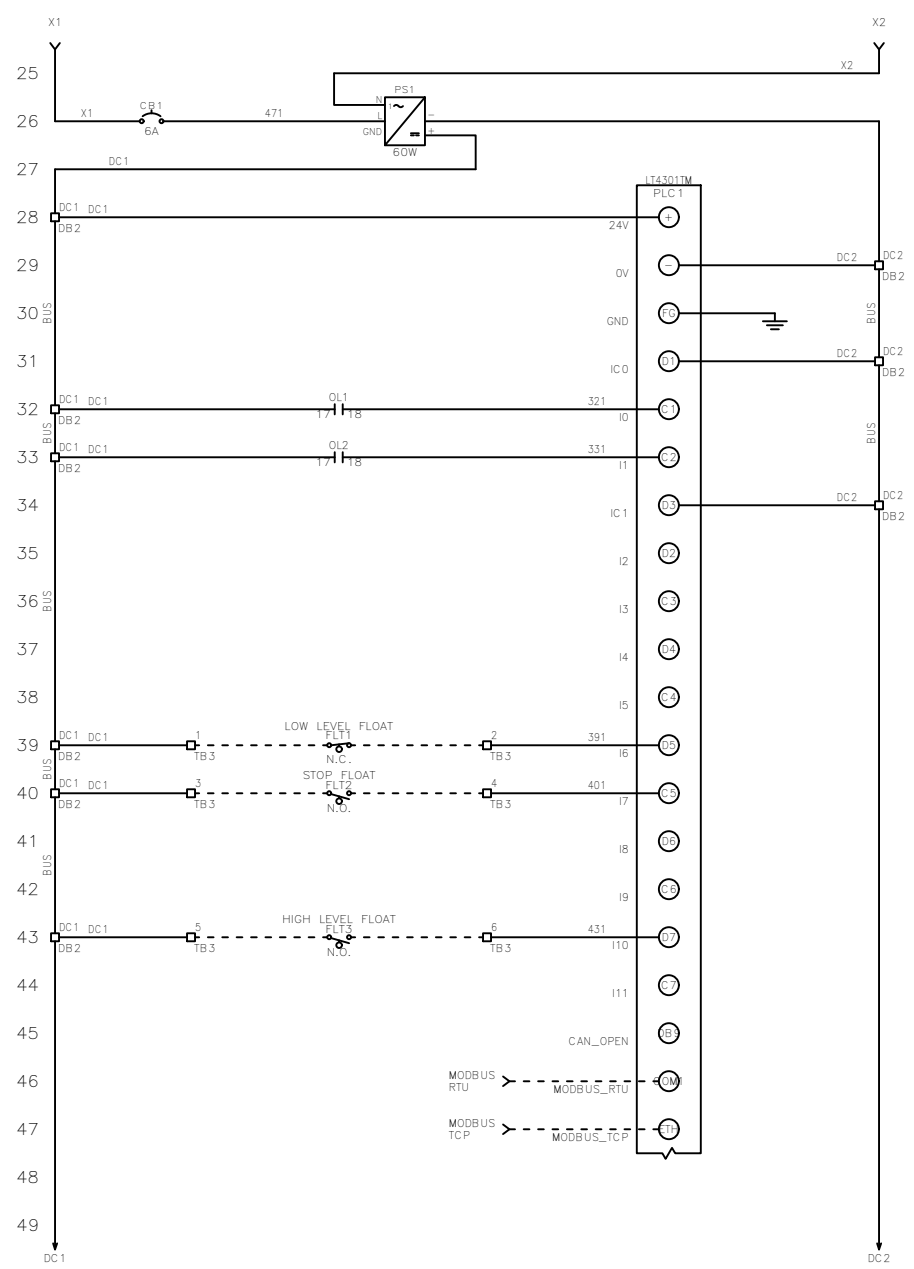
