

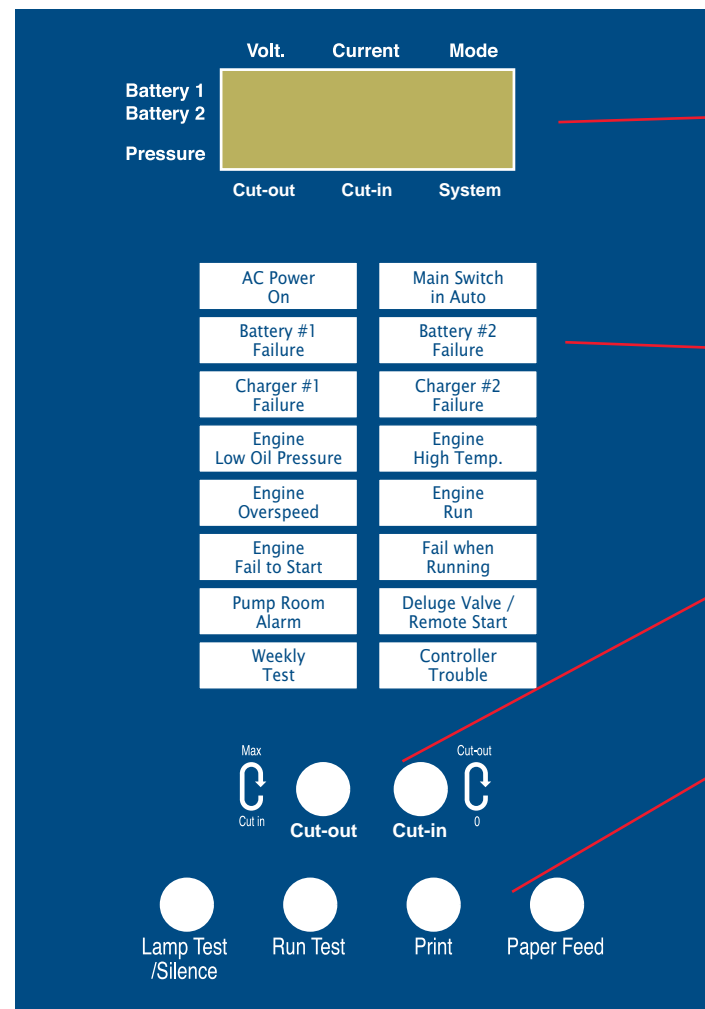
GFD
MODEL

Diesel Engine Fire Pump Controller Micro-processor based



GFD
MODEL

ANNUNCIATOR AND LCD DISPLAY



Digital display

- Individual charger voltmeter and ammeter readout
- Individual charger mode indication
- Individual Cut-in, Cut-out and system pressure readout

Annunciator and display panel

- 16 annunciator points c/w super bright red LED

Pressure setting field adjustments

- Accessible with main door closed
- Live settings adjustments visible on display

Manual operators

- Lamp test / silence push button
- Run test push button
- Print push button
- Paper feed push button



HOW TO ORDER: GFD - Negative ground - 12 or 24 VDC - Wall mounted - BCE - 10 - options
Ex.: GFD - N - 12 - W - BCE - 10 - options

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Diesel Engine Fire Pump Controller Micro-processor based



MEMBER
10 - 11

Diesel Engine Fire Pump Controller Micro-processor based

MAIN FEATURES:

