

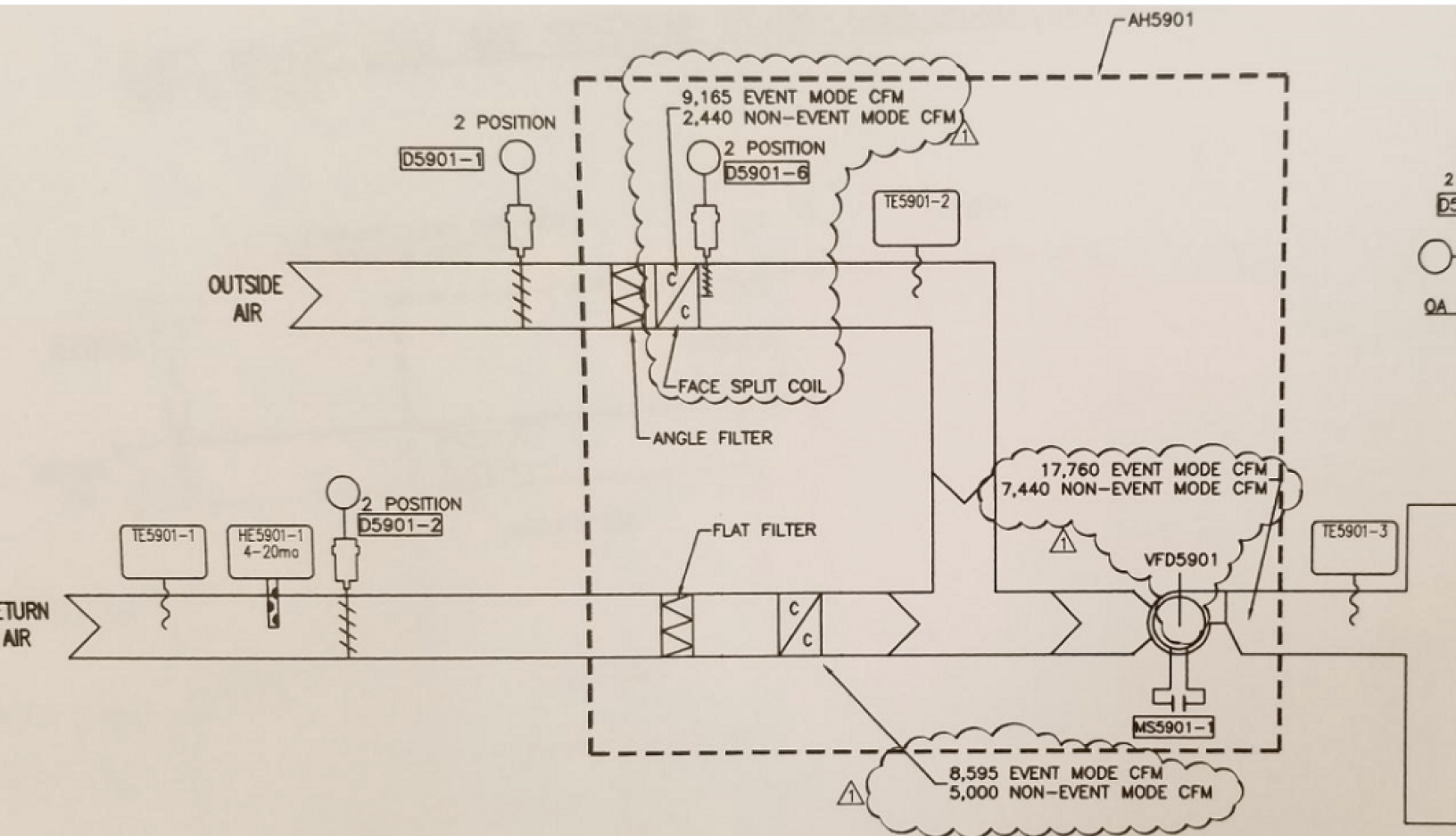
SPLIT SYSTEM CONDENSING UNIT AND MODULAR AIR HANDLER UNIT SCHEDULE

MARK		AH1801A	AH1801B	AH1802	AH1903A	AH2801	AH4803A	AH4806	AH4905A	AH5901
TOTAL SUPPLY AIR	CFM	1,340	5,735	7,080	10,800	7,170	11,365	6,695	10,825	19,355 (EVENT MODE) 39,355 (NON-EVENT MODE)
STATIC PRESSURE (EXT/TOTAL)	IN. H ₂ O	1.5/2.75	1.5/2.78	1.5/2.7	1.5/2.81	1.5/2.81	0.5/2.54	1.5/2.8	1.5/2.79	1.25/2.35
AIR QUANTITY	CFM	1,340	1,340 (FROM AH1801A)	4,700 (FROM AH1903A)	10,800	1,110 (FROM AH1903A)	3,390	6,695	10,825	9,169/2,440
ENTERING TEMPERATURE DB/WB	°F/°F	90.0/79.0			90.0/79.0		90.0/79.0	90.0/79.0	90.0/79.0	86.7/77.9
COOLING COIL TOTAL CAPACITY	MBH	124.6			1,001.3		289.7	640.0	1,006.5	800.4/208.5
COOLING COIL SENSIBLE CAPACITY	MBH	52.2			431.5		128.1	274.8	420.9	363.3/91.7
COOLING COIL	ROWS/FPI	8/11			8/8		8/11	8/6	8/8	8/8
COOLING COIL MAX AIR PRESS. DROP	IN. H ₂ O	0.83			0.85		0.69	0.93	0.86	0.81
COOLING COIL MAX. FACE VELOCITY	FPM	386.2			442.4		341.4	447.6	443.5	427/113
SATURATED SUCTION TEMP.	°F	44.1			37.3/39.7		47.3/47.3	32.7/38.9	36.5/39.5	38.6/44.8/-
LEAVING TEMPERATURE COOLING DB/WB	°F/°F	53.9/52.8			53.0/52.9		54.7/53.7	53.7/53.5	54.0/52.8	53.0/53.0
FILTERS	TYPE/EFF.	ANGLE/35%			ANGLE/35%		ANGLE/35%	ANGLE/35%	ANGLE/35%	ANGLE/35%
AIR QUANTITY	CFM		5,735	7,080		7,170		7,975		8,595/5,000
ENTERING TEMPERATURE DB/WB	°F/°F		70.1/60.3	60.8/55.8		71.7/61.0		75.0/62.4		75.0/62.4
COOLING COIL TOTAL CAPACITY	MBH		122.4	69.0		175.0		204.7		225.9/169.5
COOLING COIL SENSIBLE CAPACITY	MBH		100.2	55.0		139.4		174.8		220.1/143.9
COOLING COIL	ROWS/FPI		8/8	4/14		6/8		4/11		6/8
COOLING COIL MAX AIR PRESS. DROP	IN. H ₂ O		0.78	0.57		0.72		0.37		0.39/0.42
COOLING COIL MAX. FACE VELOCITY	FPM		453.7	483.7		493.7		372 (531 W. OA CLOSED)		507/295
SATURATED SUCTION TEMP.	°F		44.1	43.3		39.4		41.8/41.8		43.7/-
LEAVING TEMPERATURE COOLING DB/WB	°F/°F		53.9/52.8	53.6/52.2		53.7/52.5		54.7/53.7		55.0/55.0