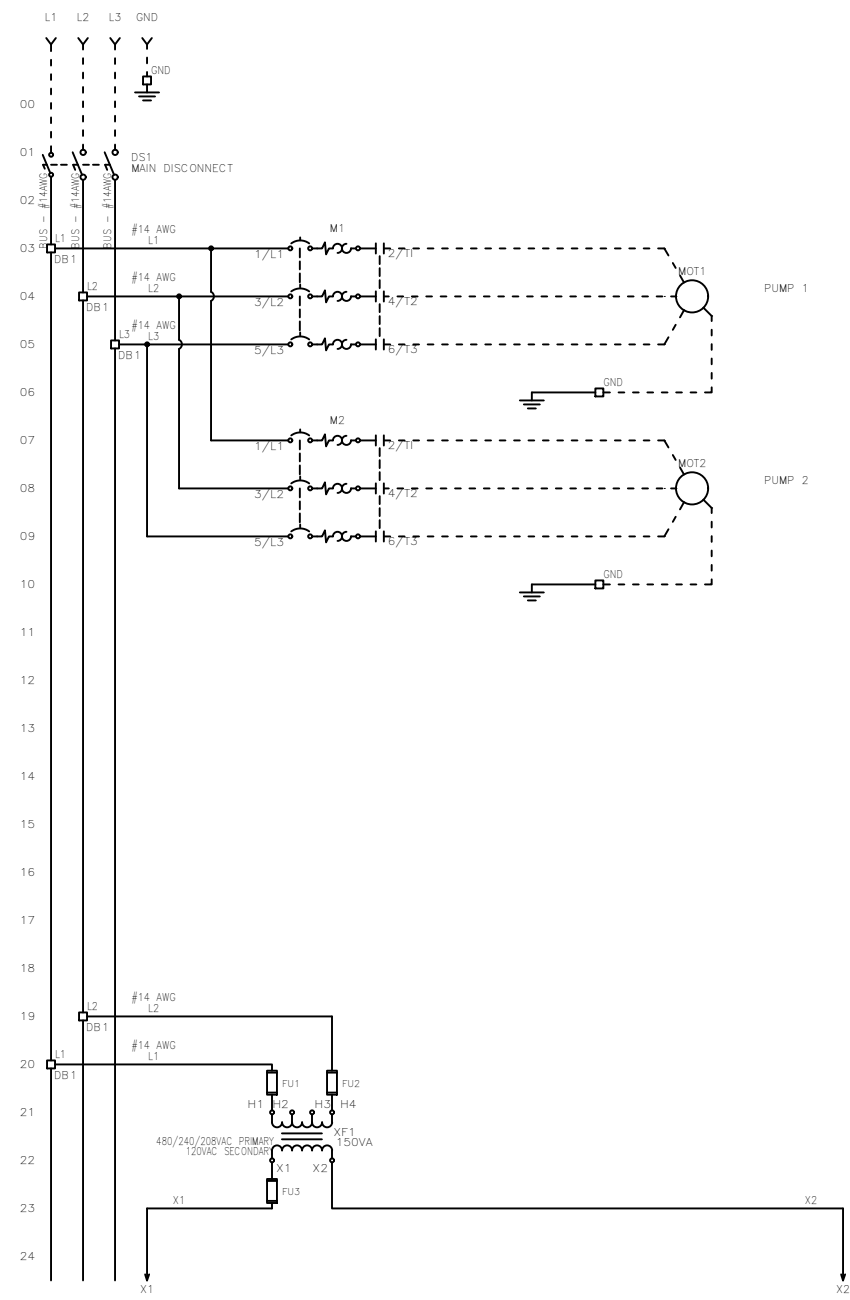


