

**NOTES**

- 1) ALL DIMENSIONS GIVEN IN INCHES UNLESS OTHERWISE SPECIFIED.
- 2) DESIGN CONDITIONS:  
 MAX PRESSURE 150 PSI  
 MAX TEMPERATURE 140°F  
 565 GPM @ 70' TDH
- 3) APPROXIMATE MASS: 1354 LBS (DRY)

#	COMPONENT
1	NEMA 4X, UL, 460V/3PH/60Hz CONTROL PANEL
2	FILTER: 6" SAF-6000, 50 MICRON SCREEN
3	PUMP: 20HP 3600RPM, 460/3/60, 565 GPM @ 70' TDH
4	PURGE: 2" BERMAD SERIES 400
5	BASE: EPOXY COATED CARBON STEEL
6	FACE PIPE: 6" 304SS
7	SOLENOID: 24VAC ASCO RED HAT
8	DP SWITCH: MIDWEST MODEL 146
9	DRIVE MOTOR: 1/4HP BALDOR 33-1924-0422G1
10	ISOLATION VALVE: 6" BRAY S31 BUTTERFLY VALVE

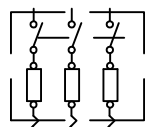
**Amiad WATER SYSTEMS**  
 120-J TALBERT ROAD  
 MOORESVILLE, NC 28117  
 PH: (704) 662-3133  
 FAX: (704) 662-3155

DRAWING DATE: 8/1/2016		DRAWING TITLE: FILTR SKID 6" SAF 6000 WITH PUMP AND CONTROLS	
SCALE: 1:20		DRAWING NUMBER: <b>700301-000044</b>	
SHEET 1 OF 2		CAT NUMBER: 700301-000044	
DRAWN BY: MAV		REV. NO. 1	
CHECKED BY: SAL		GENERAL TOLERANCES (EXCEPT AS NOTED)	
APPROVED BY: _____		ANGULAR ± 1° FRACTIONAL ± 1/8" Dec: 2 PL ± 0.05", 3 PL ± 0.010"	

NO.	REVISION NOTES	DATE	BY
1	BASE DETAIL UPDATE	2/8/2016	BJH

460V/3φ/60 Hz

L1 L2 L3

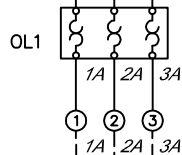
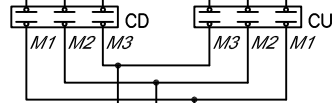
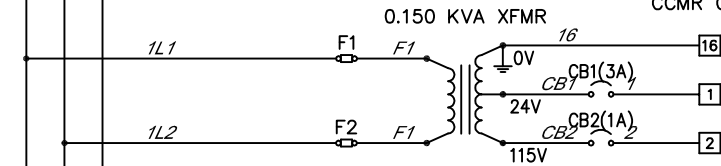


MAIN DISCONNECT AND BRANCH CIRCUIT PROTECTION PROVIDED BY OTHERS (MAXIMUM OF 90A DUAL TIME DELAY FUSE OR 90A INVERSE TIME BREAKER RECOMMENDED)

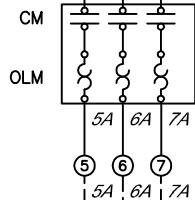
LOCKABLE NON-FUSED DISCONNECT SWITCH (RATED @ 80 AMPS)

150VA TRANSFORMER	
VOLTAGE	FUSING
575	1A
460	1A
400	1A
230	2A
208	2A

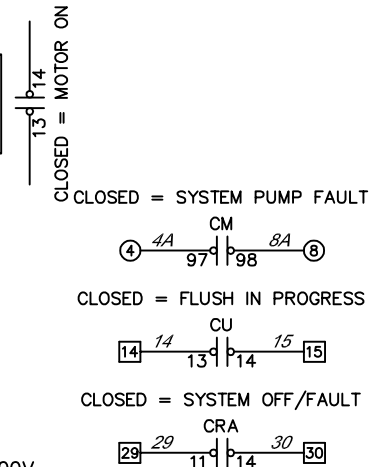
ALL FUSING TO BE LITTELFUSE CL. CC CCMR OR EQUIV.



