

Model number nomenclature



38AH - 054 -- - 6 2 1 DA
 38AH - 064 -- - 5 0 - FA

38AH - Split System Condensing Unit

Start Options
 -- Across-the-Line Start

Unit Size - Nominal Tons (kW)
 Nominal Capacity 60 Hz Nominal Capacity 50 Hz
024 - 20 Tons (70 kW) **024** - 18 Tons (63 kW)
028 - 25 Tons (88 kW) **028** - 21 Tons (73 kW)
034 - 30 Tons (106 kW) **034** - 25 Tons (87 kW)
044 - 40 Tons (140 kW) **044** - 35 Tons (123 kW)
054 - 50 Tons (175 kW) **054** - 41 Tons (144 kW)
064 - 60 Tons (211 kW) **064** - 50 Tons (175 kW)
074 - 70 Tons (246 kW) **074** - 61 Tons (214 kW)
084 - 80 Tons (281 kW) **084** - 69 Tons (242 kW)
094 - 90 Tons (316 kW) **094** - 78 Tons (274 kW)
104 - 100 Tons (351 kW) **104** - 87 Tons (305 kW)
124 - 120 Tons (422 kW) **124** - 100 Tons (351 kW)
134 - 130 Tons (457 kW) **134** - 111 Tons (390 kW)

Not Used

Condenser Fin Material
 -- Aluminum (Standard)
C - Copper
K - Pre-Coated Aluminum
E - E-Coated Al Fin/Cu Tube
F - E-Coated Cu Fin/Cu Tube

Voltage Designation
1 - 575-3-60
2 - 380-3-60
5 - 208/230-3-60
6 - 460-3-60
8 - 230-3-50 (Part Wind, 044 Size)
9 - 380/415-3-50

Factory Installed Options

024-034
AA - Standard Dual Circuit Unit
AC - Standard Unit, VAV

 044-084
 -- Standard Dual Circuit Unit
BA - Std Unit, VAV
DA - Single-Circuit Unit
FA - Single-Circuit Unit, VAV
KA - Single-Circuit Unit, NFD
LA - Single-Circuit Unit, VAV, NFD
HA - Std Unit, NFD
JA - Std Unit, VAV, NFD

 094-104
 -- Standard Dual Circuit Unit
BA - Std Unit, VAV
HA - Std Unit, NFD
JA - Std Unit, VAV, NFD

 124-134
DA - Standard Dual Module Unit
FA - Single-Circuit Unit, VAV
KA - Single-Circuit Unit, NFD
LA - Single-Circuit Unit, VAV, NFD

Packaging*

-- Standard Domestic - Coil Protector
2 - Optional Domestic - Skid and Coil Protector
3 - Standard Export - Top and Bottom Skid, Coil Protector and Full Plastic Bag Enclosure
4 - Optional Export - Full Wooden Crate

Revision

0 - Original Model

LEGEND

Al - Aluminum
Cu - Copper
NFD - Non-Fused Disconnect
VAV - Variable Air Volume

Quality Assurance

Certified to ISO 9001:2000

*Packaging options 2 and 4 are not available on 38AH024-034 units.



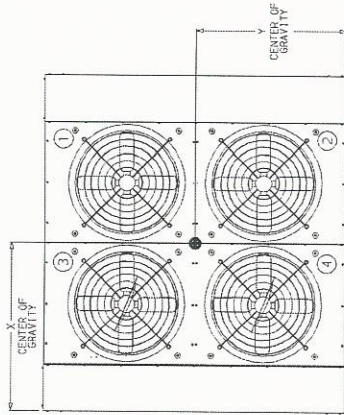
38AH044-064 UNITS (See Page 22 for Corner Weights)

UNIT SUCTION AND LIQUID LINES

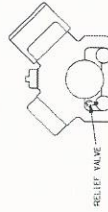
DESCRIPTION	DUAL CIRCUIT, ft.-in. [mm]	SINGLE CIRCUIT, ft.-in. [mm]
Suction Connection(s)	0-2 1/8 [54]	0-2 5/8 [67]
Liquid Connection(s)	0-1 1/8 [29]	0-1 1/8 [29]
Suction C	2-1 1/8 [627]	1-10 5/16 [567]
Liquid D	1-10 1/16 [561]	1-10 5/16 [567]
Suction (Ckt A)	1-7 13/16 [503]	2-5/8 [626]
Suction (Ckt B)	2-5 3/4 [756]	2-11 1/8 [892]
Liquid (Ckt A)	2-10 5/8 [879]	—
Liquid (Ckt B)	—	—

