PLANT ROOFTOP UNITS SCHEDULE (DIRECT FIRED)

MARK	SERVICE	MODEL / MFR.	TONS	SUPPLY FAN DATA							NATURAL GAS HEATING COIL							FILTER DATA		CURB	DISCONNECT	INLET DAMPER	CONTROL PANEL	MCA	SCCR(KAIC)	MOCP	ELECTRICAL (V/PH/HZ)	DIMENSIONS (LxWxH, IN)	OPERATING WEIGHT (LBS)	REMARKS
				TOTAL AIR CAPACITY (CFM)	OUTDOOR AIR CAPACITY MIN/MAX (CFM)	EXTERNAL STATIC PRESSURE (IN WG)	TOTAL STATIC PRESSURE (IN WG)	FAN WHEEL DIA (IN)	FLA (A)	MOTOR (HP)	BURNER SIZE (MBH)	MIN OUTPUT (MBH)	AIR TEMPERATURE... ENTERING G (F)	AIR TEMPERATURE... LEAVING (F)	TURN DOWN	REGULATOR	MAXIMUM GAS INLET PRESSURE (IN WG)	MINIMUM GAS INLET PRESSURE (IN WG)	MERV	TYPE										
RTU-01	STORAGE AREA	TT1025/WEATHER-RITE	-	20,000	10,000/20,000	1	2.36	36	22.1	15	-	633.6	46	75	30:1	-	27	11.3	8	PLEATED	YES	NON FUSED	MOTORIZED	YES	27.70	10	48.30	460/3/60	258x58x62	3,088	1 THRU 14, 16, 17,18
RTU-02	COMPRESSOR ROOM	TT3580/WEATHER RITE	-	58,225	58,225	2	3.21	66	65	50	-	1446.5	21.9	45.1	30:6	-	27	7.9	8	PLEATED	YES	NON FUSED	MOTORIZED	YES	82.50	10	147.30	460/3/60	284x140x102	6,480	1 THRU 5, 7, 8, 10 THRU 14, 17, 18
RTU-03	A2- DRYING	XT115/WEATHER RITE	-	7,350	7,350	0.875	1.69	18	7.6	5	-	253.5	21.9	54.1	30:7	-	14	7.7	8	PLEATED	YES	NON FUSED	MOTORIZED	YES	10.80	10	18.10	460/3/60	107x43.3x40.2	2,394	2 THRU 5, 7, 8, 10 THRU 14, 17, 18
RTU-04	A5-CONDENSING	XT112/WEATHER RITE	-	1,360	1,360	0.85	1.6	7	3.4	2	-	42.5	21.9	50.9	30:8	-	14	6.7	8	PLEATED	YES	NON FUSED	MOTORIZED	YES	5.50	10	8.70	460/3/60	81.7x28.3x32.2	1,402	3 THRU 5, 7, 8, 10 THRU 14, 17, 18

PKG. 13M02

REMARKS

1. RTU IS HEATING AND VENTILATION UNIT ONLY, NO COOLING. INSTALLED OUTDOORS
2. CONTROLS AND SEQUENCE PER SHEET 1/MH-701
3. PREMIUM FANS
4. 2", MERV 8
5. LOW TEMPERATURE LIMIT SWITCH, HIGH AND LOW GAS PRESSURE SWITCHES
6. MODULATING UNIT OPERATION: FIXED AMOUNT OF BURNER AIR (OA) MIXED WITH VARIABLE OA/RA
7. PITCHED FULL CURB: 20" HIGH CURB, INSULATED WITH 1" 1.5# NEOPRENE COATED FIBERGLASS INSULATION,
8. STAINLESS STEEL DRAIN PAN
9. RETURN AIR AND OUTSIDE AIR DAMPER SIZED FOR 100% OF THE TOTAL AIRFLOW. MODULATING ACTUATOR INCLUDED.
10. DDC CONTROLS CAPABLE OF CONNECTION AND CONTROL BY A FUTURE BMS
11. REGULATOR, TO REDUCE INLET GAS PRESSURE TO THE REQUIRED PRESSURE AT UNIT.
12. SMOKE DETECTORS (120V) ON SUPPLY AND RETURN DUCTS WHERE APPLICABLE
13. SINGLE-POINT POWER CONNECTION WITH MAIN UNIT NON-FUSED 65k AIC RATED DISCONNECT SWITCH.
14. STANDARD INLET AND RETURN DAMPERS WHERE APPLICABLE
15. NO RETURN SECTION
16. MAX OA DURING SUMMER ZONE AND MIN OA DURING WINTER ZONE
17. PROVIDE BURNER SIZE TO MEET MINIMUM HEATING REQUIRED
18. (B) CONTROLS CONTRACTOR SHALL CONTROL ECONOMIZER AND PROVIDE SPACE TEMPERATURE SENSOR