MAX. VOLTAGE: 600V  
MAX. AMPERES: 5A



MAX. VOLTAGE: 600V  
MAX. AMPERES: 40A



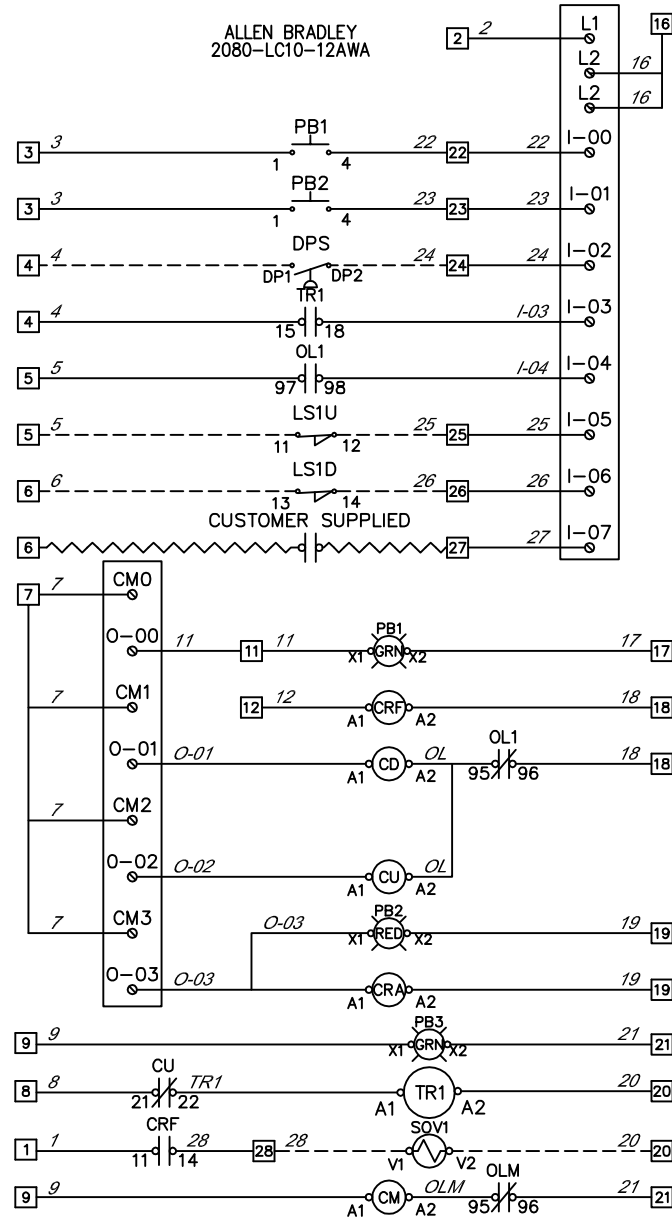
POWER	460V/3~/60HZ
TOTAL FLA	45.33 AMPS
SCCR	5 kA RMS SYMMETRICAL, 600V MAX.
LARGEST MTR.	30 HP

STANDARD	UL 508A
SIZE	16"L x 14"W x 7"D
UL RATING	TYPE 4X
MATERIAL	POLYCARBONATE

- GROUND PER 2011 NATIONAL ELECTRICAL CODE ARTICLE 250.
- PANEL WIRING: \_\_\_\_\_  
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 ELECTRIC 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]

