(F	L/RK)	B"RTI	J-1" -	PACK	AGED	DX	TYPE	HEA	TING-0	COOI	LING H	EAT F	PUM	IP & G	AS
UNIT MARK	UNIT EQUIP. SERVES	"DAIKIN" "REBEL" MFGR.'S		DESSIC	ANT ENTHA	ALPY HEA	T WHEEL	(SENS. & I	RY DATA FO LATENT) & GN EAT=96	TOTAL	(SUPPLY AI	R FAN w/l	ECM-D	N PERFORM IRECT DRIV IPPLY AIR F	VE MT
EQUIP. NUMBER	NAMED	MODEL NUMBER	(MBH) @ 10.7 EER	°F/DP & G	. DB-WB°F & RAINS/#) EA DEWPOINT	TIN WINT	ER=17°FD	B/16°FWB	(S)&(W)=°F EXHAUST A LOCKERS			TOTAL S.P. IN. W.C.	FAN RPM	"ECM" FAN MOTOR EFFIC'Y	MOT H.F (F.L.
RTU-1	LOCKERS	DPS020AD	(234.36)	96°F/76°F	68.2°F-DP	102.5 GR.	(S)169.52		(S): 75/62		5800	2.8	1299	PREMIUM	5 (7
									(W):70/58	47/42					

NOTES AND ACCESSORIES: (ALL SUPPLIED BY "RTU-1" UNIT MANUFACTURER AS INTEGRAL TO AND SUPPLIED WITH EACH DEDICATED 100% O/A UNIT-- SEE SPEC'S FOR ADDITIONAL REQM'TS FOR ALL ACCESSORIES & REQ'D. MINIMUM CONTROLS, AS LISTED HEREIN) 1. PROVIDE UNIT WITH INTERNAL FAN ISOLATION BASE WITH ISOLATORS. ALL UNIT FANS SHALL BE PLUG-TYPE/CENTRIFUGAL SINGLE OR DOUBLE INLET DESIGN TYPE. UNIT SHALL BE SUPPLIED w/PRESSURIZATION MODE CONTROLLER FOR BLDG. PRESS. CONTROL & HAVE ON-BOARD "MICRO-TECH-2" DDC CONTROL SYSTEM INTRGRATED BY "DAIKIN". 2. PROVIDE UNIT WITH AN "IN-UNIT INTEGRAL FILTER RACK" w/4" THICK "MERV-13" PLEATED PRE-FILTERS, & INTERNAL AUTO RECIRCULATION MODE OPERATION IN UNOCCUPIED DEHUMID. MODE w/AUTO O/A DAMPER & EXH. DAMPERS CLOSED. 3. PROVIDE UNIT w/2" THK. (R=14) DOUBLE-WALLED CLOSED CELL PRE-INSULATED PANEL CONSTRUCTION PER SPECS. ALL UNITS SHALL BE COMPLETE PACKAGED UNITS w/INTEGRAL VFD DRIVES. & S/A & RET./EXH. AIR DUCT CONNECTION DESIGN. 4. PROVIDE UNIT w/INTEGRAL DESICCANT ENTHALPHY HEAT-RECOVERY WHEEL SECTION, SPACER SECTION BETWEEN THE UNIT'S DEHUMID./EVAPORATOR COIL & THE UNIT'S HOT-GAS REGENERATION REHEAT COIL AS MINIMUM MANDATORY REQM'T. PER ENGINEER'S SPECS. 5. PROVIDE UNIT w/INTEGRAL FACTORY UNIT-MOUNTED & FACTORY PRE-WIRED ELECTRICAL MOTOR VFD DRIVE STARTERS & CONTROLS WITHIN THE UNIT. ALL ELECTRICAL DISCONNECT SWITCHES PROVIDED BY UNIT MFGR. 6. UNIT SHALL HAVE BOTTOM SUPPLY AIR DISCHARGE & BOTTOM EXHAUST/RETURN AIR DUCT CONN'S. UNITS SHALL HAVE BOTTOM SUPPLY AIR DISCHARGE & BOTTOM RETURN AIR DUCT CONN'S. FOR ALL CONNECTIONS WITHIN MFGR'S 16" HIGH SEISMIC ROOF CURBS.

