O & M Manual IM05805008K Effective: March 2011

EATON DFDAP-M / FDAP-M
Remote Alarm Panels

Powering Business Worldwide

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INSTALLATION & MAINTENANCE MANUAL FOR REMOTE ALARM PANELS

In order to familiarize yourself with the Remote Alarm Panel, please read the instruction manual thoroughly and carefully. Retain the manual for future reference.

1. Installation and Mounting of the Controller

Carefully unpack the controller and inspect thoroughly.

The controller is not free standing and must be bolted securely to a wall. For dimensional and weight data please refer to the respective data sheets for the Remote Alarm Panels.

Figure #1 - Electric Remote Alarm Panel
Figure #2 - Diesel Remote Alarm Panel

2. Electrical Connections

All electrical connections should meet national and local electrical codes and standards.

The controller should be located or so protected that they will not be damaged by water escaping from pumps or pump connections. Current carrying parts of controllers shall be a minimum of 12 inches (305 mm) above the floor level.

- Prior to starting, verify all data on the nameplate such as, catalog number and AC line voltage.

- Inspect all electrical connections, components and wiring for any visible damage and correct as necessary. Ensure that all electrical connections are tightened before energizing.

- Install necessary conduit using proper methods and tools.

- Incoming Normal power and Supervisory (backup) power connections are clearly marked L and N and are located on the upper right side of the microprocessor board.

2.1 Electrical Checkout Instructions (For Use with Eaton Remote Alarm Panels)

WARNING:The following procedures should be carried out by a qualified electrician familiar with the electrical safety procedures associated with this product and its associated equipment.

2.2 Electric Remote Alarm Panels (Full Service) – For Electrical Schematic Refer to Figure #3

Note: The alarm buzzer can be silenced by pressing the 'Silence Alarm' button on the front of the controller.

2.2. - Turn power on to the Fire Pump Controller and to the Remote Alarm Panel
- In the Fire Pump Controller press the 'Local Start' pushbutton, the controller will start
- The 'Pump Running' LED should illuminate and the alarm will sound on the Alarm Panel
- Press the 'Stop' pushbutton on the front of the fire pump controller

2.2. - Move the disconnect handle on the Fire Pump Controller to the 'OFF' Position
- The 'Common Alarm' and 'Phase Failure' LED's should illuminate and the alarm will sound on the Alarm Panel
- Move the disconnect handle back to the 'ON' Position

2.2.3 - In the menu under the Alarm category, change the phase rotation to the opposite of what it is currently set for.
- The 'Common Alarm' and 'Phase Reversal' LED's should illuminate and the alarm will sound on the Alarm Panel
- Return the menu setting to the correct rotation.

2.3 Diesel Remote Alarm Panels – For Electrical Schematic Refer to Figure #4

Note: The alarm buzzer can be silenced by pressing the 'Silence Alarm' button on the front of the controller.

2.3.1 - Turn power on to the Fire Pump Controller and to the Remote Alarm Panel
- Place the controller in the 'AUTO' mode by turning the Main Switch to “AUTO”
- Start the controller by pushing the “Engine Test" button on the Diesel controller membrane / keypad, then push the “Acknowledge” button.
- The 'Engine Running' light should illuminate and the alarm will sound on the alarm panel
- Place the controller in the 'OFF' mode by turning the Main Switch to “OFF”
- The 'Not in Auto Mode' LED will illuminate and the alarm will sound on the alarm panel

2.3.2 - Place the controller in the 'AUTO' mode by turning the Main Switch to “AUTO”
- Start the controller by pushing the “Engine Test" button on the Diesel controller membrane / keypad, then push the “Acknowledge” button.
- Place a jumper between Terminal #38 & #11 in the Fire Pump Controller (Low Fuel)
- The 'Common Alarm’ and ‘Low Fuel’ LED’s should illuminate and the alarm will sound on the alarm panel
- Place the controller in the 'OFF' mode by turning the Main Switch to “OFF”

2.4 Operation

2.4.1 Lamp Test Button
Each remote alarm panel is equipped with a Lamp Test button that fully tests all LED's when pressed. Operating the lamp test button will not change the state of the internal output relays

2.4.2 Normal and Supervisory (backup) Supply Voltage
The remote alarm panels will accept both 120 volt 50/60Hz and 240 volt 50/60Hz power supply on either of the normal and supervisory (backup) source inputs. If the normal source of supply is lost, the panel will automatically switch to the supervisory (backup) source. Both the normal and supervisory (backup) sources must be independent of each other.

