



Heating & Air Conditioning

CACRTU1372011

S RTU 14 SEER Tech Guide



FEATURES

- Wide-capacity range; both cooling only and heat pump available
- High Energy Efficiency Ratio, SEER = 14
- Attractive appearance, outstanding anti-rust cabinet after 1000 hours salt spray test
- Removable bottom - for convertible side-or-bottom supply - and return connections
- Uses a durable piston as a throttle device which guarantees the system's reliable operation
- Compressor is protected with internal overload
- G90 galvanized heavy gauge plate conforming to ASTM A 653
- All coils are tested at 450psig
- Auxiliary electric heaters for field installation available
- Other options for field installation available
- ARI certified & ETL Listed

WARRANTY

5-Year limited compressor
Standard 5-Year limited parts

Tested in accordance with:



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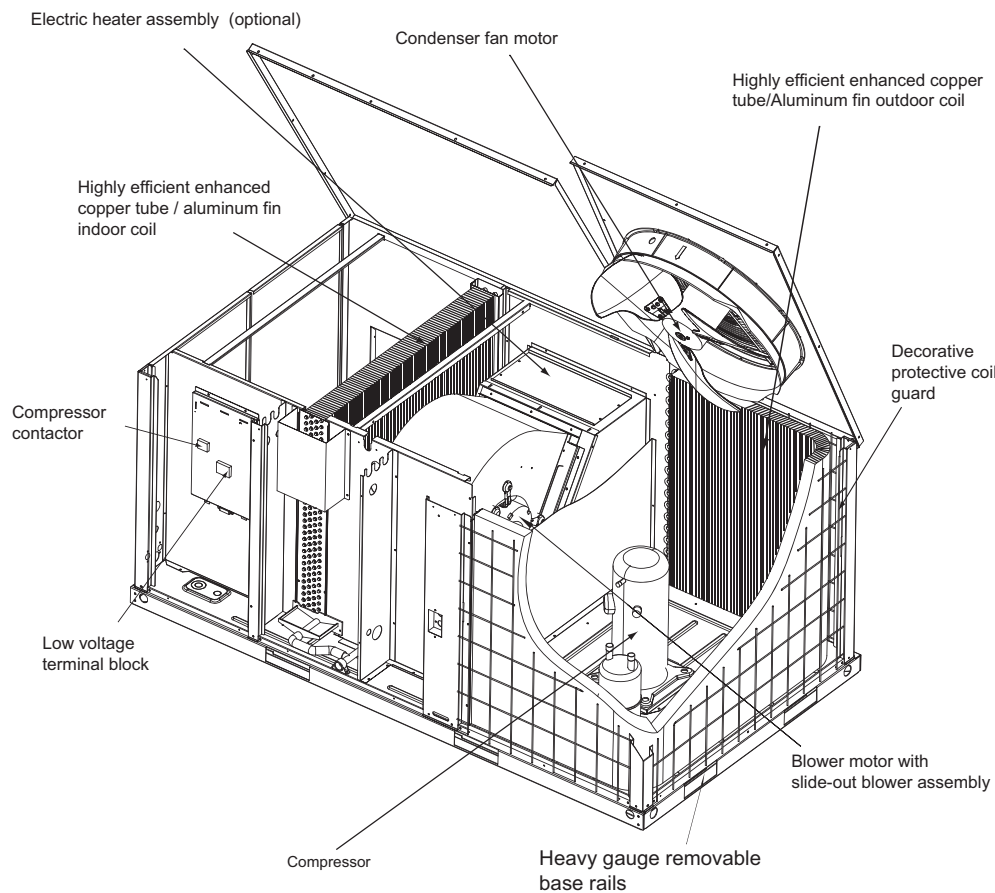
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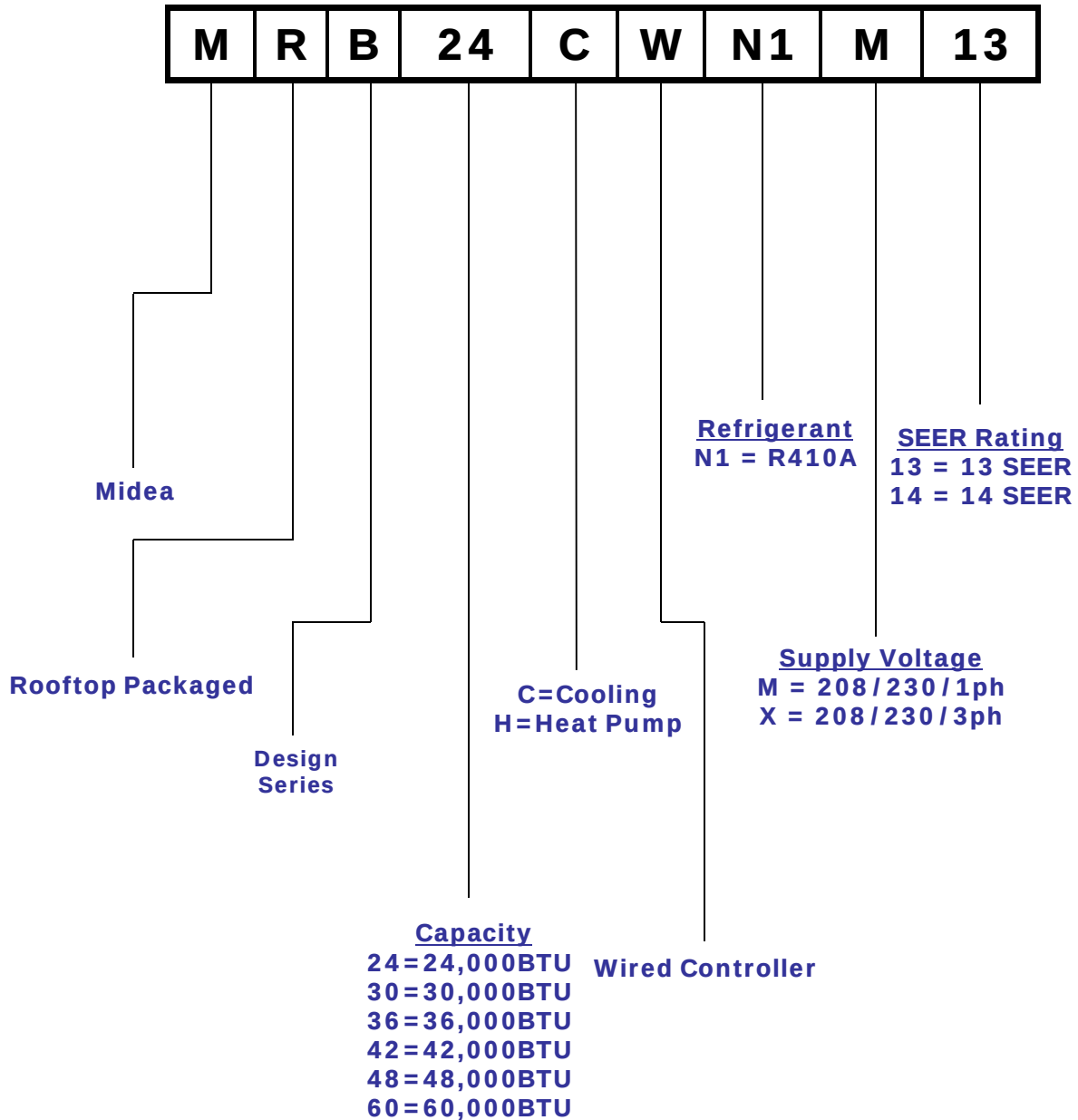
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Component Location

Cooling Unit and Heat Pump



MIDEA ROOFTOP PACKAGED UNIT NOMENCLATURE



14 SEER Physical Data

Component	Models							
	MRB-24CWN1-M14	MRB-24HWN1-M14	MRB-30CWN1-M14	MRB-30HWN1-M14	MRB-36CWN1-M14	MRB-36HWN1-M14	MRB-36CWN1-X14	MRB-36HWN1-X14
Nominal Tonnage	2.0	2.0	2.5	2.5	3.0	3.0	3.0	3.0
ARI COOLING PERFORMANCE								
Gross Capacity @ ARI A point (Btu)	24,644	24,444	30,313	29,913	37,388	37,588	37,563	36,525
ARI net capacity (Btu)	23,600	23,400	29,000	28,600	35,800	36,000	36,000	35,000
EER	11.5	11.5	12	12	12	11.5	12	11.5
SEER	14	14	14	14	14	14	14	14
Nominal CFM	835	835	1050	1050	1250	1270	1250	1250
System power (kW)	2.05	2.03	2.35	2.42	2.98	3.13	3.00	3.04
Refrigerant type	R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a
Refrigerant charge (lb-oz)	4-7	4-10	6-6	6-10	6-10	7-15	7-1	7-1
ARI HEATING PERFORMANCE								
47°F Capacity Rating (Btu)	—	21,600	—	28,800	—	36,000	—	35,400
System Power (kW)	—	1.75	—	2.24	—	2.86	—	2.77
17°F Capacity Rating (Btu)	—	11,300	—	16,200	—	19,600	—	19,800
System Power(kW)	—	1.6	—	2.04	—	2.6	—	2.45
HSPF (BTU/Watts-hr.)	—	7.7	—	8.0	—	8.0	—	8.0
DIMENSIONS (Inches)								
Length	75-19/32	75-19/32	75-19/32	75-19/32	75-19/32	75-19/32	75-19/32	75-19/32
Width	42	42	42	42	42	42	42	42
Height	28-3/32	28-3/32	28-3/32	28-3/32	28-3/32	28-3/32	28-3/32	28-3/32
OPERATING WT. (lbs)	410	419	432	441	432	441	432	441
COMPRESSORS								
Type	Scroll 1-spd	Scroll 1-spd	Scroll 1-spd	Scroll 1-spd	Scroll 1-spd	Scroll 1-spd	Scroll 1-spd	Scroll 1-spd
Quantity	1	1	1	1	1	1	1	1
CONDENSER COIL DATA								
Face area (Sq. Ft)	14.49	14.49	14.49	14.49	14.49	14.49	14.49	14.49
Rows	1	1	2	2	2	2	2	2
Fins per inch	20	20	20	20	20	20	20	20
Tube diameter	9/32	9/32	9/32	9/32	9/32	9/32	9/32	9/32
Circuitry Type	interlaced	interlaced	interlaced	interlaced	interlaced	interlaced	interlaced	interlaced
EVAPORATOR COIL DATA								
Face area (Sq. Ft)	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15
Rows	2	2	3	3	3	3	3	3
Fins per inch	16	16	16	16	16	16	16	16
Tube diameter	5/16	5/16	5/16	5/16	5/16	5/16	5/16	5/16
Circuitry Type	interlaced	interlaced	interlaced	interlaced	interlaced	interlaced	interlaced	interlaced
Refrigerant control	Orifice	Orifice	Orifice	Orifice	Orifice	Orifice	Orifice	Orifice
CONDENSER FAN DATA								
Fan diameter (Inch)	23-5/8	23-5/8	23-5/8	23-5/8	23-5/8	23-5/8	23-5/8	23-5/8
Type	Prop	Prop	Prop	Prop	Prop	Prop	Prop	Prop
Drive type	Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct
No. speeds	1	1	1	1	1	1	1	1
Number of motors	1	1	1	1	1	1	1	1
Motor HP each	1/12	1/12	1/6	1/6	1/6	1/6	1/6	1/6
RPM	1075	1075	825	825	825	825	825	825
Nominal total CFM	2440	2440	3145	3145	3145	3145	3145	3145
DIRECT DRIVE EVAP FAN DATA								
Quantity	1	1	1	1	1	1	1	1
Fan Size (Inch)	10×10	10×10	10×10	10×10	10×10	10×10	10×10	10×10
Type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
No. speeds	3	3	3	3	3	3	3	3
Motor HP each	1/4	1/4	1/3	1/3	1/2	1/2	1/2	1/2
RPM	1075	1075	1075	1075	1075	1075	1075	1075
Motor frame size	48	48	48	48	48	48	48	48
FILTERS								
(No.) Size Recommended in.	(1) 22×14×1	(1) 22×14×1	(1) 22×14×1	(1) 22×14×1	(1) 22×14×1	(1) 22×14×1	(1) 22×14×1	(1) 22×14×1

* The above Table data for reference only.

