

Installation Manual

Automated Fuel

Maintenance

System



FT-I-10A and FT-I-20A



APPROVED

FUEL TECHNOLOGIES INTERNATIONAL LLC

www.fueltech.us

Installation

Contents

<i>Overview</i> -----	<i>Page 2</i>
<i>Installation Notes</i> -----	<i>Page 3</i>
<i>Identifying Parts FT-I-10A & 20A</i> -----	<i>Page 4</i>
<i>Stand Alone Installation</i> -----	<i>Page 5</i>
<i>Alternate In-Line Installation</i> -----	<i>Page 6</i>
<i>Electrical Drawings</i> -----	<i>Page 7 - 11</i>
<i>Cabinet Drawings</i> -----	<i>Page 12 & 13</i>

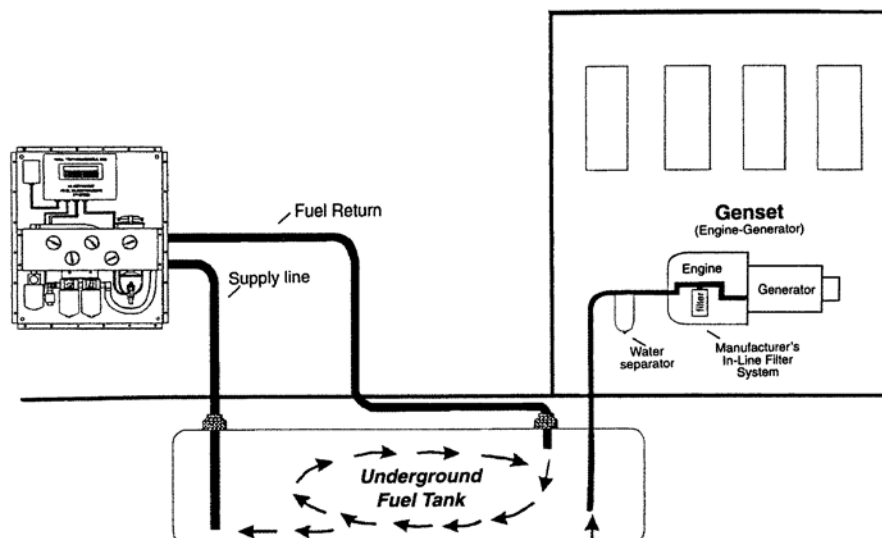
OVERVIEW

1. The complete automated diesel fuel maintenance system with cabinet shall be designed for wall or pedestal mounting

Supply line to be installed at the sump end of the storage tank **1"** from the bottom and Plumbed to The automated fuel maintenance system. A **FOOT VALVE** must be installed on supply line to Keep system primed.

2. A return line to be installed to the opposite end of the storage tank.
3. Caution should be taken not to exceed the 15-ft. suction lift capability of the fuel circulation pump.
4. Should vertical suction lift exceed 15 ft. the circulation pump in FTI cabinet should be removed and replaced with submersible pump in storage tank. Submersible pump shall be wired to FTI control panel. A flow control valve and a flow meter may be required to set fuel flow at 10 or 20 gpm, depending on system.
5. Fuel Technologies, fuel conditioner stabilizer to be added to the existing fuel tank, and proportionally when additional fuel is added to the storage tank.
7. Fuel Technologies, fuel conditioner stabilizer to be added to stored diesel fuel annually.

HOW IT WORKS



INSTALLATION NOTES

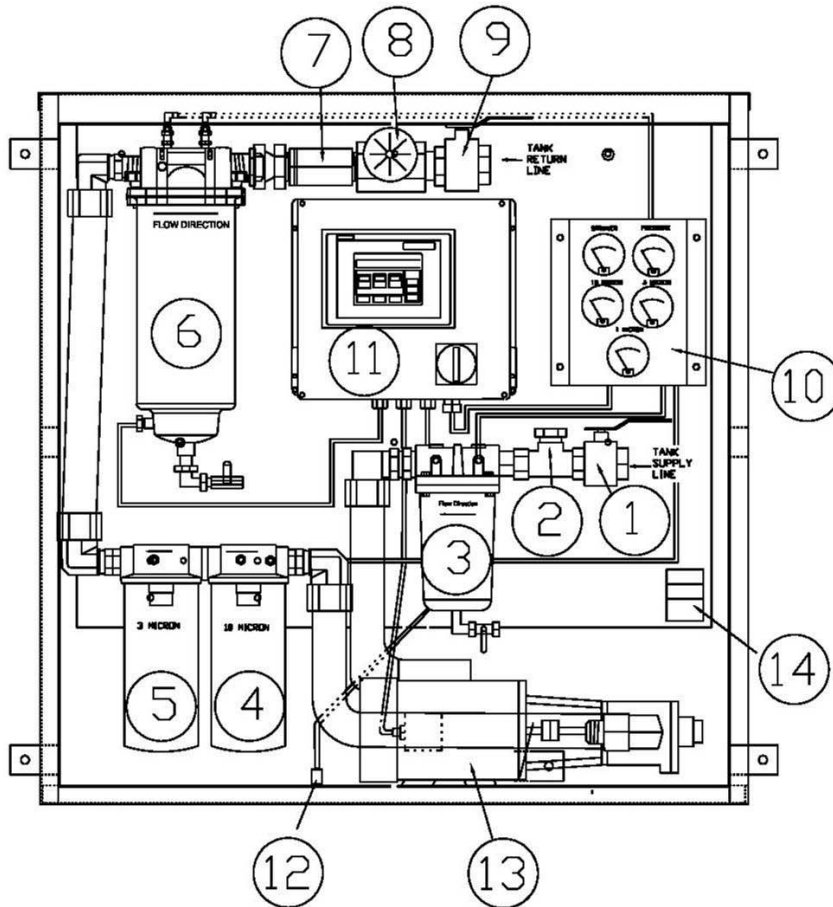
1. FTI systems operate on either above ground or underground tanks. Any installation should be completed by a qualified plumbing contractor and qualified electrician.
2. Wall mount or pedestal mount should be bolted into place.
3. 220V AC, Single Phase, 20 amp. Power supply must be available at system location.
4. A Disconnect switch is provided on control box for power shut off.
5. Pipe plugs were installed in the supply and return line for shipping purposes only, and must be removed prior to installation.
6. Holes will need to be added in cabinet for electrical, Fuel supply line, and Fuel return line.
7. All FTI models are factory tested using lightweight oil. Some of this fluid may remain in the unit. It will not interfere with the performance of the system.
8. On initial start up, if the system does not fill with fluid, the pump may require priming.
(SEE PRIMING TEE LOCATION ON NEXT PAGE)