FNAME: HTRD-31-X

REVDATE: 1120

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	UPDATED PLC1 BLOCK	11/2/20	AO



**MULTI-TAP TRANSFORMER:**

CONNECT FACTORY TAGGED WIRES TO APPROPRIATE TRANSFORMER VOLTAGE TAP. SEE BELOW FOR CONNECTIONS:

FOR 208V OPERATION, CONNECT TO FUSE INPUT HF & TO TRANSFORMER TAP H2.

FOR 240V OPERATION, CONNECT TO FUSE INPUT HF & TO TRANSFORMER TAP H3.

FOR 480V OPERATION, CONNECT TO FUSE INPUT HF & TO TRANSFORMER TAP H4.

----- DASHED LINE INDICATES FIELD WIRING.

USE COPPER CONDUCTORS ONLY.

TEMPERATURE RATING OF CONDUCTORS IS TO BE:  
60°C (140°F) FOR UNDER 100A.  
75°C (167°F) FOR OVER 100A.

BRANCH CIRCUIT PROTECTION SHALL BE PROVIDED BY THE INSTALLER: MUST BE SIZED ACCORDING TO PUMP/MOTOR MANUFACTURING SPECIFICATIONS.

VERIFY CORRECT OPERATION OF CONTROL PANEL AFTER INSTALLATION IS COMPLETE.

FIELD WIRING TORQUE SPECS.		UL #:	DRAWN BY:		DATE:
TERMINAL BLOCK UT 2,5	5 IN-LB	E320866	AO		4/8/20
TERMINAL BLOCK UT 4	7 IN-LB		KM		4/8/20
TERMINAL BLOCK UT 6	15 IN-LB	TOTAL FLA:	LARGEST MOT. FLA		
TERMINAL BLOCK UT 10	15 IN-LB	11 A	5.0 A		
TERMINAL BLOCK UT 16	25 IN-LB	VOLTAGE:	PHASE:		
TERMINAL BLOCK UT 35	30 IN-LB	208/240/480 VAC	3 PH		
TS1, TS2, J2 & J3 PCB	5 IN-LB	FREQUENCY:	ENCLOSURE TYPE:		
TRANSFORMER H1F, H2F & H3F	15 IN-LB	60 Hz	NEMA 3R		
TRANSFORMER H1, H2 & H3	10 IN-LB	SHORT CIRCUIT CURRENT:			
DS1 VLS3P63-125 R1	45 IN-LB	5KA RMS SYMMETRICAL			
DS1 LK4JU3CN 100A	36 IN-LB	600V MAXIMUM			
DS1 LK4MU3N 200A	200 IN-LB				
M1/ M2 T1, T2 & T3	15 IN-LB				

THIS DRAWING CONTAINS PROPRIETARY INFORMATION AND SHALL NOT BE USED OR DISCLOSED WITHOUT PRIOR WRITTEN AUTHORIZATION.

