



COMPU-AIRE INC.

MAXI-KOOL

CEILING, ATTIC OR ROOF MOUNTED
SELF CONTAINED OR SPLIT SYSTEMS

2 THRU 12 TON

*Specialized Environmental Air Conditioning
Systems for Computer Rooms, Telecommunications Facilities,
Laboratories, and Hospitals*

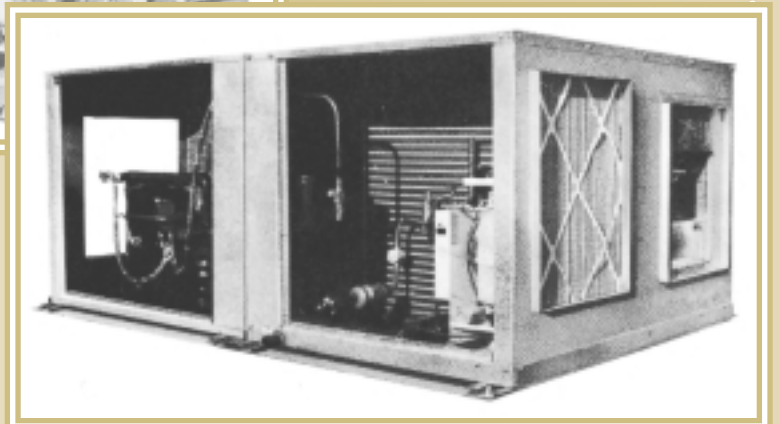
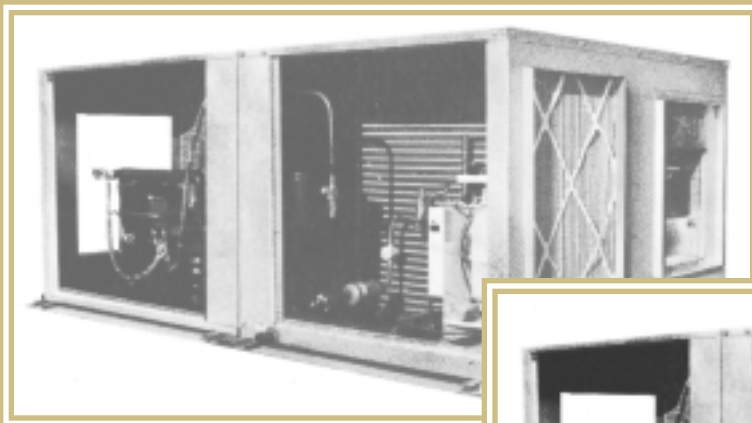
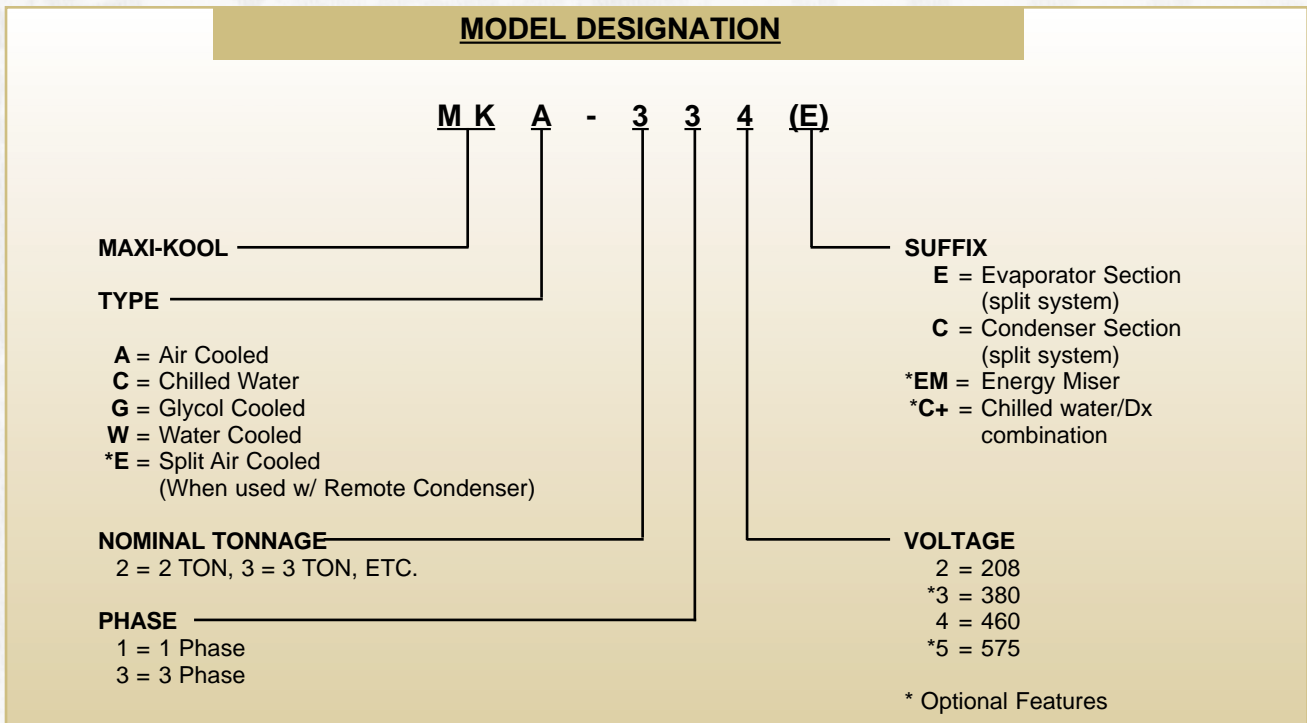


TABLE OF CONTENTS

MODEL DESIGNATION	2
INTRODUCTION	3
AVAILABLE SYSTEMS	4
STANDARD FEATURES	5
OPTIONAL FEATURES	6
TECHNICAL DATA	
-- AIR COOLED.....	7
-- WATER / GLYCOL COOLED.....	8
-- CHILLED WATER	9
ELECTRICAL DATA	9 10
DIMENSIONAL DATA	
-- WATER / GLYCOL COOLED.....	11
-- CHILLED WATER	11
-- AIR COOLED SPLIT WITH REMOTE CONDENSER.....	11
-- AIR COOLED.....	12 13
INSTALLATION	14
MECHANICAL SPECIFICATIONS	15



MAXI-KOOL

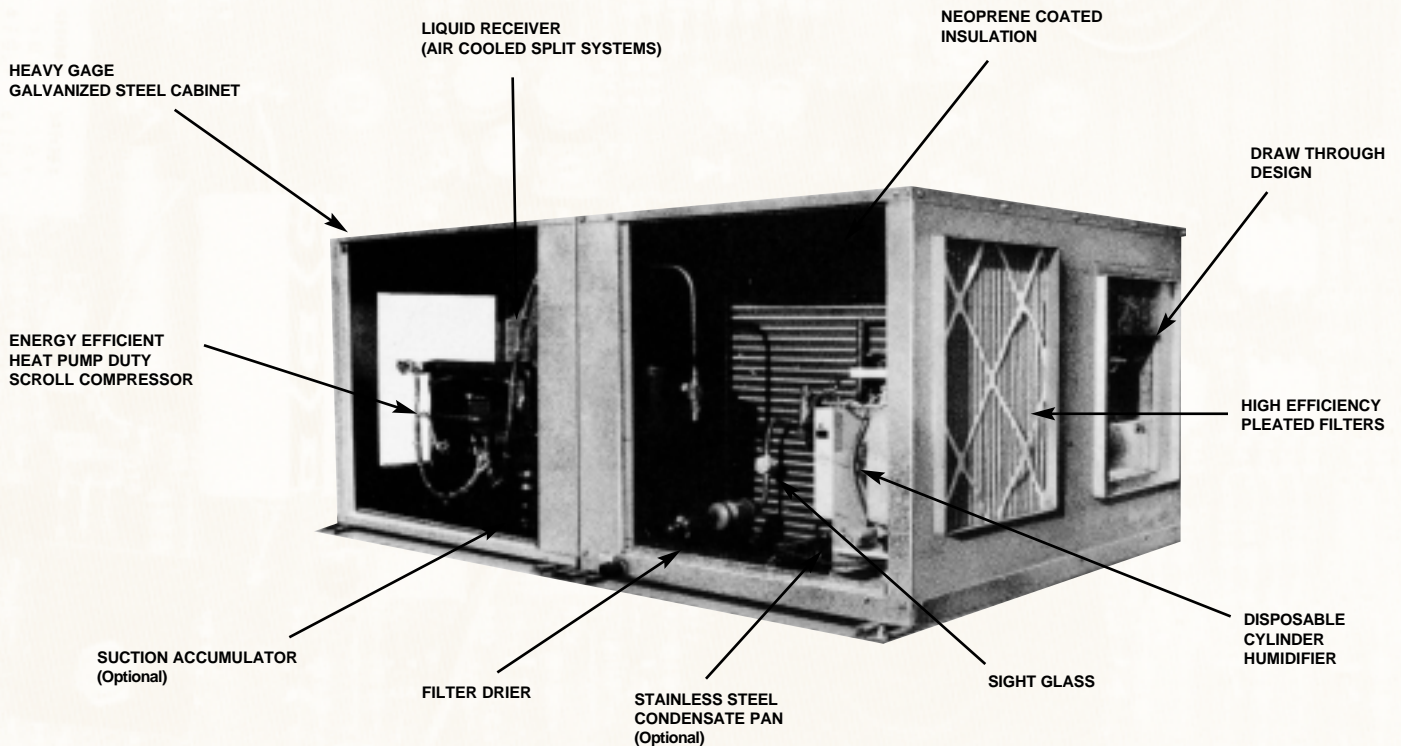
COOL SOLUTIONS FOR HOT SITUATIONS

Compu-Aire understands the special environmental control (Temperature, Humidity, Air Filtration) needs for both main frame and main-computer rooms, and presents to the user the MAXI-KOOL unit.

ETL Listed, the MAXI-KOOL is installed in the ceiling or roof and is available in over 50 capacities and cooling methods.

The MAXI-KOOL offers space saving compact design with many flexible configuration options, which allows the system to be tailored to the needs of your application. One more reason why users prefer the MAXI-KOOL is for its draw through design for the maximum heat transfer efficiency.