- 15-day pressure and 15-day event recorder with RS-232 communication port for data retrieval
- IP 55 enclosure
- Two independent fully automatic battery chargers for 12 VDC or 24 VDC rated at 10 A.
- Automatic starting of engine on pressure drop as detected by a built-in 304 stainless steel pressure transducer rated for 0-300 PSI
- Manual starting of engine by manual crank push buttons
- Programmable time clock for Weekly Test and manual Run Test push button initiated by energizing of drain solenoid valve
- Manual and Automatic stop (programmable minimum run period timer)
- Sequential start timer (programmable)
- Automatic crank cycle as per NFPA 20
- Visual alarms as per NFPA 20
- 4" alarm bell
- AC and DC circuit breakers
- Master selector switch (Hand-Off-Auto)
- Provision for remote start and deluge valve start
- Anti-condensation heater and thermostat
- Tropicalization
- Remote alarm circuits rated 8A, 250 VAC for:
 - Engine Run (DPDT)
 - Selector Switch in Off or Hand (1 N/O)
 - Selector Switch in Auto (1 N/O)
 - Engine Trouble (1 DPDT):
 - Overspeed
 - High coolant temperature
 - Fail to start
 - Fail when running
 - Low oil pressure
- Controller trouble (1 DPDT):
 - Battery 1 or 2 failure
 - Pressure line failure
 - Charger 1 or 2 failure
- Pump room alarms (1 DPDT):
 - Low suction
 - Low pump room temperature
 - Low fuel level
 - High fuel level
 - Water reservoir low
 - AC failure battery chargers
 - Water reservoir empty
- Gland plate for incoming power and engine connections
- Dimensions 700mm high x 600mm long x 250mm wide
- Shipping weight 48 kg

• Digital annunciator

• Crank 1 push button

• Crank 2 push button

• Stop push button

• Hand-Off-Auto selector switch



• Pressure transducer and test solenoid valve



• RS-232 communication port for retrieval of pressure and event recordings

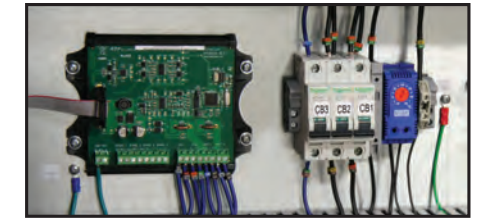


• Gland plate

• 4" alarm bell



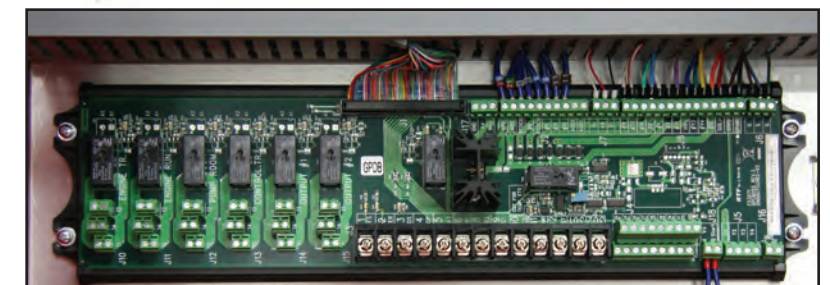
• Battery chargers



• AC and DC circuit breakers
• Communication circuit board
• Anti-condensation heater and thermostat



