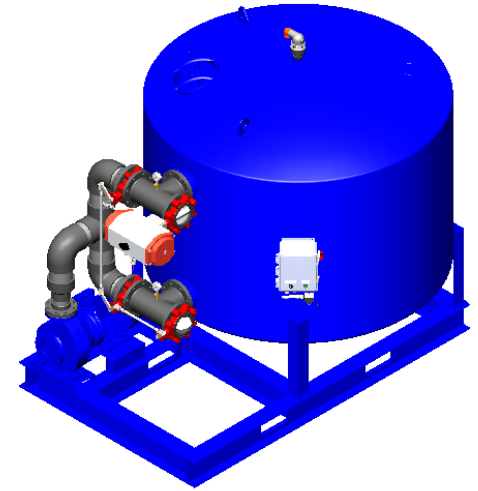
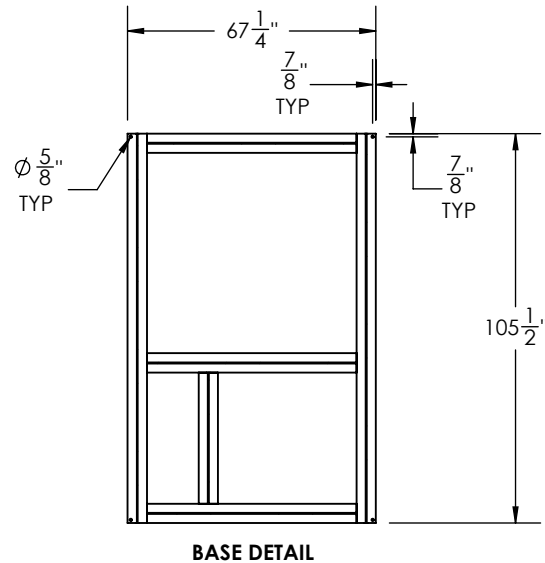
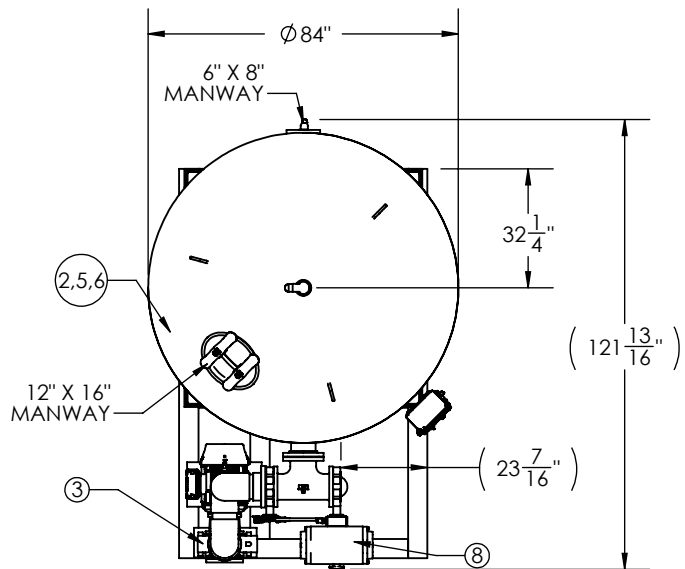


