## **ECU**®

# Fault Expander Manual

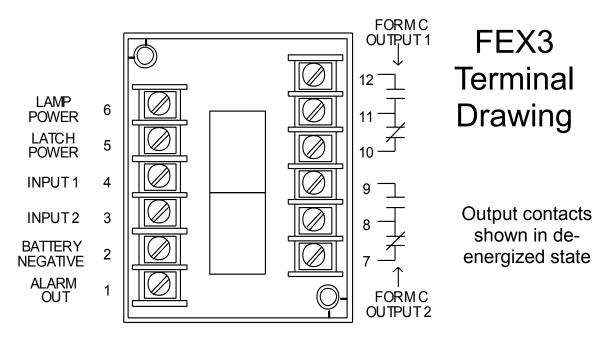
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#### **Unit Review**



The FEX3 is a highly flexible design component. It was originally developed for expansion of the ECU-100 product. Later it was adapted to the 99 series engine controls. It can be used with or without engine controls for general purpose use.

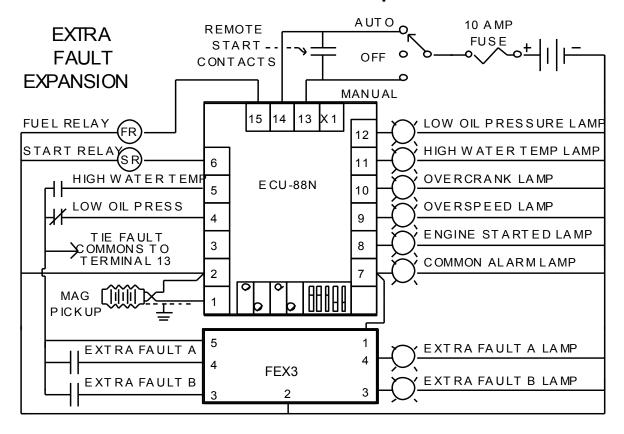
The fundamental basic operation can be just as a module with two separate relays. Use just terminals 2,3,4 on input and the relays outputs can be used as isolation contacts.

Apply a latch power voltage two terminal 5 and the relays will hold state After a positive voltage is applied. You must remove the input signal and the latch power voltage to clear the relay.

Alarm out will output if either terminals 3 or 4 have voltage on them.

Terminal 6 should not be used for any application.

### FEX3 Example



#### Basic FEX3 operation

The FEX3 is shown here in a typical application. The unit is monitoring two extra faults. All faults must have their common tied to terminal 13 of the engine control in this example since this is the only way to clear the faults. If you tie the commons to battery positive the unit will never reset after a fault condition.

Notice that the output alarm pin terminal 1 is being fed into terminal 7 of the engine control. This allows the engine control to go into a shutdown mode in the event of a fault.

The output contacts were not used in this case since the lamps are being fed from the input terminals 4 and 5. These terminals go high and stay high until the input and latch power are removed.