14 SEER Physical Data (Continued)

Component	Models							
	MRB-42CWN1-M14	MRB-42HWN1-M14	MRB-48CWN1-M14	MRB-48HWN1-M14	MRB-48CWN1-X14	MRB-48HWN1-X14	MRB-60CWN1-M14	MRB-60HWN1-M14
Nominal Tonnage	3.5	3.5	4.0	4.0	4.0	4.0	5.0	5.0
ARI COOLING PERFORMANCE								
Gross Capacity @ ARI A point (Btu)	43,813	43,813	49,913	49,913	49,913	49,625	61,825	62,325
ARI net capacity (Btu)	42,000	42,000	48,000	48,000	48,000	48,000	59,500	60,000
EER	12	12	12	12	12	12	11.5	11.5
SEER	14	14	14	14	14	14	14	14
Nominal CFM	1450	1450	1550	1550	1550	1550	1860	1860
System power (kW)	3.53	3.63	4.00	4.00	4.00	3.98	5.17	5.22
Refrigerant type	R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a
Refrigerant charge (lb-oz)	7-15	8-13	9-8	10-2	9-8	9-8	9-11	10-9
ARI HEATING PERFORMANCE								
47°F Capacity Rating (Btu)	—	42,000	—	48,000	—	48,000	—	60,000
System Power (kW)	—	3.21	—	3.79	—	3.63	—	4.62
17°F Capacity Rating (Btu)	—	24,200	—	28,800	—	27,400	—	35,200
System Power (kW)	—	3.0	—	3.5	—	3.30	—	4.2
HSPF (BTU/Watts-hr.)	—	8.0	—	8.0	—	8.0	—	8.0
DIMENSIONS (Inches)								
Length	75-19/32	75-19/32	75-19/32	75-19/32	75-19/32	75-19/32	75-19/32	75-19/32
Width	42	42	42	42	42	42	42	42
Height	28-3/32	28-3/32	33-3/64	33-3/64	33-3/64	33-3/64	33-3/64	33-3/64
OPERATING WT. (lbs)	496	505	496	505	496	505	507	516
COMPRESSORS								
Type	Scroll 1-spд	Scroll 1-spд	Scroll 1-spд	Scroll 1-spд	Scroll 1-spд	Scroll 1-spд	Scroll 1-spд	Scroll 1-spд
Quantity	1	1	1	1	1	1	1	1
CONDENSER COIL DATA								
Face area (Sq. Ft)	17.39	17.39	17.39	17.39	17.39	17.39	17.39	17.39
Rows	2	2	3	3	3	3	3	3
Fins per inch	20	20	20	20	20	20	20	20
Tube diameter	9/32	9/32	9/32	9/32	9/32	9/32	9/32	9/32
Circuitry Type	interlaced	interlaced	interlaced	interlaced	interlaced	interlaced	interlaced	interlaced
EVAPORATOR COIL DATA								
Face area (Sq. Ft)	6.34	6.34	6.34	6.34	6.34	6.34	6.34	6.34
Rows	4	4	4	4	4	4	4	4
Fins per inch	16	16	16	16	16	16	16	16
Tube diameter	5/16	5/16	5/16	5/16	5/16	5/16	5/16	5/16
Circuitry Type	interlaced	interlaced	interlaced	interlaced	interlaced	interlaced	interlaced	interlaced
Refrigerant control	Orifice	Orifice	Orifice	Orifice	Orifice	Orifice	Orifice	Orifice
CONDENSER FAN DATA								
Fan diameter (Inch)	23-5/8	23-5/8	23-5/8	23-5/8	23-5/8	23-5/8	23-5/8	23-5/8
Type	Prop	Prop	Prop	Prop	Prop	Prop	Prop	Prop
Drive type	Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct
No. speeds	1	1	1	1	1	1	1	1
Number of motors	1	1	1	1	1	1	1	1
Motor HP each	1/6	1/3	1/3	1/3	1/3	1/3	1/3	1/3
RPM	825	1075	1075	1075	1075	1075	1075	1075
Nominal total CFM	3145	4245	4245	4245	4245	4245	4245	4245
DIRECT DRIVE EVAP FAN DATA								
Quantity	1	1	1	1	1	1	1	1
Fan Size (Inch)	10×10	10×10	10×10	10×10	10×10	10×10	10×10	10×10
Type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
No. speeds	3	3	3	3	3	3	3	3
Motor HP each	3/4	3/4	3/4	3/4	3/4	3/4	1	1
RPM	1075	1075	1075	1075	1075	1075	1075	1075
Motor frame size	48	48	48	48	48	48	48	48
FILTERS								
(No.) Size Recommended in.	(1) 22×14×1	(1) 22×14×1	(1) 22×14×1	(2) 22×14×1	(1) 22×14×1	(1) 22×14×1	(2) 22×14×1	(1) 22×14×1

* The above Table data for reference only.

14 SEER Physical Data (Continued)

Component	Models						
	MRB-60CWN1-X14	MRB-60HWN1-X14					
Nominal Tonnage	5.0	5.0					
ARI COOLING PERFORMANCE							
Gross Capacity @ ARI A point (Btu)	61,350	61,350					
ARI net capacity (Btu)	59,000	59,000					
EER	11.5	11.5					
SEER	14	14					
Nominal CFM	1880	1880					
System power (kW)	5.15	5.135					
Refrigerant type	R410a	R410a					
Refrigerant charge (lb-oz)	9-15	10-2					
ARI HEATING PERFORMANCE							
47°F Capacity Rating (Btu)	—	60,000					
System Power (kW)	—	4.51					
17°F Capacity Rating (Btu)	—	34,200					
System Power(kW)	—	4.03					
HSPF (BTU/Watts-hr.)	—	8.0					
DIMENSIONS (Inches)							
Length	75-19/32	75-19/32					
Width	42	42					
Height	33-3/64	33-3/64					
OPERATING WT. (lbs)	507	516					
COMPRESSORS							
Type	Scroll 1-spd	Scroll 1-spd					
Quantity	1	1					
CONDENSER COIL DATA							
Face area (Sq. Ft)	17.39	17.39					
Rows	3	3					
Fins per inch	20	20					
Tube diameter	9/32	9/32					
Circuitry Type	interlaced	interlaced					
EVAPORATOR COIL DATA							
Face area (Sq. Ft)	6.34	6.34					
Rows	4	4					
Fins per inch	16	16					
Tube diameter	5/16	5/16					
Circuitry Type	interlaced	interlaced					
Refrigerant control	Orifice	Orifice					
CONDENSER FAN DATA							
Fan diameter (Inch)	23-5/8	23-5/8					
Type	Prop	Prop					
Drive type	Direct	Direct					
No. speeds	1	1					
Number of motors	1	1					
Motor HP each	1/3	1/3					
RPM	1075	1075					
Nominal total CFM	4245	4245					
DIRECT DRIVE EVAP FAN DATA							
Quantity	1	1					
Fan Size (Inch)	10×10	10×10					
Type	Centrifugal	Centrifugal					
No. speeds	3	3					
Motor HP each	1	1					
RPM	1075	1075					
Motor frame size	48	48					
FILTERS							
(No.) Size Recommended in.	(1) 22×14×1	(1) 22×14×1					

* The above Table data for reference only.

Cooling and heat pump Unit Limitations

Size (Tons)	Model	Unit Voltage	Unit Limitations		
			Applied Voltage		Outdoor DB Temp
			Min	Max	Max (°F)
024 (2.0)	MRB-24C MRB-24H	208/230-1-60	187	252	115
030 (2.5)	MRB-30C MRB-30H	208/230-1-60	187	252	115
036 (3.0)	MRB-36C MRB-36H	208/230-1-60	187	252	115
		208/230-3-60	187	252	115
042 (3.5)	MRB-42C MRB-42H	208/230-1-60	187	252	115
048 (4.0)	MRB-48C MRB-48H	208/230-1-60	187	252	115
		208/230-3-60	187	252	115
060 (5.0)	MRB-60C MRB-60H	208/230-1-60	187	252	115
		208/230-3-60	187	252	115

Capacity Performance

MRB-24CWN1-M14/MRB-24HWN1-M14

COOLING

Ambient Temperature(°F)		Air Flow	CFM	600						800						1000								
				Ent	DB	(°F)	65	70	75	80	85	90	65	70	75	80	85	90	65	70	75	80	85	90
75	Entering Wet Bulb(°F)	77	MBH	*	*	*	28.1	28.0	27.9	*	*	*	31.5	31.7	31.8	*	*	*	34.5	34.8	35.0			
		67	MBH	*	23.1	23.6	23.3	23.6	23.9	*	26.1	25.8	26.3	26.8	27.3	*	27.3	27.2	27.9	28.6	29.3			
		57	MBH	17.5	18.1	18.7	20.1	20.9	21.7	19.6	20.5	21.4	23.6	24.2	24.8	20.1	21.6	23.1	25.3	26.0	26.7			
		77	MBH	*	*	*	26.4	26.3	26.2	*	*	*	29.6	29.5	29.5	*	*	*	31.6	31.5	31.4			
		67	MBH	*	21.6	21.5	22.0	21.9	21.9	*	24.2	24.1	25.2	25.1	25.1	*	25.6	25.5	26.6	26.5	26.5			
		57	MBH	16.5	16.7	18.0	19.2	20.1	20.9	19.0	19.2	20.8	22.4	23.4	24.4	19.5	19.7	21.7	23.7	24.8	25.8			
		77	MBH	*	*	*	23.9	23.8	23.8	*	*	*	27.0	26.9	26.9	*	*	*	28.7	28.6	28.6			
		67	MBH	*	19.2	19.1	19.4	19.4	19.3	*	21.5	21.4	22.4	22.3	22.3	*	22.3	22.2	23.1	23.0	23.0			
		57	MBH	14.5	14.6	15.7	16.7	17.5	18.2	16.1	16.3	18.0	19.7	20.6	21.5	16.6	16.8	18.9	21.0	21.9	22.9			
		77	MBH	*	*	*	21.3	21.2	21.2	*	*	*	23.7	23.6	23.6	*	*	*	24.2	24.1	24.1			
		67	MBH	*	16.9	16.8	17.1	17.1	17.0	*	18.7	18.6	19.1	19.1	19.0	*	19.1	19.0	19.2	19.2	19.1			
		57	MBH	12.9	13.0	14.5	15.9	16.6	17.3	14.5	14.6	16.4	18.1	18.9	19.7	14.6	14.7	16.7	18.6	19.4	20.3			
105		77	MBH	*	*	*	18.5	18.5	18.4	*	*	*	21.1	21.0	21.0	*	*	*	21.0	20.9	20.9			
		67	MBH	*	14.3	14.2	14.6	14.6	14.5	*	15.6	15.5	16.6	16.6	16.5	*	15.3	15.2	16.5	16.5	16.4			
		57	MBH	11.2	11.3	12.6	14.0	14.6	15.2	12.4	12.5	14.0	15.4	16.1	16.8	12.6	12.7	14.2	15.7	16.4	17.1			

Note: " " indicates for no data.

MRB-24HWN1-M14

HEATING

Relative humidity of condenser coil		Air Flow	CFM	600						800						1000					
				10	20	30	40	50	60	10	20	30	40	50	60	10	20	30	40	50	60
72	EDB(°F)	80	MBH	5.1	7.7	11.5	14.1	17.2	23.6	5.3	8.9	12.3	15.5	19.2	23.9	2.7	7.1	11.7	15.3	19.7	24.9
		70	MBH	4.3	8.0	13.7	16.5	22.3	25.8	6.6	9.5	13.6	17.1	21.4	24.9	4.3	8.0	13.7	16.5	22.3	25.8
		55	MBH	8.0	11.0	13.6	18.3	21.3	26.4	8.9	11.8	15.3	19.0	23.2	27.5	8.6	11.2	16.1	19.5	24.7	29.2

Note: (1) " * " indicates for no data.

(2) EDB: dry bulb temperature of indoor unit.

