

PRE-PURCHASED MODULAR AIR-SOURCE HEAT PUMP SCHEDULE

TAG	LOCATION	NO. OF MODULES	NOMINAL CAPACITY (TONS/MODULE)	COOLING PERFORMANCE (PER BANK OF 6 MODULES)										HEATING PERFORMANCE (PER BANK OF 6 MODULES)										ELECTRICAL DATA (PER BANK OF 6 MODULES)				PHYSICAL DATA (PER BANK OF 6 MODULES)				MANUFACTURER	MODEL NUMBER
				AMBIENT TEMP (F)	CAPACITY (TONS)	EER@AHR1 COND. (KW/PER MODULE)	POWER DRAW @ OPERATING COND. (KW/PER MODULE)	EWT/LWT (F)	FLOWRATE (GPM)	GLYCOL (%)	PRESSURE DROP (FT H2O)	AMBIENT TEMP (F)	CAPACITY (MBH)	COP @ AHR1 COND.	POWER DRAW @ OPERATING COND. (KW/PER MODULE)	EWT/LWT (F)	FLOWRATE (GPM)	GLYCOL (%)	PRESSURE DROP (FT H2O)	VOLTS/PH/Hz	MCA	MCP	UNIT SHORT CIRCUIT CIRCUT WITHSTAND (KA)	WORKING WEIGHT (LBS)	DIMENSIONS (LxWxH)								
ASHP-1	28TH FLOOR MER ROOF	6	35.79	95	214.74	10.20	41.41	6048	471.3	40	13.7	13	1975.2	3.45	50.78	120130	427.7	40	10.7	460/3/60	413.0	450	65	23,000	412"x112"x105"	YORK	YMAE003SPJ46V6XSA						
ASHP-2	28TH FLOOR MER ROOF	6	35.79	95	214.74	10.20	41.41	6048	471.3	40	13.7	13	1975.2	3.45	50.78	120130	427.7	40	10.7	460/3/60	413.0	450	65	23,000	412"x112"x105"	YORK	YMAE003SPJ46V6XSA						
ASHP-3	28TH FLOOR MER ROOF	6	35.79	95	214.74	10.20	41.41	6048	471.3	40	13.7	13	1975.2	3.45	50.78	120130	427.7	40	10.7	460/3/60	413.0	450	65	23,000	412"x112"x105"	YORK	YMAE003SPJ46V6XSA						

- MODULAR AIR-SOURCE HEAT PUMP SCHEDULE NOTES:
1. SYSTEM CAPACITIES MUST BE CALCULATED WITH DEFWOST DE-RATES ACCOUNTED FOR.

2. PERFORMANCE DATA MUST BE CERTIFIED BY AHR1 TEST FACILITY.

3. EACH MODULE SHALL BE PROVIDED WITH FACTORY INSTALLED CONTROLLER. HEAT PUMP MFR. SHALL PROVIDE SYSTEM MASTER CONTROLLER(S) TO STAGE UNITS AND INSURE EVEN RUN TIME ACROSS COMPRESSORS.

4. SYSTEM MASTER CONTROLLER MUST CONTROL ELECTRONIC ISOLATION VALVES - EACH BANK SHALL HAVE THE CAPABILITY OF RUNNING SOME MODULES IN COOLING AND SOME MODULES IN HEATING.

5. EACH MODULE SHALL BE HYDRAULICALLY AND ELECTRICALLY ISOLATED.

6. EACH MODULE SHALL BE PROVIDED WITH FACTORY INSTALLED ELECTRONIC ISOLATION VALVES AND MANUAL ISOLATION VALVES FOR BOTH HW & CHW CIRCUITS.

