

Torque Rating Table											
Component	Tag	Torque Rating									
		5	7.5	10	15	20	25	30	40	50	60
208/240V Power Distribution Block, Motor Terminal Block	PDB-Px, MTB-Px	35lb-in 4.0N-m	40lb-in 4.5N-m	45lb-in 5.1N-m	45lb-in 5.1N-m	45lb-in 5.1N-m	N/A	N/A	N/A	N/A	N/A
480V Power Distribution Block	PDB-Px	35lb-in 4.0N-m	35lb-in 4.0N-m	35lb-in 4.0N-m	40lb-in 4.5N-m	40lb-in 4.5N-m	40lb-in 4.5N-m	45lb-in 5.1N-m	50lb-in 5.6N-m	50lb-in 5.6N-m	50lb-in 5.6N-m
480V Motor Terminal Block	MTB-Px	35lb-in 4.0N-m	35lb-in 4.0N-m	35lb-in 4.0N-m	40lb-in 4.5N-m	40lb-in 4.5N-m	40lb-in 4.5N-m	120lb-in 13.5N-m	120lb-in 13.5N-m	120lb-in 13.5N-m	120lb-in 13.5N-m
Neutral Terminal Block	N-Px	35lb-in 4.0N-m	40lb-in 4.5N-m	45lb-in 5.1N-m	120lb-in 13.5N-m	120lb-in 13.5N-m	N/A	N/A	N/A	N/A	N/A
Motor Ground Block	GND1	35lb-in 4.0N-m	35lb-in 4.0N-m	35lb-in 4.0N-m	35lb-in 4.0N-m	35lb-in 4.0N-m	40lb-in 4.5N-m	45lb-in 5.1N-m	50lb-in 5.6N-m	50lb-in 5.6N-m	50lb-in 5.6N-m
Field Terminations	TB1A										

Pump Panel Fuse Schedule					
Fuse	Type	Volts	Amps	Description	
F-PX	FWH	500	XX	VFD Protection	
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.

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

Equipment List Per Pump Panel						
Item	Tag	Description	Manufacturer	Model	Qty	
1	ENC1	Enclosure, 60"H x 36"W x 24"D, Free-Stand Single Access; 3-Point Latch; 12 Gauge 304 SS, Type 3R, 4, 4X, 12	Hoffman	A603624SSFSN4	2	
2	BPNL1	Enclosure, 60"H x 36"W, Back Panel w/ Mounting Channel, Painted Steel	Hoffman	A60P36F1	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, H2OMIT, 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	Square D	See HP Table	2	
8	PDB-Py	Power Distribution Block Cover	Square D	See HP Table	2	
9	N-Py	Neutral Distribution Block	Square D	See HP Table	2	
10	GND	Ground, Lug (2), 600V #14-1/0 AWG	NSI	2-0T	2	
11	GND	Ground, Bar 5 Points	Square D	PK5GTA	2	
12	MTB-Py	Motor Termination Block	Square D	See HP Table	2	
13	MTB-Py	Motor Termination Block Cover	Square D	See HP Table	2	
14	ISO GND	Power Distribution Block, 1-Pole, 600V 175A 10KA Sym., Line-(1) #14-2/0 AWG Load-(1) #14-2/0 AWG	Square D	9080LBA162101	2	
15	ISO GND	Power Distribution Block, 1-Pole, Cover, Clear	Square D	9080LB21	2	
16	F-Py	Fuse, High Speed, Semi-Conductor	Bussman	See HP Table	6	
17	F-Py	Fuse, Base, Connector Type	Bussman	See HP Table	6	
18	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	
19	HVACy	Air Conditioner, Vertical Mount	Hoffman	See HP Table	2	
20	HTRY	Heater, Electrical 400W, 120VAC	Hammond Manuf.	FLHTF400A115	2	
21	VFD-Py	Variable Frequency Drive	Yaskawa	See HP Table	2	
22	LR-Py	Line Reactor 5%		See HP Table	2	
23	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	
24	SS1-Py,SS2-Py	Contact block with protected terminals 1 N.O. / 1 N.C	Square D	9001KA1	6	
25	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	
26	LS2,LS3	Switch, Intrusion Alarm, Momentary On, Maintained Off, 3/4A SPST N.C.	NSI	76030PS	2	
27	TBy	Terminal Block, UT 4, Feed Through Terminal, 600V 30A 26-10AWG, Grey	Phoenix Contact	3044102	48	
28	Tby	Terminal Block, UT 4-PE, 26-10AWG, Green/Yellow	Phoenix Contact	3044128	4	
29	TBy, TByA	Terminal Block, D-UT 2,5/10, End Cover, Grey	Phoenix Contact	3047028	4	
30	TByA	Terminal Block, UT 10, Feed Through Terminal, 600V 65A 20-6AWG, Grey	Phoenix Contact	3044160	8	
31	XF1	Control Transformer, Primary & Secondary Fusing, 1KVA, 220-480VAC x 120VAC	Square D	9070TF1000D1	2	
32	XF1	Control Transformer, Fuse Puller	Square D	9070FP-1	2	
33	XF1	Control Transformer, 250-5000 VA, Fingersafe Covers	Square D	9070FSC-2	2	
34	F-H1, F-H2	Fuse, 13/32" x 1-1/2", Class CC, Time Delay Rejection, 600V 5A, 200KAIR	Bussmann	FNQR-5	4	
35	F-X1	Fuse, 13/32" x 1-1/2", Midget, Time Delay, 500V 7A, 10KAIR	Bussmann	FNQ-7	2	
36	---	Terminal Block, End Clamp, E/NS 35 N	Phoenix Contact	800886	8	
37	CON1-Py,CON2-Py,CON3-Py	Connector, GST18®, Female, 250V 20A 4kVimpulse, Screw Connection, 6.2lb-in	Wieland	92.931.3053.1	6	
38	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						
39	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	
40	PPMyA	Relay, 11-Pin Tubular Socket, 300V 10A	Custom Connector	ES11	2	
Pump Protection Circuits Option G1						
39	PPMyA	Pump Protection Module (Supplied by Pump MFG)	Grundfos	SMART "S" RELAY	2	
Pump Protection Circuits Option K1						
39	PPMyA	PumpSafe Relay Module A (Supplied by Pump MFG)	KSB	Module A	2	
40	TByA	Terminal Block, UT 10, Feed Through Terminal, 600V 65A 20-6AWG, Grey	Phoenix Contact	3044160	Add 4	
Pump Protection Circuits Option K2						
39	PPMyA	PumpSafe Relay Module A (Supplied by Pump MFG)	KSB	Module A	2	
40	PPMyD	PumpSafe Relay Module D (Supplied by Pump MFG)	KSB	Module D	2	
41	Tby	Terminal Block, UT 4, Feed Through Terminal, 600V 30A 26-10AWG, Grey	Phoenix Contact	3044102	Add 4	
42	TByA	Terminal Block, UT 10, Feed Through Terminal, 600V 65A 20-6AWG, Grey	Phoenix Contact	3044160	Add 12	

