Product Description

Eaton's Remote Alarm Panels are designed to provide audible and visual alarms for Electric and Diesel Fire Pump Controllers.
These remote panels are located at a point of constant attendance when the pump room is not constantly supervised.

Product Features

Microprocessor Control

All DFDAP-M and FDAP-M Remote Alarm Panels are microprocessor based.
The same microprocessor board is used for both Electric and Diesel units.

Power Supply Voltages

Both Normal and Supervisory (backup) power supply voltages can be supplied from 110 to 240Vac, 50-60 Hz. Both Normal and Supervisory power is supplied by customer.

Normal / Supervisory (backup) Power Source

If the Normal power source is not available, the controller will automatically switch to the Supervisory (backup) source. When normal power is restored, the controller will switch back to the normal source.

Audible Alarm

An audible buzzer will sound when any alarm condition occurs. It will continue to sound until either the Silence Alarm button is pressed, or the alarm condition is satisfied.

Lamp Test Button

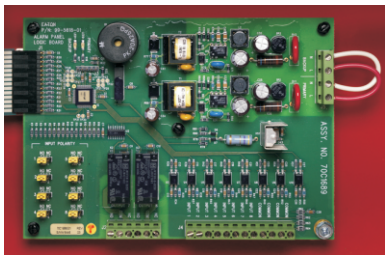
The lamp test button on the membrane will simultaneously test all LED's.

Silence Alarm Button

The Silence Alarm button on the membrane will silence all active alarms when pressed, but has no effect on the associated alarm LED(s). If another alarm condition occurs after the silence button has been pressed, the alarm buzzer will re-sound until the button is pressed again, or the alarm condition is satisfied.

User Selectable Alarm Inputs

Each panel accepts up to eight (8) inputs. Each input can be selected as either normally open or normally closed by use of jumpers on the microprocessor board.



"Normal Power On" Indication

The Normal Power On LED will turn ON when the normal power is available and will turn OFF when the controller switches to the Supervisory (backup) power source.
The alarm buzzer will sound when the normal power is not available and will remain ON until the normal power is restored, or the Silence Alarm button is pressed.

Output Relays

Output relays are PCB style - rated for 8A/250VAC.

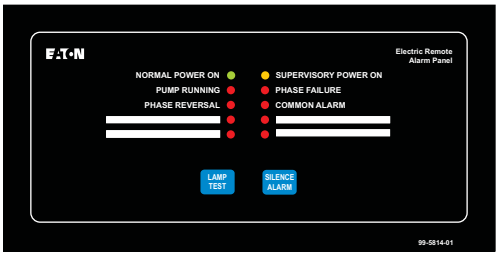
NEMA 1 Enclosures

All remote alarm panels come standard with NEMA 1 enclosures.

Membrane Indication

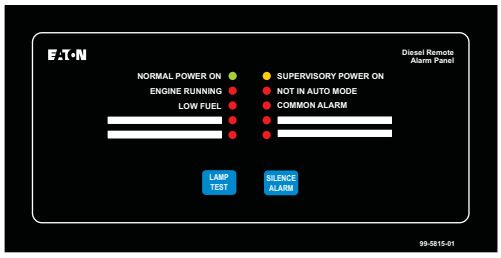
Inputs five (5) and six (6) are directly connected to two LED's on the bottom left on the membrane. A space is provided beside each LED for labeling purposes.

Inputs seven (7) and eight (8) are directly connected to two LED's on the bottom right on the membrane. As well as LED indication and labeling area on the membrane, they will each provide an output signal from a corresponding SPDT, 8Amp relay.



Electric

- Normal Power On
- Supervisory Power On
- Pump Running
- Phase Failure
- Phase Reversal
- Common Alarm
- Custom - (2)
- Custom with SPDT, 8Amp relay Output - (2)



Diesel

- Normal Power On
- Supervisory Power On
- Engine Running
- Not In Auto Mode
- Low Fuel
- Common Alarm
- Custom - (2)
- Custom with SPDT, 8 Amp relay Output - (2)

Technical Data and Specifications

Line Terminals (Incoming Cables)

Recommended Wire Size	Distance Number of feet (meters) from the controller to the remote alarm panel.
Stranded # 16	3000 (914.4)
Stranded # 14	4500 (1371.6)
Stranded # 12	7000 (2133.6)

Standards & Certification

The DFDAP-M / FDAP-M Remote Alarm Panels meet or exceed the requirements of Underwriters Laboratories, Underwriters Laboratories Canada, the Canadian Standards Association, the New York City building code, and are built to NFPA 20 standards.