2.4.3 Audible Alarm
When any alarm conditions are present, the audible alarm will sound. It will continue to sound until either the silence alarm button is pressed, or the alarm condition is satisfied.

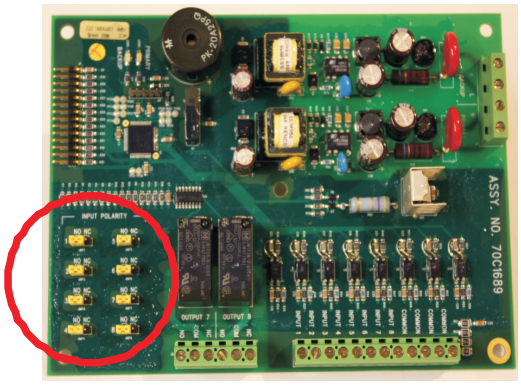
2.4.4 Silence Alarm Button
An audible alarm silencing button is provided that silences all active alarms when pressed. Pressing the button has no effect on the associated alarm LED(s). Should a second alarm condition occur after the silence button has been pressed, the audible alarm will re-sound until the silence button is pressed again, or the alarm condition has been satisfied.

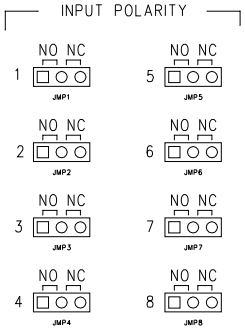
2.4.5 Normal Power ON LED
The normal power ON LED indicates when normal power is available and will turn off when the controller switches to the supervisory (backup) power source. An audible alarm will sound when normal power is not available and will remain ON until normal power is restored, or the silence pushbutton is pressed.

2.4.6 LED Visual Indicators
The FDAP-M electric remote alarm panel has four LED visual indicators to indicate Pump Running, Phase Failure, Common Alarm and Phase Reversal. The DFDAP-M diesel remote alarm panel also has four LED visual indicators that indicate Not in AUTO Mode, Engine Running, Common Alarm and Low Fuel.

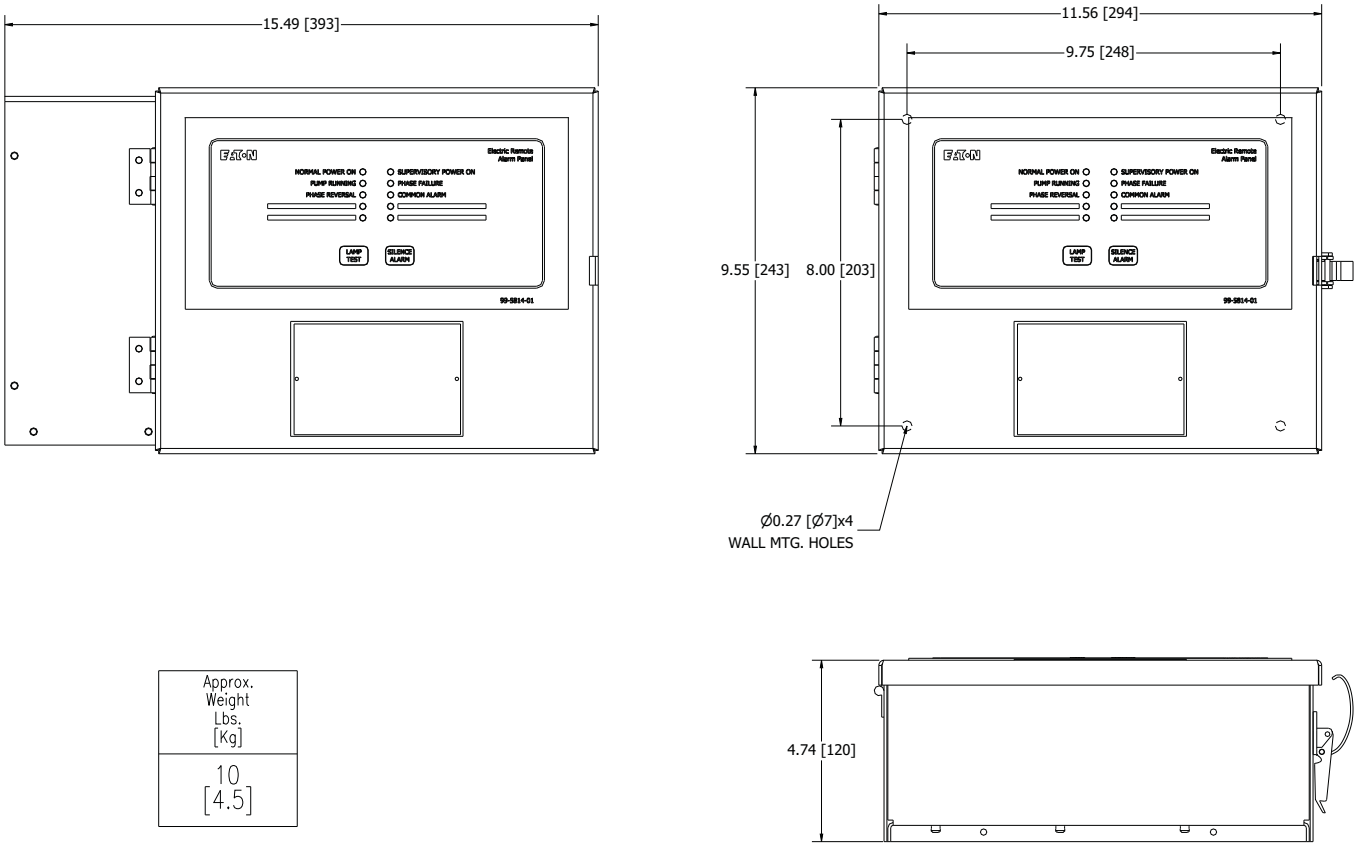
2.4.7 Output Relays
Two Form-C alarm output relays can be programmed to indicate specific alarm conditions.
The relays are printed circuit board style mounted on the alarm panel main circuit board. They are rated for 8 amps / 250VAC. They are de-energized under normal conditions regardless of input status selected.