Compu-Aire's unique ceiling and roof mounted air conditioner not only keeps pace with rapidly changing computer technology, but also offers the highest degree of reliability in component and system operation.



PROVIDES TOTAL ENVIRONMENTAL CONTROL FOR

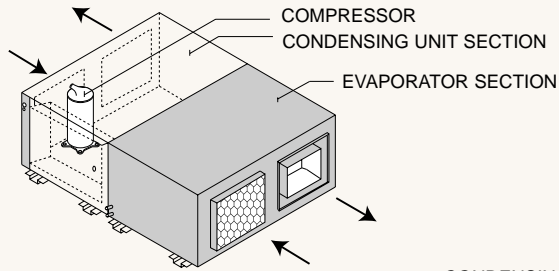
Computer Rooms, Internet Data Centers

Telecommunication Facilities, Museums, Laboratories, Imaging Centers,

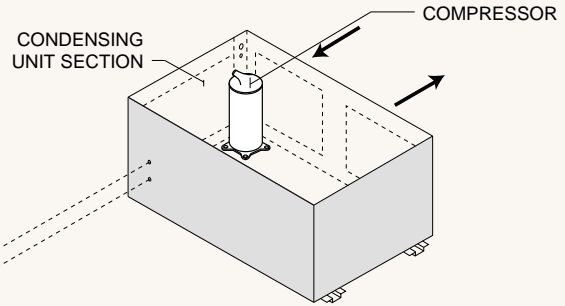
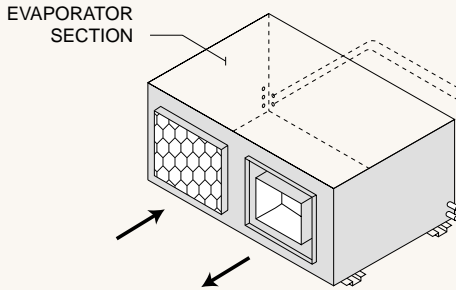
Hospitals - MRI/CAT Scans

AVAILABLE SYSTEMS

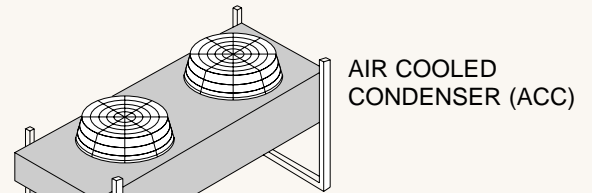
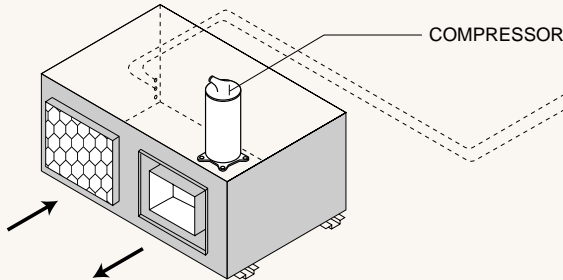
AIR COOLED PACKAGE UNIT (MKA)



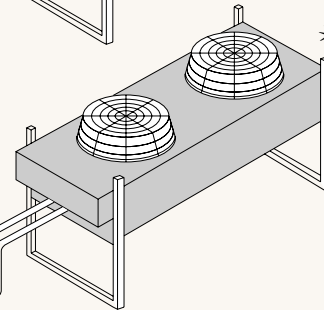
* AIR COOLED SPLIT SYSTEM WITH CONDENSING UNIT MKA-(E) WITH MKA-(C)



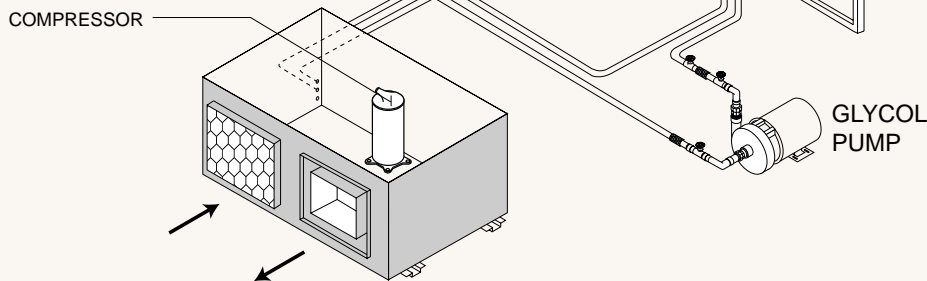
* AIR COOLED SPLIT SYSTEM MKE WITH REMOTE AIR COOLED CONDENSER ACC



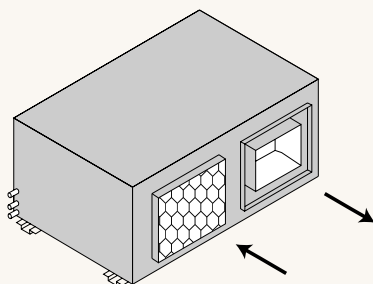
* DRY FLUID COOLER (DFC)



WATER/GLYCOL COOLED SYSTEM MKW/MKG WITH REMOTE DFC & GLYCOL PUMP



CHILLED WATER SYSTEM MKC



* - Optional See page 5

STANDARD FEATURES

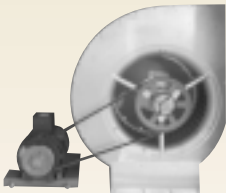
Self contained package ceiling / roof mounted closed loop system available in Air, Water, Glycol, or Chilled Water configuration.

- High efficiency coil provides maximum air draw through to meet space capacity.
- Thermally insulated galvanized steel pan is provided for the evaporator coil to prevent from any water reaching the floor.
- Fully insulated cabinet.
- Side access is made easy for servicing via well insulated access panel.
- Single point electrical connection.



SYSTEM 2000 MICROPROCESSOR CONTROLS

Dual display, digitally operated, remote controller for precise temperature and humidity control. 16 character LCD display and six push button switches. Displays current room temperature, unit status and alarm messages. Five year battery back up for volatile memory.



BELT DRIVE FAN ASSEMBLY

Belt driven motors for field adjustment to match external static pressure requirement. Blowers are DWDI, centrifugal with forward curved blades, both dynamically and statically balanced.



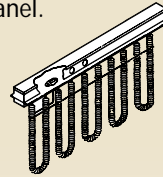
SCROLL COMPRESSOR

High efficiency scroll compressor with built in:

- * Thermal overload protection
- * Pressure relief valve
- * Current overload

REFRIGERANT CIRCUITS

- * Thermal expansion valve
- * Filter drier
- * Sight glass
- * High & low pressure switch
- * Schraeder Fittings



ELECTRIC REHEAT

The electric heating coil shall be low watt density, stainless steel fin tubular construction.



DISPOSABLE CYLINDER HUMIDIFIER

Pre-wired, pre-piped maintenance free, steam generating humidifier. Humidifier is equipped with disposable cylinder.



WATER REGULATING VALVE

(Water/Glycol cooled units only)
2-way, 150 psig head pressure actuated valve.



WATER COOLED CONDENSER

(Water Cooled units only)
Heavy duty, counter flow coaxial condensers.



CHILLED WATER VALVE

(Chilled Water units only)
Two (2) way, Two (2) position chilled water valve.

OPTIONAL FEATURES

SPLIT SYSTEM:

This option facilitates split system installations. The air cooled condensing section, including the compressor, can be separate from the evaporator air handling section and factory supplied with stub connections. Factory pressure tested, sealed and shipped with a holding charge.

WEATHERIZING FOR OUTDOOR INSTALLATION:

This can be applied to complete standard package unit, or to condenser section only. Hood and bird screen is installed on the condenser supply and discharge. (see page 12)



CONDENSATE PUMP:

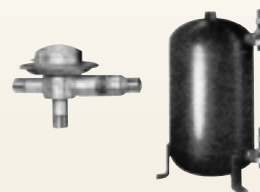
Plenum rated condensate pump is provided for field installation. Separate power source is required.

LOW AMBIENT CONTROL:

(Air cooled units only)

LOW AMBIENT CONTROL TO -30°F:

Flooded type low ambient control with head pressure valve, insulated and heated liquid receiver.

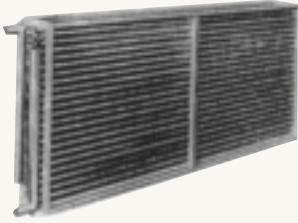


LOW AMBIENT CONTROL TO 0°F:

(Air Cooled units only)
Pneumatic Type-Damper good down to 0°F. Damper on Condensing side of unit.

OPTIONAL FEATURES (CON'T)

ENERGY MISER UNIT:



Compu-Aire Energy Miser System is integrated with glycol cooled Maxi-Kool. At entering glycol temperature of 45°F and below, the Energy Miser System can provide total system capacity, thereby resulting in substantial reduction in operating costs.

SINGLE PHASE:

System can be provided for single phase power supply, 208 or 230 voltage where available and for units up to and including 5 tons.

HOT GAS BYPASS:

Hot gas bypass valve is factory installed in the compressor discharge for precise capacity control in the cooling mode and for protection against coil freeze up during partial or low load conditions. For Air Cooled Split Systems, a hot gas bypass line needs to be field installed between the evaporator and condenser section.

SPECIAL WATER VALVE FOR MKW / MKG SYSTEMS:

The following alternate water valves are available

- A. Three-way head pressure regulating valve rated at 150 psig.
- B. Two-way head pressure regulating valve rated at 300 psig.
- C. Three-way head pressure regulating valve rated at 300 psig.

ALTERNATE REHEAT:

- Steam Reheat: Coil is factory piped with a 2-way on/off control valve.
- Hot Water Reheat: Coil is factory piped with a 2-way on/off control valve
- Hot Gas Reheat: Coil is factory piped with a 3-way solenoid valve and refrigerant check valve.

ALTERNATE HUMIDIFIER:

Steam Humidifier: Dry steam, double jacketed type, piped with a solenoid valve. Steam trap and Y-strainer to be factory provided and field installed outside of the unit.

DISCONNECT SWITCH:

Fused Disconnect: A fused disconnect switch can be supplied

with the indoor unit for field installation. Fuses to be field supplied and installed.