MRB-30CWN1-M14 / MRB-30HWN1-M14

COOLING

Ambient Temperature(°F)		Air	Flow	CFM	800					1000						12000						
		Ent	DB	(°F)	65	70	75	80	85	90	65	70	75	80	85	90	65	70	75	80	85	90
75	Entering Wet Bulb(°F)	77	MBH	*	*	*	37.7	37.5	37.1	*	*	*	40.4	40.1	39.7	*	*	*	43.6	43.1	42.2	
		67	MBH	*	30.7	30.5	30.3	30.0	29.6	*	33.0	32.7	32.5	32.4	32.2	*	35.5	35.2	34.8	34.8	34.8	
		57	MBH	23.6	23.7	23.5	24.5	25.0	25.3	24.9	25.5	26.0	26.7	27.4	28.1	26.6	27.3	28.0	29.1	30.0	31.1	
85		77	MBH	*	*	*	35.4	35.1	34.6	*	*	*	37.3	37.1	36.9	*	*	*	39.6	39.5	38.9	
		67	MBH	*	28.0	27.8	27.6	27.4	27.2	*	30.1	29.8	29.6	29.7	29.6	*	31.9	31.8	31.7	32.0	32.2	
		57	MBH	20.7	20.9	21.0	21.8	22.3	22.5	21.6	22.6	23.5	24.0	24.7	25.3	22.0	23.7	25.3	27.8	27.7	28.8	
95		77	MBH	*	*	*	32.1	31.9	31.4	*	*	*	34.1	33.7	33.4	*	*	*	36.5	36.0	35.2	
		67	MBH	*	25.4	25.0	24.6	24.5	24.5	*	27.3	26.8	26.4	27.0	27.4	*	29.5	28.6	27.8	29.0	30.1	
		57	MBH	17.7	18.5	19.1	19.5	20.1	20.1	19.0	20.2	21.4	22.3	23.4	24.3	20.2	21.7	23.2	25.0	26.6	28.3	
105		77	MBH	*	*	*	28.7	28.5	28.0	*	*	*	30.4	30.0	29.5	*	*	*	32.4	32.0	31.2	
		67	MBH	*	22.1	21.8	21.6	21.8	22.0	*	23.7	23.4	23.1	24.0	24.7	*	25.2	25.0	24.7	25.8	26.9	
		57	MBH	13.6	15.0	16.3	17.0	18.0	18.4	14.2	16.4	18.7	19.6	21.2	22.4	14.5	17.5	20.6	21.7	23.8	25.5	
115		77	MBH	*	*	*	24.6	24.7	24.5	*	*	*	26.2	26.1	26.1	*	*	*	27.9	28.0	27.7	
		67	MBH	*	18.4	18.1	17.9	18.7	19.5	*	19.7	19.4	19.2	20.7	22.0	*	21.1	20.7	20.2	22.1	24.0	
		57	MBH	10.4	12.2	13.8	14.7	15.9	16.6	12.0	13.8	15.6	17.1	18.7	20.2	13.0	15.1	17.1	19.0	20.9	22.8	

Note: " " indicates for no data.

MRB-30HWN1-M14

HEATING

Relative humidity of condenser coil		Air Flow	CFM	800						1000						1200					
				10	20	30	40	50	60	10	20	30	40	50	60	10	20	30	40	50	60
		Ent	ODB	(°F)																	
72	EDB(°F)	80	MBH	11.4	14.8	18.3	22.1	25.8	29.5	11.8	15.5	19.1	23.1	27.1	30.9	12.2	16.1	20.0	24.2	28.1	32.0
		70	MBH	12.1	15.6	19.1	22.9	27.6	32.2	13.2	16.7	20.2	24.0	27.7	31.4	13.5	17.3	21.1	25.2	28.9	32.6
		55	MBH	13.9	17.4	20.9	24.7	28.4	31.9	15.3	18.4	21.5	24.8	28.8	32.6	15.7	19.1	22.5	26.3	29.8	33.3

Note: (1) " * " indicates for no data.
(2) EDB: dry bulb temperature of indoor unit.

Midea Heating & Air Conditioning

MRB-36CWN1-M14 / MRB-36HWN1-M14

COOLING

Ambient Temperature(°F)			Air	Flow	CFM	600						800						1000					
			Ent	DB	(°F)	65	70	75	80	85	90	65	70	75	80	85	90	65	70	75	80	85	90
75	Entering Wet Bulb(°F)	77	MBH	*	*	*	42.9	43.0	42.7	*	*	*	44.8	44.8	44.5	*	*	*	47.4	47.3	46.9		
		67	MBH	*	38.7	38.2	38.3	38.8	39.0	*	39.8	39.5	40.0	40.4	40.8	*	42.0	41.5	41.7	42.2	42.9		
		57	MBH	32.7	32.6	33.3	34.2	35.1	36.3	33.9	34.0	34.6	35.0	35.8	36.5	35.2	36.0	37.7	37.8	38.4	39.1		
		77	MBH	*	*	*	41.4	41.5	40.7	*	*	*	42.9	43.0	42.7	*	*	*	45.3	45.0	44.6		
		67	MBH	*	36.9	36.5	37.0	37.7	38.2	*	38.1	38.0	38.2	38.7	39.3	*	39.5	39.0	39.9	40.5	41.2		
		57	MBH	29.8	30.0	31.1	33.7	34.6	35.9	31.1	32.0	32.9	34.8	35.4	36.5	32.2	33.7	35.4	36.3	37.5	38.0		
		77	MBH	*	*	*	38.4	38.5	38.4	*	*	*	39.8	39.8	39.9	*	*	*	41.8	42.0	41.8		
		67	MBH	*	33.6	33.5	33.3	33.8	34.2	*	34.6	34.5	34.5	34.6	36.0	*	35.9	35.6	35.7	36.2	38.7		
		57	MBH	26.3	26.0	28.2	30.2	32.5	34.7	27.1	27.5	29.8	32.2	34.1	35.9	27.9	29.5	31.6	34.0	35.9	37.3		
		77	MBH	*	*	*	35.8	36.0	35.6	*	*	*	37.0	37.1	37.0	*	*	*	38.5	38.7	38.6		
		67	MBH	*	30.6	30.1	30.5	31.3	32.1	*	31.7	31.6	31.7	32.5	33.4	*	32.8	32.5	32.9	34.7	35.9		
		57	MBH	21.3	23.6	26.0	28.1	29.0	29.8	24.1	25.0	27.6	29.6	30.7	32.5	26.0	26.8	28.5	31.3	32.7	33.2		
105		77	MBH	*	*	*	33.0	33.3	33.1	*	*	*	33.9	34.0	33.7	*	*	*	35.4	35.6	35.2		
		67	MBH	*	27.5	27.2	27.4	29.5	31.4	*	28.7	28.3	28.5	29.9	31.1	*	29.7	29.0	29.3	31.8	33.3		
		57	MBH	20.4	21.0	23.4	25.5	27.4	29.1	21.8	22.5	24.0	26.9	28.1	29.7	23.1	23.8	26.2	28.4	30.0	31.5		

Note: " " indicates for no data.

MRB-36HWN1-M14

HEATING

Relative humidity of condenser coil		Air	Flow	CFM	1000						1200						1400					
		Ent	ODB	(°F)	10	20	30	40	50	60	10	20	30	40	50	60	10	20	30	40	50	60
72	FDB (°F)	80	MBH	16.0	20.2	24.4	28.7	33.7	38.4	16.1	20.4	25.0	29.4	34.5	39.0	16.1	20.0	25.1	29.9	35.0	39.9	
		70	MBH	17.0	21.4	25.6	30.1	34.8	39.1	17.2	21.7	25.9	30.8	35.4	39.8	17.0	21.7	26.2	31.5	36.0	40.6	
		55	MBH	18.7	22.8	27.3	30.7	35.9	39.8	18.9	23.3	27.7	30.9	36.4	40.2	18.9	23.7	28.1	32.0	37.0	41.1	

Note: (1) " * " indicates for no data.

(2) EDB: dry bulb temperature of indoor unit.

Midea Heating & Air Conditioning

MRB-36CWN1-X14 / MRB-36HWN1-X14

COOLING

Ambient Temperature(°F)		Air	Flow	CFM	1000					1200					1400							
		Ent	DB	(°F)	65	70	75	80	85	90	65	70	75	80	85	90	65	70	75	80	85	90
75	Entering Wet Bulb(°F)	77	MBH	*	*	*	42.9	43.0	42.7	*	*	*	44.8	44.8	44.5	*	*	*	47.4	47.3	46.9	
		67	MBH	*	38.7	38.2	38.3	38.8	39.0	*	39.8	39.5	40.0	40.4	40.8	*	42.0	41.5	41.7	42.2	42.9	
		57	MBH	32.7	32.6	33.3	34.2	35.1	36.3	33.9	34.0	34.6	35.0	35.8	36.5	35.2	36.0	37.7	37.8	38.4	39.1	
		77	MBH	*	*	*	41.4	41.5	40.7	*	*	*	42.9	43.0	42.7	*	*	*	45.3	45.0	44.6	
		67	MBH	*	36.9	36.5	37.0	37.7	38.2	*	38.1	38.0	38.2	38.7	39.3	*	39.5	39.0	39.9	40.5	41.2	
		57	MBH	29.8	30.0	31.1	33.7	34.6	35.9	31.1	32.0	32.9	34.8	35.4	36.5	32.2	33.7	35.4	36.3	37.5	38.0	
		77	MBH	*	*	*	38.4	38.5	38.4	*	*	*	39.8	39.8	39.9	*	*	*	41.8	42.0	41.8	
		67	MBH	*	33.6	33.5	33.3	33.8	34.2	*	34.6	34.5	34.5	34.6	36.0	*	35.9	35.6	35.7	36.2	38.7	
		57	MBH	26.3	26.0	28.2	30.2	32.5	34.7	27.1	27.5	29.8	32.2	34.1	35.9	27.9	29.5	31.6	34.0	35.9	37.3	
		77	MBH	*	*	*	35.8	36.0	35.6	*	*	*	37.0	37.1	37.0	*	*	*	38.5	38.7	38.6	
		67	MBH	*	30.6	30.1	30.5	31.3	32.1	*	31.7	31.6	31.7	32.5	33.4	*	32.8	32.5	32.9	34.7	35.9	
		57	MBH	21.3	23.6	26.0	28.1	29.0	29.8	24.1	25.0	27.6	29.6	30.7	32.5	26.0	26.8	28.5	31.3	32.7	33.2	
		115	77	MBH	*	*	*	33.0	33.3	33.1	*	*	*	33.9	34.0	33.7	*	*	*	35.4	35.6	35.2
			67	MBH	*	27.5	27.2	27.4	29.5	31.4	*	28.7	28.3	28.5	29.9	31.1	*	29.7	29.0	29.3	31.8	33.3
			57	MBH	20.4	21.0	23.4	25.5	27.4	29.1	21.8	22.5	24.0	26.9	28.1	29.7	23.1	23.8	26.2	28.4	30.0	31.5

Note: " " indicates for no data.

MRB-36HWN1-X14

HEATING

		Air	Flow	CFM	1000						1200						1400					
		Ent	ODB	(°F)	10	20	30	40	50	60	10	20	30	40	50	60	10	20	30	40	50	60
Relative humidity of condenser coil	72	EDB (°F)	80	MBH	16.0	20.2	24.4	28.7	33.7	38.4	16.1	20.4	25.0	29.4	34.5	39.0	16.1	20.0	25.1	29.9	35.0	39.9
			70	MBH	17.0	21.4	25.6	30.1	34.8	39.1	17.2	21.7	25.9	30.8	35.4	39.8	17.0	21.7	26.2	31.5	36.0	40.6
			55	MBH	18.7	22.8	27.3	30.7	35.9	39.8	18.9	23.3	27.7	30.9	36.4	40.2	18.9	23.7	28.1	32.0	37.0	41.1

Note: (1) " * " indicates for no data.
(2) EDB: dry bulb temperature of indoor unit.