AIR ROTATION UNITS

MARK	LOCATION	SERVICE	MFR.	MODEL	SUPPLY FAN DATA						OPERATING DATA								HEATING DATA			FILTER DATA		MCA	MOCP	ELECTRICAL (V/HZ/PH)	OPERATING WEIGHT (LBS)	REMARKS
					CFM TOTAL	CFM OUTSIDE AIR MAX/MIN	ESP. IN. W.G.	TSP. IN. W.G.	FAN QUANTITY	HP	SERVICE	CFM	dP AIR IN. W.G.	MAX FACE VELOCITY FPM	ENTERING AIR TEMP. (°F) DB	ENTERING AIR TEMP. (°F) WB	LEAVING AIR TEMP. (°F) DB	LEAVING AIR TEMP. (°F) WB	METHOD	OUTPUT (MBH)	MAX.NATURAL GAS INLET PRESS. (PSIG)	MAX FACE VELOCITY FPM	FILTER TYPE					
PKG. 13M02																												
ARU-01	ROOF	DRY CHEMISTRY PROCESSING	JOHNSON	AR85D-20-MG-F	46,400	46,400/30,000	0.5	---	2	10	COOLING	---	---	---	---	---	---	---	---	---	---	500	2" MERV 8	42	50	460/3/60	-	1 THRU 23
											HEATING	46,400	---	---	22	---	90	---	DIRECT FIRED NG	2,080	---						
PKG. 14M02																												
ARU-02	ROOF	WET CHEMISTRY PROCESSING	JOHNSON	AR85D-20-MG-F	46,400	46,400/30,000	0.5	---	2	10	COOLING	---	---	---	---	---	---	---	---	---	---	500	2" MERV 8	42	50	460/3/60	-	1 THRU 23
											HEATING	46,400	---	---	22	---	90	---	DIRECT FIRED NG	2,080	---						

OUTDOOR CONSTRUCTION

2. MULTI-PASS, INDIRECT FIRED GAS FURNACE WITH MODULATING GAS CONTROL AND FM APPROVED GAS TRAIN (APPROPRIATE TO THE SPECIFIED GAS PRESSURE AT THE CONTRACTOR CONNECTION TO THE EQUIPMENT GAS TRAIN), PROVIDE NATURAL GAS REGULATOR AS NECESSARY TO BRING BUILDING NATURAL GAS PRESSURE DOWN TO PRESSURE REQUIRED BY AIR HANDLER BURNER (S)
3. TWO (2) HIGH TEMPERATURE LIMITS, ONE FOR AUTOMATIC RESET (FACTORY SET AT 200˚F) AND ONE FOR MANUAL RESET (FACTORY SET AT 250˚F).
4. SINGLE-POINT POWER CONNECTION WITH MAIN UNIT NON-FUSED 65k AIC RATED DISCONNECT SWITCH.
5. FIRE PROTECTION INTERLOCK WITH AN EXTERNAL POWER SOURCE AT 120 V
6. SMOKE DETECTORS (120V) ON SUPPLY AND RETURN DUCTS
7. ODP PREMIUM EFFICIENCY MOTOR(S).
8. VARIABLE FREQUENCY DRIVE INCLUDED FOR SOFT-START OPERATION. INCLUDES SHAFT GROUNDING RING OR INDUCTIVE ABSORBERS.
9. EXTERIOR AIR-DRY ENAMEL FINISH, JOHNSON GRAY
10. CASING CONSISTING OF DOUBLE-WALL INSULATED CONSTRUCTION – 18 GAUGE PAINTED STEEL EXTERIOR, 2" 1.5# DENSITY INSULATION AND 20-GAUGE STEEL INTERIOR LINER.
11. VERTICAL AND HORIZONTAL DISCHARGE LOUVERS PAINTED TO MATCH CABINET FINISH.
12. RETURN AIR FINISHING GRILL PAINTED TO MATCH CABINET FINISH.
13. TOTAL UNIT HEIGHT TO 26'0". PHYSICAL DIMENSIONS - 152"L x 72"W x 312"H
14. PREMIUM TYPEHIGH STATIC, LOW NOISE, AIRFOIL AXIAL FAN BLADES.
15. INTEGRAL TURNING VANE IN DISCHARGE PLENUM.
16. MIXED AIR FILTER TRACK(S) WITH ONE (1) SET OF 2" MERV-8 FILTERS.
17. OUTSIDE AIR LOUVER WITH INSECT SCREEN.
18. OUTSIDE AIR DAMPER SIZED FOR 100% OF THE TOTAL AIRFLOW. MODULATING ACTUATOR INCLUDED.
19. RETURN AIR DAMPER SIZED FOR DESIGN CFM.
20. CONTROLS AND SEQUENCE PER SHEET 1/MH-701
21. MAGNEHELIC GAUGE WITH A FACTORY SETTING TO INDICATE WHEN FILTER MAINTENANCE IS REQUIRED
22. ECONOMIZER – OUTSIDE AND RETURN AIR DAMPERS SHALL BE SIZED FOR 100% OF THE TOTAL AIRFLOW. PROVIDE MODULATING ACTUATORS
23. DDC CONTROLS CAPABLE OF CONNECTION AND CONTROL BY A FUTURE BMS