Rain Tight Disconnect: A rain-tight, fused disconnect switch can be supplied with the outdoor unit for field installation. Fuses to be field supplied and installed.

HACR Circuit Breaker: HACR approved circuit breaker can be supplied (factory installed) with the unit.

REMOTE AIR COOLED CONDENSER:

Remote air cooled condenser is a low profile design constructed of copper tube and high efficiency aluminum fin coil. A factory wired control panel is provided for field installation in a weather proof housing on the condenser.

DRY FLUID COOLER & PUMP PACKAGE:

A DFC matching the water cooled condenser capacity, at design elevation, glycol solution percentage and ambient temperature, can be provided for remote installation and field piped for the water/glycol solution, and interconnected to the indoor air conditioner.



A close coupled centrifugal pump and motor for circulating glycol solution can be provided for field mounting, with a pump motor weathershield.

FOUR YEAR COMPRESSOR WARRANTY:

Compressor is warranted for additional 4 years. This additional warranty takes effect after expiration of the 1st year standard warranty. Total coverage is extended to 5 years from the date of start up.

SPECIAL INDUSTRIAL APPLICATIONS:

The Maxi-Kool can be provided with a variety of special application options such as:

- Stainless Steel cabinet for corrosion resistance
- Double wall construction for noise reduction
- Epoxy / Phenolic coated / Copper - Copper coils for corrosion resistance
- Internally isolated blowers for vibration reduction
- TEFC motors
- High Efficiency Motors

ADVANCED TECHNOLOGY

CONTROLS - SYSTEM 2200:

The remote wall mounted microprocessor based, solid state controls has 4 rows, 40 characters, back lit, supertwist liquid crystal display (LCD). Information is displayed and presented in a format that is easily viewed and understood.



Standard Features:

- Stand alone panel
- Smooth keyboard type switches with tactile feedback
- 2 analog inputs
- Non volatile memory
- Data of unit and room conditions
- System trending
- Forward and backward menu access
- Programmable automatic restart

Protective and Safety Features:

- Multi-level password access
- Watch dog timer
- Remote alarm
- Alarm displayed in order of occurrence
- Start time delay
- Compressor short cycle control

Optional Features:

- Remote dial up and communications
- RS-422/485 network capabilities
- Auto changeover and/or auto rotation for operational redundancy or allow switching of units to maximize component life
- Seven day time clock
- "P" Lan network capability
- Effective zone control
- Full Graphic display
- EMS / BMS capabilities
- Foreign Language capability

TABLE NO. 1		TECHNICAL DATA					
MKA: AIR COOLED							
NOMINAL TONS:	2	3	4	5	8	10	12
DESCRIPTION:MODEL:MKA 208/1/60	212	312	412	512	N/A	N/A	N/A
208-230/3/60	232	332	432	532	832	1032	1232
460/3/60	234	334	434	534	834	1034	1234
COOLING CAPACITY							
Entering Air 80°F DB, 67°F WB, 95°F Ambient (26.7°C DB, 19.4°C WB, 35°C Ambient)							
Total-Btu/hr (kW)	29,800 (8.7)	42,150 (12.3)	55,400 (16.2)	63,500 (18.6)	110,100 (32.2)	134,500 (39.4)	146,500 (42.9)
Sensible-Btu/hr (kW)	22,100 (6.5)	33,720 (9.9)	46,170 (13.5)	54,100 (15.8)	97,320 (28.5)	101,950 (29.8)	115,600 (33.8)
EER	10.2	10.2	10.3	10.1	10.2	10.3	10.1
Entering Air 72°F DB, 60°F WB, 95°F Ambient (22.2°C DB, 15.5°C WB, 35°C Ambient)							
Total-Btu/hr (kW)	21,200 (6.2)	31,200 (9.1)	41,200 (12.1)	51,500 (15.1)	83,100 (24.3)	106,350 (31.1)	116,100 (34.0)
Sensible-Btu/hr (kW)	17,500 (5.1)	25,800 (7.6)	36,400 (10.7)	44,500 (13.0)	75,600 (22.1)	92,500 (27.0)	105,250 (30.8)
EVAPORATOR SECTION							
AIR FLOW DATA							
CFM - Based on 0.5" ESP (L/s)	900 (425)	1,500 (708)	2,000 (945)	2,500 (1,180)	3,350 (1,580)	4,000 (1,888)	4,800 (2,265)
Fan Motor HP	0.75	1.0	1.0	1.5	2.0	3.0	3.0
EVAPORATOR COIL- Copper Tubing, Aluminum Fins							
Face Area-Square Ft. (m²)	1.75 (0.16)	3.6 (0.33)	5.0 (0.46)	5.0 (0.46)	7.5 (0.70)	12.8 (1.19)	12.8 (1.19)
Rows	5	4	5	5	5	4	5
CONDENSER SECTION							
AIR FLOW DATA							
CFM- Based on 0.5" ESP (L/s)	1,600 (755)	2,250 (1,062)	2,750 (1,298)	3,250 (1,535)	5,000 (2,360)	7,000 (3,300)	8,000 (3,775)
Fan Motor HP	0.75	1.0	1.0	1.5	2.0	5.0	5.0
CONDENSER COIL - Copper Tubing, Aluminum Fins							
Face Area-Square Ft. (m²)	4.5 (0.42)	4.5 (0.42)	6.75 (0.63)	6.75 (0.63)	6.75 (0.63)	12.85 (1.19)	14.45 (1.34)
Rows	4	4	5	5	6	6	6
COMPRESSOR DATA - High Efficiency Scroll R-22							
Tonnage	2.0	3.0	4.0	5.0	4.0	5.0	6.0
Quantity	1	1	1	1	2	2	2
REHEAT (Electric)							
kW /Stages	7.5/1	7.5/1	7.5/1	7.5/1	15/2	15/2	15/2
Btu/hr. Includes Fan Motor	27,522	28,160	28,160	29,433	57,245	57,245	59,793
HUMIDIFIER-Self Generating Type with Disposable Cylinder							
kW	3.4	3.4	3.4	3.4	3.4	6.8	6.8
Lbs/hr (kg/hr)	10 (4.5)	10 (4.5)	10 (4.5)	10 (4.5)	10 (4.5)	17.5 (8.0)	17.5 (8.0)
PIPING DATA							
Condensate Drain-O.D.	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
*Liquid Line-O.D.	3/8"	1/2"	5/8"	5/8"	(2)5/8"	(2)5/8"	(2)5/8"
*Suction Line-O.D.	1/2"	5/8"	7/8"	7/8"	(2)7/8"	(2)7/8"	(2)7/8"
Humidifier Supply	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"

BOLD FACE DATA IN METRIC UNITS

* For Split Units

TABLE NO. 2	TECHNICAL DATA						
MKW : WATER COOLED / MKG: GLYCOL COOLED							
NOMINAL TONS:	2	3	4	5	8	10	12
DESCRIPTION:MODEL:MKW/MKG 208/1/60	212	312	412	512	N/A	N/A	N/A
208-230/3/60	232	332	432	532	832	1032	1232
460/3/60	234	334	434	534	834	1034	1234
COOLING CAPACITY *							
Entering Air 80°F DB, 67°F WB (26.7°C DB, 19.4°C WB)*							
Total-Btu/hr (kW)	26,200 (7.7)	38,900 (11.4)	58,300 (17.1)	64,600 (18.9)	91,400 (26.8)	134,500 (39.4)	146,500 (42.9)
Sensible-Btu/hr (kW)	22,000 (6.4)	32,600 (9.5)	48,900 (14.3)	54,300 (15.9)	76,800 (22.6)	101,950 (29.8)	115,600 (33.8)
EER	10.4	10.9	12.8	11.2	11.1	12.4	11.4
Entering Air 72°F DB, 60°F WB (22.2°C DB, 15.5°C WB)*							
Total-Btu/hr (kW)	21,800 (6.4)	32,100 (9.4)	42,400 (12.5)	53,000 (15.6)	78,800 (23.2)	106,350 (31.1)	116,100 (34.0)
Sensible-Btu/hr (kW)	18,100 (5.3)	26,600 (7.8)	37,300 (11.0)	45,800 (13.5)	65,400 (19.2)	92,500 (27.0)	105,250 (30.8)
WATER FLOW DATA **							
GPM 85°F Entering Water (L/s)	6.0 (0.38)	9.0 (0.57)	12.0 (0.76)	15.0 (0.95)	24.0 (1.51)	30.0 (1.89)	36.0 (2.27)
Pressure Drop psig (kPa)	8.5 (58.6)	9.5 (65.5)	13.1 (90.3)	10.2 (70.3)	13.4 (92.4)	10.6 (73.1)	11.6 (80.0)
AIR FLOW DATA -							
CFM - Based on 0.5" ESP (L/s)	900 (425)	1,500 (708)	2,000 (945)	2,500 (1,180)	3,350 (1,580)	4,000 (1,888)	4,800 (2,265)
Fan Motor HP	0.75	1.0	1.0	1.5	2.0	3.0	3.0
EVAPORATOR COIL - Copper Tubing, Aluminum Fins							
Face Area-Square Ft. (m²)	1.75 (0.16)	3.6 (0.33)	5.0 (0.46)	5.0 (0.46)	7.5 (0.70)	12.8 (1.19)	12.8 (1.19)
Rows	5	4	5	5	5	4	5
COMPRESSOR DATA - High Efficiency Scroll R-22							
Tonnage	2.0	3.0	4.0	5.0	4.0	5.0	6.0
Quantity	1	1	1	1	2	2	2
REHEAT (Electric)							
kW/Stages	7.5/1	7.5/1	7.5/1	7.5/1	15/2	15/2	15/2
Btu/hr. Includes Fan Motor	27,522	28,160	28,160	29,433	57,245	57,245	59,793
HUMIDIFIER-Self Generating Type with Disposable Cylinder							
kW	3.4	3.4	3.4	3.4	3.4	6.8	6.8
Lbs/hr (kg/hr)	10 (4.5)	10 (4.5)	10 (4.5)	10 (4.5)	10 (4.5)	17.5 (8.0)	17.5 (8.0)
PIPING DATA							
Condensate Drain-O.D.	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
Water Supply-O.D.	5/8"	5/8"	7/8"	7/8"	1-1/8"	1-5/8"	1-5/8"
Water Return-O.D.	5/8"	5/8"	7/8"	7/8"	1-1/8"	1-5/8"	1-5/8"
Humidifier Water Supply	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"

