



## Diesel Engine Fire Pump Controller Micro-processor based

The model GPD fire pump controller for a diesel engine driven fire pump is built to the latest NFPA20 standard, UL218 listed, FM approved and provides for:

- Manual starting of the engine by two (2) independent manual crank push buttons.
- Automatic starting of engine on pressure drop as detected by a built in 304 stainless steel 0-300psi rated pressure transducer.
- Crank cycle of three (3) fifteen (15) second start attempts per battery with fifteen (15) second rest periods in between the starting attempts. A Failure to Start alarm is initiated if engine does not start after this crank cycle.
- Automatically programmed exercising of engine as initiated by a real time clock energizing a drain solenoid on the pressure sensing line.
- Manual exercising of the engine as initiated by the Run Test push button
- Manual stop of engine by Stop push button.
- Automatic stop of engine by a minimum run period timer which can be enabled if required or disabled if not required.
- Engine Overspeed shut down and alarm (manual reset).
- Engine Low Oil Pressure and High Engine Temperature alarm (manual reset) and shutdown only during automatic exercise.

Only high quality components, all UL listed or recognized and CSA certified, are used throughout to assure the best possible reliability.

The complete assembled and wired controllers are factory tested before shipping and ready for immediate installation.

### CONTROLLER PROTECTION LEVEL:

- Standard NEMA 2
- Optional NEMA 3R
- Optional NEMA 12
- Optional NEMA 4
- Optional NEMA 4X

### DIMENSIONS:

- 36" high x 24" wide x 8" deep (without mounting feet)
- Mounting feet are standard (16" high)

### WEIGHT:

- Approximate weight 150lbs (68kg)

### OPERATIONAL TEMPERATURE LIMITS:

- 41°F to 122°F (5°C to 50°C)



N.Y.C.  
APPROVED



OPTIONAL

# GPD

MODEL



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### STANDARD FEATURES:

- Two independent fully automatic battery chargers rated for 10 A. continuous charge, 12 or 24 VDC c/w AC input filter, current limiter, over current shutoff, 500 mA trickle charge, dead cell detection, low battery voltage alarm.
- 304 stainless steel pressure transducer rated for 0-300PSI
- 4" bell
- Individual manual crank push buttons (2)
- Individual battery circuit breakers
- Master selector switch (manual-off-auto)
- Run period timer for automatic stop
- Sequential start timer
- Run test push button
- Provision for remote start push button
- Provision for deluge valve start

- Drain solenoid valve for weekly exercise
- System overpressure adjustable setting and optional alarm contact (DPDT) for use with pressure limiting device supplied on diesel engines
- Terminal connection (301-302) for ECM diesel engine
- Remote alarm circuits rated 8A. 220VAC for
  - Engine run (DPDT).
  - Master Selector Switch in Off or Manual (1 N/O).
  - Master Selector Switch in Auto (1 N/O).
  - Engine Trouble (1 DPDT): Overspeed, fail to start, low oil pressure, high coolant temperature, fail when running
- Controller trouble (1 DPDT):
  - Battery 1 or 2 failure, charger 1 or 2 failure, pressure line failure
- Pump room alarms (1 DPDT):
  - Low suction, low fuel level, water reservoir low, water reservoir empty, low pump room temperature, high fuel level, AC failure
- Pressure and event recorder with thermal printer supplied as standard.

### OPTIONAL FEATURES:

- Type A: Individual engine alarm contacts (DPDT)
- Type B: Pump room alarm contacts (DPDT)
- Type C: Operational modifications
- Type D: Miscellaneous

#### 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

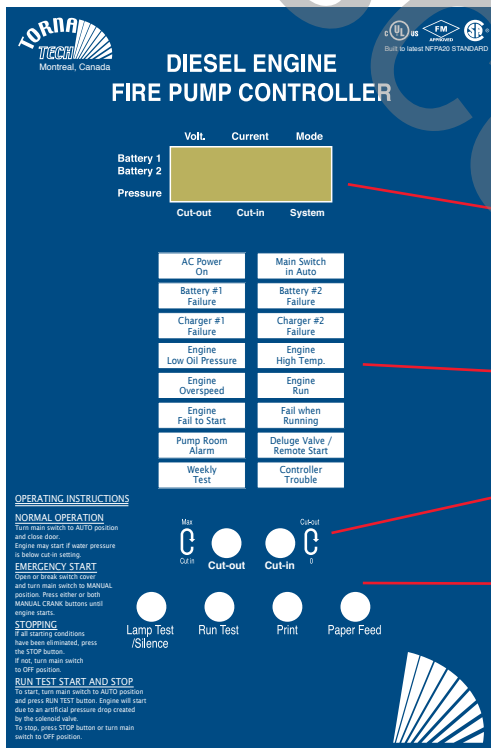
- 16 annunciator points c/w super bright red led

#### 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:** GPD - Negative or Positive ground - 12 or 24 VDC - Floor or Wall mounted - BCE - 10 - options  
Ex.: GPD - N - 12 - F - BCE - 10 - options

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