MRB-42CWN1-M14 / MRB-42HWN1-M14

COOLING

Ambient Temperature(°F)		Air	Flow	CFM	1200					1400						16000						
		Ent	DB	(°F)	65	70	75	80	85	90	65	70	75	80	85	90	65	70	75	80	85	90
75	Entering Wet Bulb(°F)	77	MBH	*	*	*	52.1	52.0	51.9	*	*	*	52.9	52.3	51.6	*	*	*	55.3	54.6	53.9	
		67	MBH	*	46.2	45.7	45.1	45.0	44.9	*	47.2	46.8	46.4	46.2	45.9	*	49.1	48.6	48.1	48.2	48.2	
		57	MBH	36.2	36.6	37.1	39.3	40.7	42.4	35.6	38.0	40.3	40.7	43.4	44.9	37.8	39.3	40.9	43.8	45.2	47.3	
85		77	MBH	*	*	*	50.9	50.3	49.7	*	*	*	51.8	51.5	51.2	*	*	*	54.0	53.7	53.3	
		67	MBH	*	43.6	43.1	42.6	42.8	43.0	*	44.5	44.1	43.8	44.5	45.1	*	45.3	45.2	45.1	46.4	47.7	
		57	MBH	32.2	34.2	36.3	37.7	39.1	40.6	33.0	35.2	37.4	39.5	41.5	43.6	32.1	35.8	39.5	41.1	44.5	46.9	
95		77	MBH	*	*	*	47.7	47.3	46.9	*	*	*	48.7	48.6	48.5	*	*	*	50.7	50.7	50.7	
		67	MBH	*	40.5	40.2	39.8	40.2	40.5	*	41.5	41.3	41.0	42.1	43.2	*	42.1	41.9	41.7	43.9	46.1	
		57	MBH	30.2	31.8	33.4	35.3	36.6	38.2	30.3	32.7	35.1	37.1	39.9	42.3	30.2	33.4	36.6	38.1	42.9	46.1	
105		77	MBH	*	*	*	43.8	43.3	42.7	*	*	*	45.1	44.8	44.4	*	*	*	48.3	47.3	46.4	
		67	MBH	*	37.2	36.7	36.2	36.2	36.2	*	38.0	37.9	37.8	38.7	39.7	*	39.4	39.6	39.7	40.8	42.0	
		57	MBH	27.0	28.2	29.5	33.3	31.9	33.2	26.3	28.8	31.3	34.5	36.3	38.8	28.8	31.4	34.0	37.0	39.1	41.7	
115		77	MBH	*	*	*	40.4	40.0	39.5	*	*	*	40.5	40.5	40.6	*	*	*	41.4	42.0	42.6	
		67	MBH	*	33.9	33.5	33.0	34.3	35.5	*	34.4	34.6	34.7	35.9	37.0	*	37.1	36.7	36.3	37.8	39.2	
		57	MBH	23.8	26.0	28.2	30.9	32.7	35.0	24.9	27.4	29.8	32.3	34.7	37.2	25.8	28.6	31.4	34.2	37.0	39.8	

Note: " " indicates for no data.

MRB-42HWN1-M14

HEATING

Relative humidity of condenser coil		Air Flow	CFM	1200						1400						1600					
				10	20	30	40	50	60	10	20	30	40	50	60	10	20	30	40	50	60
		Ent	ODB	(°F)																	
72	EDB (°F)	80	MBH	17.6	22.6	27.6	32.7	37.0	41.3	18.5	23.2	28.0	32.8	37.5	42.1	18.3	23.5	28.6	33.7	38.2	42.7
				19.6	24.1	28.5	33.0	37.9	42.8	20.3	24.4	28.5	32.7	37.5	42.3	20.0	24.8	29.7	34.6	38.4	42.3
				21.0	25.4	29.9	34.4	38.9	43.5	21.5	25.8	30.1	34.4	38.5	42.6	22.1	26.5	30.9	35.2	39.0	42.7

Note: (1) " * " indicates for no data.

(2) EDB: dry bulb temperature of indoor unit.

MRB-48CWN1-M14 / MRB-48HWN1-M14

COOLING

Ambient Temperature(°F)		Air	Flow	CFM	1350						1550						1750					
		Ent	DB	(°F)	65	70	75	80	85	90	65	70	75	80	85	90	65	70	75	80	85	90
75	Entering Wet Bulb(°F)	77	MBH	*	*	*	61.8	63.1	64.3	*	*	*	64.6	66.1	67.6	*	*	*	67.8	68.5	69.3	
		67	MBH	*	50.8	50.3	52.2	52.8	53.4	*	53.2	52.6	54.5	55.2	56.0	*	54.2	53.4	53.6	55.6	57.6	
		57	MBH	40.7	41.1	43.2	45.3	46.9	48.5	42.5	43.0	45.7	48.4	49.9	51.5	43.9	44.3	47.1	49.9	51.4	53.0	
85		77	MBH	*	*	*	57.5	57.8	58.1	*	*	*	60.7	61.0	61.3	*	*	*	62.4	62.7	63.0	
		67	MBH	*	47.3	47.1	48.4	48.5	48.7	*	49.5	49.0	49.9	50.5	51.1	*	50.7	50.2	50.3	51.5	52.7	
		57	MBH	36.9	37.2	39.4	41.6	43.0	44.3	38.2	38.6	41.2	43.7	45.1	46.5	38.7	39.1	42.1	45.1	46.5	47.9	
95		77	MBH	*	*	*	53.3	53.5	53.8	*	*	*	55.5	55.8	56.0	*	*	*	57.2	57.5	57.8	
		67	MBH	*	43.7	43.2	43.9	44.7	45.4	*	45.0	44.8	45.3	46.5	47.6	*	46.1	45.6	46.3	47.3	48.4	
		57	MBH	33.1	33.5	37.2	41.0	41.2	41.3	34.3	34.6	37.8	41.0	42.2	43.3	34.7	35.0	38.6	42.1	43.1	44.0	
105		77	MBH	*	*	*	49.6	49.8	50.1	*	*	*	51.3	51.6	51.8	*	*	*	52.4	52.6	52.9	
		67	MBH	*	39.5	39.1	40.8	42.4	43.9	*	40.9	40.5	42.2	44.2	46.3	*	41.6	41.2	42.9	45.3	47.6	
		57	MBH	30.1	30.4	33.7	37.1	38.5	40.0	31.2	31.5	35.4	39.2	40.6	42.1	32.1	32.4	36.2	40.1	41.7	43.3	
115		77	MBH	*	*	*	44.6	44.8	45.1	*	*	*	46.5	46.7	46.9	*	*	*	47.5	47.8	48.0	
		67	MBH	*	35.4	35.1	37.0	38.8	40.6	*	36.4	36.0	37.8	40.1	42.4	*	36.9	36.5	38.5	41.1	43.7	
		57	MBH	26.6	26.9	30.4	33.9	35.4	37.0	27.6	27.8	32.0	36.2	37.4	38.6	29.0	29.3	33.2	37.1	38.4	39.8	

Note: " " indicates for no data.

MRB-48HWN1-M14

HEATING

Relative humidity of condenser coil		Air	Flow	CFM	1350						1550						1750					
		Ent	ODB	(°F)	10	20	30	40	50	60	10	20	30	40	50	60	10	20	30	40	50	60
72	EDB (°F)	80	MBH	22.4	28.4	33.2	38.5	46.0	52.2	22.8	28.5	33.0	40.2	47.5	53.7	22.0	28.7	34.5	41.1	48.6	55.4	
		70	MBH	23.4	29.5	35.2	40.6	48.3	54.4	24.9	30.1	34.9	42.5	49.8	56.3	24.2	30.2	36.4	43.0	51.0	58.1	
		55	MBH	25.9	31.6	37.1	44.4	51.6	57.2	26.9	32.6	38.5	43.6	52.8	59.1	26.7	33.2	40.3	46.8	54.1	59.7	

Note: (1) " * " indicates for no data.

(2) EDB: dry bulb temperature of indoor unit.

Midea Heating & Air Conditioning

MRB-48CWN1-X14 / MRB-48HWN1-X14

COOLING

Ambient Temperature(°F)		Air	Flow	CFM	1350						1550						1750					
		Ent	DB	(°F)	65	70	75	80	85	90	65	70	75	80	85	90	65	70	75	80	85	90
75	Entering Wet Bulb(°F)	77	MBH	*	*	*	61.8	63.1	64.3	*	*	*	64.6	66.1	67.6	*	*	*	67.8	68.5	69.3	
		67	MBH	*	50.8	50.3	52.2	52.8	53.4	*	53.2	52.6	54.5	55.2	56.0	*	54.2	53.4	53.6	55.6	57.6	
		57	MBH	40.7	41.1	43.2	45.3	46.9	48.5	42.5	43.0	45.7	48.4	49.9	51.5	43.9	44.3	47.1	49.9	51.4	53.0	
85		77	MBH	*	*	*	57.5	57.8	58.1	*	*	*	60.7	61.0	61.3	*	*	*	62.4	62.7	63.0	
		67	MBH	*	47.3	47.1	48.4	48.5	48.7	*	49.5	49.0	49.9	50.5	51.1	*	50.7	50.2	50.3	51.5	52.7	
		57	MBH	36.9	37.2	39.4	41.6	43.0	44.3	38.2	38.6	41.2	43.7	45.1	46.5	38.7	39.1	42.1	45.1	46.5	47.9	
95		77	MBH	*	*	*	53.3	53.5	53.8	*	*	*	55.5	55.8	56.0	*	*	*	57.2	57.5	57.8	
		67	MBH	*	43.7	43.2	43.9	44.7	45.4	*	45.0	44.8	45.3	46.5	47.6	*	46.1	45.6	46.3	47.3	48.4	
		57	MBH	33.1	33.5	37.2	41.0	41.2	41.3	34.3	34.6	37.8	41.0	42.2	43.3	34.7	35.0	38.6	42.1	43.1	44.0	
105		77	MBH	*	*	*	49.6	49.8	50.1	*	*	*	51.3	51.6	51.8	*	*	*	52.4	52.6	52.9	
		67	MBH	*	39.5	39.1	40.8	42.4	43.9	*	40.9	40.5	42.2	44.2	46.3	*	41.6	41.2	42.9	45.3	47.6	
		57	MBH	30.1	30.4	33.7	37.1	38.5	40.0	31.2	31.5	35.4	39.2	40.6	42.1	32.1	32.4	36.2	40.1	41.7	43.3	
115		77	MBH	*	*	*	44.6	44.8	45.1	*	*	*	46.5	46.7	46.9	*	*	*	47.5	47.8	48.0	
		67	MBH	*	35.4	35.1	37.0	38.8	40.6	*	36.4	36.0	37.8	40.1	42.4	*	36.9	36.5	38.5	41.1	43.7	
		57	MBH	26.6	26.9	30.4	33.9	35.4	37.0	27.6	27.8	32.0	36.2	37.4	38.6	29.0	29.3	33.2	37.1	38.4	39.8	

Note: " " indicates for no data.

MRB-48HWN1-X14

HEATING

Relative humidity of condenser coil		Air Flow		CFM	1350						1550						1750					
		Ent	ODB	(°F)	10	20	30	40	50	60	10	20	30	40	50	60	10	20	30	40	50	60
		72		EDB (°F)	80	MBH	22.4	28.4	33.2	38.5	46.0	52.2	22.8	28.5	33.0	40.2	47.5	53.7	22.0	28.7	34.5	41.1
		70	MBH		23.4	29.5	35.2	40.6	48.3	54.4	24.9	30.1	34.9	42.5	49.8	56.3	24.2	30.2	36.4	43.0	51.0	58.1
		55	MBH		25.9	31.6	37.1	44.4	51.6	57.2	26.9	32.6	38.5	43.6	52.8	59.1	26.7	33.2	40.3	46.8	54.1	59.7

Note: (1) " * " indicates for no data.

(2) EDB: dry bulb temperature of indoor unit.