BOLD FACE DATA IN METRIC UNITS

*** MKG CAPACITIES : MULTIPLY WATER COOLED CAPACITIES BY 0.853 TO OBTAIN CAPACITIES FOR GLYCOL / WATER SOLUTION @ 30%**

**** CONSULT FACTORY FOR GLYCOL PRESSURE DROP, FLUID COOLER, AND PUMP SELECTIONS**

TABLE NO. 3		TECHNICAL DATA						
MKC: CHILLED WATER								
NOMINAL TONS:	2	3	4	5	8	10	12	
DESCRIPTION:MODEL:MKC 208/1/60	212	312	412	512	N/A	N/A	N/A	
208-230/3/60	232	332	432	532	832	1032	1232	
460/3/60	234	334	434	534	834	1034	1234	
COOLING CAPACITY								
BASED ON 45°F ENTERING WATER AND 10°F TEMPERATURE DIFFERENCE								
Entering Air 80°F DB, 67° F WB (26.7°C DB, 19.4°C WB)*								
Total-Btu/hr (kW)	25,500 (7.5)	39,800 (11.7)	52,200 (15.3)	64,700 (18.9)	93,200 (27.3)	193,719 (56.7)	224,000 (65.6)	
Sensible-Btu/hr (kW)	18,300 (5.4)	32,700 (9.6)	42,300 (12.4)	53,700 (15.7)	77,400 (22.7)	128,191 (37.5)	149,876 (43.9)	
Entering Air 72°F DB, 60°F WB (22.2°C DB, 15.5°C WB)*								
Total-Btu/hr (kW)	16,100 (4.7)	30,400 (8.9)	39,200 (11.5)	47,100 (13.8)	75,200 (22.0)	96,831 (28.4)	112,166 (32.8)	
Sensible-Btu/hr (kW)	15,000 (4.4)	29,300 (8.6)	38,600 (11.3)	46,700 (13.7)	74,400 (21.8)	96,831 (28.4)	112,166 (32.8)	
AIR FLOW DATA								
CFM - Based on 0.5" ESP (L/s)	900 (425)	1,500 (708)	2,000 (945)	2,500 (1,180)	3,350 (1,580)	4,500 (2,124)	5,400 (2,548)	
Fan Motor HP	0.75	1.0	1.0	1.5	2.0	3.0	3.0	
COOLING COIL DATA - Copper Tubing, Aluminum Fins								
Face Area-Square Ft. (m ²)	1.75 (0.16)	3.6 (0.33)	5.2 (0.48)	5.2 (0.48)	7.6 (0.71)	12.8 (1.19)	12.8 (1.19)	
Rows	4	4	4	4	4	4	4	
GPM (L/s)	4.3 (0.27)	6.5 (0.41)	8.9 (0.56)	11.1 (0.70)	16.0 (1.01)	38.5 (2.43)	44.8 (2.83)	
Pressure Drop FT of Water (kPa)	16.8 (50.2)	15.4 (46.0)	14.7 (44.0)	15.5 (46.3)	17.1 (51.1)	25.1 (75.0)	37.7 (112.7)	
REHEAT (Electric)								
kW /Stages	7.5/1	7.5/1	7.5/1	7.5/1	15/2	15/2	15/2	
Btu/hr. Includes Fan Motor	27,522	28,160	28,160	29,433	57,245	59,793	59,793	
HUMIDIFIER-Self Generating Type with Disposable Cylinder								
kW	3.4	3.4	3.4	3.4	3.4	6.8	6.8	
Lbs/hr (kg/hr)	10 (4.5)	10 (4.5)	10 (4.5)	10 (4.5)	10 (4.5)	17.5 (8.0)	17.5 (8.0)	
PIPING DATA								
Condensate Drain-O.D.	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	
Water Supply-O.D.	5/8"	5/8"	7/8"	7/8"	1-1/8"	1-5/8"	1-5/8"	
Water Return-O.D.	5/8"	5/8"	7/8"	7/8"	1-1/8"	1-5/8"	1-5/8"	
Humidifier Water Supply	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	

BOLD FACE DATA IN METRIC UNITS

TABLE NO. 4		ELECTRICAL DATA								
UNIT MODEL		VOLTAGE / PHASE / HERTZ								
		208-230 / 1 / 60			208-230 / 3 / 60			460 / 3 / 60		
		FLA	MCA	MFS	FLA	MCA	MFS	FLA	MCA	MFS
Air Cooled Packaged Unit Without Reheat And Humidifier										
MKA-2	24.8	28.2	40	14.5	16.6	25	7.5	8.6	15	
MKA-3	31.5	36.0	50	19.4	22.3	35	9.9	11.3	15	
MKA-4	40.0	46.6	70	23.0	26.8	40	12.2	14.4	25	
MKA-5	50.7	58.7	90	30.7	35.5	60	15.2	17.7	30	
MKA-8	N/A	N/A	N/A	45.0	48.8	60	24.0	26.2	35	
MKA-10	N/A	N/A	N/A	65.8	70.6	90	32.6	34.9	40	
MKA-12	N/A	N/A	N/A	68.6	73.8	100	32.6	34.9	40	
Air Cooled Packaged Unit With Reheat And Humidifier										
MKA-2	60.9	73.3	90	35.3	42.6	50	16.9	20.4	25	
MKA-3	67.6	81.0	100	40.2	48.3	60	19.7	23.8	30	
MKA-4	76.1	91.7	125	43.8	52.8	70	21.6	26.1	35	
MKA-5	86.8	103.8	150	51.5	61.5	80	24.6	29.5	40	
MKA-8	N/A	N/A	N/A	71.7	85.9	100	34.2	41.1	50	
MKA-10	N/A	N/A	N/A	88.2	103.5	125	41.8	48.4	60	
MKA-12	N/A	N/A	N/A	89.6	105.2	125	41.8	48.4	60	

TABLE NO. 4 Continued		ELECTRICAL DATA									
UNIT MODEL			VOLTAGE / PHASE / HERTZ								
			208-230 / 1 / 60			208-230 / 3 / 60			460 / 3 / 60		
	FLA	MCA	MFS	FLA	MCA	MFS	FLA	MCA	MFS		
Air Cooled Split Unit - Evaporator Section Without Reheat And Humidifier											
MKA-2 (E)	5.6	7.0	15	3.0	3.8	15	1.5	1.9	15		
MKA-3 (E)	6.8	8.5	15	3.9	4.9	15	1.8	2.3	15		
MKA-4 (E)	6.8	8.5	15	3.9	4.9	15	1.8	2.3	15		
MKA-5 (E)	9.3	11.6	20	5.7	7.1	15	2.4	3.0	15		
MKA-8 (E)	N/A	N/A	N/A	7.5	9.4	15	3.4	4.3	15		
MKA-10 (E)	N/A	N/A	N/A	10.5	13.1	20	4.8	6.0	15		
MKA-12 (E)	N/A	N/A	N/A	10.5	13.1	20	4.8	6.0	15		
Air Cooled Split Unit - Evaporator Section With Reheat And Humidifier											
MKA-2 (E)	41.7	52.1	60	23.8	29.8	30	10.9	13.6	15		
MKA-3 (E)	42.8	53.5	60	24.7	30.9	35	11.2	14.0	15		
MKA-4 (E)	42.8	53.5	60	24.7	30.9	35	11.2	14.0	15		
MKA-5 (E)	45.4	56.7	60	26.5	33.1	40	11.8	14.8	20		
MKA-8 (E)	N/A	N/A	N/A	49.2	61.5	70	22.2	27.8	30		
MKA-10 (E)	N/A	N/A	N/A	52.2	65.2	70	23.6	29.5	30		
MKA-12 (E)	N/A	N/A	N/A	52.2	65.2	70	23.6	29.5	30		
Air Cooled Split Unit - Condensing Section											
MKA-2 (C)	19.2	22.6	35	11.5	13.6	20	6.0	7.1	15		
MKA-3 (C)	24.7	29.2	45	15.4	18.3	30	8.5	10.2	15		
MKA-4 (C)	33.2	39.8	70	19.0	22.8	40	10.4	12.6	20		
MKA-5 (C)	41.4	49.4	80	25.0	29.8	50	12.6	15.1	25		
MKA-8 (C)	N/A	N/A	N/A	37.5	41.3	60	20.6	22.8	30		
MKA-10 (C)	N/A	N/A	N/A	55.3	60.1	80	27.6	30.1	40		
MKA-12 (C)	N/A	N/A	N/A	59.1	63.3	90	27.6	30.1	40		
Water Cooled Unit Without Reheat And Humidifier											
MKW-2	19.2	22.6	35	11.5	13.6	20	3.0	7.1	15		
MKW-3	24.7	29.2	45	15.4	18.3	30	8.5	10.2	15		
MKW-4	33.2	39.8	70	19.0	22.8	40	10.4	12.6	20		
MKW-5	41.4	49.4	80	25.0	29.8	50	12.6	15.1	25		
MKW-8	N/A	N/A	N/A	37.5	41.3	60	19.8	21.9	30		
MKW-10	N/A	N/A	N/A	49.1	53.9	70	24.8	27.3	40		
MKW-12	N/A	N/A	N/A	51.9	57.1	80	24.8	27.3	40		
Water Cooled Unit With Reheat And Humidifier											
MKW-2	55.3	67.7	80	32.3	39.6	50	15.4	18.9	25		
MKW-3	60.8	74.2	90	36.2	44.3	60	17.9	21.9	30		
MKW-4	69.3	84.9	110	39.8	48.8	70	19.8	24.3	35		
MKW-5	77.5	94.5	125	45.8	55.5	80	22.0	26.9	35		
MKW-8	N/A	N/A	N/A	64.2	78.4	90	30.4	37.2	45		
MKW-10	N/A	N/A	N/A	71.5	86.8	110	33.6	40.8	50		
MKW-12	N/A	N/A	N/A	72.9	88.5	110	33.6	40.8	50		
Chilled Water Unit Without Reheat And Humidifier											
MKC-2	5.6	7.0	15	3.0	3.8	15	1.5	1.9	15		
MKC-3	6.8	8.5	15	3.9	4.9	15	1.8	2.3	15		
MKC-4	6.8	8.5	15	3.9	4.9	15	1.8	2.3	15		
MKC-5	9.3	11.6	20	5.7	7.1	15	2.4	3.0	15		
MKC-8	N/A	N/A	N/A	7.5	9.4	15	3.4	4.3	15		
MKC-10	N/A	N/A	N/A	10.5	13.1	20	4.8	6.0	15		
MKC-12	N/A	N/A	N/A	10.5	13.1	20	4.8	6.0	15		
Chilled Water Unit With Reheat And Humidifier											
MKC-2	41.7	52.1	60	23.8	29.8	30	10.9	13.6	15		
MKC-3	42.8	53.5	60	24.7	30.9	35	11.2	14.0	15		
MKC-4	42.8	53.5	60	24.7	30.9	35	11.2	14.0	15		
MKC-5	45.4	56.7	60	26.5	33.1	40	11.8	14.8	20		
MKC-8	N/A	N/A	N/A	49.2	61.5	70	22.2	27.8	30		
MKC-10	N/A	N/A	N/A	52.2	65.2	70	23.6	29.5	30		
MKC-12	N/A	N/A	N/A	52.2	65.2	70	23.6	29.5	30		