2.4.8 Alarm Inputs
Each controller is equipped with eight user selectable alarm inputs. Each can be selected as normally open (N.O.) or normally closed (N.C.) by the use of jumpers on the microprocessor board.





Electrical Remote Alarm Panel - FDAP-M



Approx. Weight Lbs. [Kg]
10 [4.5]

NOTE:
1. ALL ENCLOSURES FINISHED IN FIRE PUMP RED
2. CABLE ENTRANCE EITHER TOP OR BOTTOM
3. STANDARD ENCLOSURE TYPE NEMA 1

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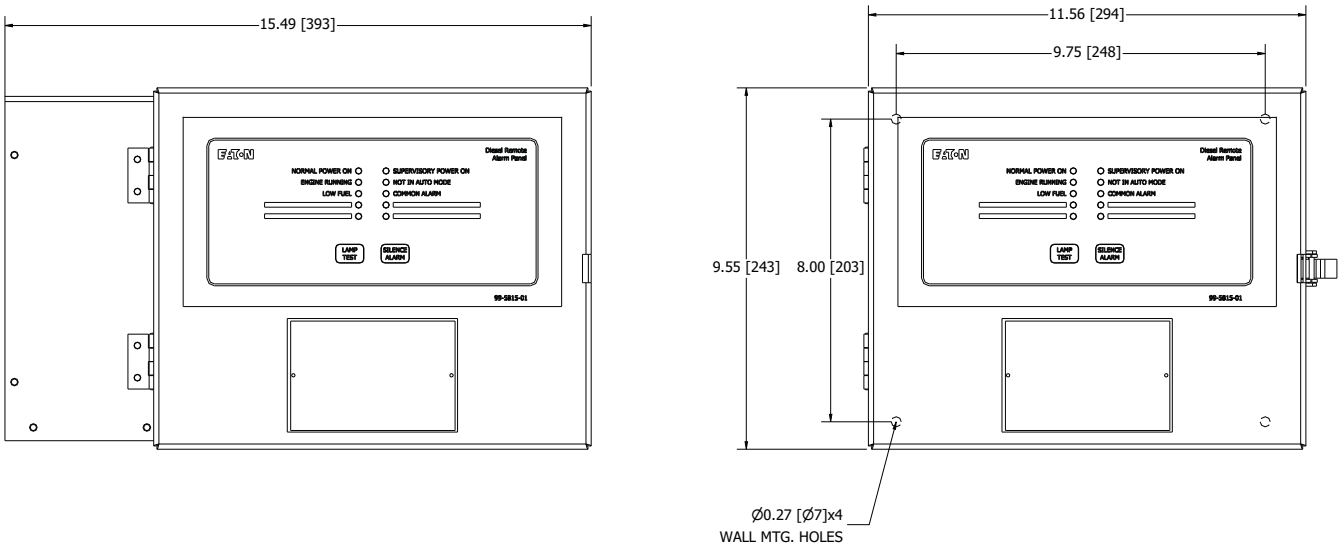
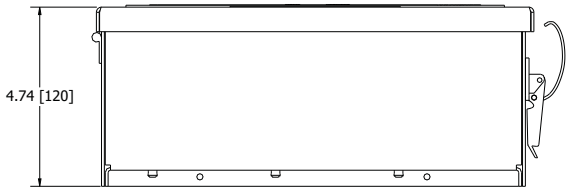
FIGURE 1