MRB-60CWN1-M14/MRB-60HWN1-M14

COOLING

Ambient Temperature (°F)		Air Flow	CFM	1600						1800						2000						
		Ent	DB	(°F)	65	70	75	80	85	90	65	70	75	80	85	90	65	70	75	80	85	90
	75	Entering Wet Bulb (°F)	77	MBH	*	*	*	76.6	75.7	74.9	*	*	*	76.2	76.9	77.6	*	*	*	85.2	83.9	82.7
			67	MBH	*	67.1	65.7	61.8	61.8	61.9	*	72.2	71.0	68.2	67.9	67.6	*	74.9	70.3	70.2	71.3	72.3
			57	MBH	51.6	54.3	55.9	62.8	61.4	60.0	53.3	56.1	59.9	65.5	65.2	64.9	55.3	58.2	62.7	67.8	68.8	69.8
	85		77	MBH	*	*	*	72.3	71.4	70.6	*	*	*	71.8	72.5	73.2	*	*	*	74.4	74.8	75.2
			67	MBH	*	59.3	58.8	58.3	58.3	58.4	*	61.9	61.0	60.1	60.5	60.8	*	64.0	62.9	61.7	62.6	63.5
			57	MBH	45.8	48.2	49.7	56.0	56.0	56.1	46.8	49.2	52.7	57.7	58.1	58.4	48.3	50.9	54.9	59.3	60.1	61.0
	95		77	MBH	*	*	*	66.5	67.4	66.3	*	*	*	68.9	69.8	67.9	*	*	*	71.0	72.1	69.0
			67	MBH	*	54.7	55.1	53.4	55.8	56.7	*	56.6	56.8	55.8	57.7	59.4	*	58.7	58.9	57.5	59.8	62.5
57			MBH	43.2	43.4	51.2	51.3	52.8	54.4	45.3	45.2	48.3	53.6	55.3	57.0	47.1	46.5	45.4	55.2	57.6	60.0	
105	77		MBH	*	*	*	61.7	61.6	61.4	*	*	*	63.5	63.4	63.3	*	*	*	65.2	65.3	65.3	
	67		MBH	*	49.3	49.4	49.5	50.8	52.2	*	50.5	50.8	51.0	52.7	54.5	*	51.8	52.1	52.4	54.5	56.6	
	57		MBH	37.7	38.1	43.5	47.5	48.8	50.1	38.8	39.6	45.6	49.0	50.6	52.3	39.9	42.3	47.1	50.3	52.3	54.3	
115	77		MBH	*	*	*	56.6	55.6	56.0	*	*	*	58.9	57.2	57.6	*	*	*	60.0	58.6	59.2	
	67		MBH	*	45.3	44.9	44.3	45.2	47.4	*	46.5	45.8	45.3	46.8	49.6	*	47.5	46.6	47.2	48.2	51.3	
	57		MBH	34.2	34.6	40.3	42.5	44.0	45.5	35.3	37.0	41.3	43.5	45.6	47.6	36.3	39.5	42.2	45.3	47.3	49.3	

Note: " " indicates for no data.

MRB-60HWN1-M14

HEATING

Relative humidity of condenser coil		Air Flow	CFM	1600						1800						2000						
		Ent	ODB	(°F)	10	20	30	40	50	60	10	20	30	40	50	60	10	20	30	40	50	60
		72	EDB (°F)	80	MBH	23.9	31.3	35.7	45.5	53.6	63.0	25.6	30.2	38.7	46.6	54.6	64.7	24.3	33.4	40.0	48.3	56.1
70	MBH			19.8	32.1	39.5	48.1	55.9	64.7	24.8	32.1	42.2	48.9	57.1	66.1	26.3	32.5	37.3	49.7	58.5	68.0	
55	MBH			24.9	34.3	40.4	50.6	59.2	68.3	30.1	36.2	42.5	52.5	60.8	69.4	30.8	36.1	43.0	54.0	62.2	70.0	

Note: (1) " * " indicates for no data.
(2) EDB: dry bulb temperature of indoor unit.

Midea Heating & Air Conditioning

MRB-60CWN1-X14 / MRB-60HWN1-X14

COOLING

Ambient Temperature(°F)		Air	Flow	CFM	1600					1800						2000						
		Ent	DB	(°F)	65	70	75	80	85	90	65	70	75	80	85	90	65	70	75	80	85	90
		Entering Wet Bulb(°F)																				
75	75	77	MBH	*	*	*	76.6	75.7	74.9	*	*	*	76.2	76.9	77.6	*	*	*	85.2	83.9	82.7	
		67	MBH	*	67.1	65.7	61.8	61.8	61.9	*	72.2	71.0	68.2	67.9	67.6	*	74.9	70.3	70.2	71.3	72.3	
		57	MBH	51.6	54.3	55.9	62.8	61.4	60.0	53.3	56.1	59.9	65.5	65.2	64.9	55.3	58.2	62.7	67.8	68.8	69.8	
85		77	MBH	*	*	*	72.3	71.4	70.6	*	*	*	71.8	72.5	73.2	*	*	*	74.4	74.8	75.2	
		67	MBH	*	59.3	58.8	58.3	58.3	58.4	*	61.9	61.0	60.1	60.5	60.8	*	64.0	62.9	61.7	62.6	63.5	
		57	MBH	45.8	48.2	49.7	56.0	56.0	56.1	46.8	49.2	52.7	57.7	58.1	58.4	48.3	50.9	54.9	59.3	60.1	61.0	
95		77	MBH	*	*	*	66.5	67.4	66.3	*	*	*	68.9	69.8	67.9	*	*	*	71.0	72.1	69.0	
		67	MBH	*	54.7	55.1	53.4	55.8	56.7	*	56.6	56.8	55.8	57.7	59.4	*	58.7	58.9	57.5	59.8	62.5	
		57	MBH	43.2	43.4	51.2	51.3	52.8	54.4	45.3	45.2	48.3	53.6	55.3	57.0	47.1	46.5	45.4	55.2	57.6	60.0	
105	77	MBH	*	*	*	61.7	61.6	61.4	*	*	*	63.5	63.4	63.3	*	*	*	65.2	65.3	65.3		
	67	MBH	*	49.3	49.4	49.5	50.8	52.2	*	50.5	50.8	51.0	52.7	54.5	*	51.8	52.1	52.4	54.5	56.6		
	57	MBH	37.7	38.1	43.5	47.5	48.8	50.1	38.8	39.6	45.6	49.0	50.6	52.3	39.9	42.3	47.1	50.3	52.3	54.3		
115	77	MBH	*	*	*	56.6	55.6	56.0	*	*	*	58.9	57.2	57.6	*	*	*	60.0	58.6	59.2		
	67	MBH	*	45.3	44.9	44.3	45.2	47.4	*	46.5	45.8	45.3	46.8	49.6	*	47.5	46.6	47.2	48.2	51.3		
	57	MBH	34.2	34.6	40.3	42.5	44.0	45.5	35.3	37.0	41.3	43.5	45.6	47.6	36.3	39.5	42.2	45.3	47.3	49.3		

Note: " " indicates for no data.

MRB-60HWN1-X14

HEATING

Relative humidity of condenser coil		Air Flow	CFM	1600						1800						2000					
				10	20	30	40	50	60	10	20	30	40	50	60	10	20	30	40	50	60
		Ent	ODB	(°F)																	
72	EDB (°F)	80	MBH	23.9	31.3	35.7	45.5	53.6	63.0	25.6	30.2	38.7	46.6	54.6	64.7	24.3	33.4	40.0	48.3	56.1	66.2
		70	MBH	19.8	32.1	39.5	48.1	55.9	64.7	24.8	32.1	42.2	48.9	57.1	66.1	26.3	32.5	37.3	49.7	58.5	68.0
		55	MBH	24.9	34.3	40.4	50.6	59.2	68.3	30.1	36.2	42.5	52.5	60.8	69.4	30.8	36.1	43.0	54.0	62.2	70.0

Note: (1) " * " indicates for no data.

(2) EDB: dry bulb temperature of indoor unit.

AIRFLOW PERFORMANCE

Airflow performance data is based on cooling performance with a coil and no filter in place. Use this performance table for appropriate unit size, external static applied to unit and allow operation within the minimum and maximum limits shown in table below for both cooling and electric heat operation.

AIRFLOW PERFORMANCE DATA

Side Duct Application

Model Number	Motor Speed	CFM(L/S)(Watts)								
		External Static Pressure-Inches W.C.[kPa]								
			0[0]	0.1[.02]	0.2[.05]	0.3[.07]	0.4[.10]	0.5[.12]	0.6[.15]	0.7[.17]
36	Low	CFM(L/S)	1341(633)	1286(607)	1242(586)	1193(563)	1134(535)	1063(502)	895(425)	775(366)
		RPM	630	676	720	764	809	854	927	960
		Watts	361	355	348	340	331	319	298	284
		Amps	1.57	1.55	1.52	1.51	1.46	1.41	1.34	1.29
	Middle	CFM(L/S)	1510(713)	1468(693)	1420(671)	1369(647)	1292(610)	1218(575)	1128(533)	934(441)
		RPM	701	741	779	814	854	892	928	987
		Watts	447	438	428	419	408	394	377	347
		Amps	1.95	1.92	1.88	1.84	1.8	1.75	1.69	1.59
	High	CFM(L/S)	1705(805)	1658(783)	1604(758)	1549(731)	1489(703)	1416(669)	1321(624)	1179(557)
		RPM	781	815	849	880	908	938	969	1006
		Watts	558	547	536	524	511	493	474	445
		Amps	2.45	2.41	2.36	2.32	2.26	2.21	2.14	2.04
48	Low	CFM(L/S)	1658(783)	1603(757)	1546(730)	1491(704)	1427(674)	1354(639)	1265(598)	1125(531)
		RPM	747	779	811	843	871	903	932	972
		Watts	510	500	489	478	464	449	431	405
		Amps	2.33	2.3	2.26	2.23	2.19	2.14	2.09	2.02
	Middle	CFM(L/S)	1837(868)	1776(839)	1724(814)	1647(778)	1576(744)	1502(709)	1413(667)	1295(611)
		RPM	816	845	869	894	918	942	964	992
		Watts	615	602	587	575	558	542	522	498
		Amps	2.84	2.8	2.76	2.72	2.67	2.63	2.58	2.51
	High	CFM(L/S)	2019(954)	1954(923)	1892(893)	1819(859)	1745(825)	1656(782)	1565(739)	1459(689)
		RPM	891	910	931	949	968	986	1002	1020
		Watts	756	741	723	706	689	672	649	627
		Amps	3.54	3.5	3.45	3.41	3.35	3.3	3.23	3.16
60	Low	CFM(L/S)	2064(975)	2004(946)	1942(917)	1875(886)	1806(853)	1726(815)	1643(776)	1538(726)
		RPM	905	929	953	974	993	1011	1028	1045
		Watts	731	712	687	666	643	618	595	570
		Amps	3.19	3.11	3.03	2.94	2.86	2.77	2.69	2.61
	Middle	CFM(L/S)	2177(1028)	2111(997)	2041(964)	1971(931)	1886(891)	1806(853)	1704(804)	1604(758)
		RPM	955	973	992	1007	1021	1036	1052	1065
		Watts	807	779	751	730	703	679	651	624
		Amps	3.54	3.43	3.34	3.26	3.16	3.08	2.98	2.89
	High	CFM(L/S)	2277(1075)	2209(1043)	2135(1008)	2056(971)	1974(932)	1881(888)	1781(841)	1668(788)
		RPM	998	1012	1023	1036	1049	1060	1071	1082
		Watts	878	852	828	801	777	747	719	687
		Amps	3.92	3.81	3.72	3.64	3.53	3.43	3.33	3.22

* The above airflow data for reference only.