FILTERS	TYPE/EFF.		2" PLEATED FLAT/35%	2" PLEATED FLAT/35%		2" PLEATED FLAT/35%		2" PLEATED FLAT/35%		2" PLEATED FLAT/35%
AIR QUANTITY	CFM						11,365			19,355/5,035
MIXED AIR TEMPERATURE DB/WB	°F/°F						54.7/53.7			54.0/53.7
MAX. FAN SPEED	RPM		1,809	930	1,824	954	1,836	2,287	1,828	2,735
FAN MOTOR	BHP/HP		1.3/1.5	4.9/7.5	4.9/7.5	5.2/7.5	9.4/15.0	5.4/7.5	8.4/10.0	20.1/25 (SEE NOTE 15)
ELECTRICAL CHARACTERISTICS	V/ø/Hz		460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60
FAN ARRANGEMENT/TYP	-		FC UPBLAST	FC UPBLAST	FC UPBLAST	FC UPBLAST	FC UPBLAST	FC UPBLAST	FC UPBLAST	AIRFOIL UPBLAST (IN ME21 CABINET)
DISCHARGE SOUND POWER LEVELS (OCTAVES)	1/2/3/4/5/6/7/8/9/10	81/81/86/87/87/86/80/77	83/84/89/89/86/86/78/73/67	82/82/81/85/82/74/69/61	86/86/84/87/81/74/68/60	82/82/80/86/83/75/69/61	84/84/82/81/82/77/69/61	84/85/85/88/83/79/72/64	85/85/84/87/81/74/68/60	87/84/100/104/96/83/88/85
RADIATED SOUND POWER LEVELS (OCTAVES)	1/2/3/4/5/6/7/8/9/10	83/77/69/65/71/66/61/67	85/80/70/64/66/66/65/67	84/78/68/63/66/61/59/51	87/81/75/65/65/63/59/50	84/78/68/64/67/62/59/51	86/80/73/68/64/56/51	86/81/75/66/67/66/59/54	87/81/75/65/65/63/59/50	90/88/88/84/87/82/77/78
MANUFACTURER	-		CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER
MODEL	-		39ME12	39ME14	39ME25	39ME14	39ME10	39ME21	39ME14	39ME21
UNIT WEIGHT	LBS.		1,048	2,520	4,144	2,675	5,625	2,710	4,144	3,942/5
FILTER PRESSURE DROP (CLEAN)	IN. H ₂ O		0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
UNIT LOCATION	-		MECH. RM. 1-801	MECH. RM. 1-801	MECH. RM. 1-802	MECH. RM. 1-903	MECH. RM. 2-801	MECH. RM. 4-803	MECH. RM. 4-905	MECH. RM. 5-901
SPACE SERVED	-		ADMIN. OA	ADMIN.	PRESCHOOL/ART	BLDG 1 & 2 CR. OA	MEDIA	CAFETERIA	PE LOCKER AREA	BLDG 4 CR. OA
NOTES	-		1, 2, 3, 4, 5, 6, 10	1, 2, 3, 4, 5, 6, 10, 12	1, 2, 3, 4, 5, 6, 10, 12	1, 2, 3, 4, 5, 6, 10	1, 2, 3, 4, 5, 6, 10, 12	1, 2, 3, 4, 5, 6, 10	1, 2, 3, 4, 5, 6, 10	1, 2, 3, 4, 5, 6, 10, 12, 15, 17

