to provide the capability for external interlocking. Field selectable power up or control input timing is standard. This provides staggered starting of unit after a power failure or delayed starting each time the unit is activated. All indicators light for approximately 1 second on power up or can be checked at any time using ALM/SIL button.

All of the switches and indicators on the instrument face are sealed for ease of cleaning and the prevention of switch contamination from grease, dirt, etc.. Units are provided with a custom engraved label identifying the use of the Pump Status Module.

## **ELECTRICAL CONNECTIONS**



## **MODEL 2402 SPECIFICATIONS**

AMBIENT OPERATING TEMPERATURE RANGE 0 to 40 °C

#### **POWER INPUT**

120 VAC ± 10% 15W max. 24 VDC ± 10% 650 mADC max. 12 VDC ± 10% 1200 mADC max.

#### **CONTROL INPUTS**

Contact closure or NPN transistor; 10 mADC max. @ 24 VDC

#### **CONTROL OUTPUTS**

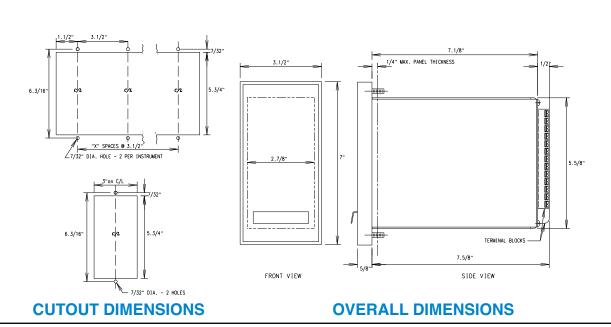
NPN solid state output; 50 VDC @ 60 mADC max. per point; 1 output for each pump starter, valve operator, fail alarm, and horn

#### **INDICATORS**

Four front panel LED indicators display status and control functions of unit

#### **SWITCHES**

Sealed contact inputs one each for AUTO, OFF, HAND and  $\ensuremath{\mathsf{ALM/SIL}}$ 



## REPRESENTED BY



## **ESSEX ENGINEERING CORPORATION**

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