D

C

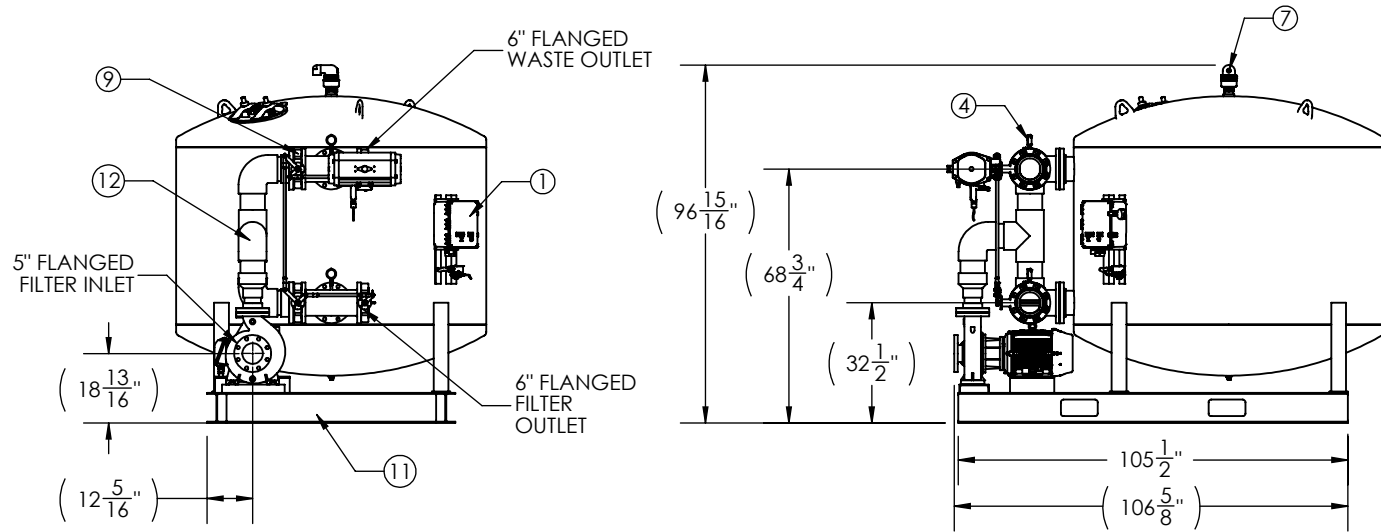
B

A



NOTES

- 1) ALL DIMENSIONS ARE GIVEN IN INCHES UNLESS OTHERWISE SPECIFIED.
- 2) DESIGN CONDITIONS:
770 GPM @ 100 PSI
MAX TEMP 140°F
FLOODED SUCTION REQUIRED
- 3) BACKWASH FLOWRATE: 575-770 GPM
- 4) REQUIRED AIR PRESSURE: 80-100 PSI
- 5) APPROXIMATE MASS:
SYSTEM: 4900 LBS
OPERATING: 24536 LBS



#	COMPONENT
1	NEMA 4X, UL, 460V/3PH/60Hz CONTROL PANEL
2	MEDIA TANK: 84" EPOXY COATED CARBON STEEL
3	PUMP: 15HP 1800, 460/3/60, 770 GPM @ 50' TDH
4	INLET/OUTLET PRESSURE GAUGES: 2.5" 0-100 PSI, LIQ FILLED
5	MEDIA: UNIGRAN #50 (X174), UNIGRAN #475 (X112)
6	UNDERDRAIN/OVERDRAIN: SLOTTED PVC/ SCH 80 PVC
7	AIR RELIEF VALVE: BARAK 2"NPT
8	PNEUMATIC VALVE ACTUATOR: BRAY S93-210
9	FILTER VALVES: BRAY S-31, BUTTERFLY, EPDM SEATS
10	BASE: EPOXY COATED CARBON STEEL I-BEAM
11	FACE PIPE: 6" PVC SCH 80

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DRAWING DATE: 7/28/2016	DRAWING TITLE: BMF-84 CS TANK WITH FACE PIPING AND PUMP
SCALE: 1:52	DRAWING NUMBER: 210490-000006
SHEET 1 OF 2	CAT NUMBER: 210490-000006
DRAWN BY: MAV	REV. NO. 0
CHECKED BY: SAL	GENERAL TOLERANCES (EXCEPT AS NOTED)
APPROVED BY: _____	ANGULAR $\pm 1^\circ$ FRACTIONAL $\pm 1/8''$ Dec: 2 PL $\pm 0.05''$, 3 PL $\pm 0.010''$