7. HEAT PUMPS TO BE PROVIDED WITH SINGLE POINT POWER PER BANK.

8. COMPRESSOR CIRCUITS NOT TO EXCEED 15 HP & REFRIGERANT MUST BE A2L (R-454B OR R-32).

9. COORDINATE MOUNTING OF UNITS ON STEEL DUNNAGE WITH MFR. MODULES CANNOT BE MOUNTED DIRECTLY ATOP ISOLATORS.

PRE-PURCHASED PLATE AND FRAME HEAT EXCHANGER SCHEDULE

DESIGNATION	LOCATION	SERVICE	CAPACITY (MBH)	PLATE MATERIAL / EFFECTIVE AREA (SQ)	SEAL MATERIAL	NO. OF PLATES (MAX NO. OF PLATES)	APPROACH TEMP. (F)	COOLING: PRIMARY SERVICE (COLD SIDE)						COOLING: SECONDARY SERVICE (HOT SIDE)						HEATING: PRIMARY SERVICE (COLD SIDE)						HEATING: SECONDARY SERVICE (HOT SIDE)						DIMENSION (LxWxH)	OPERATING WEIGHT (LBS)	MANUFACTURER / MODEL	REMARKS
								FLUID	FLOW (GPM)	EWT (F)	LWT (F)	PRESS. DROP (PSIG)	DESIGN PRESS. (PSIG)	FLUID	FLOW (GPM)	EWT (F)	LWT (F)	PRESS. DROP (PSIG)	DESIGN PRESS. (PSIG)	FLUID	FLOW (GPM)	EWT (F)	LWT (F)	PRESS. DROP (PSIG)	DESIGN PRESS. (PSIG)	FLUID	FLOW (GPM)	EWT (F)	LWT (F)	PRESS. DROP (PSIG)	DESIGN PRESS. (PSIG)				
HK-27-1	27TH FLOOR MER	CHILLER / 2-PIPES FAN COIL UNITS	4,103.793	AISI304 / 3,836.90	NBRH (SONDERLOOK)	392 / -	2.0	40% PG	750	48	60	9.95	150	WATER	682	62	50	7.11	150	40% PG	650	130	120	6.65	150	WATER	605.23	118	128	5.26	150	98.5"x25.8"x95"	7,500	BELL & GOSSETT / BY5433	-
HK-27-1	27TH FLOOR MER	CHILLER / 2-PIPES FAN COIL UNITS	4,103.793	AISI304 / 3,836.90	NBRH (SONDERLOOK)	392 / -	2.0	40% PG	750	48	60	9.95	150	WATER	682	62	50	7.11	150	40% PG	650	130	120	6.65	150	WATER	605.23	118	128	5.26	150	98.5"x25.8"x95"	7,500	BELL & GOSSETT / BY5433	-
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- PLATE AND FRAME HEAT EXCHANGER SCHEDULE NOTES:
1. PROVIDE FLANGE CONNECTION FOR ALL PIPE CONNECTION.

2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

PRE-PURCHASED PUMP SCHEDULE

DESIGNATION	SERVICE	LOCATION	TYPE	GPM	GLYCOL PROPLENE (%)	TDR (F)	WF #	IMPELLER SIZE (INCH)	NO. OF STAGE	PUMP EFF. (%)	RPM	BHP	MOTOR HP	ELECTRICAL V/Ph/Hz	WEIGHT (LBS.)	MANUFACTURER/ MODEL	COMMENTS
CWP-27-1	PRIMARY WATER LOOP	27TH FLOOR MECHANICAL ROOM	END SUCTION	750	40	80	150	9.625	-	81.6	1770	-	25	460/3/60	500	BELL & GOSSETT / E-1510-SEB	
CWP-27-2	PRIMARY WATER LOOP	27TH FLOOR MECHANICAL ROOM	END SUCTION	750	40	80	150	9.625	-	81.6	1770	-	25	460/3/60	500	BELL & GOSSETT / E-1510-SEB	
CWP-27-3	PRIMARY WATER LOOP	27TH FLOOR MECHANICAL ROOM	END SUCTION	750	40	80	150	9.625	-	81.6	1770	-	25	460/3/60	500	BELL & GOSSETT / E-1510-SEB	STANDBY
SCWP-27-1	SECONDARY WATER LOOP	27TH FLOOR MECHANICAL ROOM	END SUCTION	750	WATER	125	150	11.75	-	78.8	1770	-	40	460/3/60	550	BELL & GOSSETT / E-1510-4GC	
SCWP-27-2	SECONDARY WATER LOOP	27TH FLOOR MECHANICAL ROOM	END SUCTION	750	WATER	125	150	11.75	-	78.8	1770	-	40	460/3/60	550	BELL & GOSSETT / E-1510-4GC	
SCWP-27-3	SECONDARY WATER LOOP	27TH FLOOR MECHANICAL ROOM	END SUCTION	750	WATER	125	150	11.75	-	78.8	1770	-	40	460/3/60	550	BELL & GOSSETT / E-1510-4GC	STANDBY

- PUMP SCHEDULE NOTES (TYPICAL FOR EACH PUMP):
1. PROVIDE INERTIA BASE WITH VIBRATION ISOLATION FOR PUMP SUPPORT - SEE SPECIFICATION REQUIREMENT.

2. PROVIDE VFD FOR ALL PUMPS.

3. SEE EQUIPMENT SPECIFICATIONS FOR ADDITIONAL INFORMATION.