FLA : Full Load Amps
MCA : Minimum Circuit Ampacity
MFS : Maximum Fuse Size

DIMENSIONAL DATA 2 THRU 12 TON

- WATER COOLED • GLYCOL COOLED • CHILLED WATER SYSTEMS
- AIR COOLED SPLIT SYSTEM WHEN USED WITH REMOTE CONDENSER (MKE)

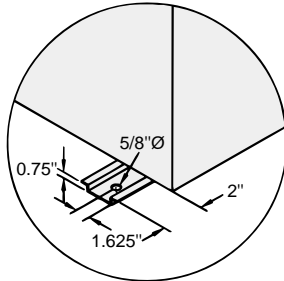
MKW, MKG
MKE, MKC

TABLE NO. 5

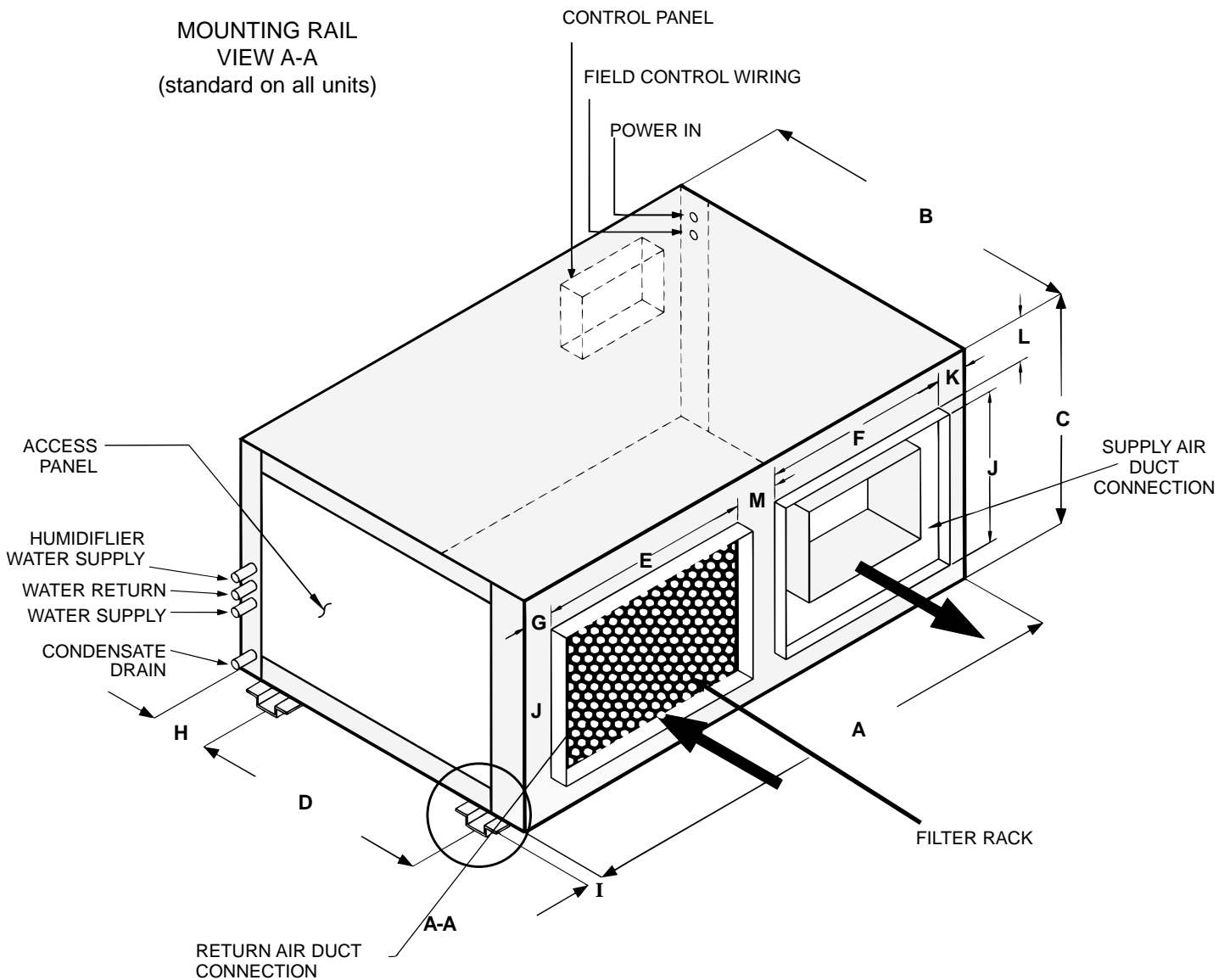
NOM. TONS	A	B	C	D	E	F	G	H	I	J	K	L	M
2 AND 3	45" (1143)	36" (914)	24" (610)	30" (762)	18" (457)	12" (305)	4" (102)	3" (76)	2" (51)	14" (356)	4.5" (114)	2.5" (64)	6.5" (165)
4 AND 5	52" (1321)	42" (1067)	30" (762)	36" (914)	23" (584)	18" (457)	4" (102)	3" (76)	2" (51)	18" (457)	3.5" (89)	4" (102)	3.5" (89)
8	72" (1829)	46" (1168)	30" (762)	40" (1016)	30" (762)	20" (508)	4" (102)	3" (76)	2" (51)	18" (457)	4.5" (114)	4" (102)	14" (356)
10 AND 12	80" (2032)	56" (1422)	50" (1270)	50" (1270)	30" (762)	20" (508)	4" (102)	3" (76)	2" (51)	38" (965)	4" (102)	4" (102)	20" (508)

FIGURES IN () ARE METRIC

WEIGHT LBS (APPROXIMATE)	
NOM. TONS	WATER COOLED
2	330
3	410
4	490
5	515
8	800
10	875
12	950



MOUNTING RAIL
VIEW A-A
(standard on all units)



DIMENSIONAL DATA 2 THRU 12 TON AIR COOLED PACKAGED UNIT

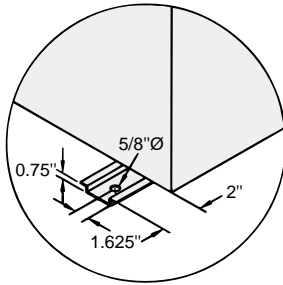
TABLE NO. 6

NOM. TONS	A	B	C	D	E	F	G	H	J	K	L	M
2 AND 3	62" (1575)	45" (1143)	24" (610)	29" (737)	30" (762)	32" (813)	3" (76)	49" (1245)	24" (610)	26" (660)	2.5" (64)	14" (356)
4 AND 5	82" (2083)	52" (1321)	30" (762)	30" (762)	42" (1067)	40" (1016)	3" (76)	56" (1422)	36" (914)	34" (864)	4" (102)	18" (457)
8	80" (2032)	72" (1829)	30" (762)	38" (965)	40" (1016)	40" (1016)	3" (76)	76" (1930)	34" (864)	34" (864)	4" (102)	18" (457)
10 AND 12	100" (2286)	80" (2032)	50" (1270)	38" (965)	50" (1270)	50" (1270)	3" (76)	86" (2184)	44" (1118)	44" (1118)	4" (102)	38" (965)

NOM. TONS	N	P	Q	R	S	T	U	V	W	X	Y	Z
2 AND 3	12" (305)	4" (102)	18" (457)	18" (457)	1.5" (38)	16" (406)	16" (406)	2" (51)	16" (406)	16" (406)	3.5" (89)	9.5" (241)
4 AND 5	18" (457)	4" (102)	23" (584)	18" (457)	1.5" (38)	18" (457)	20" (508)	3" (76)	18" (457)	18" (457)	3.5" (89)	12.5" (318)
8	20" (508)	4" (102)	30" (762)	23" (584)	2" (51)	24" (610)	24" (610)	3" (76)	20" (508)	20" (508)	14" (356)	20" (508)
10 AND 12	22" (559)	4" (102)	30" (762)	38" (965)	4" (102)	30" (762)	40" (1016)	3" (76)	24" (610)	40" (1016)	20" (508)	16" (406)

ALL BOLD FACE DATA IN METRIC UNITS (mm)

FILTER 2" PLEATED 30%		
NOM. TONS	QTY	SIZE
2 AND 3	1	20" X 20"
4 AND 5	1	20" X 25"
8	2	16" X 25"
10 AND 12	4	16" X 20"



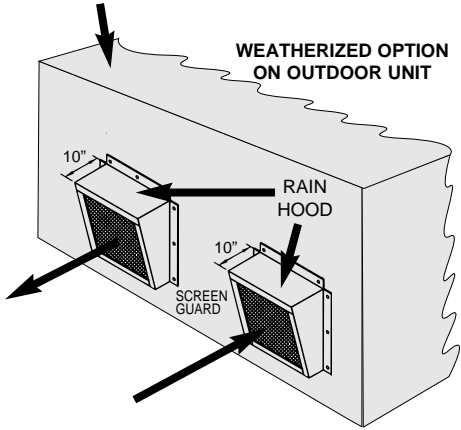
**MOUNTING RAIL
VIEW A-A
(standard on all units)**