• Incoming power connection



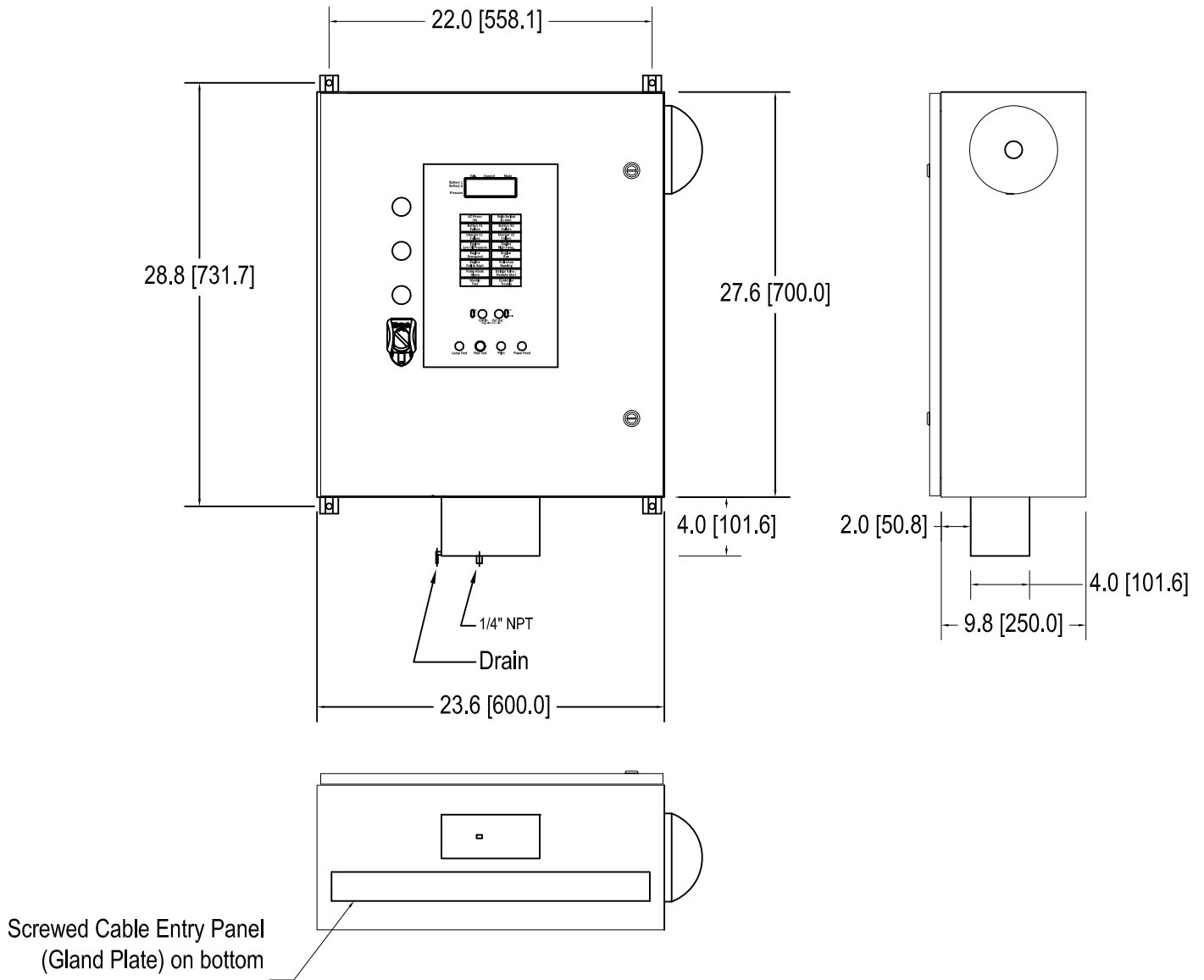
• Engine and alarm connections

DIESEL ENGINE FIRE PUMP CONTROLLER

MODEL : GFD

Dimensions

BUILT TO LATEST NFPA 20 STANDARD EDITION



NOTES :

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
- FINISHED FIRE RED.
- USE WATERTIGHT CONDUIT CONNECTOR ONLY.
- PROTECT EQUIPMENT AGAINST DRILLING CHIPS.
- AMBIANT TEMPERATURE : BETWEEN 41°F (5°C) AND 122°F (50°C)
- SHIPPING WEIGHT: WALL MOUNTED: Approx.100 Lbs - 45 Kg
- FOR ELECTRICAL RATINGS & OPTIONS INCLUDED, SEE RATING LABEL.
- NEMA 2

Drawing for information only.
 Manufacturer reserves the right to modify this drawing without notice.
 For drawing for approval or installation, please contact manufacturer.



| REV. | DATE | DESCRIPTION | APP. | DRAWING No. |
|------|----------|-------------|------|-----------------|
| | | | DES. | GFD-0044-D1 / E |
| 0. | 10/07/01 | FIRST ISSUE | VER. | |
| | | | APP. | |