N. Y. C.
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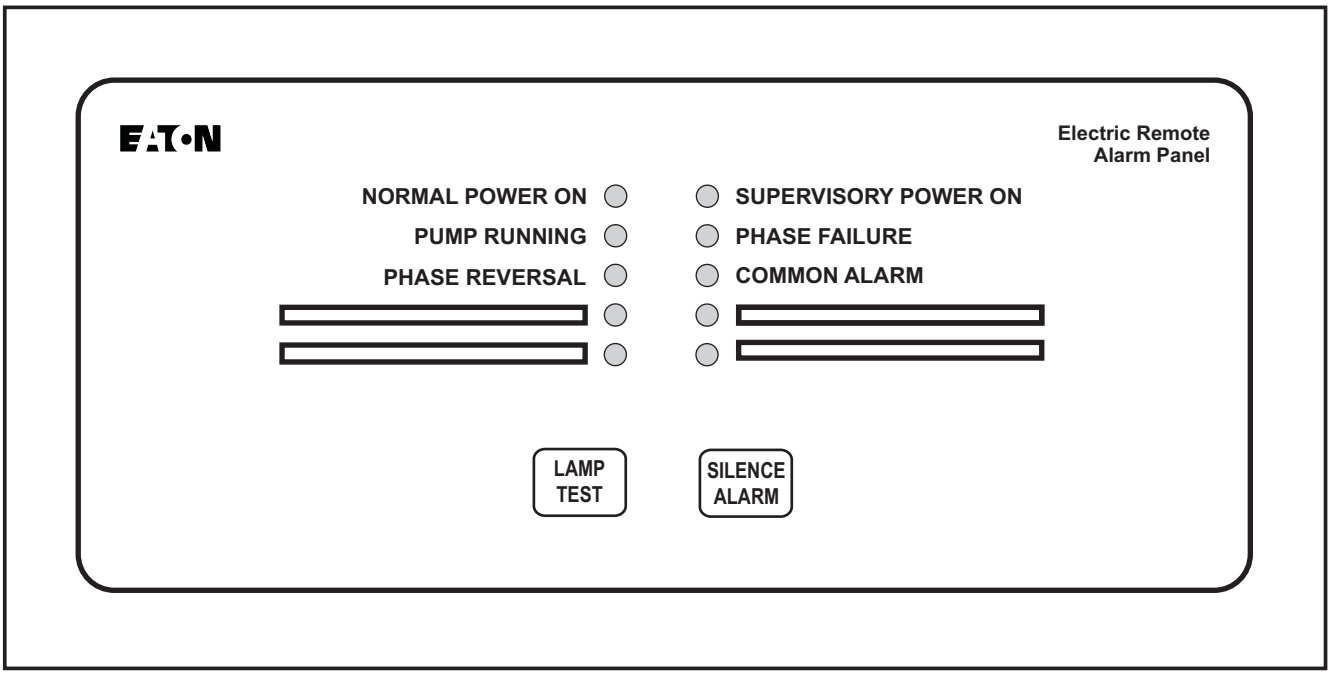
Main Display



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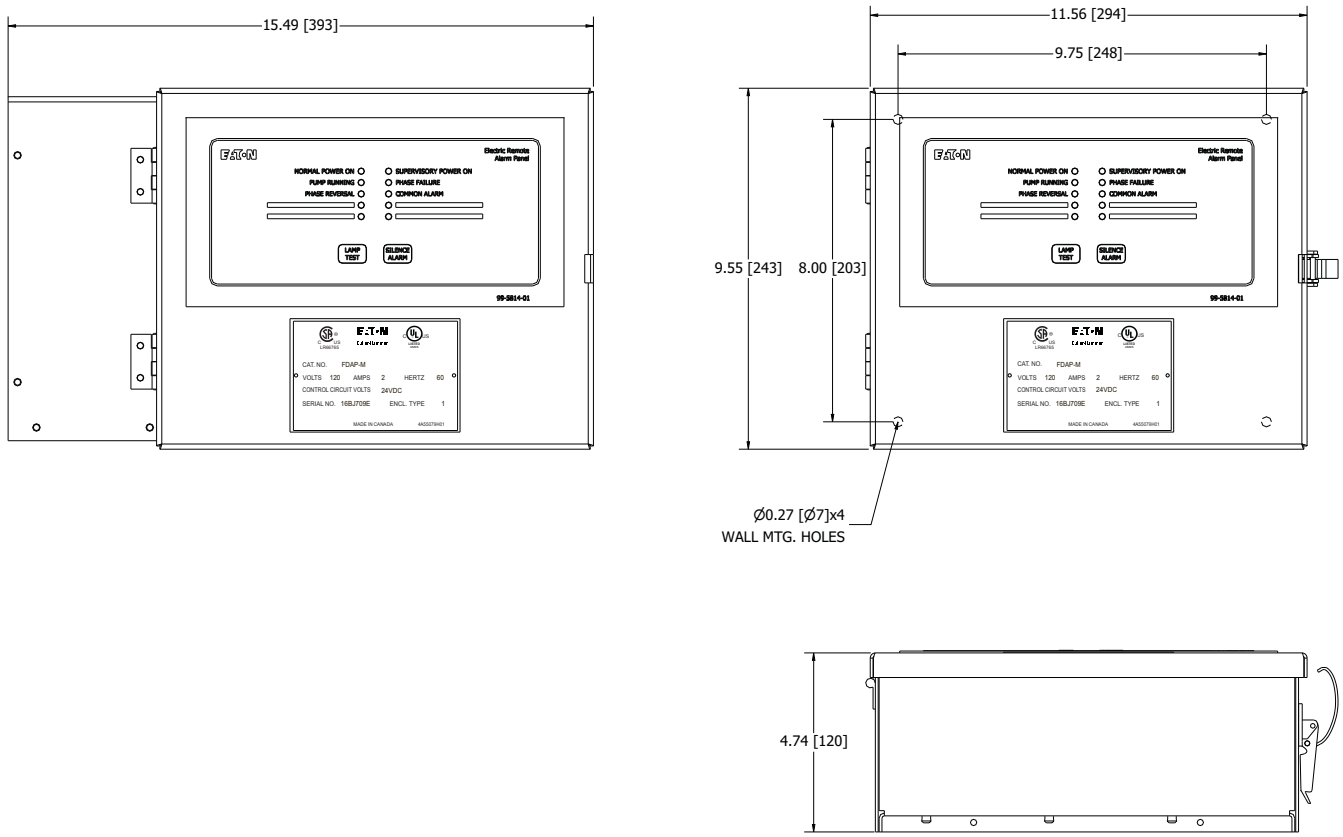
Dimensions

Standard Enclosure - Type NEMA 1 - Electric Remote Alarm Panel