Diesel Engine Remote Alarm Panel - DFDAP-M



Approx. Weight Lbs. [Kg]
10 [4.5]



NOTE:
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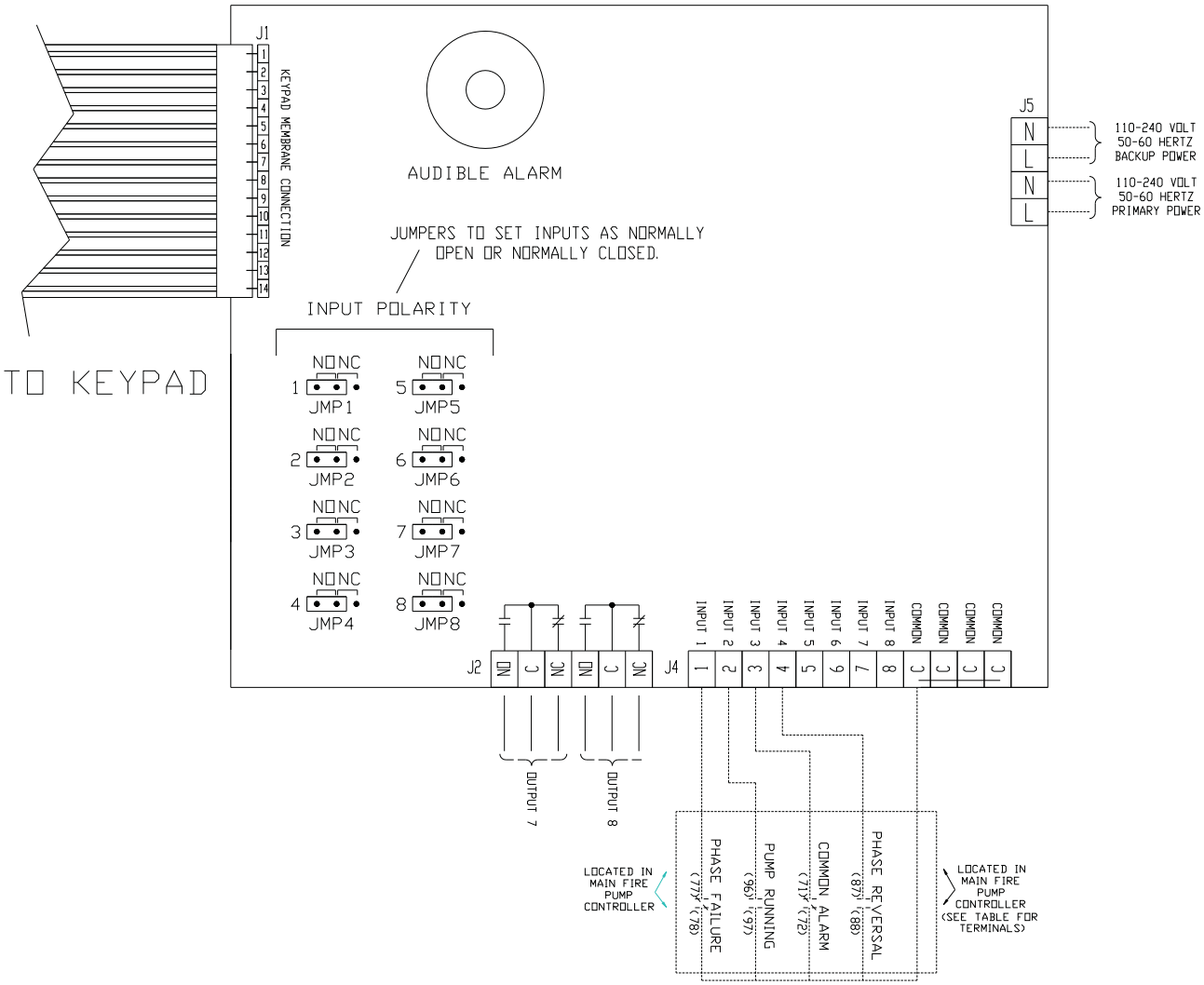
FIGURE 2

