

PANEL NAME: H1M																			
SUPPLY FROM: USB490			MAINS RATING (A): 100			FAULT CURRENT (A): 12180			PHASE: New Construction										
LOCATION: MECH RM 102			MAINS TYPE: THERMAL MAGNETIC			SHORT CIRCUIT RATING (A): 18000			SURGE SUPPRESSION: Yes										
DISTRIBUTION SYSTEM: 480/277V 3PH 4W			FEEDER ID: 100-4C			LUGS TYPE: 200% NEUTRAL:			ULSE:										
FEEDER: (4) #3 AWG CU, (1) #8 AWG CU GND, IN 1-1/4" CONDUIT 75C RATED			ENCLOSURE TYPE: NEMA 1			ISOLATED GROUND:													
CKT	CIRCUIT DESCRIPTION	VD%	AWG	GND	TRIP	FRAME	POLE	A	B	C	POLE	FRAME	TRIP	GND	AWG	VD%	CIRCUIT DESCRIPTION	CKT	
1																		2	
3	(->) HWP-1 VFD HWP-2 VFD   MOTOR MECH RM 102	0.056	#8	#10	35 A	35 A	3	3.93	0.83								(->) CP-1 VFD   MOTOR MECH RM 102	4	
5																		6	
7																		8	
9	SPARE	--	--	--	20 A	20 A	3	0.00	10.03								(->) CWP-1 VFD CWP-2 VFD   MOTOR MECH RM 102	10	
11																		12	
13																		14	
15	SPACE	--	--	--	--	--	3											16	
17																		18	
19																		20	
21	SPACE	--	--	--	--	--	3											22	
23																		24	
25	SPACE	--	--	--	--	--	1											26	
27	SPACE	--	--	--	--	--	1											28	
29	SPACE	--	--	--	--	--	1											30	
31	SPACE	--	--	--	--	--	1											32	
33	SPACE	--	--	--	--	--	1											34	
35	SPACE	--	--	--	--	--	1											36	
37	SPACE	--	--	--	--	--	1											38	
39	SPACE	--	--	--	--	--	1											40	
41	SPACE	--	--	--	--	--	1											42	
TOTAL CONNECTED LOAD: 14.8 kVA								14.8 kVA		14.8 kVA									
LOAD CLASSIFICATION		CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		NOTES:		BREAKER QUANTITIES (NEW ONLY)									
Motor		44375 VA		108.47%		48136 VA				(1) 15A / 3P, (8) 20A / 1P, (1) 20A / 3P, (1) 35A / 3P, (1) 90A / 3P									
PANEL TOTALS																			
TOTAL CONNECTED LOAD: 44.4 kVA																			
DEMAND CALCULATION NOTES:																			
TOTAL DEMAND: 48.1 kVA																			
TOTAL DEMAND AMPS: 58 A																			

PANEL NAME: EHP1																			
SUPPLY FROM: ATS1			MAINS RATING (A): 200			FAULT CURRENT (A): 19631			PHASE: New Construction										
LOCATION: EMERG GEN 118			MAINS TYPE: MAIN LUGS ONLY			SHORT CIRCUIT RATING (A): 25000			SURGE SUPPRESSION: Yes										
DISTRIBUTION SYSTEM: 480/277V 3PH 4W			FEEDER ID: 200-4C			LUGS TYPE: 200% NEUTRAL:			ULSE:										
FEEDER: (4) #3 AWG CU, (1) #8 AWG CU GND, IN 2" CONDUIT 75C RATED			ENCLOSURE TYPE: NEMA 1			ISOLATED GROUND:													
CKT	CIRCUIT DESCRIPTION	VD%	AWG	GND	TRIP	FRAME	POLE	A	B	C	POLE	FRAME	TRIP	GND	AWG	VD%	CIRCUIT DESCRIPTION	CKT	
1																		2	
3	(->) PANEL EM	--	--	--	50 A	50 A	3	0.00	0.00								(->) T-ELP1	4	
5																		6	
7																		8	
9	(->)(U) LIFT NO. 2	--	--	--	150 A	150 A	3	0.00	0.00								(->) EF-7, SF-1	10	
11																		12	
13	SPARE	--	--	--	20 A	20 A	1	0.00	0.00									14	
15	SPARE	--	--	--	20 A	20 A	1	0.00	0.00									16	
17	SPARE	--	--	--	20 A	20 A	1	0.00	0.00									18	
19	SPARE	--	--	--	20 A	20 A	1	0.00	0.00									20	
21	SPARE	--	--	--	20 A	20 A	1	0.00	0.00									22	
23	SPARE	--	--	--	20 A	20 A	1	0.00	0.00									24	
25	SPACE	--	--	--	--	--	1											26	
27	SPACE	--	--	--	--	--	1											28	
29	SPACE	--	--	--	--	--	1											30	
31	SPACE	--	--	--	--	--	1											32	
33	SPACE	--	--	--	--	--	1											34	
35	SPACE	--	--	--	--	--	1											36	
37	SPACE	--	--	--	--	--	1											38	
39	SPACE	--	--	--	--	--	1											40	
41	SPACE	--	--	--	--	--	1											42	
TOTAL CONNECTED LOAD: 0.0 kVA								0.0 kVA		0.0 kVA									
LOAD CLASSIFICATION		CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		NOTES:		BREAKER QUANTITIES (NEW ONLY)									
										(1) 20A / 1P, (2) 30A / 3P, (1) 50A / 3P, (1) 150A / 3P(U)									
PANEL TOTALS																			
TOTAL CONNECTED LOAD: 0.0 kVA																			
DEMAND CALCULATION NOTES:																			
TOTAL DEMAND: 0.0 kVA																			
TOTAL DEMAND AMPS: 0 A																			