WEIGHT LBS (APPROXIMATE)			
NOM. TONS	EVAP. SECTION	COND. SECTION	TOTAL
2	240	285	525
3	275	320	595
4	330	430	760
5	340	440	780
8	460	685	1145
10	485	725	1210
12	520	755	1275

Weight For MKC Is Same As That Of Evap. Section

WATER PROOFED
AND PAINTED

**WEATHERIZED OPTION
ON OUTDOOR UNIT**

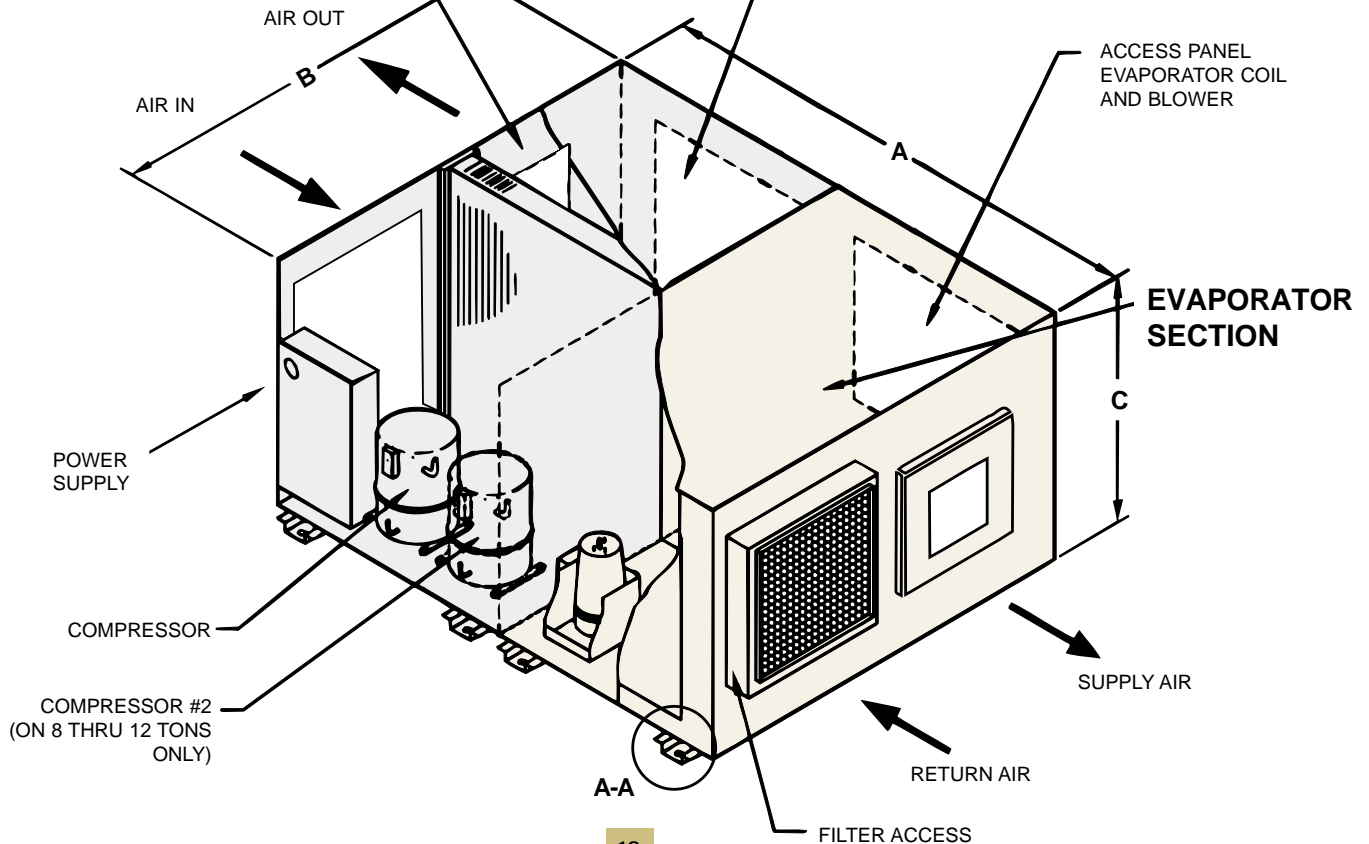


ACCESS PANEL
CONDENSER COIL
AND BLOWER

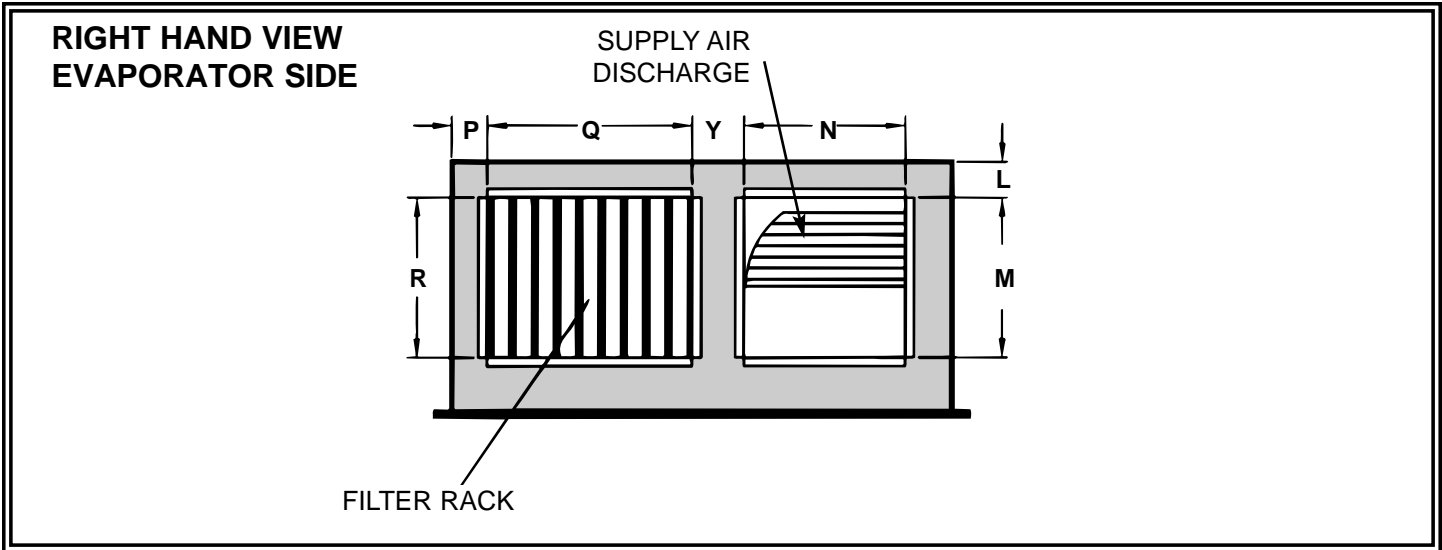
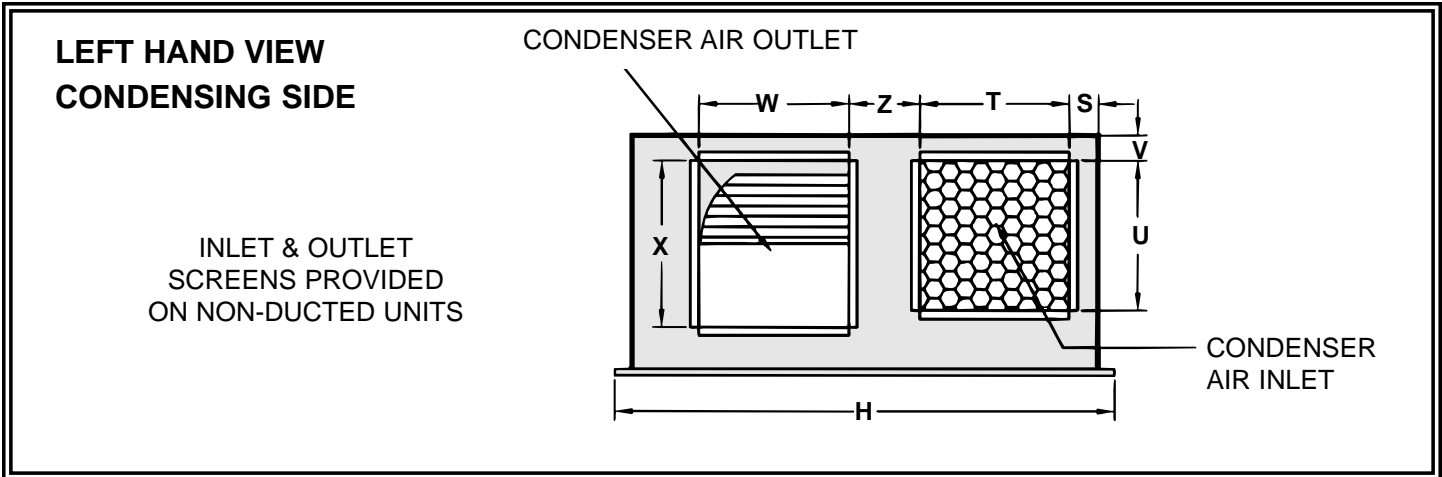
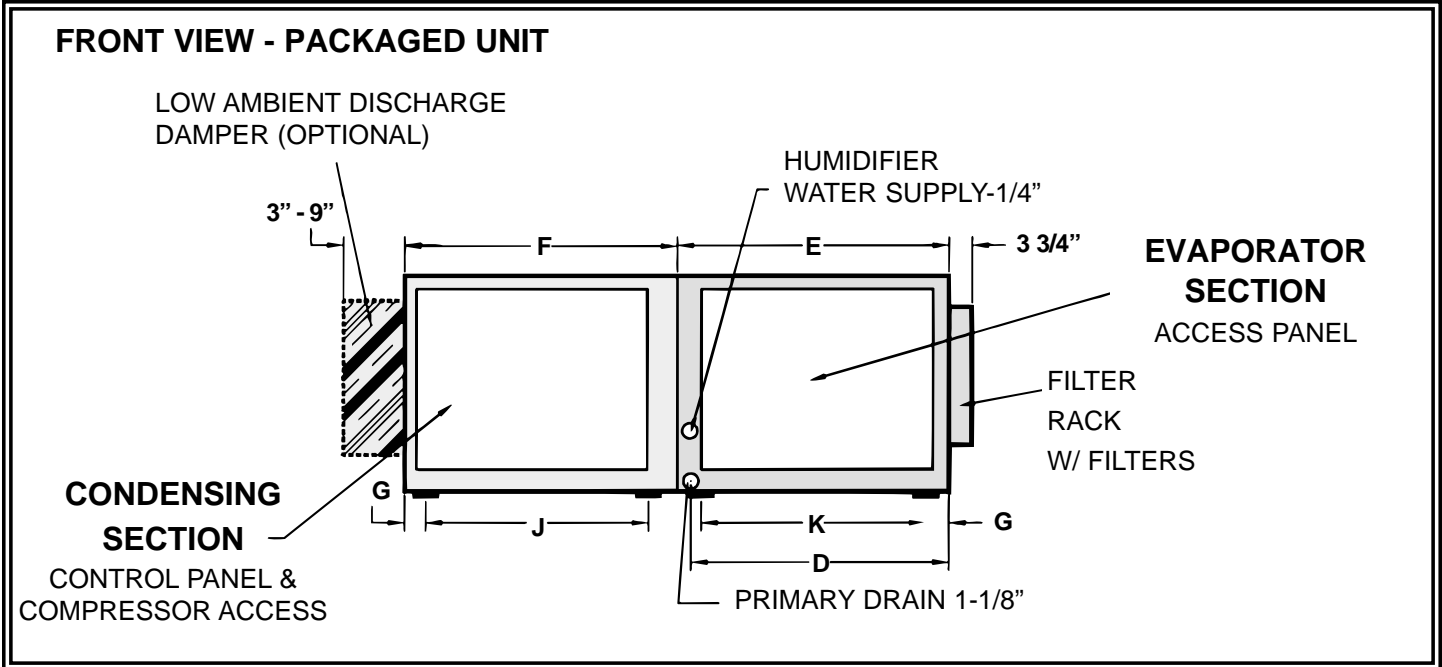
**CONDENSING
SECTION**