DO NOT RUN LONGER THAN TWO MINUTES WITHOUT FLUIDS

9. To *prime the pump, fill supply line with fuel*. Remove the priming Tee Cap and fill system. Restart the system.
10. For starting system see operations manual.

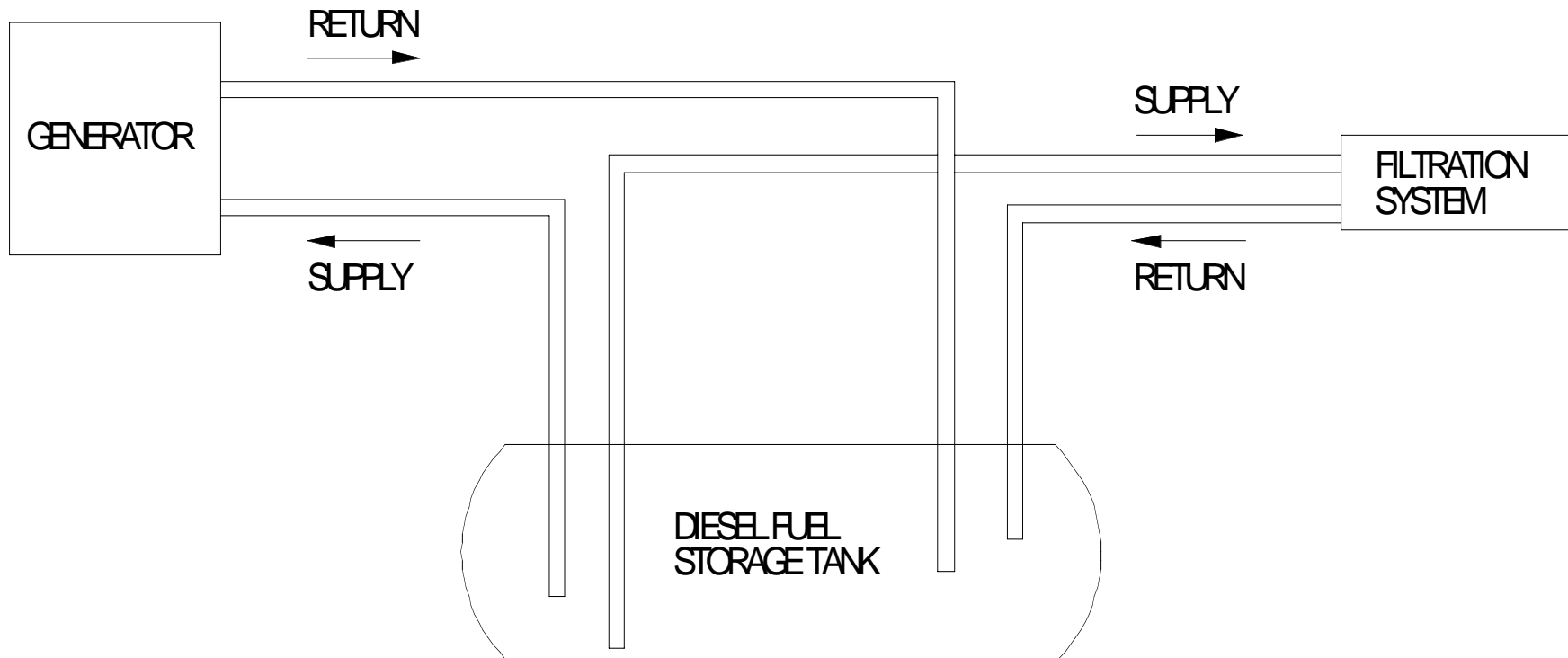
IDENTIFYING PARTS

FT-I-10A & FT-I-20A



- 1) Supply Line Hookup - NPT Ball Valve, (1 1/4" model 10A, 1 1/2" model 20A)
- 2) Priming Tee (Remove Cap and fill with Fuel if needed)
- 3) Strainer – Cartridge Type with 100 Mesh, 149 Micron Element
- 4) 10 Micron Pre Filter, Spin On Type
- 5) 3 Micron Pre Filter, Spin On Type
- 6) 1 Micron and Water Separator
- 7) Check Valve
- 8) Site Glass
- 9) Return line Hookup with NPT Ball Valve (1 1/4" model 10A, 1 1/4" model 20A)
- 10) Switch Gauge Assembly
- 11) Controller
- 12) Leak Detector
- 13) Pump / Motor Assembly
- 14) Serial Number, Model Number, FM Approved Tags