Approx. Weight Lbs. (Kg)
10 (4.5)

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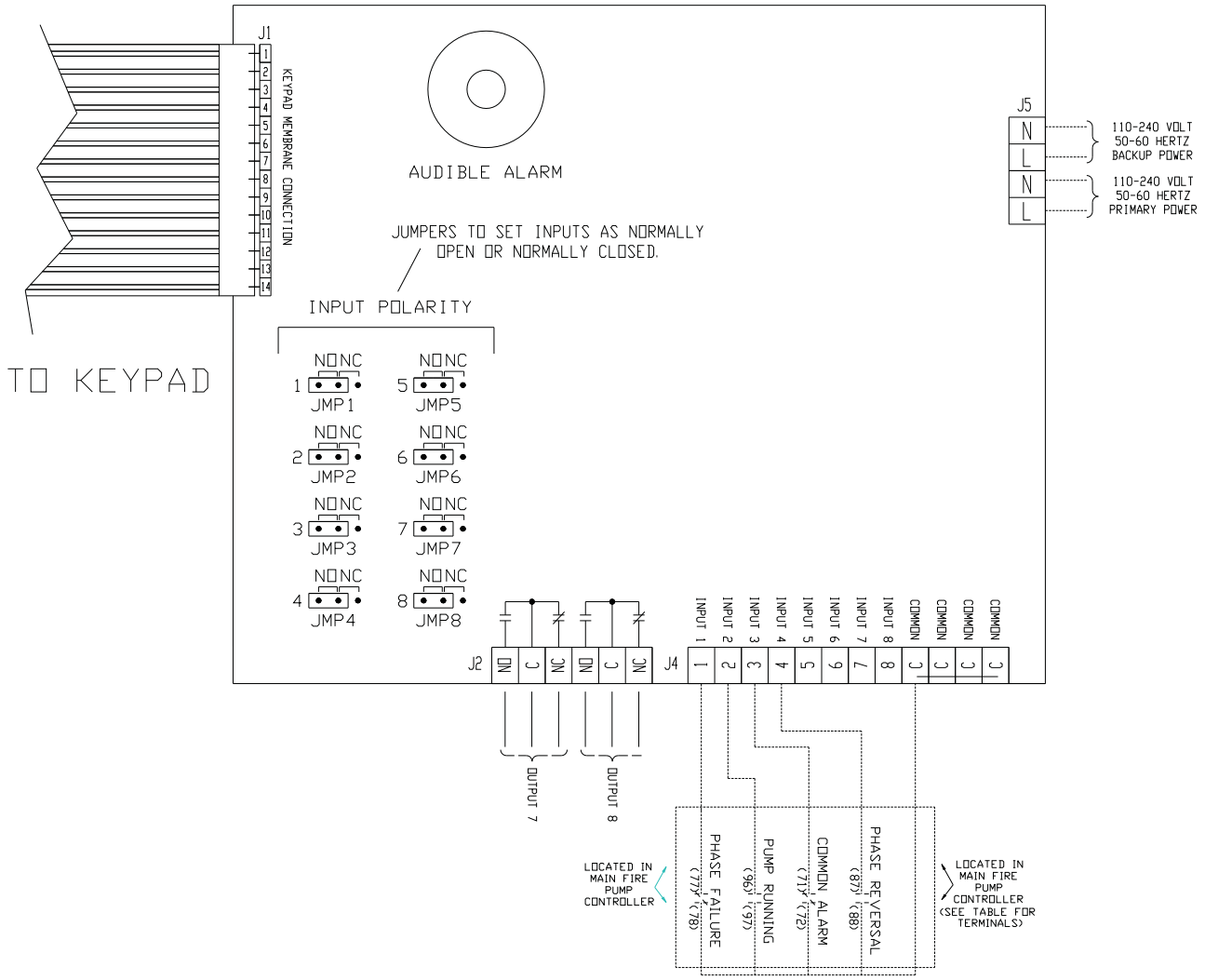
NOTES:
1. All enclosures finished in FirePump red.
2. Cable Entrance either top or bottom.
3. Standard Enclosure type NEMA 1.