Bottom Duct Application

Model Number	Motor Speed	CFM(L/S)(Watts)								
		External Static Pressure-Inches W.C.[kPa]								
			0[0]	0.1[.02]	0.2[.05]	0.3[.07]	0.4[.10]	0.5[.12]	0.6[.15]	0.7[.17]
36	Low	CFM(L/S)	1341(633)	1286(607)	1242(586)	1193(563)	1134(535)	1063(502)	895(425)	775(366)
		RPM	630	676	720	764	809	854	927	960
		Watts	361	355	348	340	331	319	298	284
		Amps	1.57	1.55	1.52	1.51	1.46	1.41	1.34	1.29
	Middle	CFM(L/S)	1510(713)	1468(693)	1420(671)	1369(647)	1292(610)	1218(575)	1128(533)	934(441)
		RPM	701	741	779	814	854	892	928	987
		Watts	447	438	428	419	408	394	377	347
		Amps	1.95	1.92	1.88	1.84	1.8	1.75	1.69	1.59
	High	CFM(L/S)	1705(805)	1658(783)	1604(758)	1549(731)	1489(703)	1416(669)	1321(624)	1179(557)
		RPM	781	815	849	880	908	938	969	1006
		Watts	558	547	536	524	511	493	474	445
		Amps	2.45	2.41	2.36	2.32	2.26	2.21	2.14	2.04
48	Low	CFM(L/S)	1658(783)	1603(757)	1546(730)	1491(704)	1427(674)	1354(639)	1265(598)	1125(531)
		RPM	747	779	811	843	871	903	932	972
		Watts	510	500	489	478	464	449	431	405
		Amps	2.33	2.3	2.26	2.23	2.19	2.14	2.09	2.02
	Middle	CFM(L/S)	1837(868)	1776(839)	1724(814)	1647(778)	1576(744)	1502(709)	1413(667)	1295(611)
		RPM	816	845	869	894	918	942	964	992
		Watts	615	602	587	575	558	542	522	498
		Amps	2.84	2.8	2.76	2.72	2.67	2.63	2.58	2.51
	High	CFM(L/S)	2019(954)	1954(923)	1892(893)	1819(859)	1745(825)	1656(782)	1565(739)	1459(689)
		RPM	891	910	931	949	968	986	1002	1020
		Watts	756	741	723	706	689	672	649	627
		Amps	3.54	3.5	3.45	3.41	3.35	3.3	3.23	3.16
60	Low	CFM(L/S)	2064(975)	2004(946)	1942(917)	1875(886)	1806(853)	1726(815)	1643(776)	1538(726)
		RPM	905	929	953	974	993	1011	1028	1045
		Watts	731	712	687	666	643	618	595	570
		Amps	3.19	3.11	3.03	2.94	2.86	2.77	2.69	2.61
	Middle	CFM(L/S)	2177(1028)	2111(997)	2041(964)	1971(931)	1886(891)	1806(853)	1704(804)	1604(758)
		RPM	955	973	992	1007	1021	1036	1052	1065
		Watts	807	779	751	730	703	679	651	624
		Amps	3.54	3.43	3.34	3.26	3.16	3.08	2.98	2.89
	High	CFM(L/S)	2277(1075)	2209(1043)	2135(1008)	2056(971)	1974(932)	1881(888)	1781(841)	1668(788)
		RPM	998	1012	1023	1036	1049	1060	1071	1082
		Watts	878	852	828	801	777	747	719	687
		Amps	3.92	3.81	3.72	3.64	3.53	3.43	3.33	3.22

* The above airflow data for reference only.

- The air distribution system has the greatest effect on airflow. The duct system is totally controlled by the contractor. For this reason, the contractor should use only industry-recognized procedures.
- Heat pump systems require a specified airflow. Each ton of cooling requires between 350 and 450 cubic feet of air per minute (CFM), or 400 CFM nominally.
- Duct design and construction should be carefully done. System performance can be lowered dramatically through bad planning or workmanship.
- Air supply diffusers must be selected and located carefully. They must be sized and positioned to deliver treated air along the perimeter of the space. If they are too small for their intended airflow, they become noisy. If they are not located properly, they cause drafts. Return air grilles must be properly sized to carry air back to the blower. If they are too small, they also cause noise.
- The installers should balance the air distribution system to ensure proper quiet airflow to all rooms in the home. This ensures a comfortable living space.
- An air velocity meter or airflow hood can give a reading of system CFM.
- When installation, installer should select the air speed according to the actual setting static pressure.

Electrical Data

14 SEER Heat Pump W/Without Electric Heat

Size (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	Electric Heat Option				MCA ¹ (Amps)	Max Fuse ² / Breaker ³ Size (Amps)
		RLA	LRA	MCC			Model	kW	Stages	Amps		
024 (2.0)	208/230-1-60	13.5A	58A	21.0A	0.57A	1.73A	None	-	-	None	19.3	30
							EHK-05C	3.8/5	1	18.1/20.8	41.9/45.3	50/50
							EHK-08C	5.6/7.5	1	27.1/31.3	53.2/58.4	60/60
							EHK-10C	7.5/10	1	36.1/41.7	64.4/71.4	70/80
030 (2.5)	208/230-1-60	14.1A	73A	22.0A	1.08A	2.03A	None	-	-	None	20.8	30
							EHK-05C	3.8/5	1	18.1/20.8	43.4/46.8	50/50
							EHK-08C	5.6/7.5	1	27.1/31.3	54.6/59.9	60/60
							EHK-10C	7.5/10	1	36.1/41.7	65.9/72.4	70/80
036 (3.0)	208/230-1-60	16.7A	79A	26.0A	1.08A	2.45A	EHK-15C	11.3/15	2	54.2/62.5	88.5/98.9	90/100
							None	-	-	None	24.5	40
							EHK-05C	3.8/5	1	18.1/20.8	47.1/50.5	50/60
							EHK-08C	5.6/7.5	1	27.1/31.3	58.3/63.6	60/70
036 (3.0)	208/230-3-60	10.4A	73A	16.3A	1.08A	2.45A	EHK-10C	7.5/10	1	36.1/41.7	69.6/76.6	70/80
							EHK-15C	11.3/15	2	54.2/62.5	92.2/102.6	100/110
							None	-	-	None	16.6	25
							EHK-10D	7.5/10	1	20.9/24.1	42.7/46.7	45/50
042 (3.5)	208/230-1-60	17.9A	112A	27.8A	1.74A	3.53A	EHK-15D	11.3/15	2	31.4/36.1	55.8/61.7	60/70
							None	-	-	None	27.7	40
							EHK-05C	3.8/5	1	18.1/20.8	50.3/53.7	60/60
							EHK-08C	5.6/7.5	1	27.1/31.3	61.5/66.8	70/70
048 (4.0)	208/230-1-60	21.8A	117A	34.0A	1.74A	3.54A	EHK-10C	7.5/10	1	36.1/41.7	72.8/79.8	80/80
							EHK-15C	11.3/15	2	54.2/62.5	95.4/105.8	100/110
							EHK-20C	15/20	2	72.2/83.3	117.9/131.8	125/150
							None	-	-	None	32.6	50
048 (4.0)	208/230-3-60	13.7A	83.1A	21.4A	1.74A	3.54A	EHK-05C	3.8/5	1	18.1/20.8	55.2/58.6	70/70
							EHK-08C	5.6/7.5	1	27.1/31.3	66.5/71.7	80/80
							EHK-10C	7.5/10	1	36.1/41.7	77.7/84.7	90/90
							EHK-15C	11.3/15	2	54.2/62.5	100.3/110.7	110/125
060 (5.0)	208/230-1-60	26.4A	134A	41.2A	1.74A	5.5A	EHK-20C	15/20	2	72.2/83.3	122.8/136.7	150/150
							None	-	-	None	22.5	35
							EHK-10D	7.5/10	1	20.9/24.1	48.6/52.6	50/60
							EHK-15D	11.3/15	2	31.4/36.1	61.7/67.6	70/70
060 (5.0)	208/230-3-60	16A	110A	24.9A	1.74A	5.5A	EHK-20D	15/20	2	41.7/48.2	74.6/82.7	80/90
							None	-	-	None	40.3	60
							EHK-05C	3.8/5	1	18.1/20.8	62.9/66.3	80/80
							EHK-08C	5.6/7.5	1	27.1/31.3	74.2/79.4	90/90
060 (5.0)	208/230-1-60	16A	110A	24.9A	1.74A	5.5A	EHK-10C	7.5/10	1	36.1/41.7	85.4/92.4	100/100
							EHK-15C	11.3/15	2	54.2/62.5	108.0/118.4	110/125
							EHK-20C	15/20	2	72.2/83.3	130.5/144.4	150/150
							None	-	-	None	27.3	40
060 (5.0)	208/230-3-60	16A	110A	24.9A	1.74A	5.5A	EHK-10D	7.5/10	1	20.9/24.1	53.4/57.4	60/60
							EHK-15D	11.3/15	2	31.4/36.1	66.5/72.4	70/80
							EHK-20D	15/20	2	41.7/48.2	79.4/87.5	80/90
							None	-	-	None	27.3	40

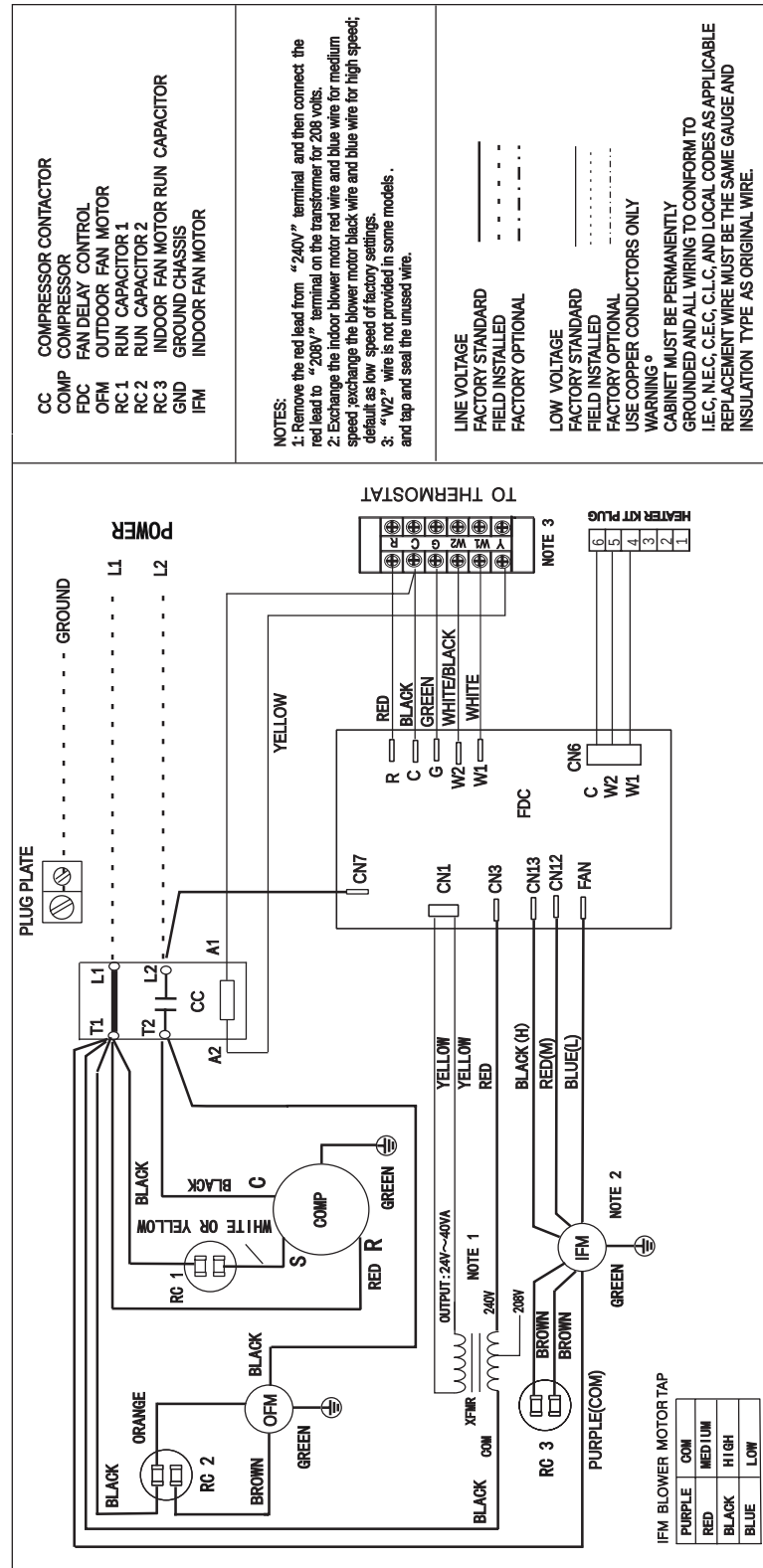
14 SEER Cooling only W/Without Electric Heat