DEMO & NEW	EXIST. "McQUAY"	CHILLER	CHILLER TOTAL	CHILLER TOTAL	CHILLEF EVAP.	8	UN	LER TOT. IT INPUT	(COMPRES I	SORS			CONDENS	ING FANS			UNIT TOTAL	DESIGN				NOTES AND ACCESSORIES
CHILLER MARK	& NEW "DAIKIN" MODEL NO's	MODE OF OPER	RATED TONS CAPACITY	WATER FLOW GPM	MAX. P.D. FT.	EWT I	LWT KW °F IN	PERFORM. EER & IPLV	TOTAL NUMBER	TOTAL MAX KW ALLOW.		LRA EACH	TOTAL NO. EACH	MAX KW Allow. Each	FLA EACH	LRA EACH	CONTROLS	MAX.DESIGN OPER. AMPS & (MOCP-A.)	MAX. & (MIN.) AMBIENT TEMP °F	UNIT VOLTAGE V/PH/HZ	NOTES AND ACCESSORIES REQUIRED	1. 2. 3.	(a) SEMI-HERMETIC OR (b) SCROLL PART WINDING START CIRCUIT BREAKERS
DEMO EXISTING	EXIST. "McQUAY"	CHILLER	158	493	25	48	38 158.	o –	(4) RECIP.	. 265.5	93	330	14	1.5	2.8	15	2	420A.(500)	95 (20)	460/3/60	1(a) THRU 16	4. 5	REPLACEABLE FILTER DRYER
ACC-1	#ALR185D	ICE	126.5	493	25	34	24 158.	0 _	(4) RECIP.	227.3	93	330	14	1.5	2.8	15	2	420A.(500)	85 (20)	+00/ 3/ 00		6.	115 VOLT CONVENIENCE OUTLET NON-FUSED DISCONNECT SWITCH
NEW ACC-1	NEW "DAIKIN"	CHILLER	99.0	250/300	20	48	38 123.	2 9.647 &	(4)SCROLL	_		8 (2)310.0 5 (2)320.0		1.5	3.6	18	2	227.1A.(250)	95 (20)	460/3/60	1(b) THRU 16	7. 8.	ANTI-RECYCLE TIMER 115 VOLT CONTROL TRANSFORMER
CHILLER	#AGZ110E	ICE	NOT USED	_	_	-		15.87	_	_	_	_	_	_	_	_	-	_	_			9.	PHASE FAILURE-REVERSAL PROTECT WATER FLOW SWITCH-FIELD MOUNTE
																						10. 11. 12. 13.	HOT GAS BYPASS-BOTH CIRCUITS 5 YEAR COMPRESSOR "PARTS ONLY" (8)-STEP MIN. CAPACITY CONTROL
	D-AL						_DG	CHV	V PUN	(P)												14. 15.	"MICROTECH" DDC STAND-ALONE CC OPEN PROTOCOL WITH "BAS" CONTR

E E	XISTIN	G BLDG CH	⊣W F	PUMF	$-C \vdash$	IWP-	- 3
EXIST. PUMP MARK	EXIST CHWP "TACO" MODEL NO.	EXIST CHWP-3 PUMP SERVICE	PUMP	CHWP-3 TOTAL GPM(ADJ)	τοται	MOTOR	
CHWP-3	FM3010	BLDG. SYSTEM CHW	1760	~350	~90-FT.	15	460/3/60
	(AD	JUSTED & RE-BALANO	ČE) (A	ADJUSTED)	(ADJUSTEI)	

NOTES :

1. EXIST. CHWP-3 PUMP SHALL BE NEWLY-ADJUSTED & RE-BALANCED FOR NEW TOTAL ADJUSTED CHWS WATER FLOW & HEAD (TDH) & SHALL BE RECORDED BY CERTIFIED TEST AND BALANCE CONTRACTOR TO ASSURE THE ABOVE FLOW RATES ARE ADJUSTED FOR THE ADD-ALTERNATE CHILLER REPLACEMENT PORTION OF PROJECT WORK TO DONE UNDER "ADD-ALTERNATE" FOR NEW CHILLER REPLACEMENT WORK.

