

RP-1-1

Location: ELECTRICAL 112
 Supply From: T-RP-1-1
 Mounting: Surface
 Enclosure: Type 1
 Notes:

Volts: 208Y/120V Wye
 Phases: 3
 Wires: 4

A.I.C. Rating: CB
 Mains Rating: 225 A
 MCB Rating: 225 A

CKT	Circuit Description	Trip	P	Wire Size	A	B	C	Wire Size	P	Trip	Circuit Description	CKT
1	Space	--	1	--	--	--	--	--	1	--	Space	2
3	Space	--	1	--	--	--	--	--	1	--	Space	6
5	Space	--	1	--	--	--	--	--	1	--	Space	8
7	HWRP-3	20 A	1	2#12 & #12GND - 3/4"	0.10	0.54	--	2#12 & #12GND - 3/4"	1	20 A	RECIP - IT 208	10
9	EF-30 - IT 208	20 A	1	2#12 & #12GND - 3/4"	0.00	0.72	--	2#12 & #12GND - 3/4"	1	20 A	RECIP - ANALYTIC LAB RM 115	12
11	RECIP - SPECIFIC & MON. RM 115	20 A	1	2#12 & #12GND - 3/4"	0.90	0.90	0.36	2#12 & #12GND - 3/4"	1	20 A	NOVAC CP OPEN OFFICE 207	14
13	RECIP - GUEST CUBICLES 203	20 A	1	2#12 & #12GND - 3/4"	0.90	0.90	0.36	2#12 & #12GND - 3/4"	1	20 A	RECIP - GUEST CUBICLES 203	14
15	RECIP - LAB A5	20 A	1	2#10 & #10GND - 3/4"	1.60	1.40	--	2#10 & #10GND - 3/4"	1	20 A	FLUME HOOD LAB 115	16
17	RECIP - LAB 208	20 A	1	2#12 & #12GND - 3/4"	0.50	0.36	--	2#12 & #12GND - 3/4"	1	20 A	RECIP - TITRATOR	18
19	FCU-1-1, FCU-1-2, FCU-1-3	20 A	2	2#12 & #12GND - 3/4"	2.25	0.20	--	2#12 & #12GND - 3/4"	1	20 A	FACP - IT 208	20
21	DI WATER SYSTEM - LAB 115	20 A	1	2#12 & #12GND - 3/4"	0.60	0.63	0.50	2#12 & #12GND - 3/4"	1	20 A	RECIP - LAB 115	22
23	EF-30 & 37 DAMPERS RM. 115	20 A	1	2#12 & #12GND - 3/4"	0.50	0.18	--	2#12 & #12GND - 3/4"	1	20 A	RECIP - LOW ROOF 123	26
27	EUH-1 - TRUCKERS RESTROOM 104	20 A	2	2#12 & #12GND - 3/4"	0.75	1.45	--	2#12 & #12GND - 3/4"	2	20 A	SPECTROMETER - LAB 115	28
29	SP-1 - LAB 115	20 A	1	2#12 & #12GND - 3/4"	1.47	1.45	0.75	2#12 & #12GND - 3/4"	2	20 A	WATER CHILLER - LAB 115	30
31	EUH-2 - FIRE RISER CLOSET 116	20 A	2	2#12 & #12GND - 3/4"	0.75	1.45	0.63	2#12 & #12GND - 3/4"	2	20 A	FCU-2-1 - IT 208	32
33	DI WATER SYSTEM - LAB 115	20 A	1	2#12 & #12GND - 3/4"	0.60	0.63	0.50	2#12 & #12GND - 3/4"	2	20 A	RACK 2 - IT 208	38
