

- 0 19-11-06 Issued for Construction
- 2 19-12-13 Issued with ADD2ME
- 3 19-12-20 Issued with ADD3ME
- 5 20-01-06 Issued with ADD6M

BOILER SCHEDULE																									
MARK	MAKE	MODEL	TYPE	WORKING FLUID	INPUT CAPACITY (Btu/h)	OUTPUT CAPACITY (Btu/h)	DESIGN FLOW (GPM)	ENT WATER TEMP (°F)	LVG WATER TEMP (°F)	PRESSURE DROP (RHZC) (kPa)	MAX OPERATING PRESSURE (RHZC) (kPa)	ELECTRICAL VOLTAGE PHASE	DESIGN WEIGHT (lbs)	MAXIMUM DIMENSIONS (WxDxH) (mm)	NOTES										
B	1	BOSCH	SSB1000TL1	B	WATER	1024000	300	290	57	3.58	150	66	180	82	32.0	95.6	31.0	92.7	120 V	1	941	427	900X800X1800	36X32X71	1
B	2	BOSCH	SSB1000TL1	B	WATER	1024000	300	290	57	3.58	150	66	180	82	32.0	95.6	31.0	92.7	120 V	1	941	427	900X800X1800	36X32X71	1
B	3	BOSCH	SSB1000TL1	B	WATER	1024000	300	290	57	3.58	150	66	180	82	32.0	95.6	31.0	92.7	120 V	1	941	427	900X800X1800	36X32X71	1
B	4	BOSCH	SSB1000	B	WATER	1024000	300	290	57	3.60	120	49	150	66	32.0	95.6	31.0	92.7	120 V	1	880	399	900X800X1800	36X32X71	1

- 1. PROVIDE BACNET CONTROLS INTERFACE TO CONNECT TO BUILDING CONTROLS SYSTEM.
- EQUALS: RBI Infinite Energy 2-1000, RBI FLEXCORE CK1000, SUBJECT TO DIMENSIONS AND CLEARANCES.

CHILLER WATER COOLED SCHEDULE																												
MARK	MAKE	MODEL	COOLING CAPACITY			EER	SEER	IPLV	COMPRESSOR				EVAPORATOR				CONDENSER			ELECTRICAL		DIMENSIONS			DESIGN WEIGHT		NOTES	
			(Btu/h)	(kW)	(tons)				TYPE	QTY	REFRIGERANT	SYSTEM FLOW (GPM)	RATED FLOW (GPM)	EWT (°F)	LWT (°F)	WPD (psi)	FLOW (GPM)	EWT (°F)	LWT (°F)	WPD (psi)	VOLTAGE	PHASE	HEIGHT (in)	LENGTH (in)	WIDTH (in)	(kg)		(lbs)
CH	1	AERMEC	WWM 0500	374400	110	31.2	16.19	20.83	SCROLL	2	R-410A	59 GPM	75 GPM	55°F	45°F	2.94 psi	66 GPM	95°F	85°F	6.49 psi	600 V	3	4'-3"	4'-4 1/2"	3'-9 1/2"	1078	2377	1, 2, 3, 4
CH	1	AERMEC	WWM 0500	374440	110	31.2	16.19	20.83	SCROLL	2	R-410A	59 GPM	75 GPM	55°F	45°F	2.94 psi	66 GPM	95°F	85°F	6.49 psi	600 V	3	4'-3"	4'-4 1/2"	3'-9 1/2"	1078	2377	1, 2, 3, 4
CH	1	AERMEC	WWM 0500	374400	110	31.2	16.19	20.83	SCROLL	2	R-410A	59 GPM	75 GPM	55°F	45°F	2.94 psi	66 GPM	95°F	85°F	6.49 psi	600 V	3	4'-3"	4'-4 1/2"	3'-9 1/2"	1078	2377	1, 2, 3, 4

- 1. CHILLER MODULES TO BE SUPPLIED TOGETHER AS COMPLETE PACKAGE WITH SINGLE HEADER.
- 2. PROVIDE BACNET CONTROLS INTERFACE TO CONNECT TO BUILDING CONTROLS SYSTEM.
- 3. CONDENSOR FLUID IS 55% PROPYLENE GLYCOL.
- 4. WEIGHT OF REFRIGERANT CHARGE IS 12.5LBS/12.5LBS FOR CIRCUITS C1/C2 RESPECTIVELY.
- EQUALS: TRANE CICD, TRANE CGWR, CLIMACOL UCW030, CARRIER 03MPW, SUBJECT TO DIMENSIONS AND CLEARANCES, PRESSURE DROP MUST MATCH SPECIFIED.