Wiring Schematic - Electric Remote Alarm Panel - FDAP-M



	LMR PLUS
PHASE FAILURE	77 & 78
PUMP RUNNING	96 & 97
COMMON ALARM	71 & 72
PHASE REVERSAL	87 & 88

NOTES:
1. ALL RELAY CONTACTS ARE SHOWN IN NO POWER CONDITION.
2. INPUTS 5 AND 6 ARE LINKED TO CUSTOM LIGHTS IN THE LEFT OF THE FRONT DISPLAY.
3. INPUTS 7 AND 8 ARE LINKED TO CUSTOM LIGHTS ON THE RIGHT OF THE FRONT DISPLAY AND OUTPUT RELAYS 7 AND 8

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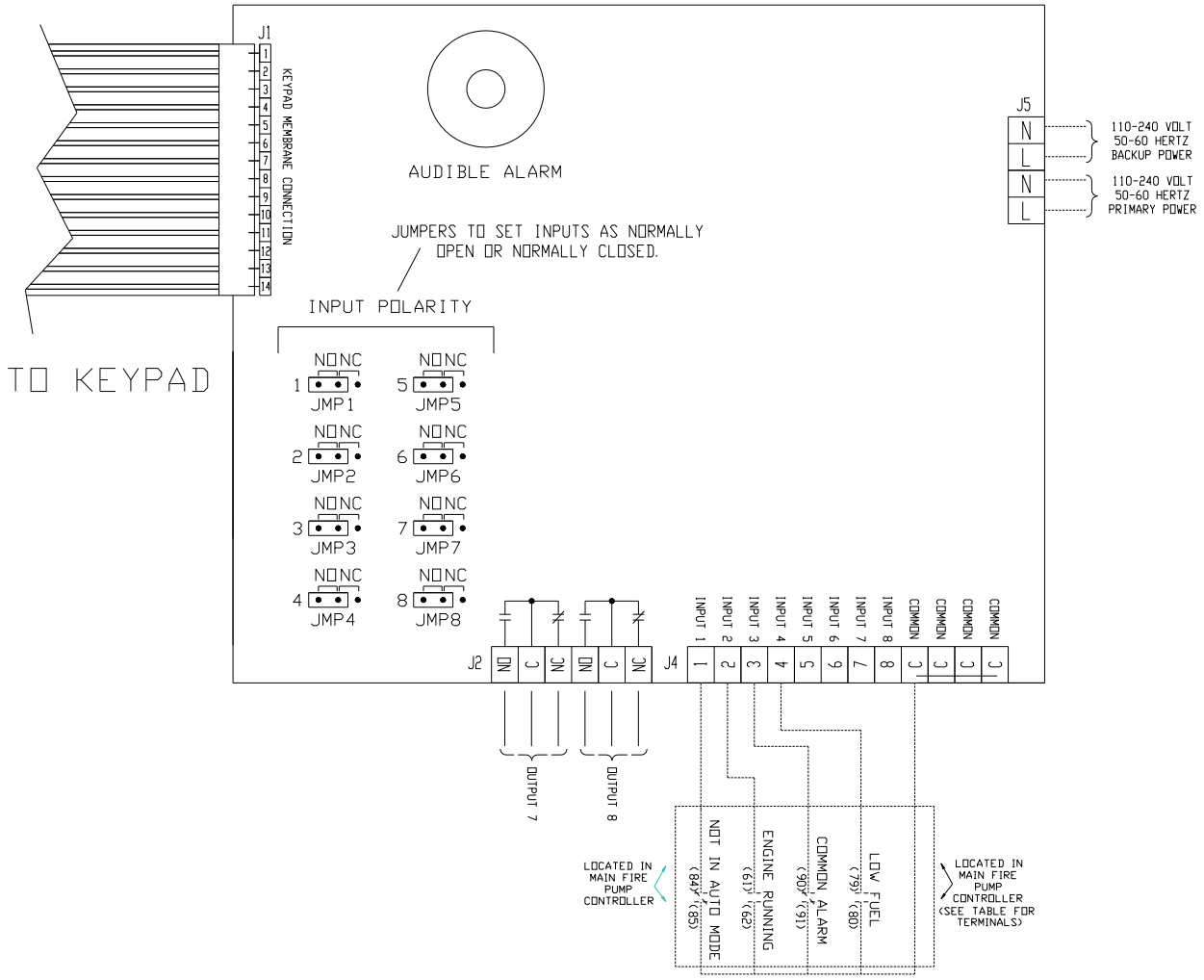
FIGURE 3

Wiring Schematic - Diesel Remote Alarm Panel - FDAP-M



	DIESEL PLUS
NOT IN AUTO MODE	84 & 85
ENGINE RUNNING	61 & 62
COMMON ALARM	90 & 91
LOW FUEL	79 & 80

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FIGURE 4

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