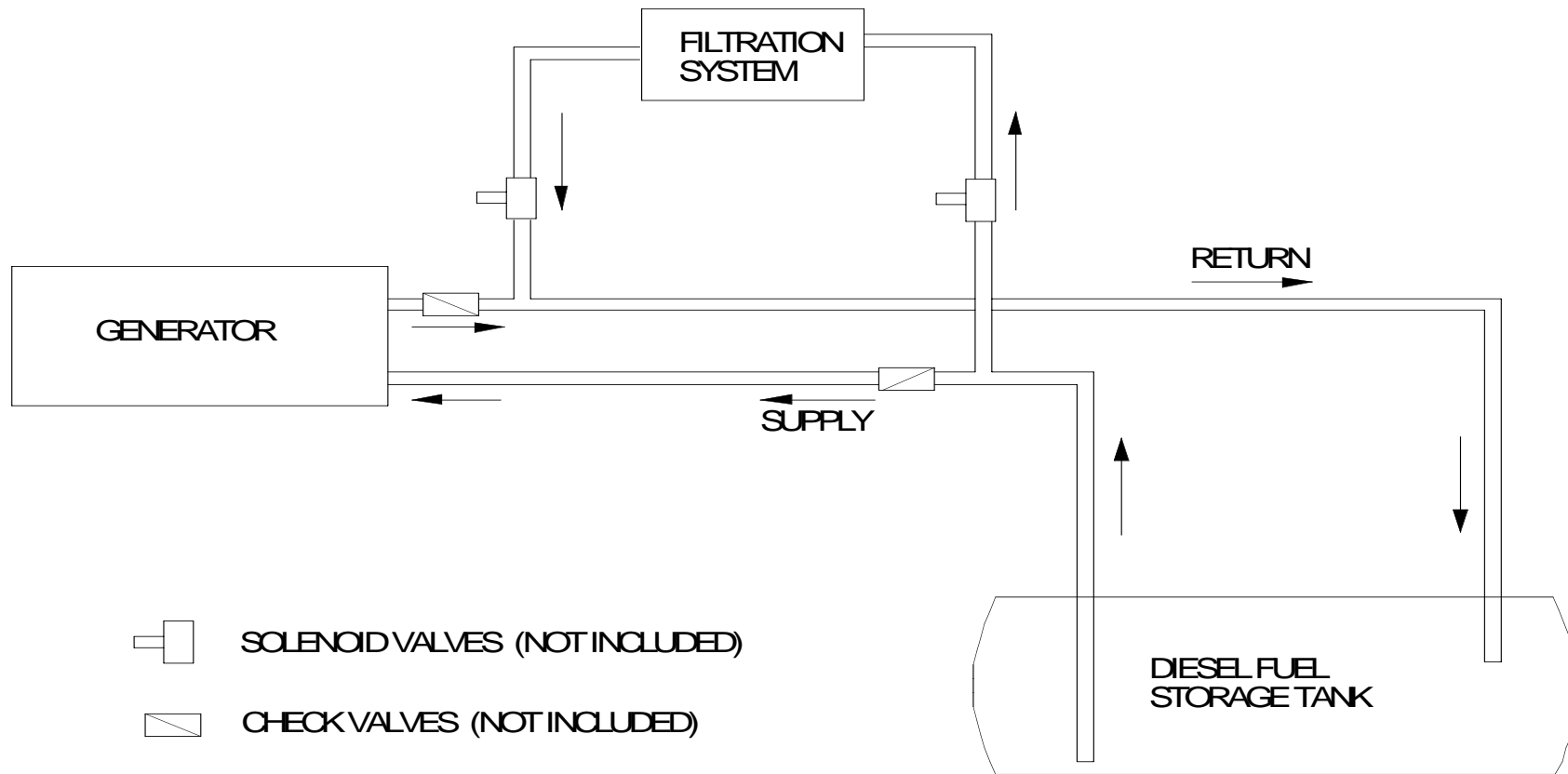
STAND ALONE INSTALLATION



Notes:

