



FPD MODEL

The model FPD fire pump controller for a diesel engine driven fire pump, built to the latest NFPA20 and UL218 Standards provides for:

- Manual starting of engine by manual crank push buttons (2)
- Automatic starting of engine on pressure drop as detected by a mercury bulb built in pressure switch. During cranking, each battery is alternatively connected to the starter for 15 seconds. After six (6) start attempts, a Failure to Start alarm is initiated.
- Automatically programmed exercising of engine as initiated by a digital time clock energizing a drain solenoid on the pressure sensing line.
- Manual exercising of the engine as initiated by the Test position of master selector switch.
- Manual stop of engine by Stop push button.
- Automatic stop of engine, if required (after automatic start only).
- Engine Overspeed shut down and alarm (manual reset).
- Engine Low Oil Pressure alarm (manual reset) and shut down only during automatic exercise cycle.
- Engine High Coolant Temperature alarm (manual reset) and shut down only during automatic exercise cycle.

BATTERY 1 FAILURE BATTERY 2 FAILURE

ANNUNCIATIONS

DPERATOR CONTROL PANEI

Only quality components, all U.L. listed or recognized and C.S.A. 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.

CHARGER 2 FAILURE

	AC POWER ON	EXERCISE CYCLE	ENGINE HIGH COOLANT TEMP.	LOW OIL PRESSURE
	ENGINE FAIL TO START	ENGINE OVERSPEED	ENGINE RUN	MAIN SWITCH AUTO
	LOW FUEL LEVEL	WATER RESERVOIR LOW	WATER RESERVOIR EMPTY	LOW PUMPROOM TEMPERATURE
	LOW SUCTION PRESSURE	FLOW METER ON	RELIEF VALVE OPEN	PRESSURE SWITCH FAILURE
	BATTERY 1 MANUAL CRAN	K MAIN S	M	BATTERY 2 ANUAL CRANK
	0	T A		0
		NORMAL SILENCE	LAMP TEST RESET	
	DC VOLT			DC VOLT
	DC AMP	TIME C	CLOCK	DC AMP
	CCB BREAKER OFF ON	1	C	CB BREAKER 2 OFF ON
L				

Diesel engine fire pump controller Relay logic based





CONTROLLER PROTECTION LEVEL:

- Standard NEMA-UL-CSA type 3R IP 14 (protected against dropping water)
- Optional NEMA-UL- CSA type 12 IP 52 (oil and dust tight)
- Optional NEMA-UL- CSA type 4 IP 65 (waterproof)
- Optional NEMA-UL- CSA type 4X IP 65 (waterproof, corrosion resistant, painted SS T-304)
- Dimensions: 48" high x 30" wide x 12" deep, Mounting feet if required: 10" high
- Weight: approx. 300 lbs (136 kg)

OPERATIONAL TEMPERATURE LIMITS:

• 41°F to 122°F (5°C to 50°C)

ANNUNCIATOR AND CONTROL PANEL

- Accessible through a lockable hinged operator door
- 20 annunciator points c/w super bright red led
- Manual crank pushbuttons (2)
- Individual charger voltmeters & ammeters
- · Individual battery circuit breakers
- Master selector switch (OFF-AUTO-TEST-MANUAL)
- Normal/silence selector switch
- Lamp test & charger reset push button
- Digital time clock



Diesel engine fire pump controller Relay logic based

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.
- Battery powered pressure recorder (7 days).
- Mercury bulb pressure switch (10-300 PSIG).
- · Run period timer for automatic stop.
- · Provision for remote start push button.
- · Provision for deluge valve start.
- · Drain solenoid valve for weekly exercise.
- Remote alarm circuits rated 10A.125VAC for
 - Engine run (2 SPDT).
 - Master Selector Switch in Auto (1 N/O).
 - Master Selector Switch in Off or Manual (1 N/O).
 - Common Engine Trouble (1 SPDT).

Overspeed, fail to start, low oil pressure, high coolant temperature, battery charger and battery failure.

OPTIONAL FEATURES:

Option no. 2	Sequence start timer (1 min. max.).
Option no. 3	Delayed automatic start on AC power failure
	(5 min. max.).
Option no. 5	4" bell instead of buzzer.
Option no. 6	Stainless steel T-316 Mercoid pressure
	switch 300 PSI.
Option no. 7	Seawater rated piping.

Option no. 15 Pressure switch failure.

Option no. 17 AC failure.

INDIVIDUAL ENGINE ALARM CONTACTS:		
SPDT 10 A., 120 V. AC.		
Option no. 8	Battery 1 - Battery 2 failure, 2 individual contacts.	
Option no. 9	Overspeed.	
Option no. 10	Low oil pressure.	
Option no. 11	High coolant temperature.	
Option no. 12	Failure to start.	
Option no. 13	Charger 1 - Charger 2 failure, 2 individual	
	contacts.	
Option no. 14	Exercise cycle run.	

PUMP ROOM INDIVIDUAL ALARM CONTACTS SPDT (pressure, temperature and level sensing devices not included):

Option no. 18	Low suction pressure.
Option no. 20	Low fuel level.
Option no. 21	Water reservoir low.
Option no. 22	Water reservoir empty.
Option no. 23	Low pump room temperature
Option no. 24	Flow meter on.
Option no. 25	Relief valve open.

ACCESSORIES & MODIFICATIONS:

Option no. 26A	Anti condensation neater & thermostat
	120 V.AC, 150 W. or 220-240 V.AC, 175 W.
Option no. 26B	Anti condensation heater & humidistat.
Option no. 27	Low pump room temperature thermostat
	and guard.

Option no. 28A Low fuel level float switch supplied as separate item (1.1/4").

Option no. 28B Low fuel level float switch supplied as separate item (1.1/2").

NEMA / UL / CSA 12 enclosure Option no. 29

(oil and dust tight). Option no. 30 NEMA / UL / CSA 4 enclosure (waterproof).

Low suction pressure switch Option no. 31 (Allen-Bradley) mounted inside controller.

NEMA / UL / CSA 4X enclosure Option no. 32 (waterproof, corrosion resistant, painted

SS T-304). Option no. 33A 220 V. / 50-60Hz incoming power. Option no. 33B 240 V. / 50-60Hz incoming power. Option no. 34 AC isolating switch (door interlock) for Europe only.

Option no. 36 Engine block heater circuit (same voltage as battery charger primary).

Option no. 37 Foam pump controller (w/o valve kit, pressure switch and recorder).

Tropicalization. Option no. 38

Option no. 39 CE listing (requires Option no. 34). Alternator output current divider Option no. 40

(if current divider is not located

on the engine).

Option no. 41 Interlock circuit to an other fire pump controller.

Lockout circuit from other equipment. Option no. 42

Option no. 43 Export Packing.

Option no. 44 Nickel-Cadnium battery chargers.

Option no. 45 French labeling. Option no. 46 Spanish labeling.

Option no. 47 Labeling in language other than English,

French or Spanish.

Option no. 48 Externally mounted wetted parts.

HOW TO ORDER: FPD - Negative or positive ground - 12 or 24 VDC - Floor or Base or Wall mounted - BC - 10 - options Ex.: FPD -F - BC - 10 - options Ν 12

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