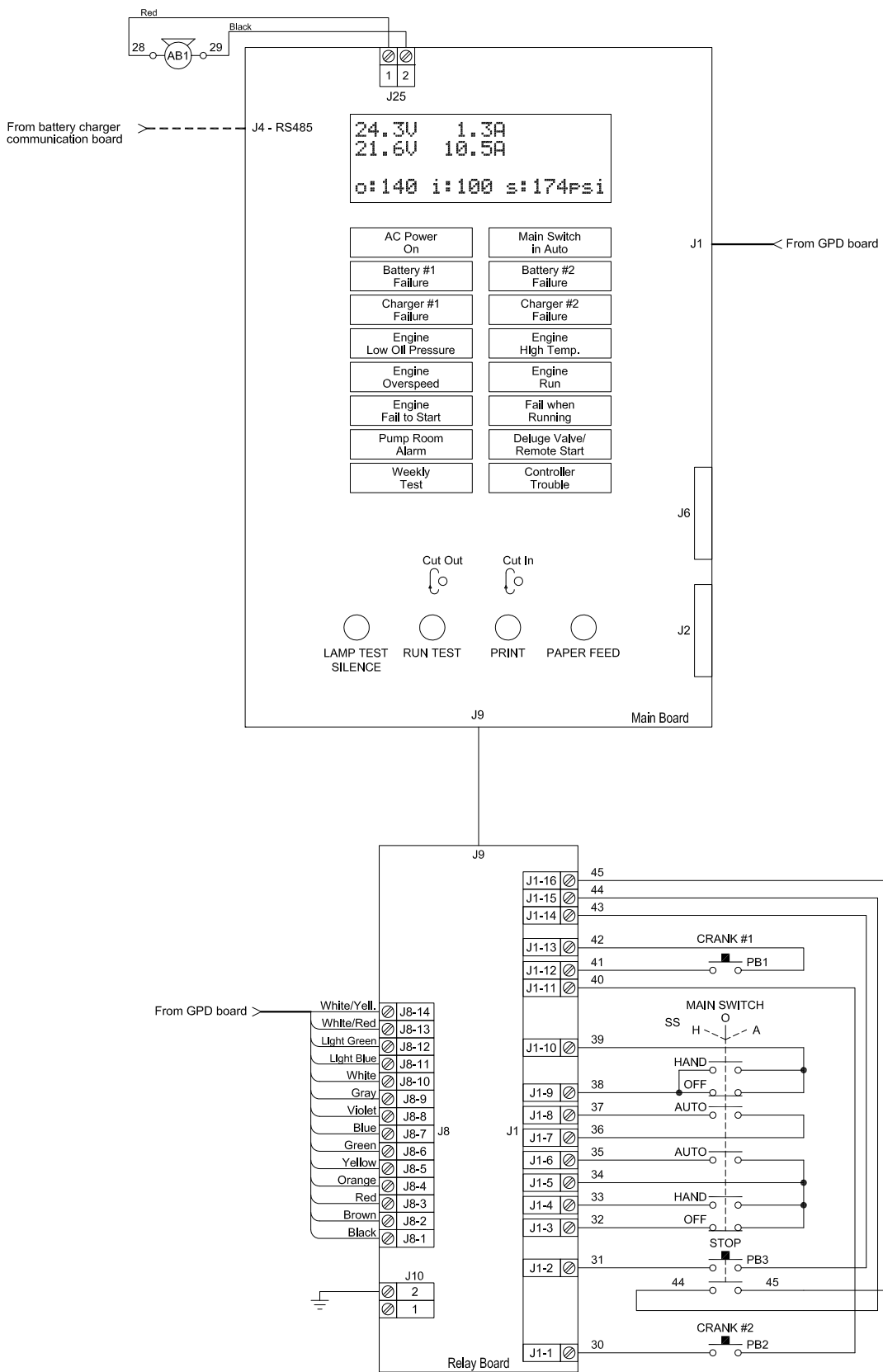
DIESEL ENGINE FIRE PUMP CONTROLLER

24 VDC NEGATIVE GROUND

Wiring schematic

MODEL : GFD

BUILT TO LATEST NFPA 20 STANDARD EDITION



| REV. | DATE | DESCRIPTION | DES. | APP. | Drawing No. |
|------|----------|-------------|------|------|--------------------|
| 1. | 10/07/22 | FIRST ISSUE | VER. | | GFD-0159-S1 2/4 /E |