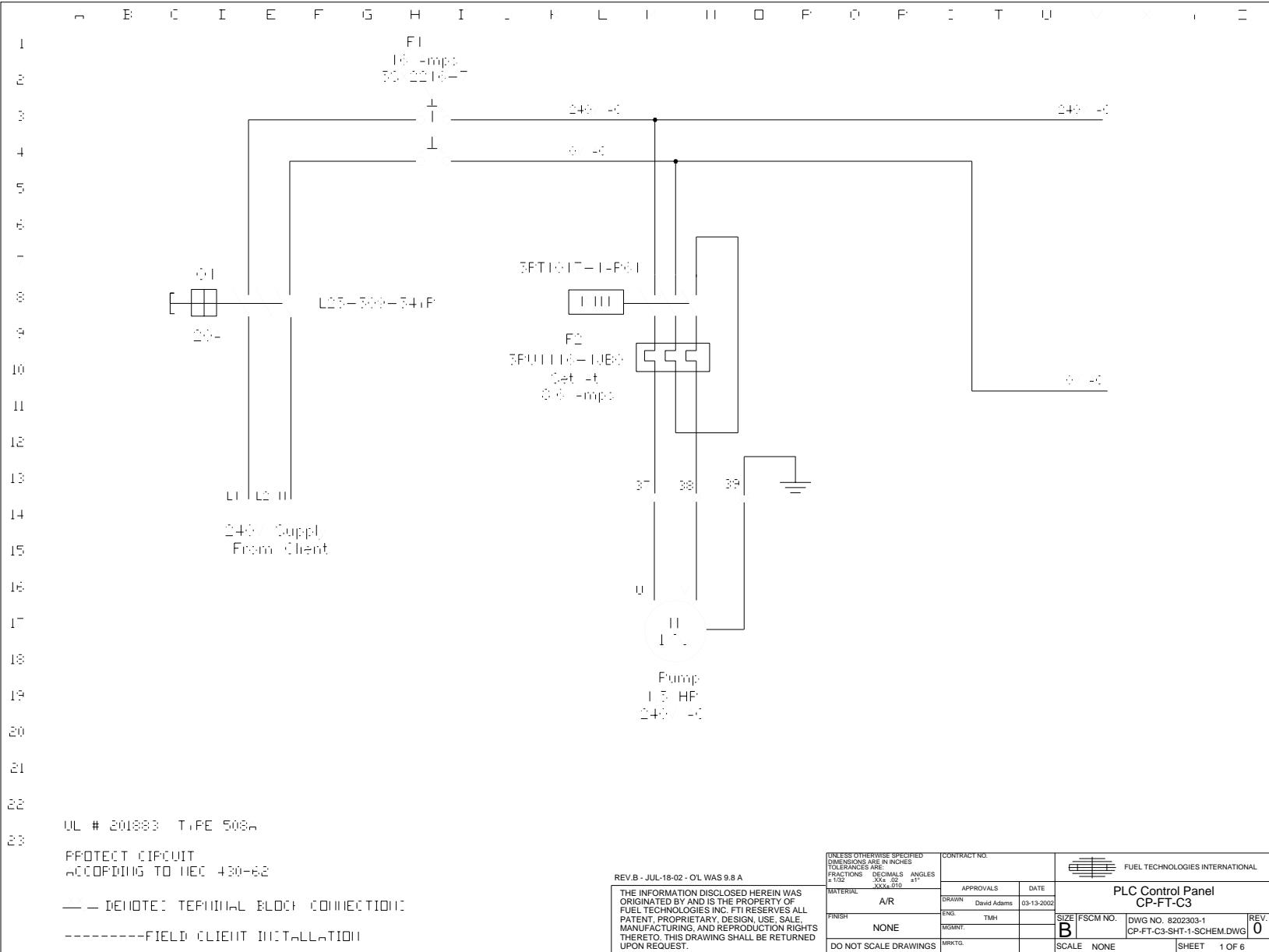
1. FTI supply line should be installed 1" from bottom of storage tank, at sump end.
2. A foot valve must be installed on supply line to keep system primed.

ALTERNATE IN LINE INSTALLATION



Notes:

1. Wire connections must be made from Generator to FTI Control Box to shut off Filtration System when Generator is running.