**PANEL SCHEDULE LEGEND**

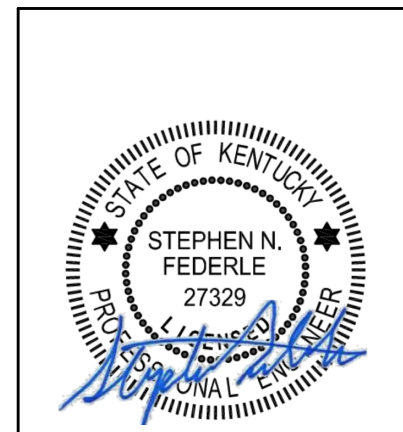
(EX) = EXISTING CIRCUIT TO REMAIN	(LT) = PROVIDE LOCK-OUT/TAG-OUT DEVICE
(H) = NEW CIRCUIT TO EXISTING CIRCUIT BREAKER	(->) = CONNECT BRANCH CIRCUIT, WHICH WAS DISCONNECTED FROM ANOTHER SOURCE AS PART OF SELECTIVE DEMOLITION, TO POLE SPACE(S) INDICATED.
(G) = PROVIDE GROUND-FAULT CIRCUIT INTERRUPTER (GFCI) CIRCUIT BREAKER	D = DETERMINE EXACT POLE ASSIGNMENT(S) BASED ON EXISTING COLOR-CODING OF THE BRANCH CIRCUIT CONDUCTOR INSULATION. PROVIDE NEW BREAKER IF REQUIRED.
(GE) = PROVIDE GROUND-FAULT EQUIPMENT PROTECTION (GFE) CIRCUIT BREAKER	W = WIRE SIZED TO COMPENSATE FOR VOLTAGE DROP
(ST) = PROVIDE SHUNT TRIP CIRCUIT BREAKER	R = REFER TO DRAWINGS FOR SPECIFICATIONS
(A) = PROVIDE ARC FAULT CIRCUIT INTERRUPTER (AFCI) CIRCUIT BREAKER	SL = SEE THE SINGLE LINE DIAGRAM / SCHEDULE FOR WIRE SIZE AND VOLTAGE DROP
(L) = PROVIDE LOCK-ON DEVICE	
(LI) = PROVIDE LONG, INSTANTANEOUS ADJUSTABLE BREAKER	

**PANEL SCHEDULE GENERAL NOTES**

- PROVIDE HACR RATED BREAKERS ON ALL MOTOR LOADS.
- ALL CONDUCTORS SHOWN ARE COPPER.
- ALL VOLTAGE DROP CALCULATIONS AND COMPENSATED WIRE SIZES ARE BASED ON RIGHT ANGLE CIRCUIT LENGTHS. ACTUAL VOLTAGE DROP MAY VARY BASED ON INSTALLED WIRE LENGTH.
- VOLTAGE DROP CALCULATIONS AND WIRE SIZES SHOWN IN THE PANEL SCHEDULES ARE FOR HOMERUN CONDUCTORS. THEY ASSUME MAXIMUM #12AWG CU CONDUCTORS FROM THE HOMERUN DEVICES ON THE CIRCUIT, WHERE DOWNSTREAM CONDUCTORS LARGER THAN #12 ARE ASSUMED. THEY HAVE BEEN INDICATED ON THE DRAWINGS. VOLTAGE DROP TO THE FARTHEST DOWNSTREAM DEVICE HAS BEEN CALCULATED TO NEVER EXCEED 5%.
- RECEPTACLE LOADS CALCULATED AT 100% OF FIRST 10kVA, 50% OF REMAINDER, MOTOR LOADS CALCULATED AT 125% OF THE LARGEST MOTOR, 100% OF ALL OTHER MOTORS.

**PANEL KEY**

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--	H1M	EDP



**REVISIONS**

NO.	DATE	DESCRIPTION

DWN: KAH    CHK: SNF  
 DATE: 05/07/2021  
 PROJECT #: 22683

ELECTRIC POWER - SCHEDULES

**E-602**

1" REFERENCE  
 KLH PROJECT # 22683