



Tag Note: Where y=1 for Pump1 Panel and y=2 for Pump2 Panel

Torque Rating Table					
Component	Tag	Torque Rating			
		5	7.5	10	15
208V Motor Terminal Block	PDB1, PDB2	35lb-in/4.0N-m	35lb-in/4.0N-m	40lb-in/4.5N-m	120lb-in/13.5N-m
240V Motor Terminal Block	PDB1, PDB2	35lb-in/4.0N-m	35lb-in/4.0N-m	35lb-in/4.0N-m	120lb-in/13.5N-m
480V Motor Terminal Block	PDB1, PDB2	35lb-in/4.0N-m	35lb-in/4.0N-m	35lb-in/4.0N-m	35lb-in/4.0N-m
Motor Ground Block	GND1	35lb-in/4.0N-m	35lb-in/4.0N-m	35lb-in/4.0N-m	35lb-in/4.0N-m
Field Terminations	TB1A				

480V Fuse Schedule				
Fuse	Type	Volts	Amps	Description
F-H1, F-H2	FNQR	600	5	XF1 Primary
F-X1	FNQ	600	7	XF1 Secondary

Instructions:
Include for 480V systems,
remove for 208V/240V systems.

Instructions:
Select the Pump Protection
Circuit Option based on selected
pump manufacturer.

Instructions:
Select appropriate chart based
on supplied voltage.

FVNR -Equipment List for 2 - Pump Panel						
Item	Tag	Description	Manufacturer	Model	Qty	
1	ENC1	Enclosure, 60"H x 24"W x 18"D, Free-Stand Single Access; 3-Point Latch; 12 Gauge 304 SS, Type 3R, 4, 4X, 12	Hoffman	A602418SSFSN4	2	
2	BPNL1	Enclosure, 60"H x 24"W, Back Panel w/ Mounting Channel, Painted Steel	Hoffman	A60P24F1	2	
3	DFNT	Enclosure, Dead Front, 60"hx24"W, Aluminum	EWS	Custom-AL-60x24	2	
4	DFNT	Enclosure, Dead Front, Swing-Out Panel Kit	Hoffman	ANADFK	2	
5	DRAIN	Enclosure, Drain Vent, HZOMIT, 2" L x 1.25" OD, 1/2" NPT/NPS, Corrosion-Resistant Poly., Type 4, 4x	Hoffman	AVDR4NM	2	
6	PNLT-Py	Enclosure, LED Light Kit, 20-60VDC 5W, Manual Switch, Screw Mount	Hoffman	LEDD1S35	2	
7	PDB-Py	Power Distribution Block, 3-Pole, 600V 175A 10KA Sym., Line-(1) #14-2/0 AWG Load-(4) #14-4 AWG	Square D	9080LBA362104	2	
8	PDB-Py	Power Distribution Block, 3-Pole, Cover, Clear	Square D	9080LB23	2	
9	N-Py	Power Distribution Block, 1-Pole, 600V 350A 10KA Sym., Line-(2) #14-2/0 AWG Load-(6) #14-4 AWG	Square D	9080LBA163206	2	
10	N-Py	Power Distribution Block, 1-Pole, Cover, Clear	Square D	9080LB31	2	
11	MTB-Py	Power Distribution Block, 3-Pole, 600V 175A 10KA Sym., Line-(1) #14-2/0 AWG Load-(1) #14-2/0 AWG	Square D	9080LBA362101	2	
12	MTB-Py	Power Distribution Block, 3-Pole, Cover, Clear	Square D	9080LB23	2	
13	GND	Ground, Lug (2), 600V #14-1/0 AWG	NSI	2-OT	2	
14	CB1-Py	Circuit Breaker, Miniature Multi 9, 1 Pole, 240V 10A 60Hz 10KAIR, Box Lug #14-4 AWG, 22 lb-in	Square D	60110	2	
15	HTRy	Heater, Electrical 400W, 120VAC	Hammond Manuf.	FLHTF400A115	2	
16	MS-Py	NEMA FVNR Starter	Square D	See HP Table	2	
17	OL-Py	Overload Melting Alloy, 3 Thermal Units	Square D	Size per Motor FLA	6	
18	OL-Py	Overload Auxiliary Contact 2N.C.	Square D	9999S05	2	
19	CT1-Py - CT3-Py	Current Transducer, AT Series, Range: 0-10A / 0-20A / 0-50A, 4-20ma	NK Technologies	AT1-420-24L-FF	6	
20	SS1-Py, SS2-Py	Selector Switch, 30mm, 2 Position Maintained, Black Standard Handle, 600V 10A, 2-SPDT, NEMA Type 4/4X/13	Square D	9001SKS11BH2	4	
21	LT1-Py	Pilot Light, 30mm Push To Test Light, 120VAC Green LED, Green Fresnel Lens, Type 1/2/3R/3/4/4X/12/13	Square D	9001SKT38LGG31	2	
22	LS2,LS3	Switch, Intrusion Alarm, Momentary On, Maintained Off, 3/4A SPST N.C.	NSI	76030PS	2	
23	CR-Py	Relay, 11-Pin Tubular, General Purpose Relay w/ Ind Light, Coil 24VDC 1.4W, 120/240VAC 10/6.5A, 3PDT	Square D	8501KPD13P14V53	2	
24	CR-Py	Relay, 11-Pin Tubular Socket, 300V 10A Accepts up to 2 #14 AWG	ABB	NDS-11	2	
25	Tby	Terminal Block, UT 4, Feed Through Terminal, 600V 30A 26-10AWG, Grey	Phoenix Contact	3044102	48	
26	TByA	Terminal Block, UT 10, Feed Through Terminal, 600V 65A 20-6AWG, Grey	Phoenix Contact	3044160	8	
27	TBy, TByA	Terminal Block, D-UT 2,5/10, End Cover, Grey	Phoenix Contact	3047028	4	
28	XF1-Py	Control Transformer, Primary & Secondary Fusing, 1KVA, 220-480VAC x 120VAC	Square D	9070TF1000D1	2	
29	XF1-Py	Control Transformer, Fuse Puller	Square D	9070FP-1	2	
30	XF1-Py	Control Transformer, 250-5000 VA, Fingersafe Covers	Square D	9070FSC-2	2	
31	F-H1, F-H2	Fuse, 13/32" x 1-1/2", Class CC, Time Delay Rejection, 600V 5A, 200KAIR	Bussmann	FNQR-5	4	
32	F-X1	Fuse, 13/32" x 1-1/2", Midget, Time Delay, 500V 7A, 10KAIR	Bussmann	FNQ-7	2	
33	- - -	Terminal Block, End Clamp, E/NS 35 N	Phoenix Contact	800886	8	
34	CON1-Py,CON2--Py,CON3-Py	Connector, GST18®, Female, 250V 20A 4kVimpulse, Screw Connection, 6.2lb-in	Wieland	92.931.3053.1	6	
35	CON1-Py,CON2--Py,CON3-Py	Connector, GST18®, Male, 250V 20A 4kVimpulse, Screw Connection, 6.2lb-in	Wieland	92.932.3053.1	6	
Pump Protection Circuits Option F1						
36	PPMyA	Relay, 11-Pin Tubular, 1-Channel Seal Fail, Coil 120V 2VA; Probe 9VDC; Sensitivity Range 470 to 10KΩ; Contact 250V 10A, SPDT	Diversified Electrical	SPM-120-AAA-10K	2	
37	PPMyA	Relay, 11-Pin Tubular Socket, 300V 10A	Custom Connector	ES11	2	
Pump Protection Circuits Option G1						
36	PPMyA	Pump Protection Module (Supplied by Pump MFG)	Grundfos	SMART "S" RELAY	2	
Pump Protection Circuits Option K1						
36	PPMyA	PumpSafe Relay Module A (Supplied by Pump MFG)	KSB	Module A	2	
37	TByA	Terminal Block, UT 10, Feed Through Terminal, 600V 65A 20-6AWG, Grey	Phoenix Contact	3044160	Add 4	
Pump Protection Circuits Option K2						
36	PPMyA	PumpSafe Relay Module A (Supplied by Pump MFG)	KSB	Module A	2	
37	PPMyD	PumpSafe Relay Module D (Supplied by Pump MFG)	KSB	Module D	2	