UL # 201883 TYPE 508a

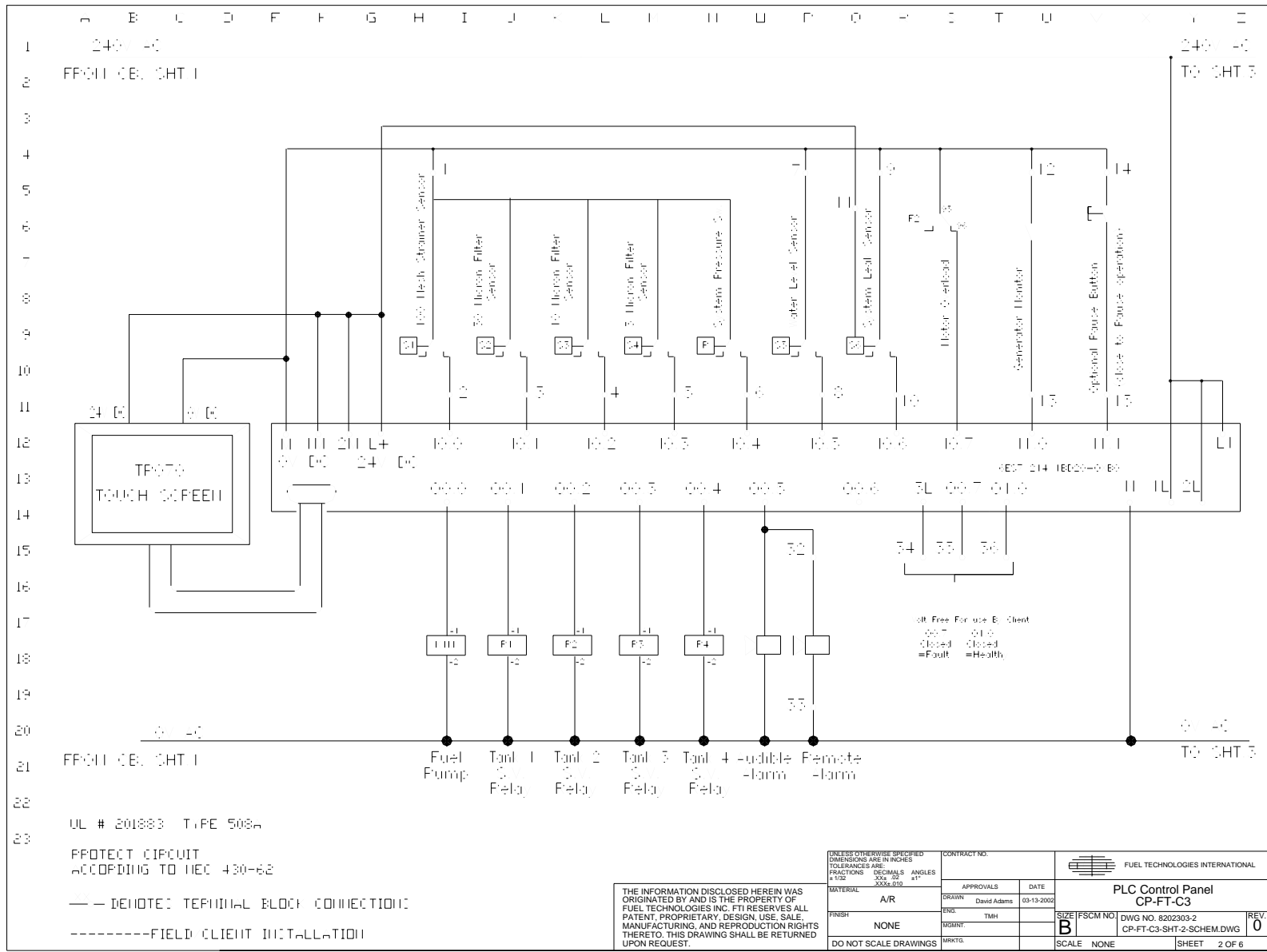
PROTECT CIRCUIT
ACCORDING TO NEC 430-62

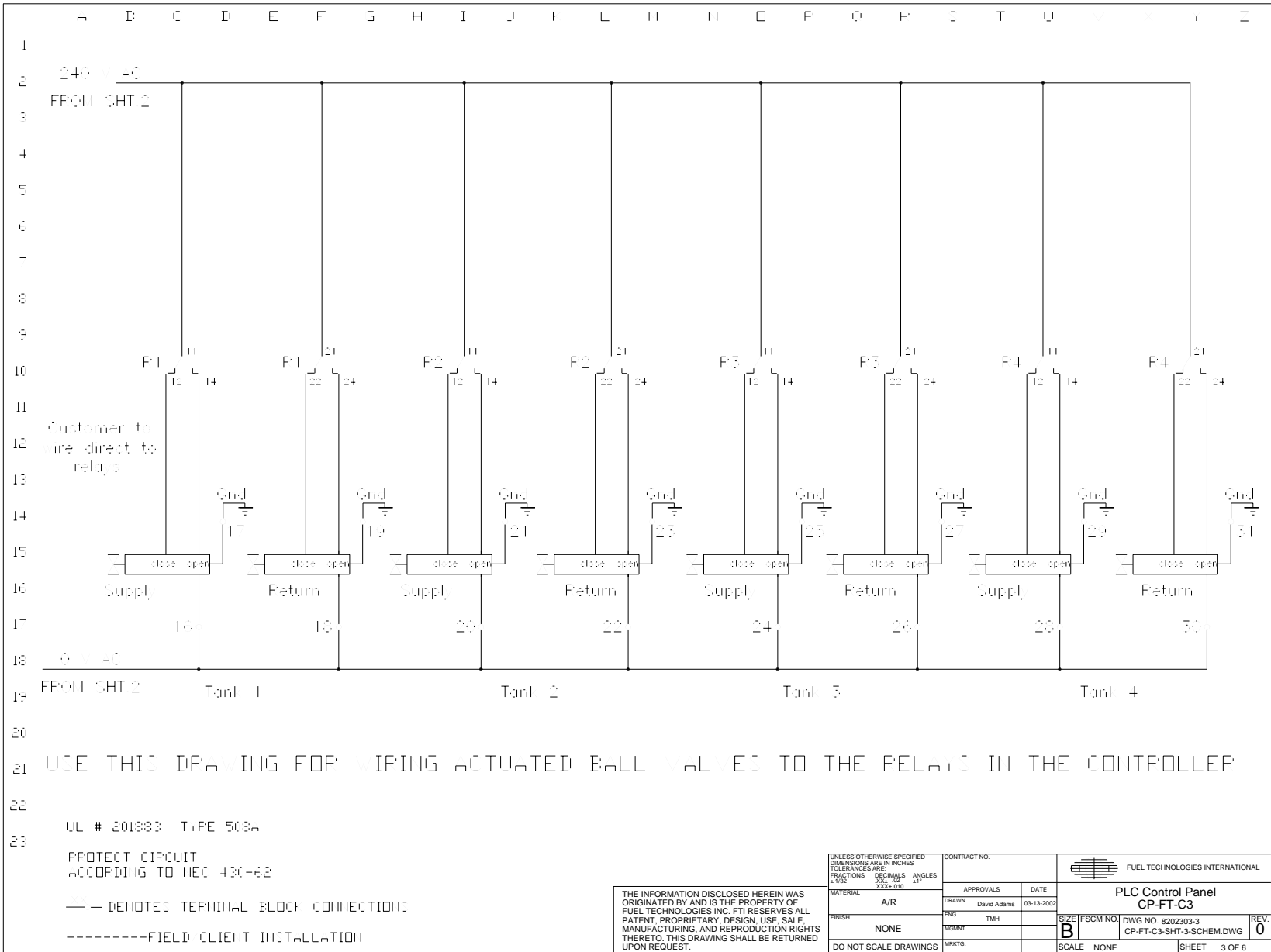
--- DENOTE: TERMINAL BLOCK CONNECTION
-----FIELD CLIENT INSTALLATION

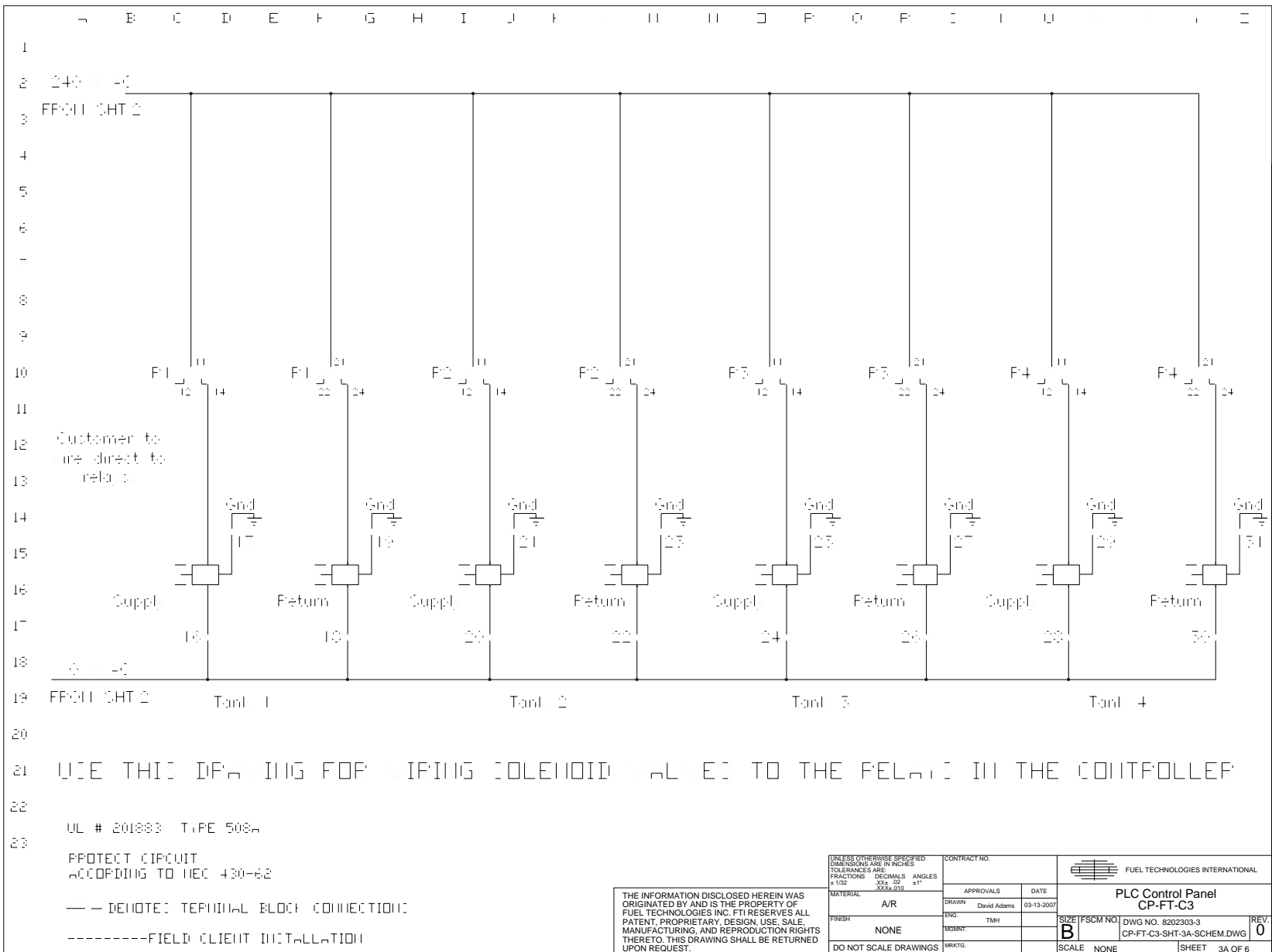
REV.B - JUL-18-02 - OL WAS 9.8 A

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± 1/32 .004 .02 ±1° XXX±.010		CONTRACT NO.		FUEL TECHNOLOGIES INTERNATIONAL	