208/240VAC Horsepower Related Components Equipment List											
Item	Tag	Horsepower									
		5	7.5	10	15	20 (240V)	25	30	40	50	60
VFD Semiconductor Fuse	F-P1, F-P2	FWH-90B	FWH-100B	FWH-200B	FWH-200B	FWH-200B	N/A	N/A	N/A	N/A	N/A
VFD Semiconductor Fuse Block	F-P1, F-P2	1BS101	1BS101	1BS102	1BS102	1BS102	N/A	N/A	N/A	N/A	N/A
5% Line Reactor 208V	LR1, LR2	RL-02502	RL-03502	RL-05502	RL-08002	RL-10002	N/A	N/A	N/A	N/A	N/A
5% Line Reactor 240V	LR1, LR2	RL-01802	RL-03502	RL-03502	RL-05502	RL-08002	N/A	N/A	N/A	N/A	N/A
Variable Frequency Drive	VFD1, VFD2	CIMR-PU2A0018FAA	CIMR-PU2A0030FAA	CIMR-PU2A0040FAA	CIMR-PU2A0056FAA	CIMR-PU2A0056FAA	N/A	N/A	N/A	N/A	N/A
Air Conditioner	HVAC1, HVAC2	G280426G1022YPL	G280426G1022YPL	G280426G1022YPL	G280426G1022YPL	G280426G1022YPL	N/A	N/A	N/A	N/A	N/A
Pump Panel Power Distribution Block	PDB-Px	9080LBA361104	9080LBA361104	9080LBA361104	9080LBA363104	9080LBA363104	N/A	N/A	N/A	N/A	N/A
Pump Panel Power Distribution Block Cover	PDB-Px	N/A	N/A	N/A	9080LB33	9080LB33	N/A	N/A	N/A	N/A	N/A
Motor Neutral Block	N-Px	9080LBA161104	9080LBA161104	9080LBA161104	9080LBA162104	9080LBA162104	N/A	N/A	N/A	N/A	N/A
Motor Termination Block	MTB-Px	9080LBA361101	9080LBA361101	9080LBA361101	9080LBA362101	9080LBA362101					
480VAC Horsepower Related Components Equipment List											
Item	Tag	Horsepower									
		5	7.5	10	15	20	25	30	40	50	60
VFD Semiconductor Fuse	F-P1, F-P2	FWH-90B	FWH-90B	FWH-80B	FWH-100B	FWH-125B	FWH-200B	FWH-250A	FWH-250A	FWH-250A	FWH-250A
VFD Semiconductor Fuse Block	F-P1, F-P2	1BS101	1BS101	1BS101	1BS101	1BS102	1BS102	1BS103	1BS103	1BS103	1BS103
5% Line Reactor	LR1, LR2	RL-00803	RL-01203	RL-01803	RL-02503	RL-03503	RL-03503	RL-04503	RL-05503	RL-08003	RL-08003
480V VFD	VFD1, VFD2	CIMR-PU4A0009FAA	CIMR-PU4A0011FAA	CIMR-PU4A0018FAA	CIMR-PU4A0023FAA	CIMR-PU4A0031FAA	CIMR-PU4A0038FAA	CIMR-PU4A0044FAA	CIMR-PU4A0058FAA	CIMR-PU4A0072FAA	CIMR-PU4A0088FAA
Air Conditioner	HVAC1, HVAC2	G280426G1022YPL	G280426G1022YPL	G280426G1022YPL	G280426G1022YPL	G280426G1022YPL	G280426G1022YPL	G280426G1022YPL	G280426G1022YPL	G280426G1022YPL	G280426G1022YPL
Pump Panel Power Distribution Block	PDB-Px	9080LBA361104	9080LBA361104	9080LBA361104	9080LBA361104	9080LBA361104	9080LBA363104	9080LBA363104	9080LBA363104	9080LBA363104	9080LBA363104
Motor Power Distribution Block Cover	PDB-Px	N/A	N/A	N/A	N/A	N/A	9080LB33	9080LB33	9080LB33	9080LB33	9080LB33
Motor Termination Block	MTB-Px	9080LBA361101	9080LBA361101	9080LBA361101	9080LBA361101	9080LBA361101	9080LBA362101	9080LBA362101	9080LBA362101	9080LBA362101	9080LBA362101