NO.	REVISION NOTES	DATE	BY

5

4

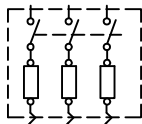
3

2

1

460V/3 ϕ /60 Hz

L1 L2 L3

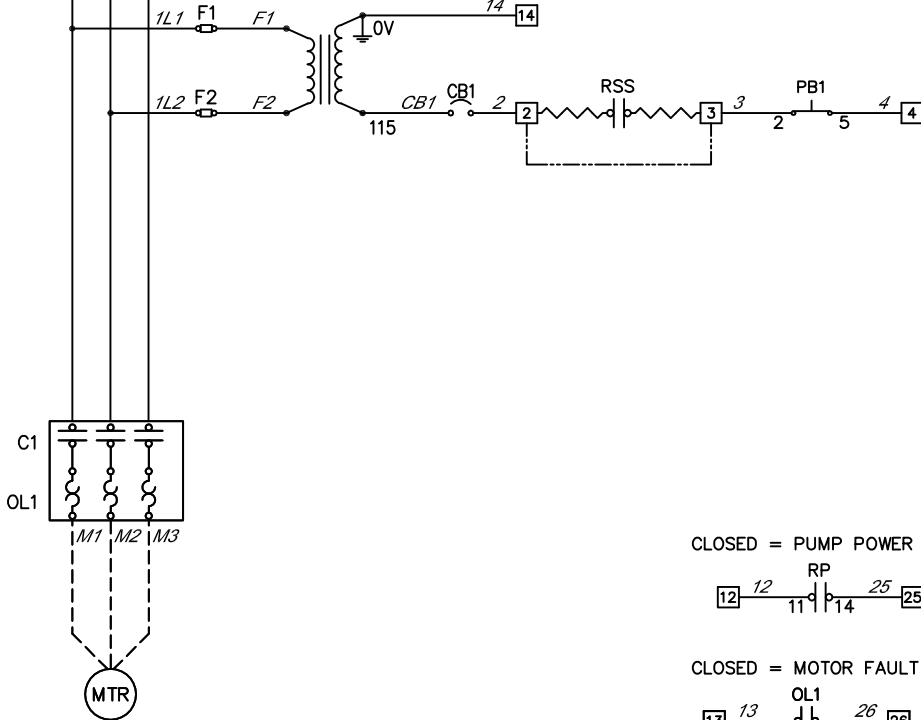


MAIN DISCONNECT AND BRANCH CIRCUIT PROTECTION PROVIDED BY OTHERS (MAXIMUM OF 70A DUAL TIME DELAY FUSE OR 100A INVERSE TIME BREAKER RECOMMENDED)

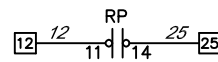
150VA TRANSFORMER		
Voltage	Fuse	Location
460	1A	H1-H4
230	2A	H2-H4
208	2A	H3-H4

LOCKABLE NON-FUSED DISCONNECT SWITCH (RATED @ 40 AMPS)

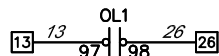
ALL PRIMARY FUSING TO BE LITTELFUSE CLASS CC, CCMR OR EQUIV.