MATERIAL A/R	APPROVALS DRAWN David Adams	DATE 03-13-2002	 PLC Control Panel CP-FT-C3		
FINISH NONE	ENG. TMH				
DO NOT SCALE DRAWINGS	MRKTG.	SIZE FSCM NO. B	DWG NO. 8202303-1 CP-FT-C3-SHT-1-SCHEM.DWG	REV. 0	
			SCALE NONE	SHEET 1 OF 6	

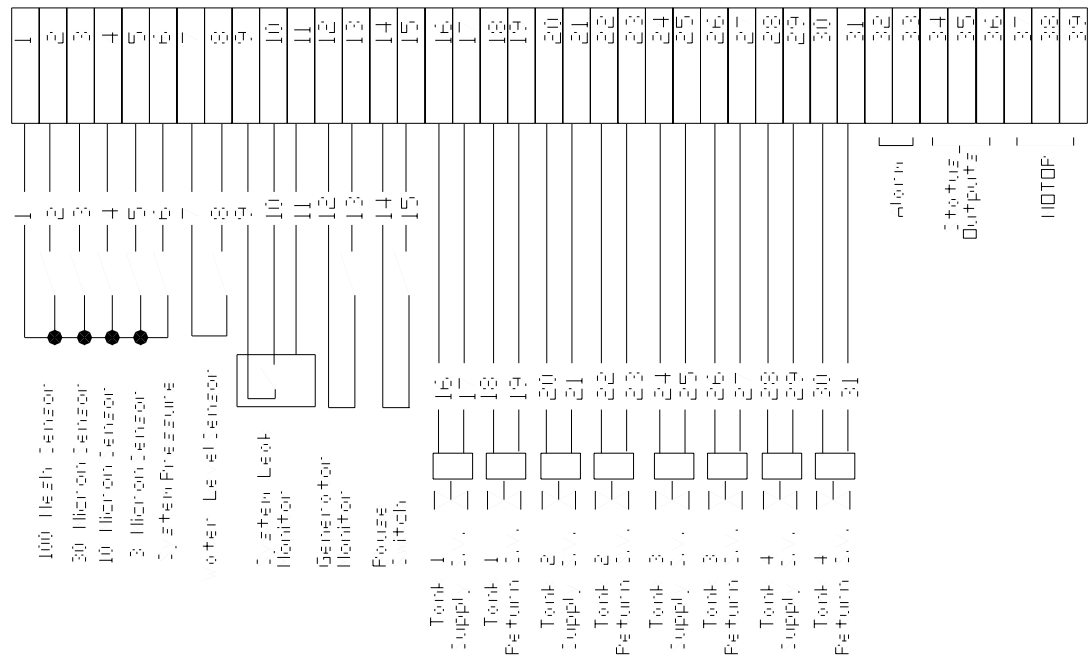
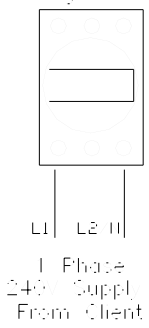