35	RACK 1 - IT 208	30 A	2	2#12 & #12GND - 3/4"	1.00	1.00	1.00	2#10 & #10GND - 3/4"	2	30 A	RACK 2 - IT 208	40
37	RACK 3 - IT 208	30 A	2	2#10 & #10GND - 3/4"	1.00	1.00	1.00	2#10 & #10GND - 3/4"	2	30 A	RACK 5 - IT 208	46
39	RACK 4 - IT 208	30 A	2	2#10 & #10GND - 3/4"	1.00	0.63	0.63	2#12 & #12GND - 3/4"	2	20 A	CU-2 - ON ROOF	50
41	EV CHARGER	40 A	2	2#4 & #6GND - CONDUIT SIZE ON PLAN	3.60	3.60	3.60	2#4 & #6GND - CONDUIT SIZE ON PLAN	2	20 A	EV CHARGER	52
43	RECIP - CONFERENCE ROOM 106	20 A	1	2#12 & #12GND - 3/4"	0.72	0.72	1.75	2#12 & #12GND - 3/4"	1	20 A	RECIP - CONFERENCE ROOM 106	54
45	RECIP - GUEST CUBICLES 203	20 A	1	2#12 & #12GND - 3/4"	0.90	0.90	1.75	2#12 & #12GND - 3/4"	1	20 A	RECIP - GUEST CUBICLES 203	56
47	RECIP - GUEST CUBICLES 203	20 A	1	2#12 & #12GND - 3/4"	0.36	0.00	0.00	2#12 & #12GND - 3/4"	1	20 A	RECIP - LAB 1 MECHANICAL ROOM 117	60
49	Space	20 A	1	--	0.00	0.00	0.00	--	1	20 A	Space	62
51	Space	20 A	1	--	0.00	0.00	0.00	--	1	20 A	Space	64
53	Space	20 A	1	--	0.00	0.00	0.00	--	1	20 A	Space	66
55	Space	20 A	1	--	0.00	0.00	0.00	--	1	20 A	Space	68
57	Space	20 A	1	--	0.00	0.00	0.00	--	1	20 A	Space	70
59	Space	20 A	1	--	0.00	0.00	0.00	--	1	20 A	Space	72
61	Space	20 A	1	--	0.00	0.00	0.00	--	1	20 A	Space	74
63	Space	20 A	1	--	0.00	0.00	0.00	--	1	20 A	Space	76
65	Space	20 A	1	--	0.00	0.00	0.00	--	1	20 A	Space	78
67	Space	20 A	1	--	0.00	0.00	0.00	--	1	20 A	Space	80
69	Space	20 A	1	--	0.00	0.00	0.00	--	1	20 A	Space	82
71	Space	20 A	1	--	0.00	0.00	0.00	--	1	20 A	Space	84
Total Load:					15.18 kVA	23.16 kVA	19.85 kVA					
Total Amps:					126 A	199 A	171 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Equipment	41874 VA	100.00%	41874 VA	Total Conn. Load: 58188 VA
HVAC	7054 VA	100.00%	7054 VA	Total Est. Demand: 58188 VA
Heating	3000 VA	100.00%	3000 VA	Total Conn.: 162 A
Receptacle	6260 VA	100.00%	6260 VA	Total Est. Demand: 162 A