Electrical Wiring Schematic



	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

N. Y. C.
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DFDAP-M / FDAP-M Remote Alarm Panels

June 2010

Typical Specifications

1. Approvals

A. The Remote Alarm Panel shall meet the requirements of the latest edition of NFPA 20 and shall be listed by [Underwriters Laboratories (UL)] [Underwriters Laboratories of Canada (ULC)] approved by [Canadian Standards Association (CSA)] and have MEA approval for New York City.

2. Construction

A. The remote alarm panel shall be equipped with a Lamp Test button which, when operated, fully tests all LED's. The Lamp Test Button shall not change the state of internal relays.

B. The panel shall accept both 120 volt 50/60Hz and 240 volt 50/60Hz power supply on either of the primary and backup source inputs. The panel shall operate such that if the primary source of supply is lost, the panel will automatically switch to the backup source. Both the primary and backup sources shall be independent of each other.

C. An audible buzzer shall sound when any alarm conditions are present. It shall continue to sound until either the silence button is pressed, or the alarm condition is satisfied.

D. A silence alarm button shall be provided to silence all active alarms when pressed. It shall have no effect on the associated alarm LED's. Should a second alarm condition occur after the silence button has been pressed, the audible alarm shall re-sound until the silence button is pressed again, or the alarm condition has been satisfied.

E. A Normal Power On LED shall indicate when normal power is available and shall turn off when the controller switches to the Supervisory (backup) power source. An audible alarm shall sound when normal power is not available and shall remain ON until normal power is restored, or the silence button is pressed.

3. Enclosure

A. The panel shall be housed in a NEMA Type-1 enclosure provided with means for wall mounting.

4. Input Contacts

A. Contact inputs shall be dry contact (non powered). Each input shall be capable of being selected as either normally open (N.O.) or normally closed (N.C.).

5. Output Contacts

A. Electric alarm panels shall provide six (6) alarm outputs to indicate Normal Power ON, Supervisory Power ON, Pump Running, Phase Reversal, Phase Failure and Common Alarm.
Diesel alarm panels shall provide six (6) alarm outputs to indicate Normal Power ON, Supervisory Power ON, Engine Running, Not in Auto Mode, Low Fuel, and Common Alarm.

B. (All outputs shall be printed circuit board relay style rated for 8amps / 250VAC. The relays shall be de-energized under normal conditions regardless of input status selected.

6. Manufacturer

A. The panel manufacturer shall manufacture the enclosure and provide completely assembled units.

B. The remote alarm panel shall be manufactured by Eaton Corporation.