A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

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UL # 201883 TYPE 508a

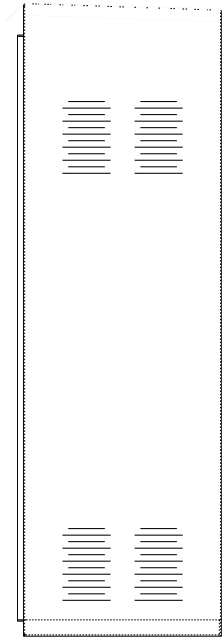
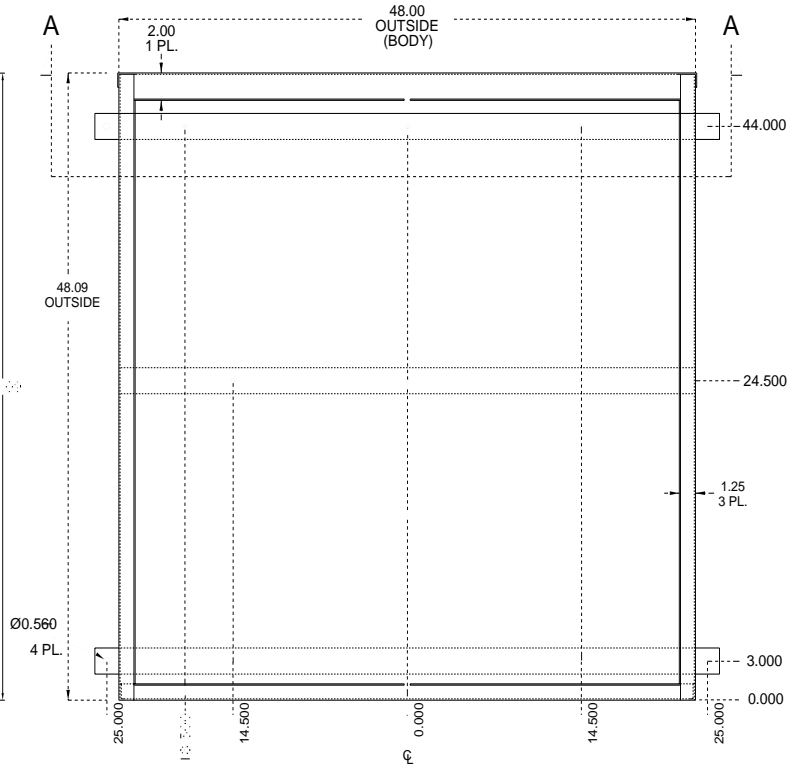
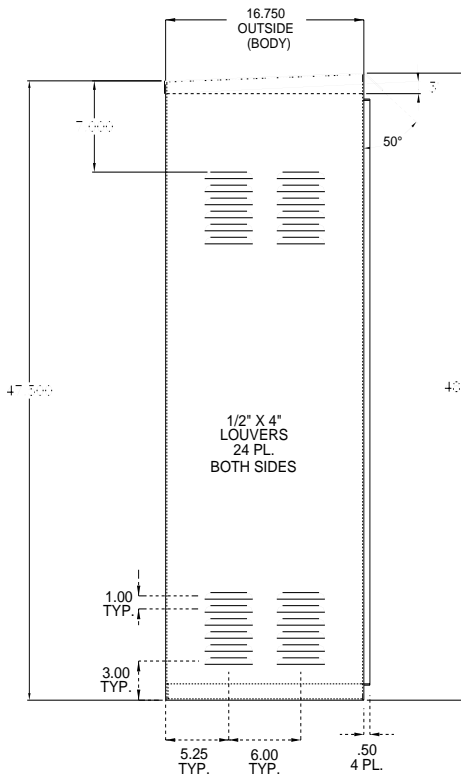
UL # 201883 TYPE 508a

PROTECT CIRCUIT
ACCORDING TO NEC 430-62

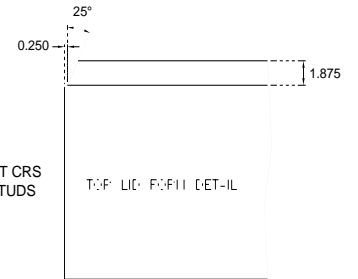
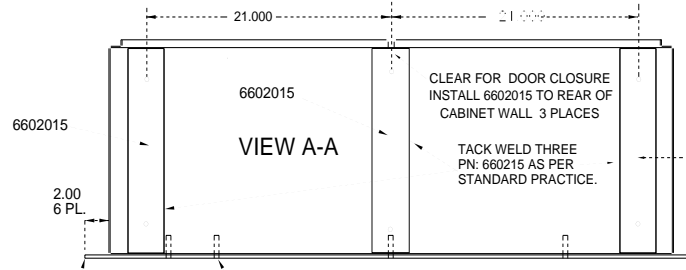
— — DENOTES TERMINAL BLOCK CONNECTIONS
-----FIELD CLIENT INSTALLATION