FIELD POWER SUPPLY CONNECTIONS

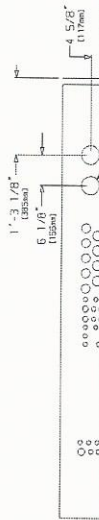
38AH UNIT SIZE	V-Ph-Hz	DIAMETER, in. [mm]	QTY
044	230-3-50	3 5/8 [92]	1
	208/230-3-60	3 5/8 [92]	1
	380/460/575-3-60	2 1/2 [63.5]	1
	346/380-415/3-50	2 1/2 [63.5]	1
054	208/230-3-60	3 5/8 [92]	1
	380/460/575-3-60	2 1/2 [63.5]	1
064	346-380/415-3-50	2 1/2 [63.5]	1
	208/230-3-60	2 1/2 [63.5]	1
	380/460/575-3-60	2 1/2 [63.5]	2
	346-380/415-3-50	2 1/2 [63.5]	1



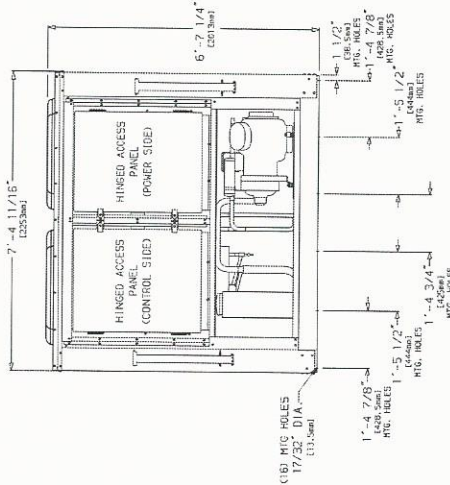
CONTROL BOX
END



RELIEF VALVES LOCATED ON THE COMPRESSORS ARE EQUIPPED WITH FIELD CONNECTIONS FOR SCALE 1:1.8



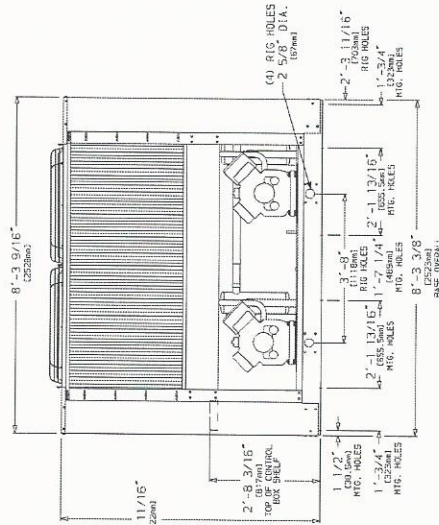
TOP VIEW OF CONTROL BOX SHELF WITH FIELD POWER SUPPLY CONNECTIONS. SCALE 1:1.0



LEGEND

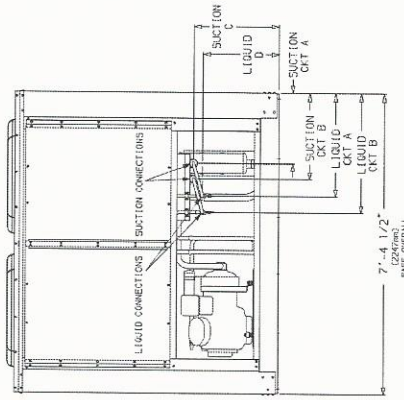
MTG — Mounting
SAE — Society of Automotive Engineers

- NOTES:
- The approximate operating weight of the unit is:
 - 38AH044 3259 lb (1480 kg)
 - 38AH044C 3547 lb (1609 kg)
 - 38AH054 3309 lb (1501 kg)
 - 38AH054C 3597 lb (1632 kg)
 - 38AH064 3565 lb (1617 kg)
 - 38AH064C 3998 lb (1813 kg)
 - Unit must have clearances for airflow as follows:
 - Top — Do not restrict in any way.



Ends — 5 ft [1524 mm]
Sides — 6 ft [1829 mm]

- Mounting holes may be used to mount unit to concrete pad. They are not recommended for mounting unit to spring isolators. If spring isolators are used, a perimeter support channel between the unit and the isolators is required.
- Two 2 in (51 mm) dia holes are recommended for parallel conductors on 044 (230-V) units and on 044 and 054 (208/230-V) units.
- A 3 5/8 in (88 mm) hole is recommended for single entry power on 064 (208/230-V) units.
- "C" in the package number indicates copper coils.