						F	PACK	AGED	СНЛ	N TRAN	ISFEF	r/pum	PING I	JNIT						
		P	UMPING DATA											HEA	T EXCHANGER [DATA (P	FHE)			
PUMP NO.	OPERATION	"SYSTECON" MODEL NO.	PUMP SERVICE	GPM	FT. HD.	НР	RPM	VOLTAGE V/PH/HZ				(ADJUS	T) HOT SIDE	WATER			``````````````````````````````````````	ADJUST) COLD SI	DE WATER	
EXIST CHP-1	PRESENT	F1030AM	CHW PRIMARY		90	15	1760	460/3/60		OPERATION	PIPE SIZE	GPM (ADJUST) INL	ET TEMP. °F	OUTLET TEMP. °F	МАХ. ДР Р	IPE SIZE	(ADJUST) GPM	INLET TEMP. °F	OUTLET TEMP. °F	мах. Др
EXIST CHP-2	PRESENT	F1030AM	CHW PRIMARY	250	90	15	1760	460/3/60		PRESENT	6"	350(ADJ.)	52.0	42.0	5.3	6"	250/300	39.0	48.6	7.0
(ADJ. EXIST)	(ADD ALTERN.)	(EXIST/CHP)	CHW PRIMARY	250-300	BAL/90'+	(EXIST)	(EXIST)	(EXIST)		FUTURE	6"	600	52.0	42.0	6.9	6"	670	39.0	48.6	8.7
,	(ADD ALTERN.)	· · · ·				、	(EXIST)	(EXIST)				(ADJUSTED)				((ADJUSTED	& RE-BALANCE)	1	
	(ADJUST	ED & RE-BAL	_ANCE)	, (ADJUSTE	ED)(ADJUS	TED & RE-	–BALANCE)												

NOTES :

1. ADD-ALTERNATE THIS PROJECT REQUIRES T&b BALANCING PUMPS SHALL BE SIZED FOR GPM LISTED, MULTIPURPOSE VALVES SHALL BE RE-BALANCED & SET FOR AD-ALTERNATE GPM CAPACITY.

2. EXIST. UNIT HAS A CENTRIFUGAL VORTEX TYPE FULL WATER FLOW

SEPARATOR UNIT WITH LIQUID RECOVERY SYSTEM AS PART OF ORIGINAL EQUIPMENT INSTALLED.

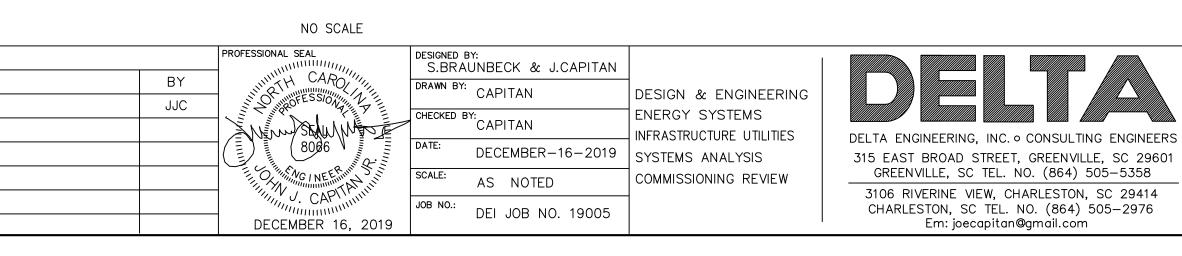
		REVISIONS
NO.	DATE	DESCRIPTION
IFOB	DEC. 16, 2019	ISSUED FOR OWNER BIDDING.