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MATERIAL A/R	APPROVALS	DATE	PLC Control Panel CP-FT-C3		
FINISH NONE	DRAWN David Adams	03-13-2002	ENG: TMH	SIZE/FSCM NO. B	DWG NO. 8202303-4 CP-FT-C3-SHT-2-SCHEM.DWG
DO NOT SCALE DRAWINGS	MRKTG.		SCALE NONE		REV. 0
					SHEET 4 OF 6



- NOTES: 1. CABINET TOP & BOTTOM ARE WELDED TO BODY.
FINISH ALL EXTERNAL SEAMS. TOP OVER BODY.
BOTTOM INSIDE BODY
2. FINISHED CABINET TO BE WATER RESISTANT.
(SEAMS TOP & BOTTOM)
3. BREAK ALL SHARP EDGES.
4. .375 DIA. THRU CABINET & FLAT STOCK.
WELD THREADED ROD TO FLAT STK. & GRIND FLUSH.
5. ASSEMBLED UNIT WEIGHT IS APPROX. 200 LBS.

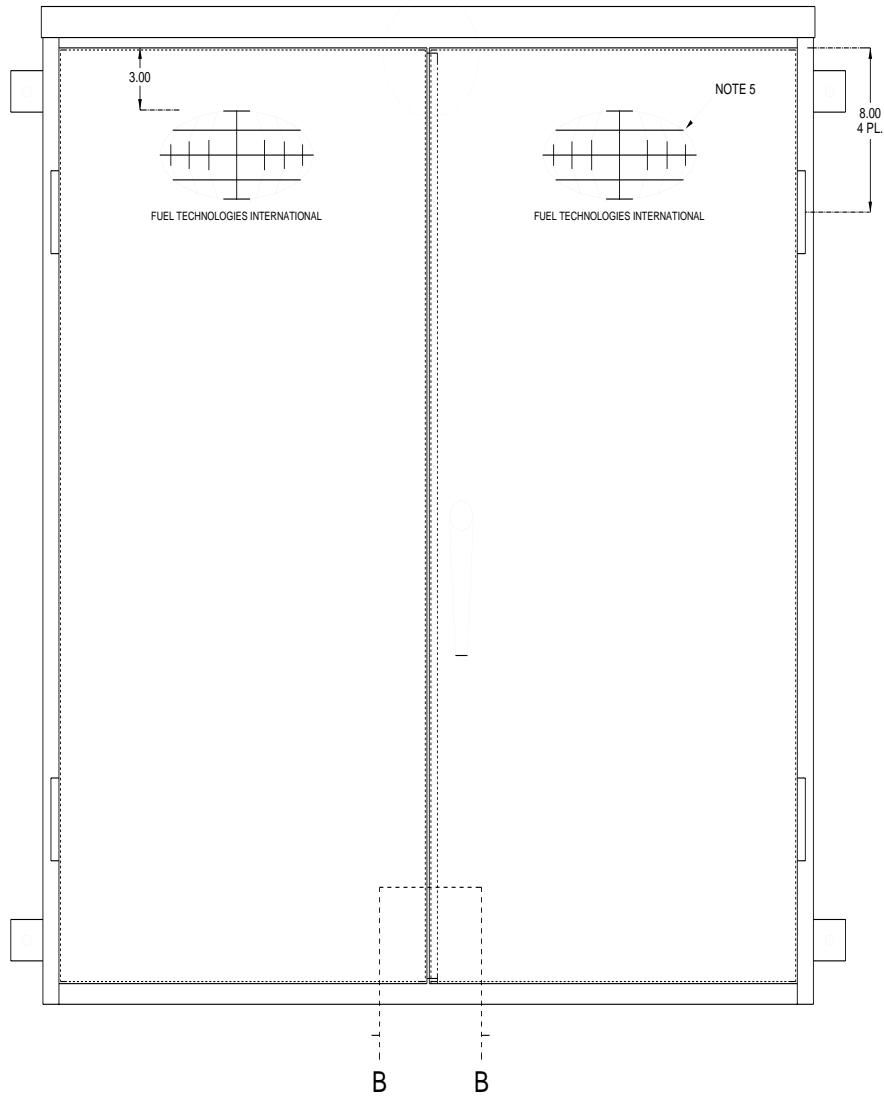


FINISH - POWDER COAT
CARDINAL, GRAY HAMMERTONE
P/N TO64-GRO5

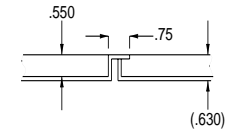
.25 X 2.00 CRS STK.
3 PC.
TACK WELD AS SHOWN

INSTALL 3/8-16 STUDS
1.50" PROTRUSION INSIDE 6 PL.
NOTE 4

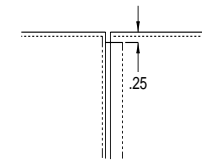
DETAIL C



VIEW B-B
2X



DETAIL C
2X



- NOTES: 1 FABRICATE 14 GA. CRS DOORS PER DETAILS.
INSIDE DIMS. TO CLEAR CAB. LIP .06/SIDE.
APPLY RUBBER WEATHERSTRIP 7 PL.
AFTER FINISH.
- 2 HANDLE - STAINLESS, 3 POINT LATCH, PADDLE LOCKABLE
- 3 HINGES - STAINLESS, SCREW ON, LIFT OFF
- 4 FINISH -POWDER COAT
CARDINAL, GRAY HAMMERTONE
P/N T064-GR05
- 5 SILKSCREEN 2 PL.