HEAT EXCHANGER SCHEDULE - WATER/WATER																			
MARK	MAKE	TYPE	CAPACITY		FLUID	SOURCE				LOAD				MAXIMUM WEIGHT (lbs)	NOTES				
			(Btu/h)	(kW)		FLOW (GPM)	TEMP (°F)	TEMP (°C)	TEMP (°F)	TEMP (°C)	TEMP (°F)	TEMP (°C)	TEMP (°F)			TEMP (°C)			
HX	1	ARMSTRONG	PLATE & FRAME	1200000	351.7	HEATING WATER	80	5.05	7.0	20.92	160	71	130	54	2000	907			
HX	2	ARMSTRONG	PLATE & FRAME	1000000	293.1	CH WATER 55% PG	198	12.49	7.0	20.92	35	2	45	7	2000	907			
HX	3	ARMSTRONG	PLATE & FRAME	1000000	293.1	HEATING WATER	66	4.16	7.0	20.92	160	71	130	54	2000	907			

- 1. HEAT EXCHANGER SHALL BE DOUBLE WALLED STAINLESS STEEL FOR USE IN POTABLE APPLICATION.
- EQUALS: WILO, SEC HEAT EXCHANGERS.

PUMP SCHEDULE													
MARK	MAKE	MODEL	PUMP TYPE	INLET DIAMETER	OUTLET DIAMETER	FLOW	HEAD	MOTOR	ELECTRICAL VOLTAGE PHASE	DESIGN WEIGHT (lbs)	(kg)	NOTES	
P	1	ARMSTRONG	DESIGN ENVELOPE 4380	CLOSE COUPLED VERTICAL IN LINE	2 1/2"	2 1/2"	280 GPM	34 FT	2.00 hp	575 V	3	250	113
P	2	ARMSTRONG	DESIGN ENVELOPE 4380	CLOSE COUPLED VERTICAL IN LINE	2 1/2"	2 1/2"	280 GPM	34 FT	2.00 hp	575 V	3	250	113
P	3	Bell & Gossett	eccocirc XL 55-45	IN LINE CIRCULATOR	1 1/2"	1 1/2"	7 GPM	51 FT	1.00 hp	208 V	1	26	12
P	4	Bell & Gossett	eccocirc XL 55-45	IN LINE CIRCULATOR	1 1/2"	1 1/2"	7 GPM	51 FT	1.00 hp	208 V	1	26	12
P	5	Bell & Gossett	eccocirc XL 95-160	IN LINE CIRCULATOR	1 1/2"	2 1/2"	91 GPM	44 FT	2.00 hp	208 V	3	40	18
P	6	Bell & Gossett	eccocirc XL 95-160	IN LINE CIRCULATOR	1 1/2"	2 1/2"	91 GPM	44 FT	2.00 hp	208 V	3	40	18
P	7	ARMSTRONG	DESIGN ENVELOPE 4380	CLOSE COUPLED VERTICAL IN LINE	1 1/2"	1 1/2"	178 GPM	77 FT	5.00 hp	575 V	3	300	136
P	8	ARMSTRONG	DESIGN ENVELOPE 4380	CLOSE COUPLED VERTICAL IN LINE	1 1/2"	1 1/2"	178 GPM	77 FT	5.00 hp	575 V	3	300	136
P	9	ARMSTRONG	DESIGN ENVELOPE 4380	CLOSE COUPLED VERTICAL IN LINE	2"	2"	198 GPM	55 FT	5.00 hp	575 V	3	300	136
P	10	ARMSTRONG	DESIGN ENVELOPE 4380	CLOSE COUPLED VERTICAL IN LINE	2"	2"	198 GPM	55 FT	5.00 hp	575 V	3	300	136
P	11	Bell & Gossett	eccocirc XL 36-45	IN LINE CIRCULATOR	1 1/2"	1 1/2"	20 GPM	11 FT	1.00 hp	208 V	1	20	9
P	12	Bell & Gossett	eccocirc XL 36-45	IN LINE CIRCULATOR	1 1/2"	1 1/2"	14 GPM	11 FT	1.00 hp	208 V	1	20	9
P	13	Bell & Gossett	eccocirc XL 20-35	IN LINE CIRCULATOR	1 1/2"	1 1/2"	3 GPM	11 FT	1.00 hp	208 V	1	20	9
P	15	Bell & Gossett	eccocirc XL 36-45	IN LINE CIRCULATOR	1 1/2"	1 1/2"	17 GPM	24 FT	1.00 hp	208 V	1	20	9
P	16	ARMSTRONG	DESIGN ENVELOPE 4380	CLOSE COUPLED VERTICAL IN LINE	2"	2"	135 GPM	82 FT	5.00 hp	575 V	3	300	136
P	17	ARMSTRONG	DESIGN ENVELOPE 4380	CLOSE COUPLED VERTICAL IN LINE	2"	2"	135 GPM	82 FT	5.00 hp	575 V	3	300	136
P	18	Bell & Gossett	eccocirc XL 55-45	IN LINE CIRCULATOR	1 1/2"	1 1/2"	25 GPM	29 FT	1.00 hp	208 V	1	26	12
P	19	Bell & Gossett	eccocirc XL 65-130	IN LINE CIRCULATOR	1 1/2"	1 1/2"	60 GPM	33 FT	1.00 hp	208 V	1	40	18
P	20	Bell & Gossett	eccocirc XL 65-130	IN LINE CIRCULATOR	1 1/2"	1 1/2"	66 GPM	37 FT	1.00 hp	208 V	1	40	18
P	21	Bell & Gossett	eccocirc XL 55-45	IN LINE CIRCULATOR	1 1/2"	1 1/2"	25 GPM	33 FT	1.00 hp	208 V	1	26	12

- 1. PROVIDE AS ARMSTRONG BUILDING ENVELOPE PUMP PAIRS FOR PARALLEL OPERATION.
- 2. PROVIDE WITH CONTROLS TO INTERFACE WITH BACNET BUILDING CONTROLS.