DIMENSIONS

UNIT 38AH	DIMENSION Y ft.-in. [mm]	DIMENSION X ft.-in. [mm]
044	3-29/4 [984]	4-1/2 [1232]
044C	3-31/8 [994]	4-3/16 [1234]
054	3-2 1/2 [978]	4-3/16 [1224]
054C	3-3 [991]	4-3/16 [1229]
064	3-2 1/2 [978]	4-1/2 [1232]
064C	3-33/16 [995]	4-5/16 [1235]

Physical data (cont)



38AH024-134 UNITS, 60 Hz ENGLISH (cont)

UNIT 38AH	044	054	064	074	084					
NOMINAL CAPACITY (tons)	40	50	60	70	80					
OPERATING WEIGHT WITH REFRIGERANT (lb) (approx)										
Cu-Al Coil (standard)	3259	3309	3565	3812	4057					
Cu-Cu Coil (optional)	3547	3597	3998	4229	4735					
SHIPPING WEIGHT WITH COIL PROTECTION ONLY (lb) (approx)										
Cu-Al Coil (standard)	3250	3290	3530	3780	4000					
Cu-Cu Coil (optional)	3538	3578	3963	4197	4678					
REFRIGERANT, TYPE			R-22							
Shipping Charge (lb)	7	7	7	9	9					
Operating Charge, Typical (lb)	62	72	88	104	130					
DUAL-CKT UNIT										
COMPRESSOR Type...Rpm	Reciprocating Semi-Hermetic...1750									
(Quantity) Cylinder Ckt*	(4) A	(4) B	(4) A	(6) B	(6) A	(6) B	(6) A	(6) B	(6) A	(6) B
Model No. 06E	-250	-250	-250	-265	-265	-275	-275	-299	-299	-299
Oil Charge (pt)	17	17	17	21	21	21	21	19	19	19
Capacity Control Steps (%)	100	100	100	100	100	100	100	100	100	100
	75	79	79	84	84	86	86	83	83	83
	50	58†	58†	69†	69†	71†	71†	67†	67†	67†
	25	42	42	48	48	43	43	50	50	50
		21	21	32	32	29	29	33	33	33
				16†	16†	14†	14†	17†	17†	17†
OPTIONAL SINGLE-CKT UNIT										
COMPRESSOR Type...Rpm	Reciprocating Semi-Hermetic...1750									
(Quantity) Cylinder Ckt**	(4) A1	(4) A2	(6) A1	(4) A2	(6) A1	(6) A2	(6) A1	(6) A2	(6) A1	(6) A2
Model No. 06E	-250	-250	-265	-250	-275	-265	-299	-275	-299	-299
Oil Charge (pt)	17	17	21	17	21	21	19	21	19	19
Capacity Control Steps (%)	100	100	100	100	100	100	100	100	100	100
	75	80	80	82	82	81	81	83	83	83
	50	61†	61†	64†	64†	62†	62†	67†	67†	67†
	25	56	56	55	55	57	57	50	50	50
		37	37	36	36	38	38	33	33	33
				18†	18†	19†	19†	17†	17†	17†
CONDENSER FANS (4 Blade)										
(Quantity) Dia (in.)	(4) 30					(6) 30				
Nominal Hp	1.0					1.0				
Airflow (cfm)	35,000					52,000				
Speed (rpm)	1140					1140				
Total Power (kW)	6.2					9.3				
CONDENSER COIL										
Rows...Fins per in.	Enhanced Copper Tubes, Lanced Aluminum Fins									
Face Area (sq ft)	2...17	2...17	2...17	3...17	2...19	3...17	2...19	3...17	3...17	3...17
Storage Capacity (lb per circuit) at 120 F	80.5	80.5	80.5	80.5	116.7	80.5	116.7	116.7	116.7	116.7
FAN CYCLING CONTROLS††	35	35	35	35	55	55	55	55	80	80
Close (psig)	255 ± 10									
Open (psig)	160 ± 10									
CONNECTIONS										
Suction, ODF (in.)***	2 1/8									
Liquid, ODF (in.)***	7/8									
Hot Gas Bypass, ODF (in.)	5/8									

LEGEND

- Cu-Al — Copper Tubes with Aluminum Fins
- Cu-Cu — Copper Tubes with Copper Fins (Optional)
- ODF — Outside Diameter, Female
- ODM — Outside Diameter, Male
- VAV — Variable Air Volume

*Circuit A compressor is lead.

†Unloading steps available only on units ordered with the VAV factory-installed option or on constant-volume units with additional field-installed accessory unloader.

**Circuit A compressor is lead on standard units; circuit B compressor is lead on optional single-circuit units.

††On all 044-134 units, fans no. 3 and 4; also on 38AH074, 084 (dual-circuit units only) and 38AH094, 104, fans no. 5 and 6.

***For optional single-circuit units, suction ODF is 2 5/8 in. and liquid ODF is 1 1/8 inches. Single circuit units have a single suction line and single liquid line. No field modification is required.

NOTES:

1. Certified dimensional drawings available on request.
2. Refer to Unloading Sequences tables, pages 118-120, for additional system capacity step data.