CONDENSING UNIT DATA		CU1801A	CU1801B	CU1802	CU1903A	CU2801	CU4803A	CU4803B	CU4806	CU4905A	CU5901A	CU5901B
NOMINAL TONS	TONS	10	10	6	100	15	25	20	70	100	70	20
OUTDOOR TEMP.	°F	95	95	95	95	95	95	95	95	95	95	95
ELECTRICAL CHARACTERISTICS	V/ø/Hz	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60
OUTDOOR FAN(S)	QTY/HP	2/0.25	2/0.25	2/0.125	6/1.0	2/0.5	2/1.0	2/1.0	6/1.0	6/1.0	6/1.0	2/1.0
OUTDOOR FAN RUN LOAD AMPS EACH	RLA	0.7	0.7	0.4	202.8 & 402.7	102.3 & 101.9	3.1	3.1	202.8 & 402.7	202.8 & 402.7	202.8 & 402.7	3.1
COMPRESSORS	QTY/HP	1	1	1	4	2	2	2	2	4	2	2
COMPRESSOR RUN LOAD AMPS EACH	RLA	17.2	17.2	9.6	1034.6 & 3043.6	16.4	22.1	19.6	1065.4 & 1046.8	1034.6 & 3043.6	1065.4 & 1046.8	19.6
COMPRESSOR LOCK ROTOR AMPS EACH	LRA	125	125	73	223	95	114	99	1034.5 & 1025.3	1034.5 & 1025.3	1034.5 & 1025.3	99
MIN. CIRCUIT AMPS/RECOMMENDED FUSE (MOCP)	MCA/AMPS	22.9/30	22.9/30	12.8/20	192.7/225	42.1/50	55.9/70	50.3/60	145.0/200	192.7/225	145.0/200	50.3/60
SEER/EER/PLV (MIN.)	-	-/12.4/-	-/12.4/-	-/12.4/-	-/10.5/-	-/10.5/-	-/11.6/13.0	-/11.6/-	-/10.0/-	-/11.6/-	-/10.0/-	-/11.6/-
UNIT WEIGHT	LBS.	531	531	352	6,160	886	1,982	1,760	4,229	6,160	4,229	1,760
MANUFACTURER	-		CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER
MODEL	-		38AR2012	38AR2012	38AR2007	38AH104(D)	38ARD016	38AH028(D)	38AH024(D)	38AH104(D)	38AH074(D)	38AH024(D)
NOTES	-		5, 6, 7, 8, 9, 11, 12, 13, 14, 16	5, 6, 7, 8, 11, 13, 14, 16	5, 6, 7, 8, 11, 13, 14, 16	5, 6, 7, 8, 9, 11, 12, 13, 14, 16	5, 6, 7, 8, 11, 13, 14, 16	5, 6, 7, 8, 11, 13, 14, 16	5, 6, 7, 8, 11, 12, 13, 14, 16	5, 6, 7, 8, 9, 11, 12, 13, 14, 16	5, 6, 7, 8, 9, 11, 13, 14, 16	5, 6, 7, 8, 9, 11, 13, 14, 16

- PROVIDE POSITIVE SLOPED STAINLESS STEEL DRAIN PAN, BRASS COIL CONNECTIONS, BRASS VENTS AND DRAINS, REMOTE BEARING LUBRICATION LINES, EXTENDED TO JUST INSIDE THE ACCESS DOOR.