Size (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	Electric Heat Option				MCA ¹ (Amps)	Max Fuse ² / Breaker ³ Size (Amps)
		RLA	LRA	MCC			Model	kW	Stages	Amps		
024 (2.0)	208/230-1-60	13.5A	58A	21.0A	0.57A	1.73A	None	-	-	-	19.3	30
							EHK-05C	3.8/5	1	18.1/20.8	24.8/28.2	30/30
							EHK-08C	5.6/7.5	1	27.1/31.3	36.1/41.3	40/45
							EHK-10C	7.5/10	1	36.1/41.7	47.3/54.3	50/60
030 (2.5)	208/230-1-60	14.1A	73A	22.0A	1.08A	2.03A	None	-	-	-	19.4	30
							EHK-05C	3.8/5	1	18.1/20.8	25.4/28.8	30/30
							EHK-08C	5.6/7.5	1	27.1/31.3	36.7/41.9	40/45
							EHK-10C	7.5/10	1	36.1/41.7	47.9/54.9	50/60
							EHK-15C	11.3/15	2	54.2/62.5	70.5/80.9	80/90
036 (3.0)	208/230-1-60	16.7A	79A	26.0A	1.08A	2.45A	None	-	-	-	24.5	40
							EHK-05C	3.8/5	1	18.1/20.8	25.7/29.1	40/40
							EHK-08C	5.6/7.5	1	27.1/31.3	37.0/42.2	40/45
							EHK-10C	7.5/10	1	36.1/41.7	48.2/55.2	50/60
							EHK-15C	11.3/15	2	54.2/62.5	70.9/81.2	80/90
036 (3.0)	208/230-3-60	10.4A	73A	16.3A	1.08A	2.45A	None	-	-	-	16.6	25
							EHK-10D	7.5/10	1	20.9/24.1	29.2/33.2	30/35
							EHK-15D	11.3/15	2	31.4/36.1	42.4/48.2	45/50
042 (3.5)	208/230-1-60	17.9A	112A	27.8A	1.08A	3.53A	None	-	-	-	27	40
							EHK-05C	3.8/5	1	18.1/20.8	27.3/30.7	40/40
							EHK-08C	5.6/7.5	1	27.1/31.3	38.5/43.8	40/45
							EHK-10C	7.5/10	1	36.1/41.7	49.8/56.8	50/60
							EHK-15C	11.3/15	2	54.2/62.5	72.4/82.8	80/90
							EHK-20C	15/20	2	72.2/83.3	94.9/108.8	100/110
048 (4.0)	208/230-1-60	21.8A	117A	34.0A	1.74A	3.54A	None	-	-	-	32.6	50
							EHK-05C	3.8/5	1	18.1/20.8	32.6/32.6	50/50
							EHK-08C	5.6/7.5	1	27.1/31.3	38.3/43.6	50/50
							EHK-10C	7.5/10	1	36.1/41.7	49.6/56.6	50/60
							EHK-15C	11.3/15	2	54.2/62.5	72.2/82.6	80/90
048 (4.0)	208/230-3-60	13.7A	83.1A	21.4A	1.74A	3.54A	None	-	-	-	22.5	35
							EHK-10D	7.5/10	1	20.9/24.1	30.6/34.6	35/35
							EHK-15D	11.3/15	2	31.4/36.1	43.7/49.6	45/50
							EHK-20D	15/20	2	41.7/48.2	56.6/64.7	60/70
060 (5.0)	208/230-1-60	26.4A	134A	41.2A	1.74A	5.5A	None	-	-	-	40.3	60
							EHK-05C	3.8/5	1	18.1/20.8	40.3/40.3	60/60
							EHK-08C	5.6/7.5	1	27.1/31.3	40.8/46.0	60/60
							EHK-10C	7.5/10	1	36.1/41.7	52.0/59.0	60/60
							EHK-15C	11.3/15	2	54.2/62.5	74.7/85.0	80/90
							EHK-20C	15/20	2	72.2/83.3	97.2/111.0	100/125
060 (5.0)	208/230-3-60	16A	110.0A	24.9A	1.74A	5.5A	None	-	-	-	27.3	40
							EHK-10D	7.5/10	1	20.9/24.1	33.0/37.0	40/40
							EHK-15D	11.3/15	2	31.4/36.1	46.2/52.0	50/60
							EHK-20D	15/20	2	41.7/48.2	59.0/67.2	60/70
							EHK-25D	18.8/25	2	52.2/60.2	72.2/82.2	80/90

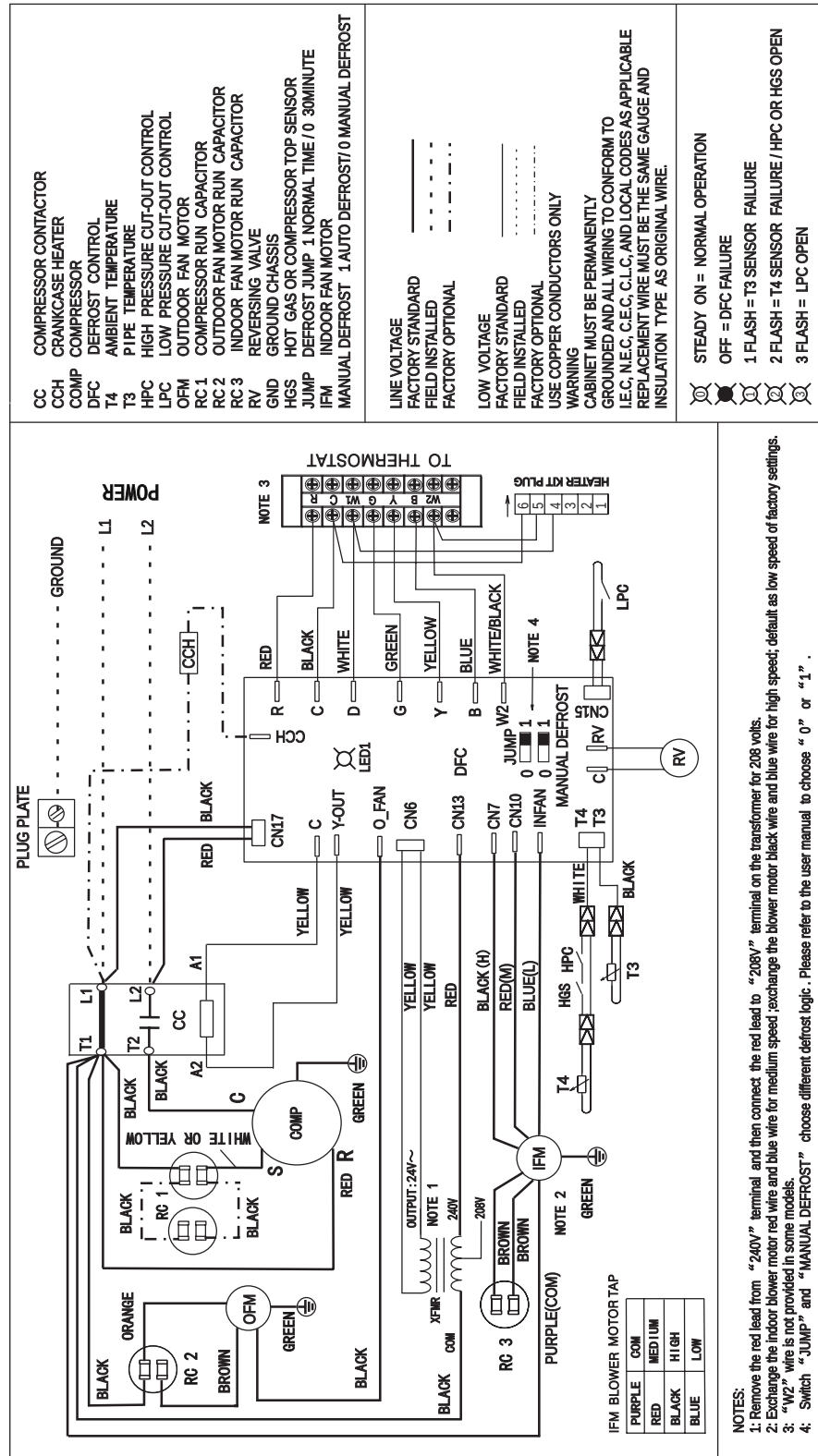
1. Minimum Circuit Ampacity.
2. Maximum Over Current Protection per Standard UL 1995.
3. Fuse or HACR circuit breaker size installed at factory or field installed.

Wiring Diagrams

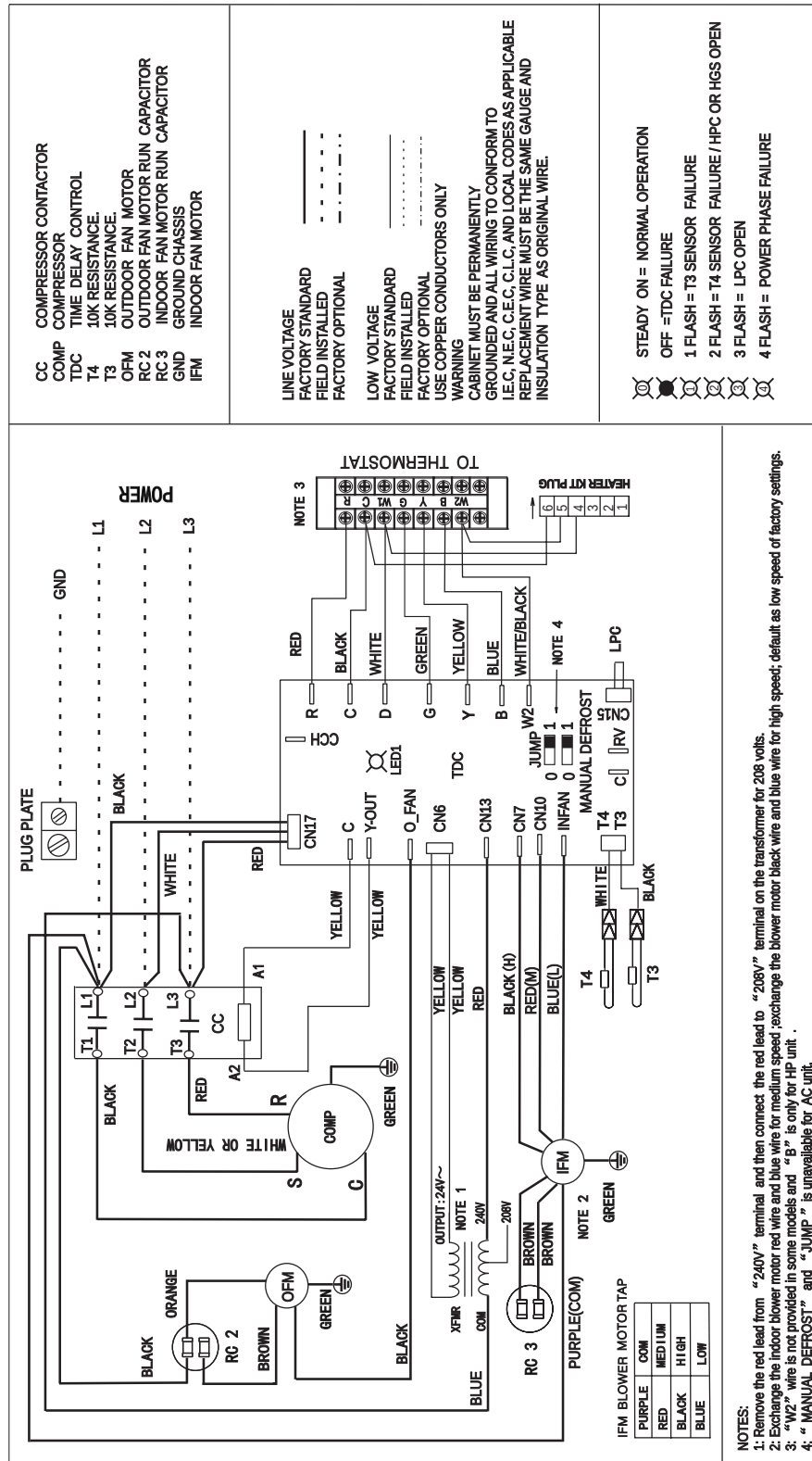
AC System Wiring Diagram (24/30/36/42/48/60K 1 phase)