208/240VAC FVNR Pump Panel Horsepower Related Components Equipment List					
Item	Tag	Horsepower			
		5	7.5	10	15
3 Phase FVNR Starter	MS1, MS2	8536SCO2V02S	8536SCO2V02S	8536SDO2V20S	8536SEO2V02S
Overloads	OL1, OL2	* Note 1	* Note 1	* Note 1	* Note 1
Power Distribution Block	PDB-Px	9080LBA361104	9080LBA361104	9080LBA361104	9080LBA363104
Power Distribution Block Cover	PDB-Px	N/A	N/A	N/A	9080LB33
Motor Neutral Block	N-P1, N-P2	9080LBA161104	9080LBA161104	9080LBA161104	9080LBA162104
Motor Termination Block	MTB-Px	9080LBA361101	9080LBA361101	9080LBA361101	9080LBA362101

480VAC FVNR Pump Panel Horsepower Related Components Equipment List					
Item	Tag	Horsepower			
		5	7.5	10	15
3 Phase FVNR Starter	MS1, MS2	8536SBO2V02S	8536SCO2V02S	8536SCO2V02S	8536SDO2V02S
Overloads	OL1, OL2	* Note 1	* Note 1	* Note 1	* Note 1
Power Distribution Block	PDB-Px	9080LBA361104	9080LBA361104	9080LBA361104	9080LBA361104
Power Distribution Block Cover	PDB-Px	N/A	N/A	N/A	N/A
Motor Termination Block	MTB-Px	9080LBA361101	9080LBA361101	9080LBA361101	9080LBA361101

SEE NOTE #10 ON SHEET DS-0.1