

ESSEX ENGINEERING CORPORATION

MODEL 2024 ELECTRONIC ALTERNATOR

.... Provides a reliable, flexible system of starting, stopping, sequencing of pumps, blowers, & other devices.

FEATURES

- Modular Construction . . . Control/Display Circuit board is easily replaced
- Alarm Silence circuitry for Audible Alarms
- All functions provided with momentary test switches
- Built in time delay prevents simultaneous lead/lag unit operation on power-up
- Lead/lag unit preference easily switch selected
- Level signals are indicated by L.E.D. lamps

DESCRIPTION

The Essex Engineering Model 2024 Electronic Alternator is a versatile, reliable system for use in starting, stopping and sequencing pumps, blowers, or other equipment to be cycled. For instance, as the level in a basin or other container changes, the level sensing switches monitor these changes and transmit a signal to the electronic alternator. The alternator, upon receiving the proper signal, will either start or stop the pumps in proper sequence.

There are separate turn-on and turn-off points for control, and for high level alarm. Isolated output contacts are provided for pump operation and alarms. The standard unit will operate from a 4 or 5 level point system, and has lock-in or non-lock-in sequence for lag level which can be field modified.



High level alarm point can be field set for lock-in, manual reset, or automatic reset. Relay K4 can follow K3 for DPDT switch operation, or be used as an audible device relay, dropping out when Alarm Silence pushbutton is added.

The electronic alternator also has a six second time delay to prevent the lag pump from starting simultaneously with the lead pump after a power failure, thus protecting an emergency generator from high inrush starting current requirements.

MODEL 2024 SPECIFICATIONS AMBIENT OPERATING TEMPERATURE RANGE 0 to 40 °C **POWER INPUT** 120 VAC ± 10% 10W Max. 12 VDC ± 10% 450 mADC **CONTACT INPUTS** 12 VDC @ 10 mA Max. **CONTACT OUTPUTS** 10A resistive @ 240 VAC TIME DELAYS Approximately 6 seconds 3/16" (4.76) DIA.-4 HOLES - \oplus IF THIS LEVEL IS REQUIRED, MOVE JUMPER ON ALTERNATOR CIRCUIT BOARD 1/8A HI-ALM POWER PMP 1 ON PMP 2 ON ALM 1 ON POWER START LG T.D. LEVEL PWRÚP 120VAC POWER ALM 2 ON STOP LC 12VDC 1 LOW STOP С START LD PW/0 2 СОМ TOP ALL 3 STAR PWW N/O ALARM RESET/OFF 4 STOP 152 1/2"(1 ON TEST 5 СОМ 6 START ₩ N/0 ₩ N/0 ALARM SIL. 10 N/C ALARM SILENCE AL TERNATE \bigcirc ESSEX ENGINEERING CORPORATION $\widehat{\infty}$ (7 (9 5 \oplus \oplus (4) 5 (2) 1"(25.4) 3.1/2"(88.9) 35) . 6 5.1/2"(139.7) NORMALLY OPEN ISOLATED CONTACT SUCH AS FLOAT SWITCH, PRESSURE SWITCH ETC. DIMENSIONS IN INCHES () DIMENSIONS IN mm MAXIMUM COMPONENT HEIGHT: 3" (76.2) LEVEL DEVICES MUST BE ARRANGED IN ASSENDING ORDER, AS INDICATED, FOR THE ALTERNATOR TO OPERATE PROPERLY **ELECTRICAL CONNECTIONS - OVERALL DIMENSIONS**

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