CLOSED = PUMP POWER ON



CLOSED = MOTOR FAULT



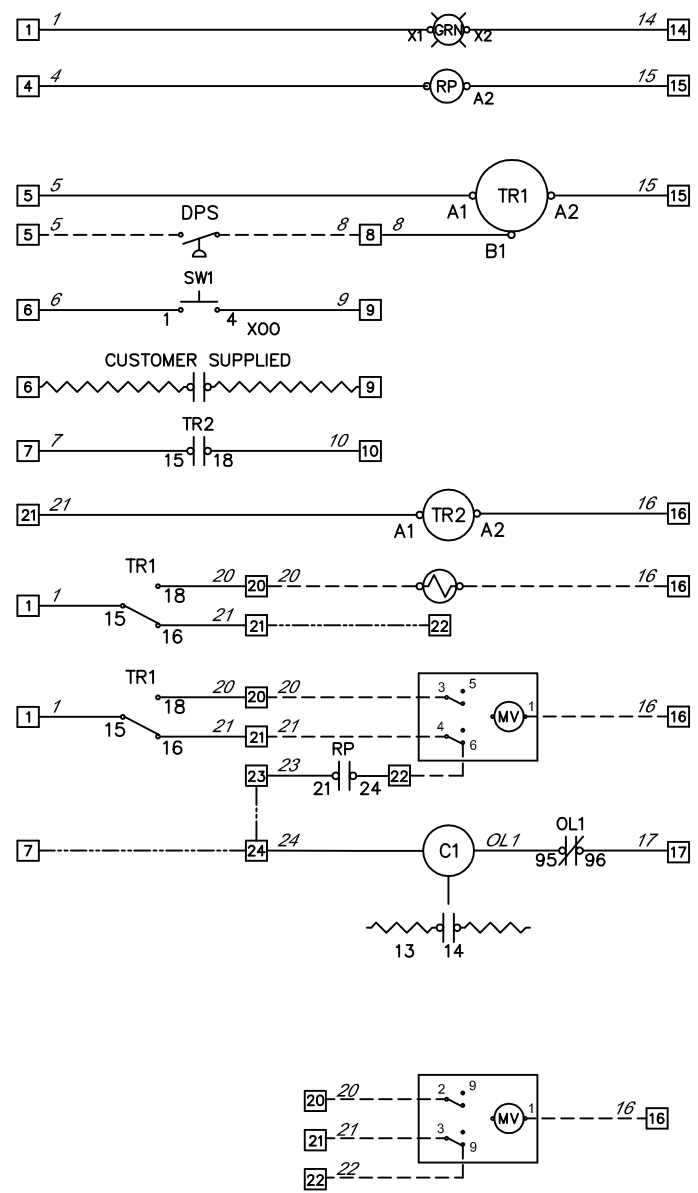
MAX. VOLTAGE: 600V
MAX. AMPERES: 39.00A

POWER	POWER	460V/3~ /60HZ
	TOTAL FLA	40 AMPS
	SCCR	5 kA RMS SYMMETRICAL, 600V MAX.
	LARGEST MTR.	35 HP

ENCLOSURE	STANDARD	UL 508A
	SIZE	12"L x 10"W x 6"D
	UL RATING	TYPE 4X
	MATERIAL	POLYCARBONATE

- GROUND PER 2011 NATIONAL ELECTRICAL CODE ARTICLE 250.
- PANEL WIRING:
SHOP/FIELD WIRING: _____
CUSTOMER'S WIRING: _____
FACTORY INSTALLED JUMPER: _____
- USE COPPER WIRE RATED 60°C MINIMUM UNLESS OTHERWISE SPECIFIED.
- DISCONNECT SWITCH TORQUE REQUIREMENTS: 35 LB IN. CONTACTOR/OVERLOAD TORQUE REQUIREMENTS: 7-10 LB IN.
- SIZE THE MAIN DISCONNECT AND BRANCH CIRCUIT PROTECTION PER 2011 NATIONAL ELECTRICAL CODE ARTICLE 430.