DIESEL ENGINE FIRE PUMP CONTROLLER

24 VDC NEGATIVE GROUND

Terminal Diagram

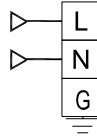
MODEL : GFD

BUILT TO LATEST NFPA 20 STANDARD EDITION

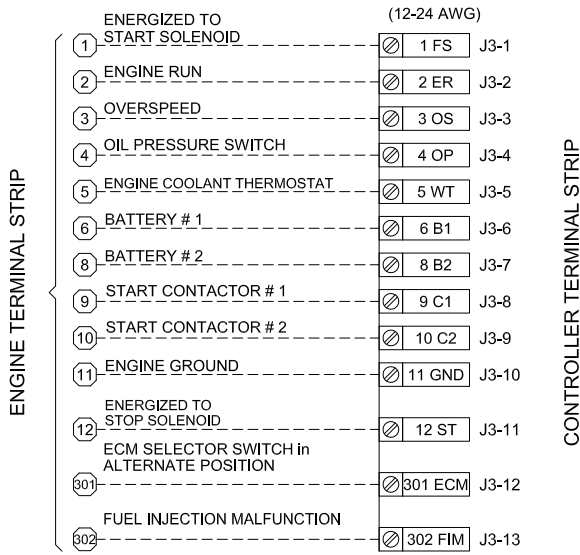
POWER SUPPLY

TERMINALS WIRE SIZE :
16 TO 6 AWG

208V-240V/ 50-60Hz



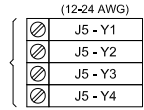
ENGINE CONNECTION



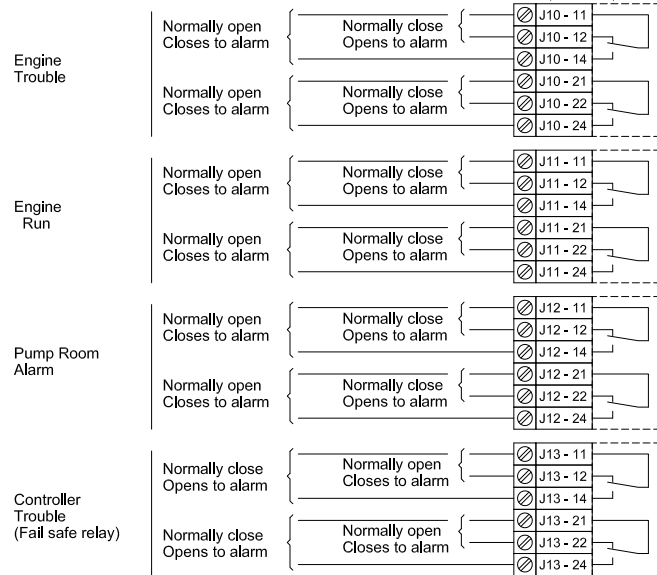
ALARM CONTACTS

J5-Y1 / J5-Y2
Closes when main switch in HAND or OFF

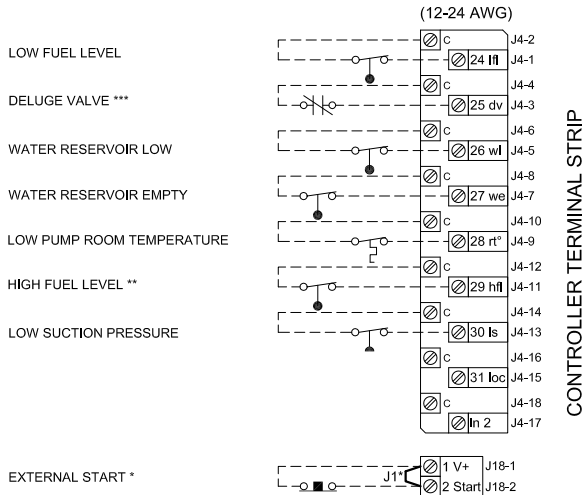
J5-Y3 / J5-Y4
Closes when main switch in AUTO



GPD Board



FIELD CONNECTIONS



* Remove jumper J1 to enable function.