SH	EATING	G ROC	OFTC	DP UI	VIT -	(100%			JTSID	e air	& EX	(HAUS ⁻	TAIR	w/EXHA	UST A		REC	OVER	Y w/DES	ICCANT	UNIT	OF TOT	AL E	ENERG	iY RE	COVERY WHEEL
NCE MTR.) I)	UNIT EXH w/E0 (LOCKERS /	CM PREMI	UM EFF.		1	ENTHALF	I (SUMMER) DES Y HEAT RECOVEF ERATION PERFOR	RY WHEEL		SYSTEM w	/ DESSICA	NT DEHUM	IDIFICATION	I PERFORMA	NCE DAT	DX-COOLING A (DX COOLIN UMMER MODE	G	AFTER-H			ELECT	<u>RTU-1</u> " UNIT FRICAL VOLTA PERATING DAT	AGE	UNIT & MAX. OPE WEIGI (MAX	RATING HTS	"RTU-1" UNIT ACCESSORIES EQUIPMENT & NOTES
OTOR H.P. F.L.A.)	DESIGN AIRFLOW CFM	MAX. AIRFLOW CFM	E.S.P. IN. W.C.	FAN RPM	MOTOR HP	UNIT MARK EQ. NUMBER	DESSICANT WHEEL SUPPLY AIR LAT- GR/LB	DESSICANT WHEEL S/A LAT DEWPOINT	UNIT MARK EQ. NUMBER	EAT TO DX COIL DB/WB	LAT FROM DX COIL DB/WB	LAT-DB/WB DESSICANT WHEEL	LAT-GR/LB DESSICANT WHEEL	UNIT MAX. LAT-S/A DB-WB/DP	UNIT MAX. LAT-S/A GR/LB.	NO. OF VSP-D COMPRESSOF & AMPS ACH	s refrig	· RE-HEAT	HOT-GAS NAT RE-HEAT EAT CAP(MBH) °F	GAS-HEAT/SECT AT TOTAL INPU °F GAS (MBH)	VOLTAGE	UNIT UNIT F.L.A. M.C.A. AMPS AMPS	M.O.P.	UNIT WEIGHT LBS.	CURB WEIGHT LBS.	(SEE "RTU-1" UNIT SPECIFICATIONS & REQM'TS. & NOTES BELOW.
(7.4)	4660	5800	0.75	1833	4.0	RTU-1	80	60.9	RTU-1	83.5/68.6	56.4/56.3	67/53.6	80.0	58/57/56.3	66.0	(1) @ 17.38 k	W 1	70/61.3	(88.29) 54*	95° 450 MBH	460/3/60	45.0 52.5	80A	4332	1,000	SEE SPECS & NOTES 1-6 BELOW

(ADD-ALTERNATE-ADJUST CHW PUMPS & PFHE FLOWS)

<u>NOTES :</u>

1. COLD SIDE INLET TEMP. INDICATES 1 DEG. F. LINE LOSS.



LL COMPRESSORS

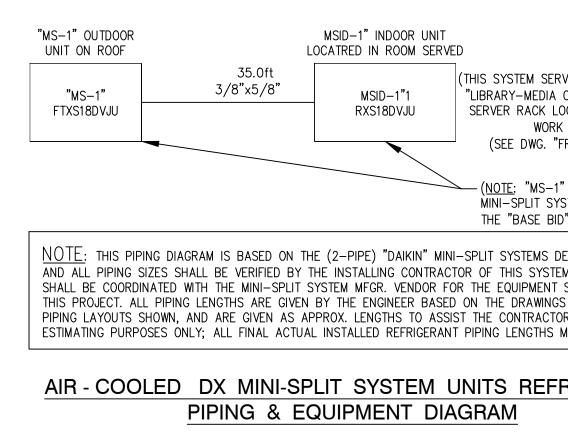
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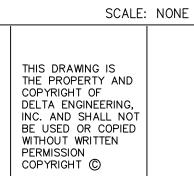
ILY" WARRANTY