AIR & AIR SEDIMENT SEPARATOR SCHEDULE									
MARK	MAKE	MODEL	SERVES	FLOW (gpm)	ALLOWABLE PRESSURE DROP (ft)	CONNECTION (in)	NOTES		
AS	1	Sprotherm	VDN 400 FL	HWS 7	170	11	1	0'-4"	102
AS	2	Sprotherm	VDN 300 FL	GHS 3	95	6	1	0'-3"	76
AS	3	Sprotherm	VDN 400 FL	CWR 2	170	11	1	0'-4"	102

EQUALS: WILO, CALEFFI NA546

HYDRAULIC SEPARATOR SCHEDULE									
MARK	MAKE	MODEL	SERVES	FLOW (gpm)	ALLOWABLE PRESSURE DROP (ft)	CONNECTION (in)	NOTES		
HS	1	Sprotherm	VDX 400 FA	HWS 7/HWS 6/HWS 7/HWS 4	55	3	1	0'-4"	102
HS	2	Sprotherm	VDX 400 FA	HWR 2/HWR 5/HWS 7/HWS 3	189	12	1	0'-4"	102

EQUALS: WILO, CALEFFI NA549

EXPANSION TANK SCHEDULE															
MARK	MAKE	MODEL	TYPE	SYSTEM VOLUME		TANK VOLUME		ACCEPTANCE VOLUME		FIELD CHARGE		DESIGN WEIGHT		NOTES	
				(GAL.)	(Litres)	(GAL.)	(Litres)	(GAL.)	(Litres)	(psi)	(kPa)	(kg)	(lbs)		
ET	1A	AMTROL	EXTROL 50LBC	PARTIAL ACCEPTANCE BLADDER	660.0	2498.4	13.0	49.2	11.1	42.0	50.00	344.74	160	353	HEATING WATER
ET	1B	AMTROL	EXTROL 50LBC	PARTIAL ACCEPTANCE BLADDER	660.0	2498.4	13.0	49.2	11.1	42.0	50.00	344.74	160	353	HEATING WATER
ET	2	AMTROL	EXTROL 35LBC	PARTIAL ACCEPTANCE BLADDER	150.0	567.8	10.0	37.9	10.0	37.9	50.00	344.74	150	331	35% PG
ET	3A	AMTROL	EXTROL 35LBC	PARTIAL ACCEPTANCE BLADDER	150.0	567.8	10.0	37.9	10.0	37.9	50.00	344.74	150	331	CHILLED WATER
ET	3B	AMTROL	EXTROL 35LBC	PARTIAL ACCEPTANCE BLADDER	150.0	567.8	10.0	37.9	10.0	37.9	50.00	344.74	150	331	CHILLED WATER
ET	4	AMTROL	EXTROL 35LBC	PARTIAL ACCEPTANCE BLADDER	100.0	378.5	10.0	37.9	10.0	37.9	50.00	344.74	150	331	55% PG
ET	5	AMTROL	EXTROL 35LBC	PARTIAL ACCEPTANCE BLADDER	65.0	246.1	10.0	37.9	10.0	37.9	60.00	413.69	73	161	HEATING WATER

EQUALS: WILO

BUFFER TANK SCHEDULE											
MARK	MAKE	MODEL	TANK VOLUME	FLUID TYPE	MAXIMUM WEIGHT		MAXIMUM DIMENSIONS			NOTES	
					(lbs)	(kg)	HEIGHT	LENGTH	WIDTH		
BF	1	AMTROL	CWBT300-6-125	300 gal	CHILLED WATER	772	350	0'-3"	0'-1 1/2"	0'-1 1/2"	1
BF	2	AMTROL	CWBT300-6-125	300 gal	CHILLED WATER	772	350	0'-3"	0'-1 1/2"	0'-1 1/2"	1

EQUALS: LAARS BTYNB38072XF5XXX

GLYCOL FILL STATION SCHEDULE												
MARK	MAKE	MODEL	SYSTEM SERVED	STORAGE CAPACITY		MAXIMUM PRESSURE		ELECTRICAL		MAXIMUM WEIGHT		NOTES
				(GAL.)	(Litres)	(psi)	(kPa)	VOLTAGE	PHASE	(lbs)	(kg)	
GFS	1	Axiom	SF-100-L	GLYCOL HEATING	100.0	378.5	55.00	120 V	1	900	408	55% PG
GFS	2	Axiom	SF-100	FLUID COOLER	55.0	208.2	55.00	120 V	1	500	227	55% PG

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Project

ST. JAMES CIVIC CENTRE

Drawn By

HYDRONIC SCHEDULES

Drawn By: EB

Review By: JS

Scale: NTS

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