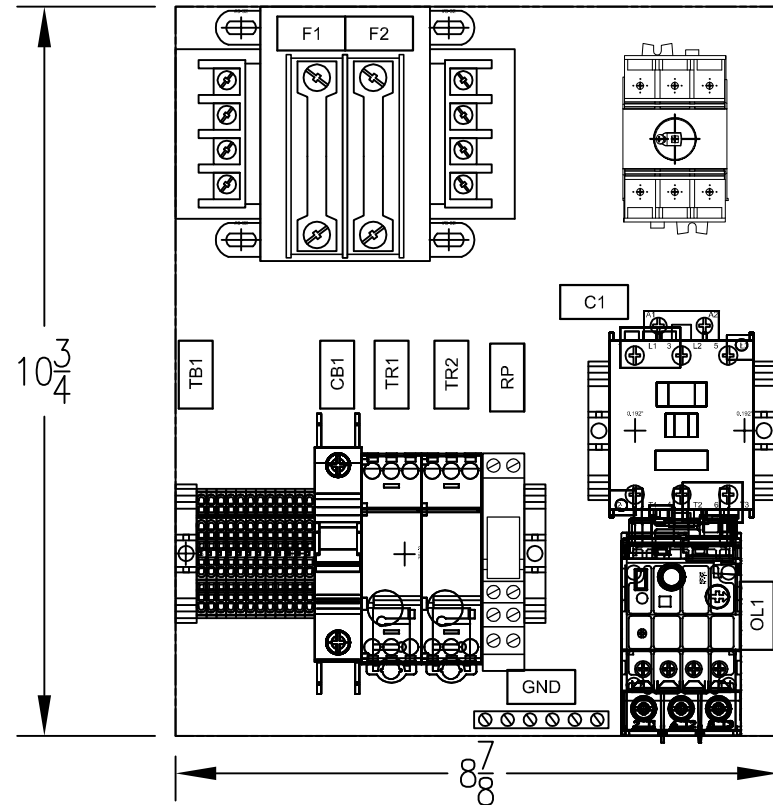
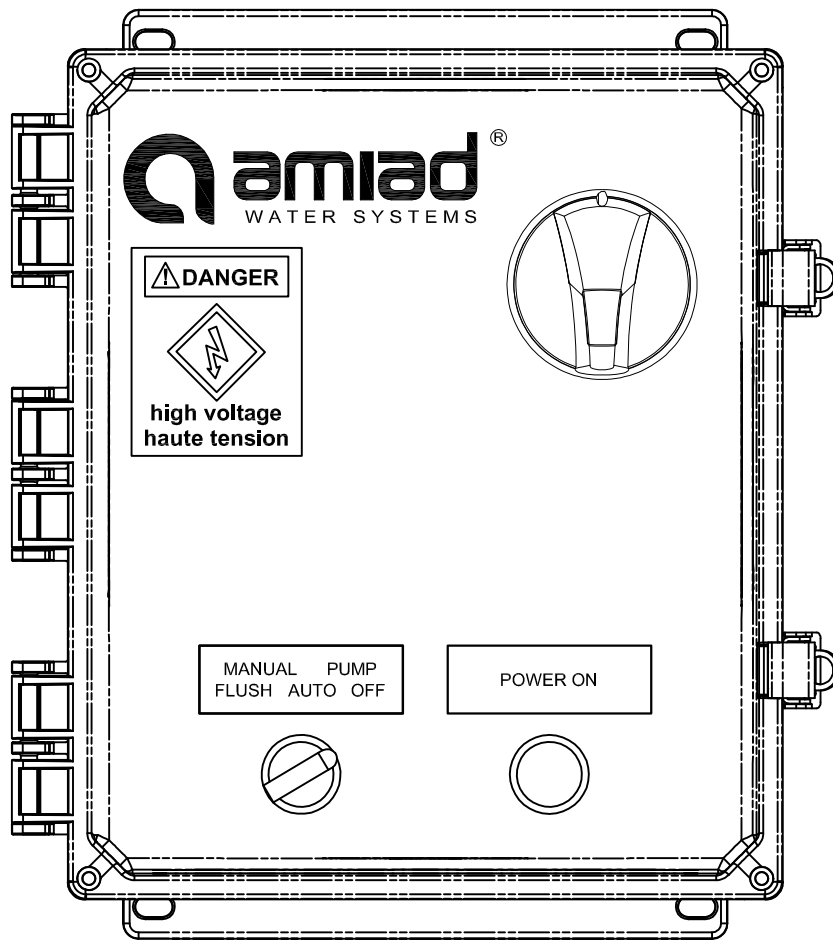
- CONDUIT HUBS AND FITTINGS MUST HAVE THE SAME UL ENVIRONMENTAL RATING AS THE CONTROL PANEL ENCLOSURE.
- WIRE COLORS ARE AS FOLLOWS—LINE=BLACK, AC=RED, NEUTRAL=WHITE, DC+=BLUE, DC-=WHITE/BLUE, GROUND=GREEN/YELLOW, EXTERNAL SOURCE=YELLOW.
- SET MOTOR OVERLOADS ACCORDING FLA ON MOTOR DATA PLATE
- ALL MOTOR WIRING TO BE AT LEAST CU, 75° RATED.
- TB1= [5] TBA= (1) TBB= (1)