CONTROLLER NTRACTOR

16. ALL CAPACITIES & PERFORMANCES ARE BASED ON 25% ETHYLENE GLYCOL-WATER SOLUTION.

DIF	FUSER	S, REG	ISTERS	& GRII	LES SO	CHEDULE	Ξ	
CE INDUSTRIES, INC.' DEL NO. OR APPVD. EQUAL	SERVICE	THROW PATTERN (SUPPLY ONLY)	AIR FLOW CFM NOM. RANGE	NECK SIZE INCHES	PRESS DROP I. W. G.	ACCESSORIES REQUIRED	SYMBOL FOR SHOP DWGS SUBMITTAL USE ONLY	
OR ALL LAY-IN SMD-D-TB	CEILING SUP	PLY AIR DIFF	USERS APPLIC	ATIONS: 6"x6"	AS NOTED	1,2,3,4	A	
SMD-D-TB	SUPPLY	4-WAT 4-WAT	250-300	6 x6 9"x9"	AS NOTED	1,2,3,4	B	
SMD-D-TB	SUPPLY SUPPLY	4-WAY	300-450 450-600	12"x12" 15"x15"	AS NOTED	1,2,3,4	C D	
PDN-D-TB	SUPPLY	FULL FACE	0-150	6"ø	AS NOTED	1,2,3,4	D1	
PDN-D-TB PDN-D-TB	SUPPLY SUPPLY	FULL FACE	150-260 260-400	8"ø 10"ø	AS NOTED	1,2,3,4	D2 D3	
OR ALL LAY-IN								
PDDR-D-TB	RET/EXH	FULL FACE	0-130	6"ø	AS NOTED	1,2,3,4	E	
PDDR-D-TB	RET/EXH	FULL FACE	150-240 250-400	8"ø 10"ø	AS NOTED	1,2,3,4 1,2,3,4	F	
PDDR-D-TB	RET/EXH	FULL FACE	450-525	10 ø 12"ø	AS NOTED	1,2,3,4	H	
PDDR-D-TB	RET/EXH RET/EXH	FULL FACE	530-700 725-800	14"ø 16"ø	AS NOTED	1,2,3,4 1,2,3,4	J K	
PDDR-D-TB	RET/EXH	FULL FACE	825-2200	16 Ø 22"X22"	AS NOTED	1,2,3,4	L	
R ALL EXPOSED BO	 r/duct mount	ED AND HARD C	EILING SURFACE N	MOUNTED SUPPL	Y AIR DIFFUSERS	S APPLICATIONS:		
SMD-D	SUPPLY	4-WAY	0-100	6"×6"	AS NOTED	1,2,3,5	M	
SMD-D SMD-D	SUPPLY SUPPLY	4-WAY 4-₩AY	150-200 250-400	9"×9" 9"×9"	AS NOTED AS NOTED	1,2,3,5 1,2,3,5	N P	
SMD-D SMD-D	SUPPLY SUPPLY	4-₩AY 4-₩AY	425-600 650-850	12"x12"	AS NOTED	1,2,3,5	Q R	
SMD-D SMD-D	SUPPLY	4-WAY 4-WAY	900-1200	15"x15" 18"x18"	AS NOTED	1,2,3,5 1,2,3,5	R S	
SMD-D	SUPPLY	4-WAY	50-1200	PLAN SIZES	AS NOTED	1,2,3,5	Т	
R ALL EXPOSED SID	I EWALL DUCT M	I OUNTED AND HA	RD SIDEWALL SUR	RFACE MOUNTED	I SUPPLY AIR GR	ILLE APPLICATIONS:		
520D 520D	SUPPLY SUPPLY	2-WAY 2-WAY	0-180 200-260	8"x6" 12"x4"	AS NOTED	1,2,3,5 1,2,3,5	U V	
520D 520D	SUPPLY	2-WAY 2-WAY	200–260 270–340	12"x4" 12"x6"	AS NOTED	1,2,3,5	W	
520D 520D	SUPPLY SUPPLY	2-WAY 2-WAY	370-550 575-720	14"x8" 16"x10"	AS NOTED	1,2,3,5 1,2,3,5	X Y	
