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BY		DD/MM/YY
DRAWN BY	ACD	28/02/23
FINAL APPROVAL	FC	28/02/23

# DIESEL ENGINE FIRE PUMP CONTROLLER 12VDC OR 24VDC NEGATIVE GROUND

**MODEL: FTA1100**

BUILT TO THE LATEST EDITION OF THE NFPA20 & NFPA70

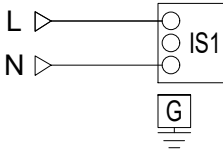


DRAWING NUMBER  
**FC1100-800/E**  
DWG REV. 0  
SHEET 1 OF 1

## Power Supply

Terminals Wire Size:  
14 - 6 AWG  
1.8-2 Nm

110-240Vac  
50-60Hz



## Engine Connections

All wiring between the controller and diesel engine shall be stranded (NFPA20)  
Wiring between controller and engine (terminals 301, 302, 303, 304, 305, 310, 311, 312, 2, 3, 4, 5) must be #14AWG as minimum.  
Wiring between controller and engine (terminals 12 [rated at 10A or 22A for 20 seconds] 1, 9, 10 [rated at 10A]) must be stranded #10AWG as minimum.  
Wiring between controller and engine (terminals 6, 8, 11 [rated at 30A]) must be stranded and sized according to distance.

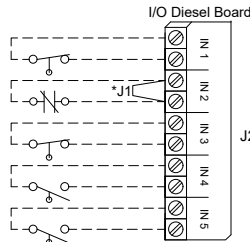
0-5' (0-1.5m) - 12 AWG (4 mm2)  
6-10' (1.8-3m) - 10 AWG (6 mm2)  
11-15' (3.3-4.5m) - 8 AWG (10 mm2)  
16-20' (4.8-6m) - 2x10 AWG (2x6 mm2)  
21-32' (6.4-9.75m) - 2x8 AWG (2x10 mm2)

Terminal	Description	Wire Size	Terminal Strip
1	Energize to Start Solenoid	12 AWG	J104
2	Engine Run	10 AWG	J104
3	Overspeed	8 AWG	J104
4	Low Oil Pressure	2x6 mm2	J104
5	High Engine Temperature	2x8 mm2	J104
6	Battery 1	2x8 mm2	J104
8	Battery 2	2x8 mm2	J104
9	Start Contactor 1	2x8 mm2	J104
10	Start Contactor 2	2x8 mm2	J104
11	Ground	2x8 mm2	J104
11	Ground	2x8 mm2	J104
12	Energize to Stop Solenoid	2x8 mm2	J104
301	Electronic Control Module Selector Switch in Alternate Position	14 AWG	J103
302	Fuel Injection Malfunction	14 AWG	J103
303	Electronic Control Module Warning	14 AWG	J103
304	Electronic Control Module Fault	14 AWG	J103
305	PLD Low Suction Pressure	14 AWG	J103
310	High Raw Water Temperature	14 AWG	J103
311	Low Raw Water Flow	14 AWG	J103
312	Low Engine Temperature	14 AWG	J103

## Field Connections

Terminals Wire Size:  
24 - 12 AWG  
0.5 Nm

- Low Fuel Level
- Remote Auto Start
- Water Reservoir Low
- Fuel Tank Leak
- High Fuel Level



## Network Connections

Terminals Wire Size:  
Shielded Female Connector RJ45

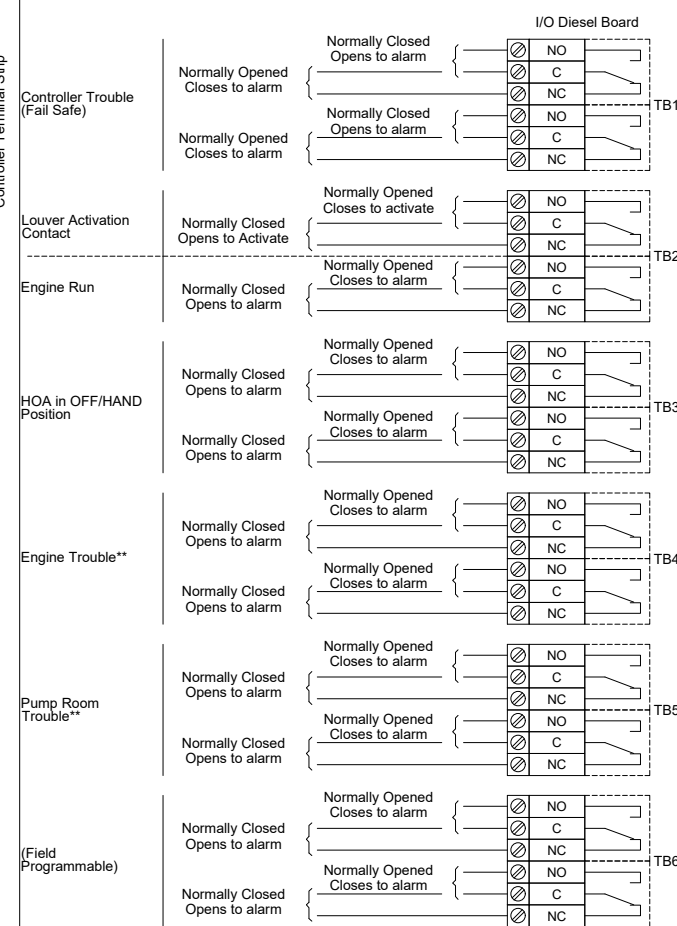
Modbus TCP/IP

Located on Main Board



## Alarm Contacts

Terminals Wire Size:  
24 - 12 AWG  
0.5 Nm



\* Remove this jumper to use this feature

\*\* Re-assignable