DEDICATED OUTDOOR AIR SUPPLY UNIT SCHEDULE (INDIRECT FIRED, DX COOLING)

MARK	SERVICE	BASIS OF DESIGN MFR.	MODEL	SUPPLY FAN DATA						EXHAUST FAN DATA						ENERGY RECOVERY DATA						COOLING / HEATING DATA				FILTER DATA				COMPRESSOR	ELECT. VOLT/PH/HZ	FLA	MCA	MROPD	OPERATING WEIGHT (LBS)	REMARKS
				CFM TOTAL	CFM O.A.	ESP. IN. W.G.	TSP. IN. W.G.	RPM	HP	CFM TOTAL	ESP. IN. W.G.	TSP. IN. W.G.	RPM	WHEEL DIA (IN)	HP	TYPE	SERVICE	ΔP AIR IN. W.G.	ENTERING OUTDOOR AIR TEMP. DB °F	ENTERING OUTDOOR AIR TEMP. WB °F	ENTERING EXHAUST AIR TEMP. DB °F	ENTERING EXHAUST AIR TEMP. WB °F	MBH TOTAL RECOVERED (BTUH)	CAPACITY MBH TOTAL / SENSIBLE	MEDIUM	CIRCUITS / STAGES	ROWS / FPI	SERVICE	TYPE	MERV RATING	MEAN ΔP IN. W.G.	QUANTITY/TOTAL POWER (KW)					
DOA-01	OFFICE VRV SYSTEM	DAIKIN	DPS007A	2,380	2,380 (E)	1.50	2.31	-	2.3	1,815	1.50	-	-	14	4	ENERGY WHEEL VFD	SUMMER		93.9	75	75.5	62	57189	94.6/70.2	DX		15/3	FILTER	COMBO 2"/4" RACK	2" MERV 8	0.02	2/5.56	460 / 3 / 60	18.1	19.4	20	2,540	I THRU 9
																	WINTER		21.9	18	70	50	85914 (A)	168.8	NG	MOD 10:1	-										

NOTES:
1. PROVIDE REGULATOR SIZED TO REDUCE TO MANFUCTURER'S REQUIRED OPERATING PRESSURE
2. DOAS SHALL BE RATED AND LISTED FOR 5KAIC SCCR. SINGLE-POINT POWER CONNECTION WITH MAIN UNIT NON-FUSED 65k AIC RATED DISCONNECT
3. SUPPLY AND EXHAUST FANS SIZED FOR MEAN FILTER PRESSURE DROP. SUPPLY AND EXHAUST FAN MOTORS SHALL BE ECM TYPE.
4. FIXED AND VARIABLE SPEED COMPRESSOR WITH HOT GAS REHEAT COIL
5. FACTORY INSTALLED GFCI
6. MANUFACTURER SHALL SUPPLY SLOPED CURBS 18" HEIGHT
7. FIXED PLATE ENERGY RECOVERY SECTION WITH UPSTREAM FILTERS AND BYPASS DAMPERS
8. MFG DDC CONTROLS WITH BACNET/IP COMMUNICATION CARD TO CONNECT TO FUTURE BMS. SUPPLY AIR TEMPERATURE CONTROL WITH DEHUMIDIFICATION AND BUILDING PRESSURIZATION CONTROL.
9. HOT GAS REHEAT COIL WITH 36 MBH CAPACITY. LEAVING AIR TEMPERATURE (70 F DB, 58.2 F WB)

*THIS SHEET IS APPLICABLE TO 11M01, 13M02 AND 14M02 SCOPE

*DASHED DOT AREAS ARE NOT IN SCOPE FOR THIS PACKAGE.

TB_REV 1.0

SSOE®

CONSULTANTS:

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09/23/2022
www.ssoe.com

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APPLY STAMP IN BLUEBEAM

PROJECT INFORMATION:

BROWNFIELD MODIFICATIONS

CLIENT INFORMATION:

ASCEND ELEMENTS

ASCEND ELEMENTS
9172 INDUSTRIAL DR NE
COVINGTON, GA
30014

CLIENT PROJECT NO: XXX-XXXXX-XX

NO.	DATE	SUBJECT
F	09/23/22	FOR BULLETIN 3 - PKG 11M01
E	08/09/22	FOR IFC - PKG 14M02
D	06/21/22	FOR BULLETIN 2 - PKG 11M01
C	06/08/22	FOR IFC - PKG 13M02
B	06/02/22	FOR BULLETIN 1 - PKG 11M01
A	04/28/22	FOR CONSTRUCTION - PKG 11M01

REVISION OR ISSUE

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DRAWING TITLE: MECHANICAL SCHEDULES

DRAWING NO: MH-601

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