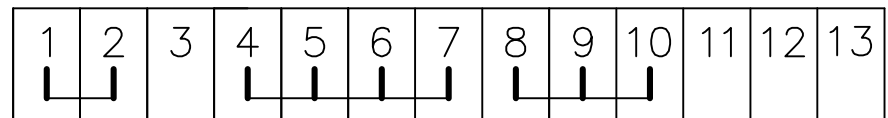
- POWER ON LIGHT
- PUMP POWER ON
- FLUSH DURATION (2 MIN) DIFFERENTIAL PRESSURE
- LOCAL FLUSH START
- REMOTE FLUSH START
- CYCLE TIMER
- CYCLE TIMER (0.05S-60HRS) FLUSH VALVE OPTIONS (SHOP TO ADD JUMPER FROM TB21 TO TB22 IF SOLENOID FLUSH VALVE IS USED)
- SYSTEM PUMP (REMOVE JUMPER FROM TB7 TO TB24 FOR EXTERNAL SOURCE FLUSH; REMOVE MECHANICAL JUMPER FROM TB23 TO TB24 FOR SYSTEM FLUSH)
- MOTOR ON DRY CONTACTS
- OPTIONAL BRAY ACTUATOR

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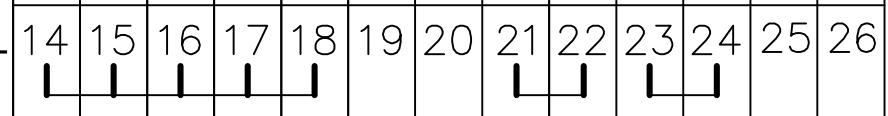
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5	10/5/2017	DELETE COUNTER	RAM	DRAWING DATE:	05/09/2014	DRAWING TITLE:	1F 460V/3~ UNI/SOL PEP 16.01-40A WIRING DIAGRAM
4	08/31/2016	ADD COUNTER, FIX PUMP "SOURCE" POWER	RAM	SCALE:	1" = 1"	DRAWING NUMBER:	720102-002093-ELC
3	07/27/2015	ADD OPTIONAL BRAY ACTUATOR	RAM	SHT.	1 of 2	REV. NO.	5
2	07/10/2014	MOTOR CONTROL	CEH	DRAWN BY:	JTE	CATALOG NUMBER:	720102-002093
1	06/03/2014	WIRE LABELS	JTE	CHKD BY:	---	GENERAL TOLERANCES	(EXCEPT AS NOTED)
NO.	DATE	NOTES	BY	APP. BY:	---	ANGULAR	±1°
GENERAL REVISIONS						FRACTIONAL	± 1/8"
						DEC:	2PL±0.05", 3PL±0.010"



UPPER LEVEL



LOWER LEVEL



NOTE

1. ALL HARDWARE WILL INCLUDE ONE MECHANICAL LOCK AND A FLAT WASHER.
2. THE ONLY EXCEPTION IS IF THE MECHANICAL SCREW IS A SELF-THREADING SCREW.
3. IF BOLT/SCREW NEEDS TO GO THROUGH A THROUGH-HOLE, THE BOLT/SCREW WILL NEED A FLAT WASHER ON BOTH SIDES OF THE MATERIAL AND MECHANICAL LOCK BEFORE THE NUT.
4. ALL HARDWARE HAS TO THREAD AT LEAST TWO COMPLETE TURNS THROUGH THE NUT/THREADED HOLE
5. IF VISIBLE, NO HARDWARE WILL EXTEND PAST THREE THREADS OUT OF THE NUT/THREADED HOLE.
6. BACKPLANE AND DEAD FRONT IF REQUIRED ARE TO BE GROUNDED ACCORDING NEC 70E.
7. UNLESS OTHERWISE NOTED, ALL CONTACTORS WILL BE AB 100-C, OVERLOADS AB 193 E-1, CONTROL RELAYS AB 700-HLT, AND CIRCUIT BREAKERS AB 1489.

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DRAWING DATE: 05/09/2014	DRAWING TITLE: 1F 460V/3~ UNI/SOL PEP 16.01-40A WIRING DIAGRAM				
SCALE: 1" = 3"	DRAWING NUMBER: 720102-002093-ELC				
SHT. 2 of 2	REV. NO. 5				
DRAWN BY: JTE	CATALOG NUMBER: 720102-002093				
NO. DATE	NOTES	BY	CHKD BY: ---	GENERAL TOLERANCES (EXCEPT AS NOTED)	ANGULAR ±1° FRACTIONAL ± 1/8" DEC: 2PL±0.05", 3PL±0.010"
GENERAL REVISIONS					
APP. BY: ---					