PDP-2-1

Location: ELECTRICAL 112
 Supply From: MSB-2
 Mounting: Surface
 Enclosure: Type 1
 Notes:

Volts: 480V
 Phases: 3
 Wires: 3

A.I.C. Rating: MLO
 Mains Rating: 600 A

CKT	Circuit Description	# of Poles	Frame Size	Trip Rating	Load	Wire Size	Remarks	
PKG. 11E01	1 ARU-1	3	40 A	40 A	15284 VA	3#8 & #10GND - 3/4"		
PKG. 13E01	2 ARU-1	3	50 A	50 A	27901 VA	3#4 & #6GND - 1"		
PKG. 13E01	3 ATS-EM-01	3	125 A	125 A	72215 VA	3#1 & #6GND - 1 1/2"		
PKG. 11E01	4 RTU-1	3	30 A	30 A	6592 VA	3#10 & #12GND - 3/4"		
PKG. 13E01	5 RTU-2	3	100 A	100 A	48992 VA	3#10 & #6GND - 1 1/2"		
PKG. 14E01	6 ARU-2	3	50 A	50 A	27901 VA	3#8 & #6GND - 1 1/4"		
PKG. 13E01	7 SPARE	3	20 A	20 A	0 VA	--		
PKG. 13E01	8 EF-1	3	20 A	20 A	6318 VA	3#10 & #12GND - 3/4"		
PKG. 13E01	9 EF-2	3	20 A	20 A	6318 VA	3#10 & #12GND - 3/4"		
PKG. 13E01	10 EF-3	3	20 A	20 A	6318 VA	3#12 & #12GND - 3/4"		
PKG. 13E01	11 EF-4	3	20 A	20 A	6318 VA	3#12 & #12GND - 3/4"		
PKG. 13E01	12 SPARE	3	20 A	20 A	0 VA	--		
PKG. 13E01	13 EF-5	3	20 A	20 A	6318 VA	3#12 & #12GND - 3/4"		
PKG. 13E01	14 EF-7	3	20 A	20 A	6318 VA	3#12 & #12GND - 3/4"		
PKG. 13E01	15 EF-8	3	20 A	20 A	6318 VA	3#12 & #12GND - 3/4"		
PKG. 13E01	16 EF-9	3	20 A	20 A	6318 VA	3#12 & #12GND - 3/4"		
PKG. 13E01	17 EF-10	3	20 A	20 A	6318 VA	3#12 & #12GND - 3/4"		
PKG. 13E01	18 EF-11	3	20 A	20 A	6318 VA	3#12 & #12GND - 3/4"		
PKG. 13E01	19 EF-12	3	20 A	20 A	6318 VA	3#12 & #12GND - 3/4"		
PKG. 14E01	20 EF-13	3	20 A	20 A	6318 VA	3#10 & #10GND - 3/4"		
PKG. 14E01	21 EF-14	3	20 A	20 A	6318 VA	3#10 & #10GND - 3/4"		
PKG. 14E01	22 EF-15	3	20 A	20 A	6318 VA	3#10 & #10GND - 3/4"		
PKG. 14E01	23 EF-16	3	20 A	20 A	6318 VA	3#10 & #10GND - 3/4"		
PKG. 14E01	24 EF-17	3	20 A	20 A	6318 VA	3#12 & #12GND - 3/4"		
PKG. 14E01	25 EF-18	3	20 A	20 A	6318 VA	3#10 & #10GND - 3/4"		
PKG. 14E01	26 HVAC	3	20 A	20 A	6318 VA	3#12 & #12GND - 3/4"		
PKG. 14E01	27 EF-20	3	20 A	20 A	6318 VA	3#12 & #12GND - 3/4"		
PKG. 14E01	28 EF-21	3	20 A	20 A	6318 VA	3#12 & #12GND - 3/4"		
PKG. 14E01	29 EF-22	3	20 A	20 A	6318 VA	3#12 & #12GND - 3/4"		
PKG. 14E01	30 EF-23	3	20 A	20 A	6318 VA	3#12 & #12GND - 3/4"		
PKG. 14E01	31 EF-24	3	20 A	20 A	6318 VA	3#12 & #12GND - 3/4"		
PKG. 11E01	32 EF-25	3	20 A	20 A	5595 VA	3#12 & #12GND - 3/4"		
PKG. 11E01	33 EF-26	3	20 A	20 A	5595 VA	3#12 & #12GND - 3/4"		
PKG. 11E01	34 EF-27	3	20 A	20 A	5595 VA	3#12 & #12GND - 3/4"		
PKG. 11E01	35 EF-28	3	20 A	20 A	5595 VA	3#12 & #12GND - 3/4"		
PKG. 13E01	36 CU-4 ON ROOF	3	20 A	20 A	6171 VA	3#12 & #12GND - 3/4"		
PKG. 13E01	37 EF-32 - MAINT. SHOP 163	3	20 A	20 A	17438 VA	3#6 & #10GND - 3/4"		
PKG. 13E01	38 SPARE	3	20 A	20 A	0 VA	--		
PKG. 11E01	39 DOA-01	3	20 A	20 A	6105 VA	3#12 & #12GND - 3/4"		
PKG. 11E01	40 CU-1 - ON ROOF	3	40 A	40 A	13488 VA	3#8 & #10GND - 3/4"		
PKG. 13E01	41 EF-31 - MAINT. SHOP 163	3	20 A	20 A	9134 VA	3#8 & #10GND - 3/4"		
PKG. 11E01	42 SPARE	3	20 A	20 A	0 VA	--		
	43							
	44							
	45							
	46							
	47							
	48							
	49							
	50							
Total Conn. Load:					434665 VA			
Total Amps:					523 A			