ACCESS PANEL
EVAPORATOR COIL
AND BLOWER

**EVAPORATOR
SECTION**

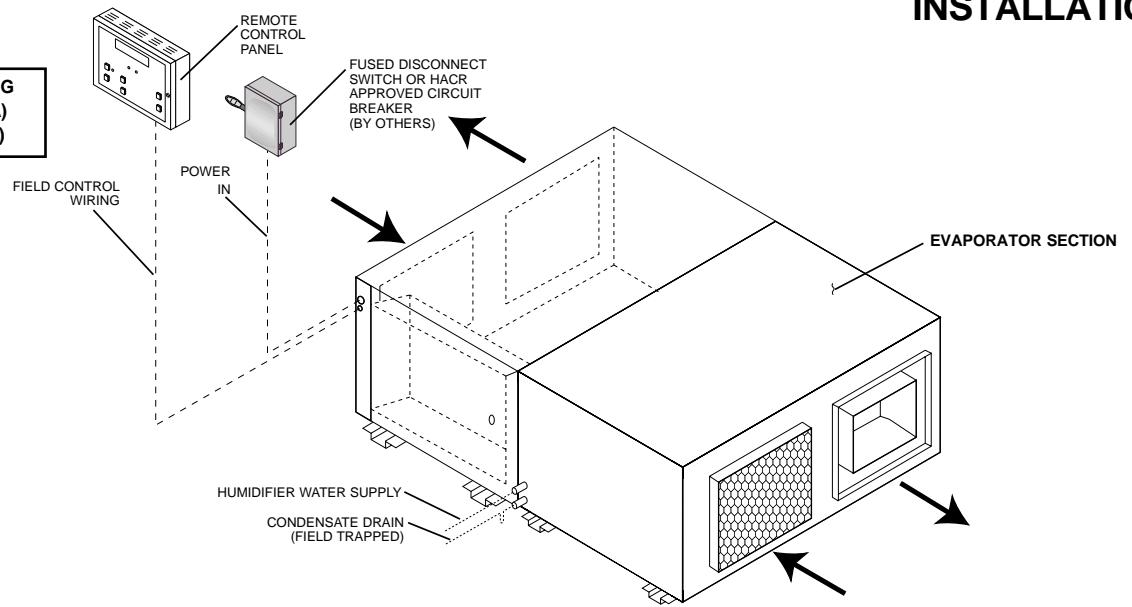


**DIMENSIONAL DETAILS FOR 2 THRU 12 TON
AIR COOLED PACKAGED UNIT**

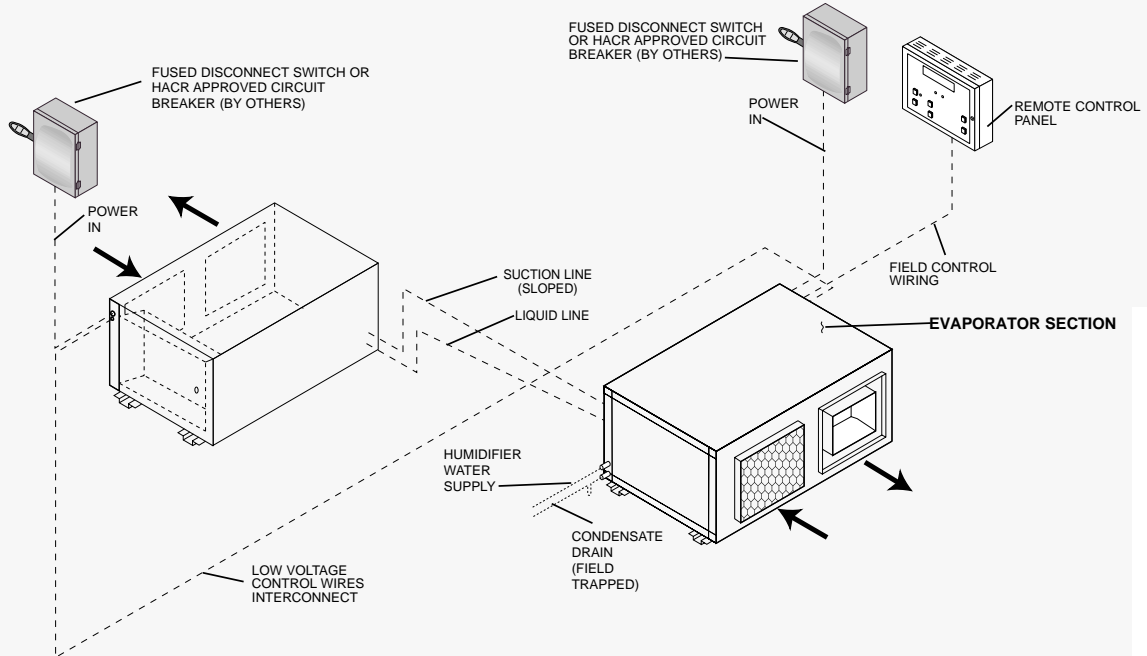


INSTALLATION

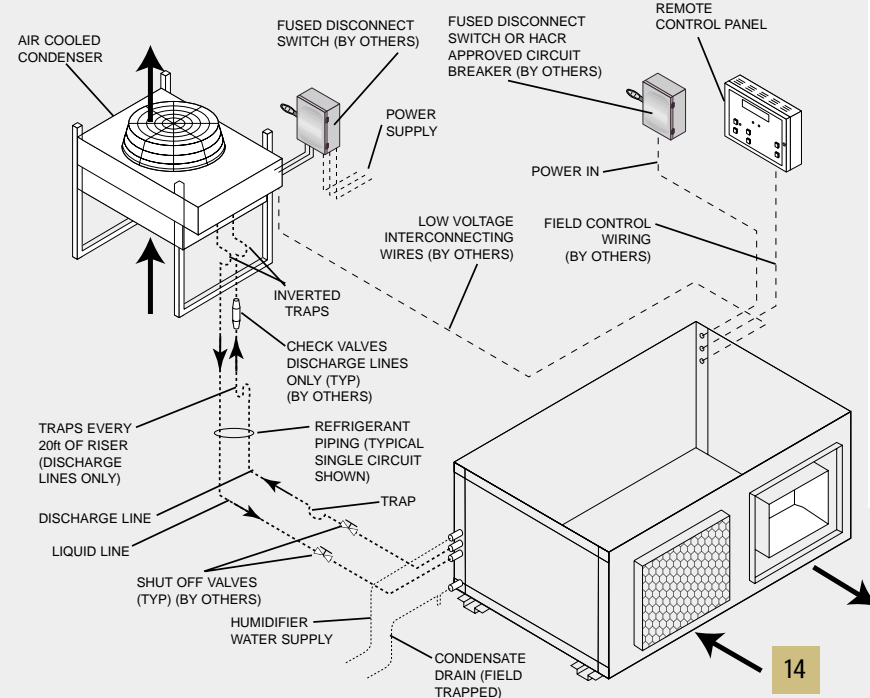
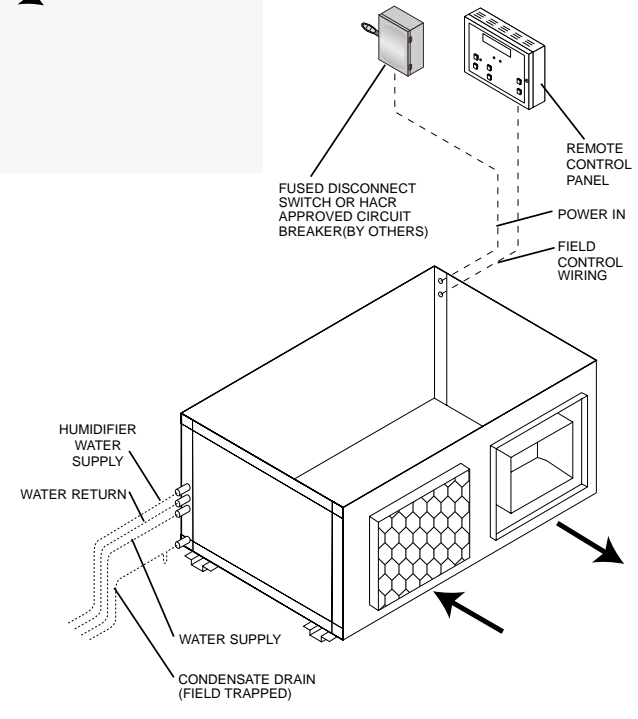
**TYPICAL FIELD PIPING & WIRING
PACKAGED AIR COOLED (MKA)
PACKAGED HEAT PUMP (MKH)**