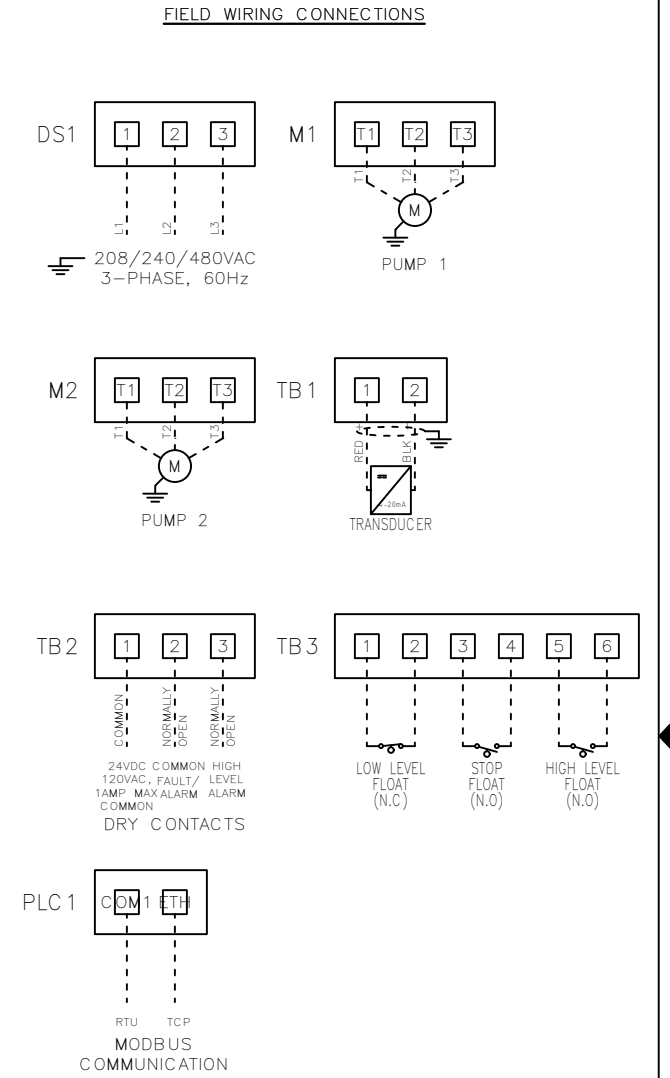
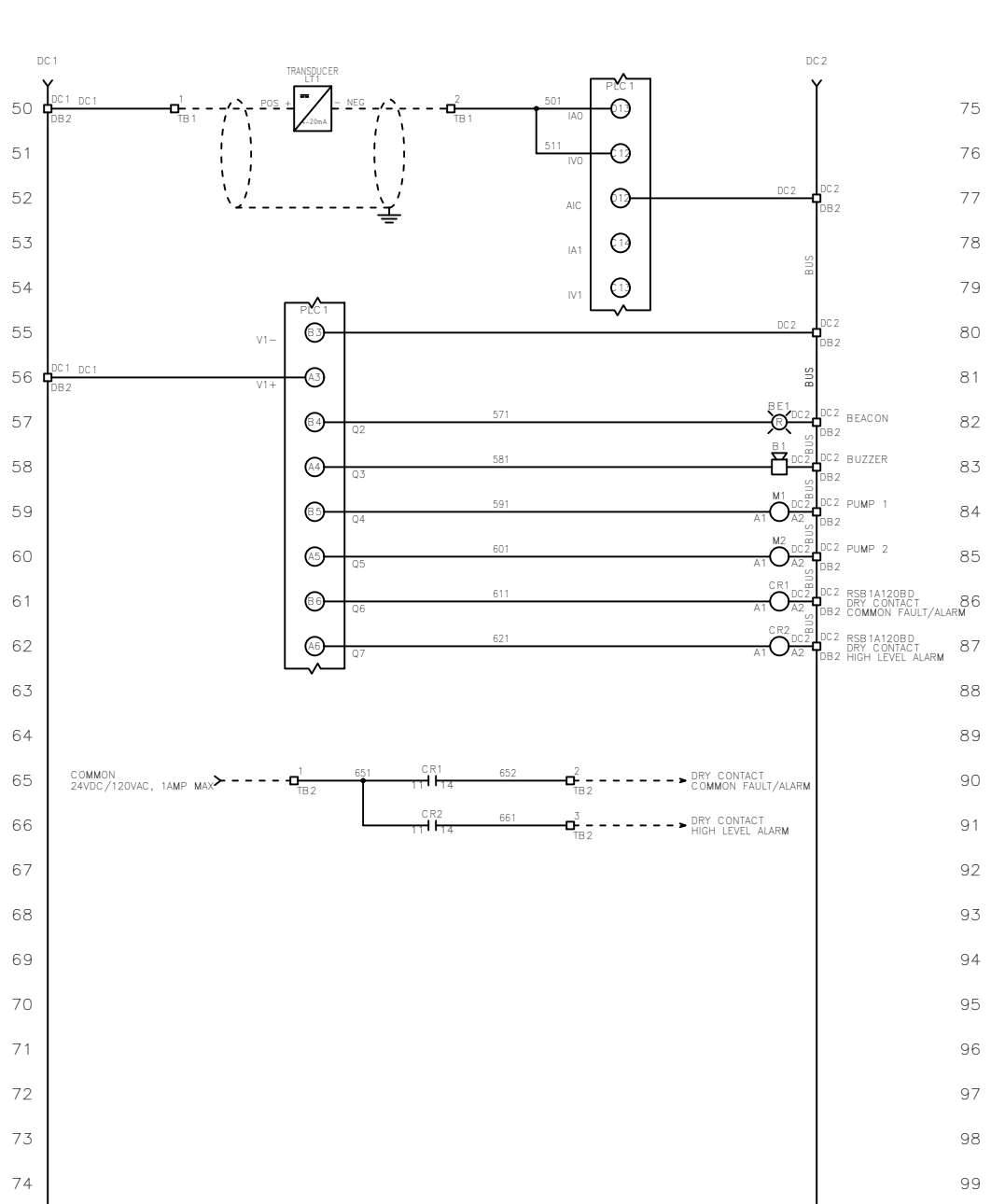