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
HVAC	362450 VA	100.00%	362450 VA	Total Conn. Load: 434665 VA
Power	72215 VA	100.00%	72215 VA	Total Est. Demand: 434665 VA
				Total Conn.: 523 A
				Total Est. Demand: 523 A

RP-2-2

Location: WORK ROOM 161
 Supply From: XF-RP-2-2
 Mounting: Surface
 Enclosure: Type 1
 Notes:

Volts: 208Y/120V Wye
 Phases: 3
 Wires: 4

A.I.C. Rating: CB
 Mains Rating: 150 A
 MCB Rating: 125 A

CKT	Circuit Description	Trip	P	Wire Size	A	B	C	Wire Size	P	Trip	Circuit Description	CKT
1	RECIP - ARU-1	20 A	1	2#12 & #12GND - 3/4"	0.36	0.90	--	2#12 & #12GND - 3/4"	1	20 A	RECIP - CONFERENCE 162	2
3	ASD FA PANEL - RM. 163	20 A	1	2#12 & #12GND - 3/4"	0.50	0.54	--	2#10 & #10GND - 3/4"	1	20 A	RECIP - RTU-384 - ON ROOF	4
5	NOVAC CP - MAINTENANCE SHOP 163	20 A	1	2#12 & #12GND - 3/4"	0.90	0.87	0.50	2#6 & #10GND - 3/4"	1	20 A	EF-35 - ON ROOF	6
7	RECIP - COMPRESSOR ROOM 160	20 A	1	2#12 & #12GND - 3/4"	0.90	1.15	1.00	2#12 & #12GND - 3/4"	1	20 A	GRANE HOST MAINT WORK ROOM 161	8
9	SUMP PUMP - COMPRESSOR ROOM 160	20 A	1	2#12 & #12GND - 3/4"	1.00	1.08	--	2#12 & #12GND - 3/4"	1	20 A	RECIP - RM. 151-154	10
11	EXHAUST FAN DAMPERS	20 A	1	2#12 & #12GND - 3/4"	1.50	0.90	--	2#12 & #12GND - 3/4"	1	20 A	RECIP - DRYING PROCESS (H-3) 150	12
13	AD-1101 - COMPRESSOR ROOM 160	20 A	1	2#12 & #12GND - 3/4"	0.00	0.00	--	2#12 & #12GND - 3/4"	2	20 A	FCU-4-1 - SWITCH CABINET AREA(A8) 152	14
15	EXHAUST FAN DAMPERS	20 A	1	2#12 & #12GND - 3/4"	1.50	0.00	--	2#12 & #12GND - 3/4"	2	20 A	IT RACK - WET CHEMISTRY PROCESSING 130	16
17	EXHAUST FAN DAMPERS	20 A	1	2#12 & #12GND - 3/4"	1.50	1.00	--	2#10 & #10GND - 3/4"	2	30 A	RECIP - MAINTENANCE SHOP 163	18
19	CU-5	20 A	2	2#12 & #12GND - 3/4"	4.57	0.90	--	2#12 & #12GND - 3/4"	1	20 A	RECIP - RTU-2 - ON ROOF	22
21	SOLVENT TANK SAFETY SHOWERS	20 A	1	2#12 & #12GND - 3/4"	0.90	0.18	--	2#12 & #12GND - 3/4"	3	20 A	BANDSAW MAINT WORK ROOM 161	26
23	RECIP - DRYING PROCESS 150	20 A	1	2#12 & #12GND - 3/4"	0.90	0.72	0.18	3#12 & #12GND - 3/4"	3	20 A	MANUAL LATHE MAINT WORK ROOM 161	30
27	RECIP - OUTDOOR - WEST	20 A	1	2#12 & #12GND - 3/4"	0.96	0.72	0.96	3#12 & #12GND - 3/4"	3	20 A	DRILL PRESS MAINT WORK ROOM 161	38
29	CUT OFF SAW MAINT WORK ROOM 161	20 A	3	3#12 & #12GND - 3/4"	0.96	1.20	0.96	3#12 & #12GND - 3/4"	3	20 A	RECIP - SWITCH CABINET AREA(A8) 152	42
31	Space	20 A	1	--	0.00	0.00						