520D	SUPPLY	2-WAY	730–855	18"×10"	AS NOTED	1,2,3,5	AA	
520D 520D	SUPPLY SUPPLY	2-WAY 2-WAY	890–1070 1080–1300	18"x12" 20"x10"	AS NOTED	1,2,3,5 1,2,3,5	BB CC	
520D	SUPPLY	2-WAT 2-WAT	1080-1300			1,2,3,5	CC	
R ALL EXPOSED SIDI	 EWALL DUCT M	TD. AND HARD S	DEWALL SURFACE	MTD. RETURN,	/EXHAUST AIR GI	RILLE APPLICATIONS:		
530D 530D	RET/EXH	1-WAY	0-180	8"x8"	AS NOTED	1,2,3,5 1,2,3,5	DD EE	
530D 530D	RET/EXH RET/EXH	1-WAY 1-WAY	200-260 270-340	10"x8" 12"x8"	AS NOTED AS NOTED	1,2,3,5	FF	
530D 530D	RET/EXH	1-WAY	370-550 575-720	14"x8" 14"x14"	AS NOTED	1,2,3,5 1,2,3,5	GG HH	
530D	RET/EXH	1-WAY	730-855	18"x14"	AS NOTED	1,2,3,5	JJ	
530D 530D	RET/EXH RET/EXH	1-WAY 1-WAY	890–1070 1080–1300	18"×18" 24"×18"	AS NOTED AS NOTED	1,2,3,5 1,2,3,5	KK LL	
530D	RET/EXH	1-WAY		PLAN SIZES		1,2,3,5	LL	
PROVIDE DEVICE PROVIDE DEVICE PROVIDE DEVICE PROVIDE DEVICE	w/INTEGRA w/REQUIRE w/MATERIA FOR LAY-I	L MANUAL O D COLOR TO AL OF ALL ST N CEILING AF	PPOSED BLADE BE OFF-WHITI EEL OR ALUMI PLICATION.	E VOLUME DA E POWDER C NUM METAL	AMPERS FOR OAT FINISH. AS NOTED; E	REGULATION OF	ENGINEER AT SU AIR DEVICE CAP PECIFIED AS THE NTED APPLICATIO	MIN. BASIS OF DESIGN & QUAL
"MS-1" O UNIT ON "MS- FTXS18	ROOF -1"	3: 3/8">	LOCA [*] 5.Oft	SID-1" INDOOR TRED IN ROOM MSID-1"1 RXS18DVJU	I SERVED (THIS S "LIBRA SERVI	SYSTEM SERVES FL ARY-MEDIA CENTEI ER RACK LOCATED WORK ROOM SEE DWG. "FR-M-	R"COMPUTER) IN LIBRARY 1)	
NOTE					MIN The	DTE: "MS-1" & "M I-SPLIT SYSTEM II E "BASE BID")	S PART OF	
AND ALL SHALL BI THIS PRO PIPING L	PIPING SIZES E COORDINATE DJECT. ALL PI AYOUTS SHOW	SHALL BE VE ED WITH THE M PING LENGTHS WN, AND ARE G	RIFIED BY THE I IINI-SPLIT SYSTE ARE GIVEN BY IVEN AS APPRO	NSTALLING CO EM MFGR. VEN THE ENGINEER X. LENGTHS T	NTRACTOR OF DOR FOR THE BASED ON TH O ASSIST THE	SYSTEMS DESIGNS THIS SYSTEM WHIC EQUIPMENT SUPPL E DRAWINGS SYST CONTRACTOR FOR E LENGTHS MAY V	CH IED FOR EM HIS	
<u>AIR -</u>	COOLE		1INI-SPLIT 3 & EQU SCALE:	IPMENT		S REFRIGE M	<u>ERANT</u>	





FLAT ROCK - NEW HVAC UPGRADE SYSTEMS SCHEDULES & DETAILS