**TYPICAL FIELD PIPING & WIRING
SPLIT AIR COOLED
[MKA-(E) & MKA-(C)]**



**TYPICAL FIELD PIPING & WIRING
SPLIT AIR COOLED (MKE)
WATER COOLED (MKW)
CHILLED WATER (MKC)**



**TYPICAL FIELD PIPING & WIRING
SPLIT AIR COOLED EVAP. WITH
REMOTE AIR COOLED
CONDENSER**

MECHANICAL SPECIFICATIONS

GENERAL:

Air Conditioner shall be:

- Air Cooled Self-contained
- Split System Air Cooled
- Water Cooled
- Glycol Cooled
- Chilled Water

All units shall be factory assembled, internally wired, piped, factory run tested, and fully charged with R-22. Split Air Cooled Systems are run tested, and sealed with a holding charge for shipment. Units shall have horizontal supply and return air, and horizontal condenser air intake and discharge. DX Systems shall include evaporator, condenser, compressor, reheat, humidifier, belt driven blowers and motors with variable pitch drives. The Chilled Water System shall include chilled water coil control valve, reheat, humidifier, belt driven blower and motor with variable pitch drive. The unit shall be factory furnished with a remote control panel (MCP-System 2000).

Air Cooled Units operating range shall be from 95°F to 50°F ambient as standard from the factory with no additional accessories. Cooling performance shall be rated in accordance with A.R.I. Standard #410. Wiring internal to the unit shall be numbered for simplified identification. Units shall be ETL listed and labeled.

CABINET shall be constructed of heavy gauge galvanized steel. Access panels shall be removable for ease of servicing. Evaporator section shall be insulated with 1", 1 1/2 lb. density insulation. The base of the cabinet shall form an emergency condensate pan. The galvanized steel condensate pan shall be coated with mastic epoxy coating - EC1000, and be provided with a moisture sensor for connection to alarm for remote monitoring. Base of unit shall have channel supports with built-in lifting and suspension holes.

EVAPORATOR FAN shall be a DWDI centrifugal type. Each fan assembly shall be dynamically and statically balanced and shall utilize a heavy duty

steel shaft with permanently lubricated bearings, and rated in accordance with AMCA Standard #210.

The fan motor shall be open drip proof, mounted on an adjustable base, 1750 RPM and shall be inherently protected by internal overload protection.

ELECTRICAL CIRCUIT: All electrical control components shall be factory mounted in a control panel box within the unit, easily accessible via a removable panel on the unit. Terminal points shall be provided for remote shut down.

Each electrical component such as fan motor, compressor, reheat, and humidifier shall be individually protected with branch circuit fuses in each leg.

REMOTE MICROPROCESSOR CONTROL PANEL - SYSTEM 2000 (FOR FIELD INSTALLATION)

The control system shall be microprocessor based. The system shall be dual display digitally operated controller having the capability of controlling air conditioning systems so that both the room and temperature and humidity shall be maintained within the selectable dead bands and set points

FILTERS shall be 2" thick disposable type, 30% efficient based on ASHRAE Standard 52-76.

AIR COOLED CONDENSING SECTION shall have aluminum fins coil bonded to copper tubes and shall have full collars that completely cover the copper tubes. The coil shall be of a counterflow design for maximum heat transfer efficiency. Head pressure headers and connections shall be copper. Fan cycling control shall be provided for mild ambient down to 50°F. The condenser fan shall be a DWDI centrifugal type. Each fan assembly shall be dynamically and statically balanced and shall utilize a heavy duty stainless steel shaft with permanently lubricated bearings.

The fan motor shall be open drip proof, 1750 RPM, and shall be inherently protected by internal overload protection.

COIL shall be constructed of copper tubes and high efficiency aluminum fins. The

evaporator coil shall be provided with an epoxy coated galvanized steel condensate pan connected directly to drain, and rated in accordance with A.R.I. Standard #410.

COMPRESSOR shall be a hermetically sealed, high efficiency scroll type. The compressor shall have internal overcurrent and over temperature protection.

REFRIGERANT CIRCUIT shall be provided with an externally equalized expansion valve, filter drier, sight glass, manual reset high pressure cutout, auto reset low pressure cutout, schrader fittings. Pump down solenoid valve and liquid receiver shall be factory installed in air cooled split systems when ordered split from the factory.

REHEAT shall be of sufficient capacity to maintain room dry bulb temperature during dehumidification cycle. The reheat coil shall be of the low watt density, stainless steel fin tubular type and shall be equipped with automatic reset high limit thermal protection, backed up by fusible link thermal cutout. Reheat shall be electrically interlocked to prevent operation when fan is not running. Reheat shall be factory installed downstream of cooling coil.

HUMIDIFIER shall be of the electronic disposable cylinder type, furnished with disposable canister, auto-flush cycle, solenoid type fill valve, pressure regulating orifice and auto-adaptive control circuit.

WATER / GLYCOL COOLED SYSTEM: A coaxial, tube in tube water/glycol cooled condenser, factory installed in the air conditioner, shall be of a counterflow design for maximum heat transfer efficiency. The water/ glycol path shall be copper. Capacity control shall be accomplished with a two-way head pressure regulating valve of 150 psig water operating pressure.

CHILLED WATER UNIT shall have factory piped two-way, two position chilled water control valve in the unit.

A COMPANY IS MEASURED – BY THE COMPANY IT KEEPS –

Minority Business Enterprise

AT&T • PACIFIC BELL • NORTEL NETWORKS • LUCENT TECHNOLOGY • ERICSSON T.I. • QUEST COMMUNICATION • CARL ZEISS • SNET • IXC COMMUNICATIONS • MVX COMMUNICATIONS • AOL • CISCO SYSTEMS • LOS ALAMITOS NATIONAL LABORATORIES • UNIVERSITY OF WISCONSIN • E.F.HUTTON • EQUITABLE LIFE INSURANCE • PRINCETON UNIVERSITY • DEPARTMENT OF ENERGY • UNIVERSITY OF MISSOURI • DISNEY CORPORATION • MARTIN MARIETTA • THIOKOL CORPORATION • UNIVERSITY OF CALIFORNIA • FEDERAL AVIATION ADMINISTRATION • NATIONAL STEEL CORPORATION • UNIVERSITY OF ARIZONA • VETERANS ADMINISTRATION HOSPITALS • SANDIA CORPORATION • CIBA-GEIGY CORPORATION • DEPARTMENT OF NAVY RAYTHEON CORPORATION • AMOCO-UNISYS CORPORATION • UNIVERSITY OF HOUSTON • BUREAU OF LAND MANAGEMENT • GENERAL SERVICES ADMINISTRATION • BURLINGTON NORTHERN RAILROAD • UNITED STATES POST OFFICE • CIGNA CORP • US AIR FORCE ACADEMY • UNIVERSITY OF NEW MEXICO • DATA GENERAL CORP. • JET PROPULSION LABORATORIES • ITT CANNON INC. • GENERAL ELECTRIC • UNIVERSAL STUDIOS • LORD & TAYLOR CO. • VANDENBERG AFB NY LIFE INSURANCE • MERRILL LYNCH INC. • STATE OF TEXAS • GOOD YEAR TIRE INC. • AVIS RENT-A-CAR • THE PENTAGON • CONOCO CORP. • BLUE CROSS/BLUE SHIELD • MACY'S CORPORATION • MCDONNELLDUGLAS CORP. • WEYERHAEUSER CORP. • BELL & HOWELL INC. • FISHER CONTROLS, INC. • UNIVERSITY OF MONTREAL • HOSPITALS CORP. OF AMERICA • UNIVERSITY OF TENNESSEE • DEPARTMENT OF THE INTERIOR • ROYAL BANK OF CANADA ALLSTATE INSURANCE CO. • ARMAND HAMMER MUSEUM • OWENS CORNING CORP • FORD AEROSPACE CORP. • US ARMY CORPS OF ENGINEERS • DEPARTMENT OF DEFENSE • MITSUBISHI ELECTRONICS • WHITE SAND MISSILE RANGE • BOEING CORPORATION • INGERSOLL RAND CORP • GTE INC. • AT&T INC. • IBM CORP. • SIEMENS INC. • XEROX CORP. • ELGIN AFB • KELLY AFB • US WEST INC. • HOLLAMAN AFB • HUGHES CORP. • FALCON AFB • AC DELCO CO. • TOYOTA CORP. • PACIFIC BELL • LTV STEEL • SYNTEC CORP. • KIRTLAND AFB • SUN MICROSYSTEM • HEWLETT PACKARD • TEXAS INSTRUMENTS • EXODUS COMMUNICATIONS • BRIADCOM • SDL OPTICS • MORGAN STANLEY DEAN WHITTER • CON EDISON • EXCITE@HOME • ARTHUR ANDERSON • PRICE WATER HOUSE



FIRST INTERSTATE BANK • MCCLELLAN AFB • NASA • MOBIL OIL • MOTOROLA CORP. • SHELL OIL • IRS • GENERAL MOTORS • DELTA AIRLINES BANK OF AMERICA PRIME COMPUTER • HONEYWELL INC. • GENERAL DYNAMICS • J. C. PENNEY INC. • BECHTEL CORP. • ROCKWELL INT'L • FORD MOTOR CO. • DIGITAL CORP. • WELLS FARGO BANK • LOCKHEED CORP.



8167 Byron Road
Whittier, CA 90606-2615
(562) 945-8971 phone
(562) 696-0724 fax
web site: www.compu-aire.com

COMPU-AIRE INC.

4/02 5M TAB 3

While every precaution has been taken to ensure accuracy and completeness in this brochure, Compu-Aire, Inc. assumes no responsibility and disclaims all liability for damages resulting from use of this information or for any errors or omissions. Subject to change without notice.

Printed in the U.S.A.