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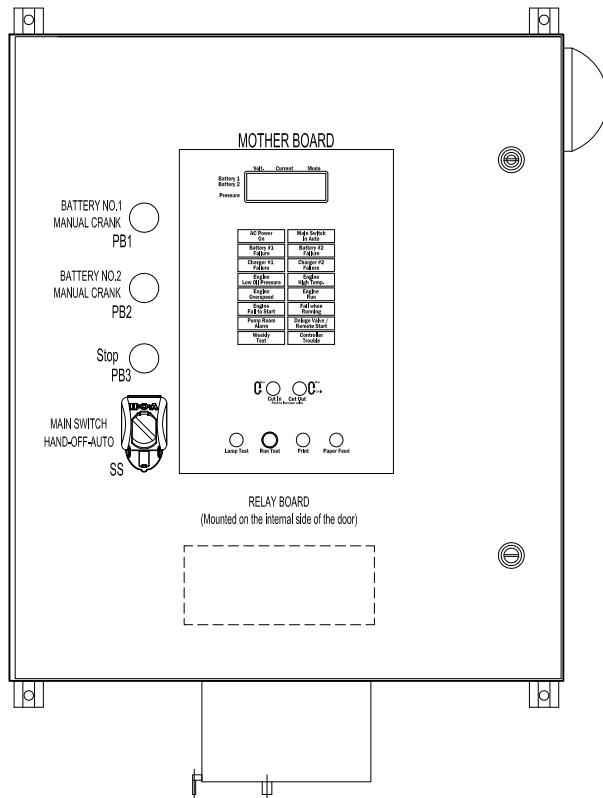
DIESEL ENGINE FIRE PUMP CONTROLLER 24 VDC NEGATIVE GROUND

MODEL : GFD

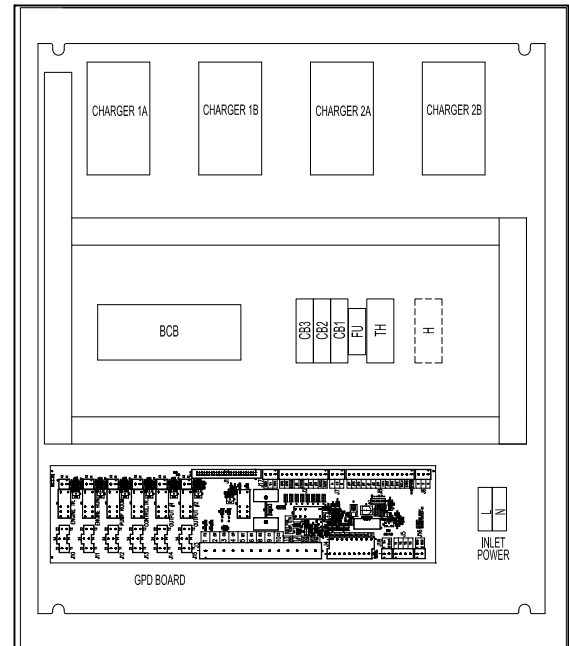
Layout

BUILT TO LATEST NFPA 20 STANDARD EDITION

| DESIGNATION | DESCRIPTION |
|-------------|---|
| CHARGER | BATTERY CHARGER #1A-1B AND #2A-2B |
| CB1-2-3 | MAGNETIC BREAKER 1 POLE 10 AMP. |
| PT | PRESSURE TRANSDUCER |
| GPD BOARD | GPD BOARD |
| MAIN BOARD | GPD MOTHER BOARD |
| RELAY BOARD | GPD RELAY BOARD |
| BCB | BATTERY CHARGER COMMUNICATION BOARD |
| AB | ALARM BELL |
| SS | LOCKABLE 3 POSITIONS SELECTOR SWITCH |
| PB1-PB2 | NORMALLY OPEN GREEN PUSH BUTTON |
| PB3 | NORMALLY OPEN RED PUSH BUTTON |
| SV | (24 Vdc) WATER SOLENOID |
| ENCLOSURE | ENCLOSURE |
| FU | 5 AMP FUSE |
| TH | THERMOSTAT |
| H | HEATER (mounted on the back of the plate) |



OUTSIDE FRONT DOOR LAYOUT



INTERNAL LAYOUT