TITLE: HTRD-31-X CONTROL SCHEMATIC				
SIZE	DWG NO.	PART NO.	REV	
B	1573	HTRD-31-X	A	
SCALE	NONE	SHEET	1 OF 2	

FNAME: HTRD-31-X

REVDATE: 1120

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	UPDATED PLC1 BLOCK	11/2/20	AO




**MULTI-TAP TRANSFORMER:**  
 CONNECT FACTORY TAGGED WIRES TO APPROPRIATE TRANSFORMER VOLTAGE TAP. SEE BELOW FOR CONNECTIONS:  
 FOR 208V OPERATION, CONNECT TO FUSE INPUT HF & TO TRANSFORMER TAP H2.  
 FOR 240V OPERATION, CONNECT TO FUSE INPUT HF & TO TRANSFORMER TAP H3.  
 FOR 480V OPERATION, CONNECT TO FUSE INPUT HF & TO TRANSFORMER TAP H4.

----- DASHED LINE INDICATES FIELD WIRING.  
 USE COPPER CONDUCTORS ONLY.  
 TEMPERATURE RATING OF CONDUCTORS IS TO BE:  
 60°C (140°F) FOR UNDER 100A.  
 75°C (167°F) FOR OVER 100A.  
 BRANCH CIRCUIT PROTECTION SHALL BE PROVIDED BY THE INSTALLER: MUST BE SIZED ACCORDING TO PUMP/MOTOR MANUFACTURING SPECIFICATIONS.  
 VERIFY CORRECT OPERATION OF CONTROL PANEL AFTER INSTALLATION IS COMPLETE.

FIELD WIRING TORQUE SPECS.		UL #:
TERMINAL BLOCK UT 2,5	5 IN-LB	E320866
TERMINAL BLOCK UT 4	7 IN-LB	
TERMINAL BLOCK UT 6	15 IN-LB	TOTAL FLA:
TERMINAL BLOCK UT 10	15 IN-LB	11 A
TERMINAL BLOCK UT 16	25 IN-LB	LARGEST MOT. FLA
TERMINAL BLOCK UT 35	30 IN-LB	5.0 A
TS1, TS2, J2 & J3 PCB	5 IN-LB	VOLTAGE:
TRANSFORMER H1F, H2F & H3F	15 IN-LB	208/240/480 VAC
TRANSFORMER H1, H2 & H3	10 IN-LB	PHASE:
DS1 VLS3P63-125 R1	45 IN-LB	3 PH
DS1 LK4JU3CN 100A	36 IN-LB	FREQUENCY:
DS1 LK4MU3N 200A	200 IN-LB	60 Hz
M1/ M2 T1, T2 & T3	15 IN-LB	ENCLOSURE TYPE:
		NEMA 3R
		SHORT CIRCUIT CURRENT:
		5KA RMS SYMMETRICAL
		600V MAXIMUM

DRAWN BY: AO  
 DATE: 4/8/20  
 APPROVED BY: KM  
 DATE: 4/8/20  
 THIS DRAWING CONTAINS PROPRIETARY INFORMATION AND SHALL NOT BE USED OR DISCLOSED WITHOUT PRIOR WRITTEN AUTHORIZATION.



**HTRD-31-X  
CONTROL SCHEMATIC**

SIZE	DWG NO.	PART NO.	REV
B	1573	HTRD-31-X	A
SCALE	NONE	SHEET	2 OF 2