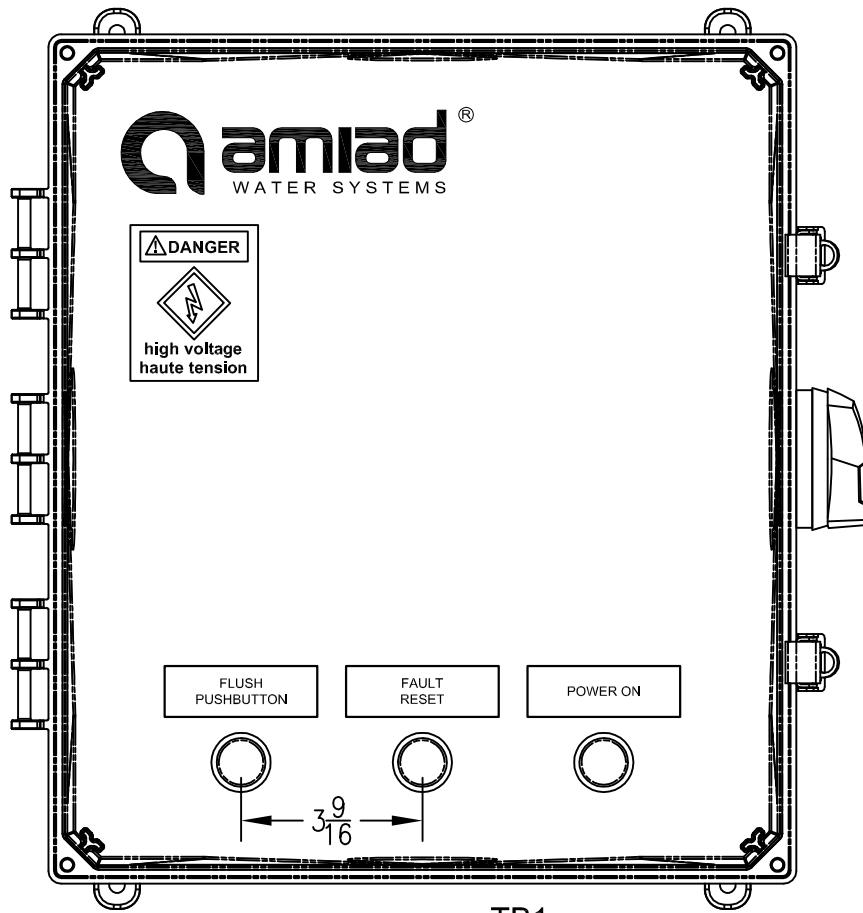
ALLEN BRADLEY  
2080-LC10-12AWA



- PLC POWER ON
- FLUSH PUSHBUTTON
- FAULT RESET PUSHBUTTON
- DIFFERENTIAL PRESSURE
- FLUSH INTERVAL TIMER
- FAULT
- UP LIMIT SWITCH
- DOWN LIMIT SWITCH
- REMOTE STOP
- FLUSH PUSHBUTTON
- FLUSH VALVE CONTROL
- MOTOR DOWN
- MOTOR UP
- FAULT RESET PUSHBUTTON
- FAULT CONTROL
- POWER ON
- FLUSH INTERVAL TIMER (0.05S-60HRS)
- FLUSH VALVE
- SYSTEM PUMP

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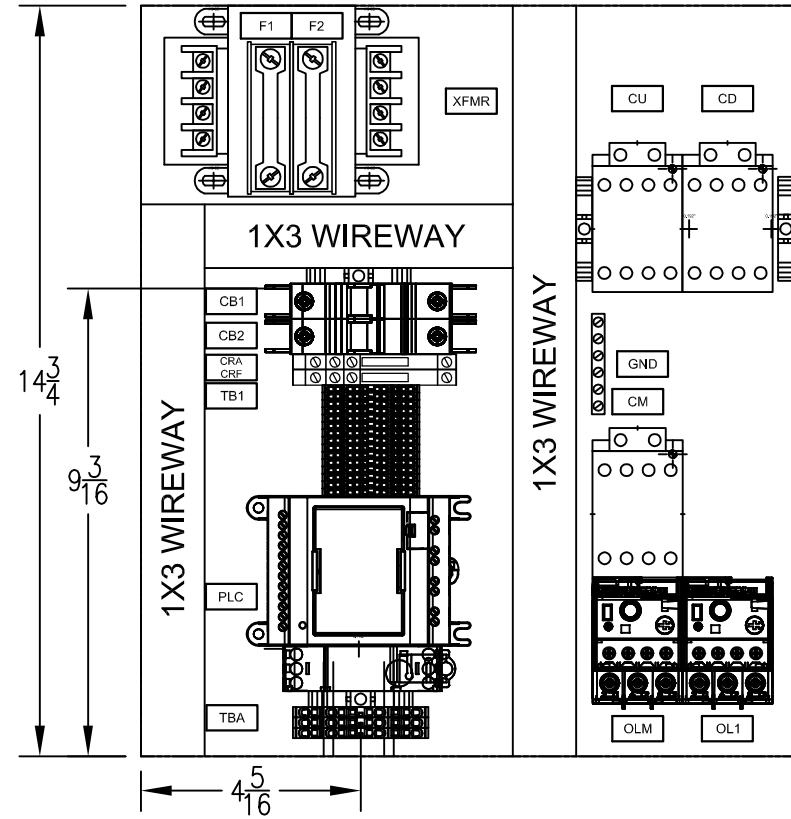
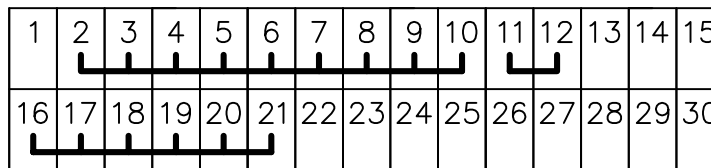
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DRAWING DATE: 11/23/2015	DRAWING TITLE: 1F 460V/3~ SOL AMD 1-5A, 16-40A WIRING DIAGRAM
SCALE: 1" = 1"	DRAWING NUMBER: 720102-000661-ELC
SHT. 1 of 2	REV. NO. 0
DRAWN BY: RAM	CATALOG NUMBER: 720102-000661
NO. DATE	NOTES
GENERAL REVISIONS	
CHKD BY: ---	GENERAL TOLERANCES (EXCEPT AS NOTED)
APP. BY: ---	ANGULAR ±1° FRACTIONAL ± 1/8" DEC: 2PL±0.05", 3PL±0.010"



TB1

UPPER LEVEL

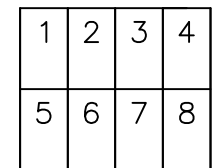
LOWER LEVEL



TBA

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: 11/23/2015	DRAWING TITLE: 1F 460V/3~ SOL AMD 1-5A, 16-40A WIRING DIAGRAM	
SCALE: 1" = 4"	DRAWING NUMBER: 720102-000661-ELC	REV. NO. 0
SHT. 2 of 2	CATALOG NUMBER: 720102-000661	
DRAWN BY: RAM	GENERAL TOLERANCES (EXCEPT AS NOTED)	ANGULAR ±1° FRACTIONAL ± 1/8" DEC: 2PL±0.05", 3PL±0.010"
NO. DATE	NOTES	BY
GENERAL REVISIONS		
APP. BY: ---	CHKD BY: ---	