- PROVIDE DOUBLE WALL UNIT. FILTER SECTIONS ON 100% OUTSIDE AIR UNITS MAY BE SINGLE WALL.
- PROVIDE PREMIUM EFFICIENT MOTORS. SEE SPECIFICATIONS. DIVISION 16 CONTRACTOR SHALL PROVIDE MOTOR STARTER.
- PROVIDE SPRING TYPE VIBRATION ISOLATORS WITH MANUFACTURER'S RECOMMENDED DEFLECTION. OMIT IF FAN/MOTOR IS INTERNALLY ISOLATED WITHIN THE FAN SECTION.
- THERMOSTAT (TEMPERATURE SENSOR) SHALL BE BY THE TEMPERATURE CONTROLS CONTRACTOR. STAGING SHALL BE CONTROLLED BY THE DDC SYSTEM.
- REFRIGERANT LINES SHALL BE SIZED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR STATIC LIFTS AND TOTAL LENGTHS REQUIRED. INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE MANUFACTURER'S RECOMMENDED REFRIGERANT SPECIALTIES INCLUDING ISOLATION VALVES, REPLACEABLE CORE FILTER DRIER, DISCHARGE MUFFLERS AND SIGHT GLASSES IN EACH REFRIGERANT CIRCUIT. PROVIDE 5 MINUTE TIME DELAY COMPRESSOR STARTING RELAY. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND ACCESSORIES.
- PROVIDE ALL REQUIRED CONTACTS AND RELAYS TO INTERFACE WITH THE BUILDING'S DDC SYSTEM. REFER TO THE POINT SCHEDULE AND THE SCHEMATICS.
- PROVIDE FIELD APPLIED APR VALVE AS SIZED AND MANUFACTURED BY RAWAL FOR EACH LEAK COMPRESSOR. PROVIDE ON BOTH COMPRESSORS IN CU5901A.
- PROVIDE WITH METAL FILTER FRAME WITH REPLACEABLE FILTER MEDIA.
- CONDENSING UNIT'S CONDENSER COILS SHALL BE PROTECTED BY AN EXPANDED STAINLESS STEEL SCREEN WITH CONTINUOUS 1" U-CORNER EDGING SECURED TO UNIT CABINET WITH STAINLESS STEEL SCREWS AT 8" O.C. MANUFACTURER'S STANDARD HALL GUARDS ARE NOT ACCEPTABLE. PROVIDE CONDENSER COIL COATING AS PER SPECIFICATIONS.
- EVAPORATOR COILS IN 100% OUTSIDE AIR STREAMS SHALL BE COPPER FINN ON COPPER TUBES AND SHALL BE COATED PER SPECIFICATIONS.
- PROVIDE A DOUBLE SUCTION RISER. VERIFY REQUIREMENTS WITH THE EQUIPMENT MFR.
- PROVIDE A SUCTION LINE ACCUMULATOR. VERIFY REQUIREMENTS WITH THE EQUIPMENT MFR.
- FAN MOTOR SHALL BE DRIVEN WITH A VARIABLE FREQUENCY DRIVE FOR FAN CONTROL. SEE VARIABLE FREQUENCY DRIVE SCHEDULE.
- PROVIDE MANUFACTURER'S PHASE LOSS PROTECTION FOR THREE PHASE MOTORS. INSTALL PHASE LOSS PROTECTION IN CONFORMANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. REFER TO SPECIFICATIONS SECTION 15781 FOR ADDITIONAL REQUIREMENTS.
- OUTSIDE AIR PATH TO HAVE SPLIT FACE COIL WITH A MOTORIZED DAMPER. THE DAMPER AND ASSOCIATED COMPRESSOR CIRCUIT SHALL BE ENABLED/OPENED DURING EVENT MODE.

** VALUES SEPARATED BY A VERTICAL BAR (|) INDICATE EVENT MODE AND NON-EVENT MODE CONDITIONS RESPECTIVELY. DURING EVENT MODE, THE MODULATING DAMPER INTEGRAL TO THE UNIT SHALL OPEN TO THE EVENT CFM INDICATED. DURING NON-EVENT MODE, THE MODULATING DAMPER INTEGRAL TO THE UNIT SHALL CLOSE TO THE NON-EVENT CFM INDICATED. THE SUPPLY FAN SPEED WILL BE CONTROLLED TO THE CFMS INDICATED FOR THE EACH MODE BY THE VFD.



TWO MODE CAV AIR SYSTEM FLOW DIAGRAM (AH590)
NOT TO SCALE