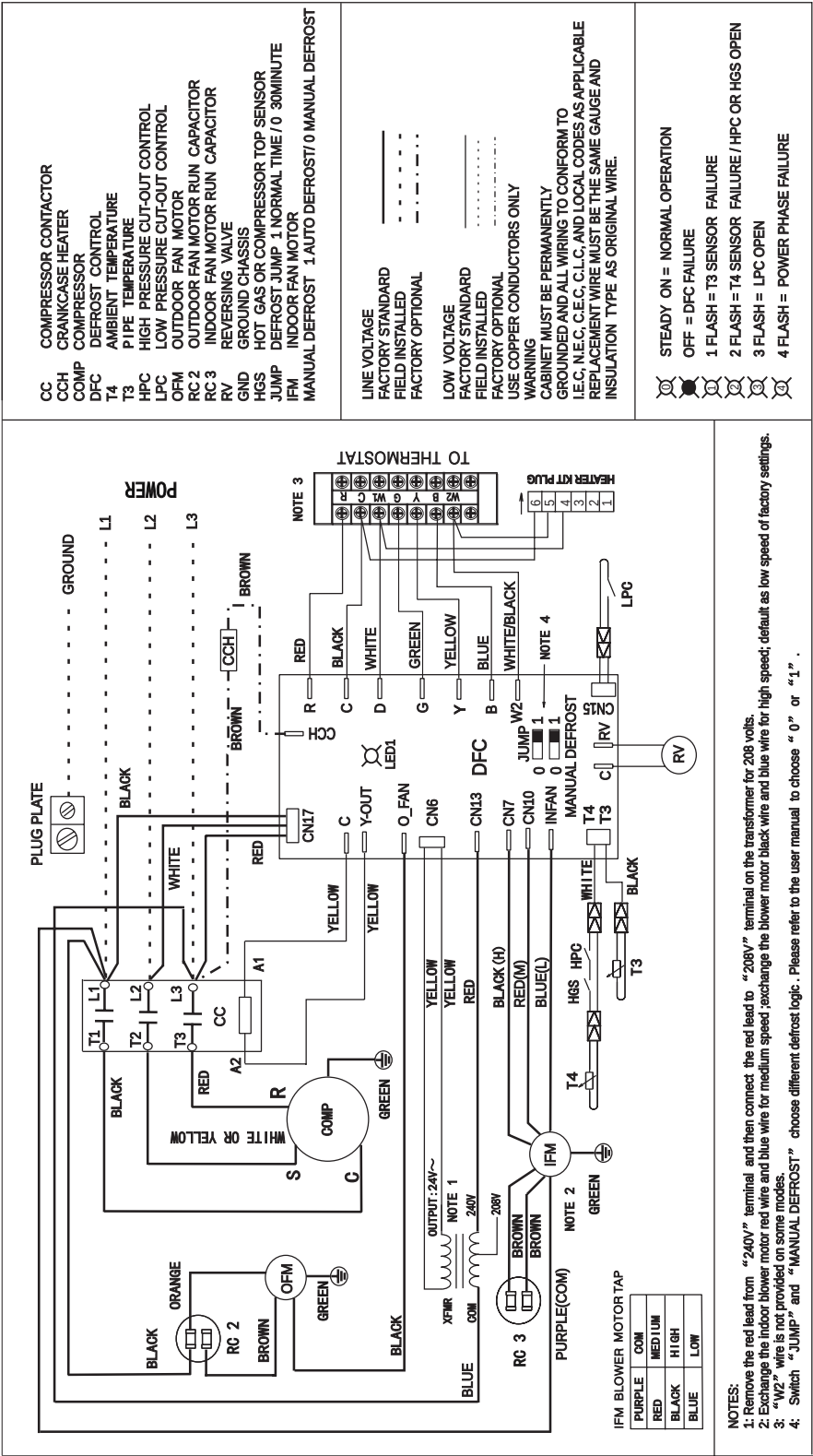
HP System Wiring Diagram (24/30/36/42/48/60K 1 phase)



AC System Wiring Diagram (36/48/60K 3 phase)

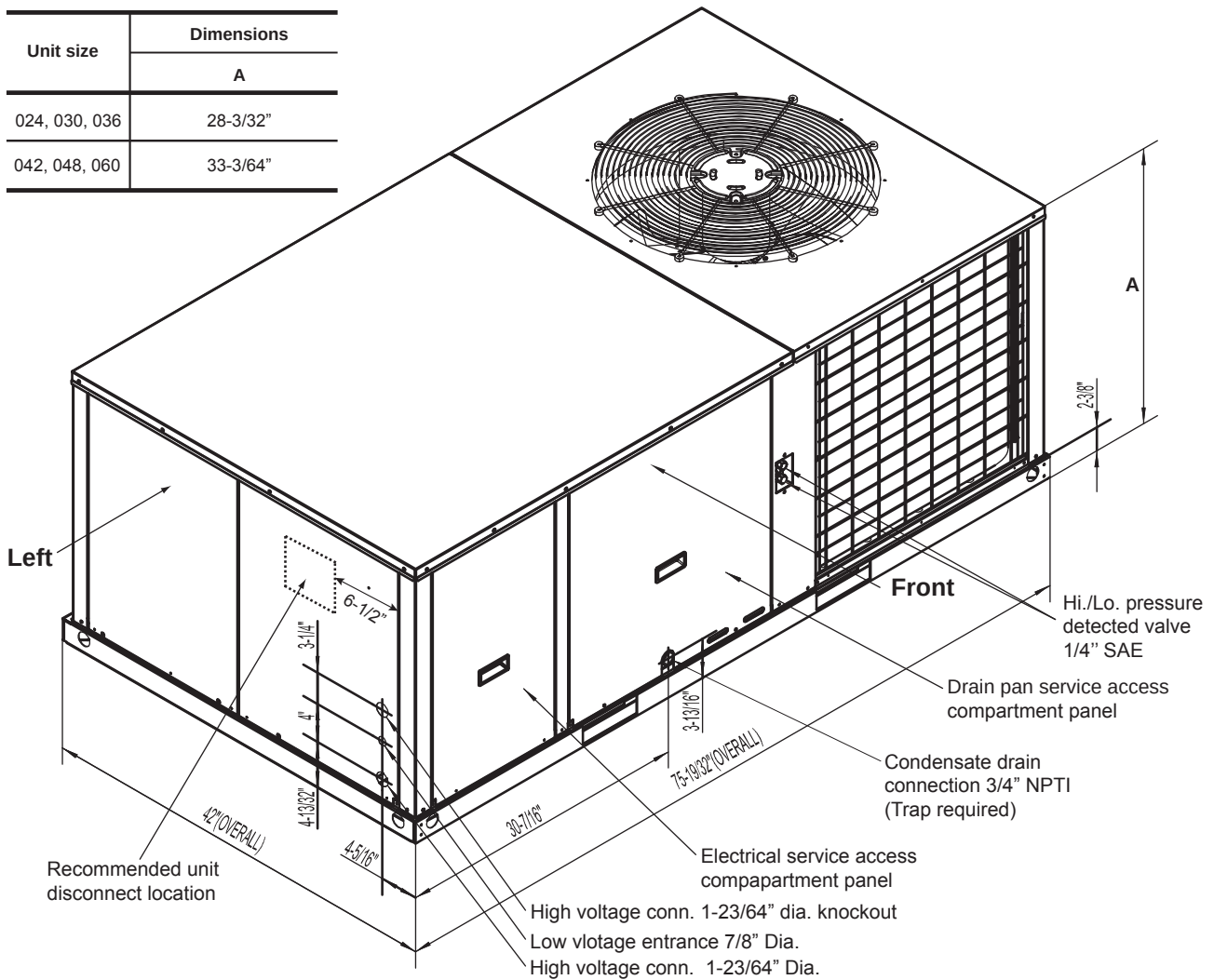


HP System Wiring Diagram (36/48/60K 3 phase)



Unit Dimensions

Unit size	Dimensions
	A
024, 030, 036	28-3/32"
042, 048, 060	33-3/64"



Unit Dimensions

Unit Clearance

Direction	Distance (in.)	Direction	Distance (in.)
Top ¹	60	Right	12
Front	30	Left	24
Rear	18 ²	Bottom ³	0

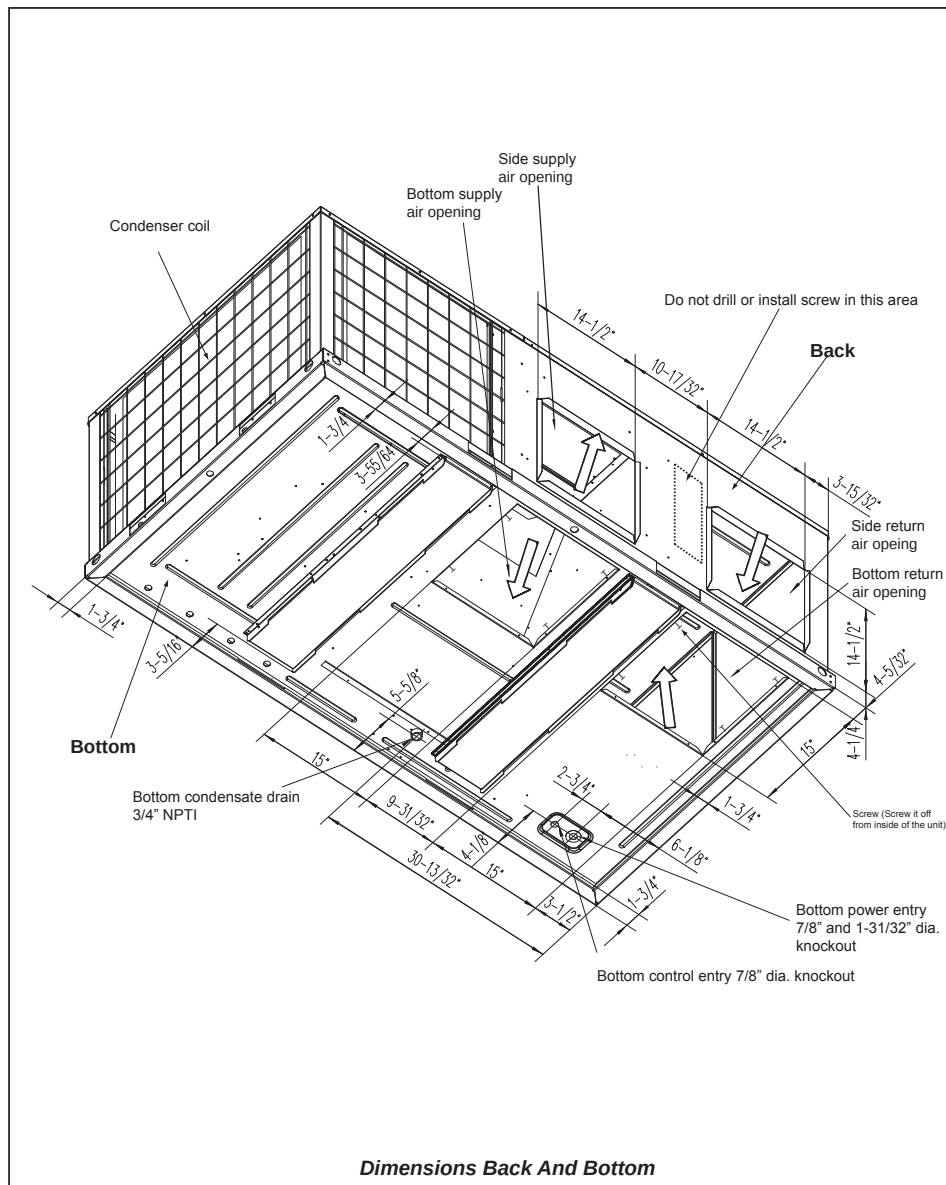
Duct clearance: 1 inch clearance for all sides of air supply duct.

- Units must be installed outdoors. Over hanging structure or shrubs should not obscure condenser air discharge outlet.
- The minimum clearance without economizer/fresh air damper. For distance with Economizer/fresh air damper, please refer to the relevant Install requirement.

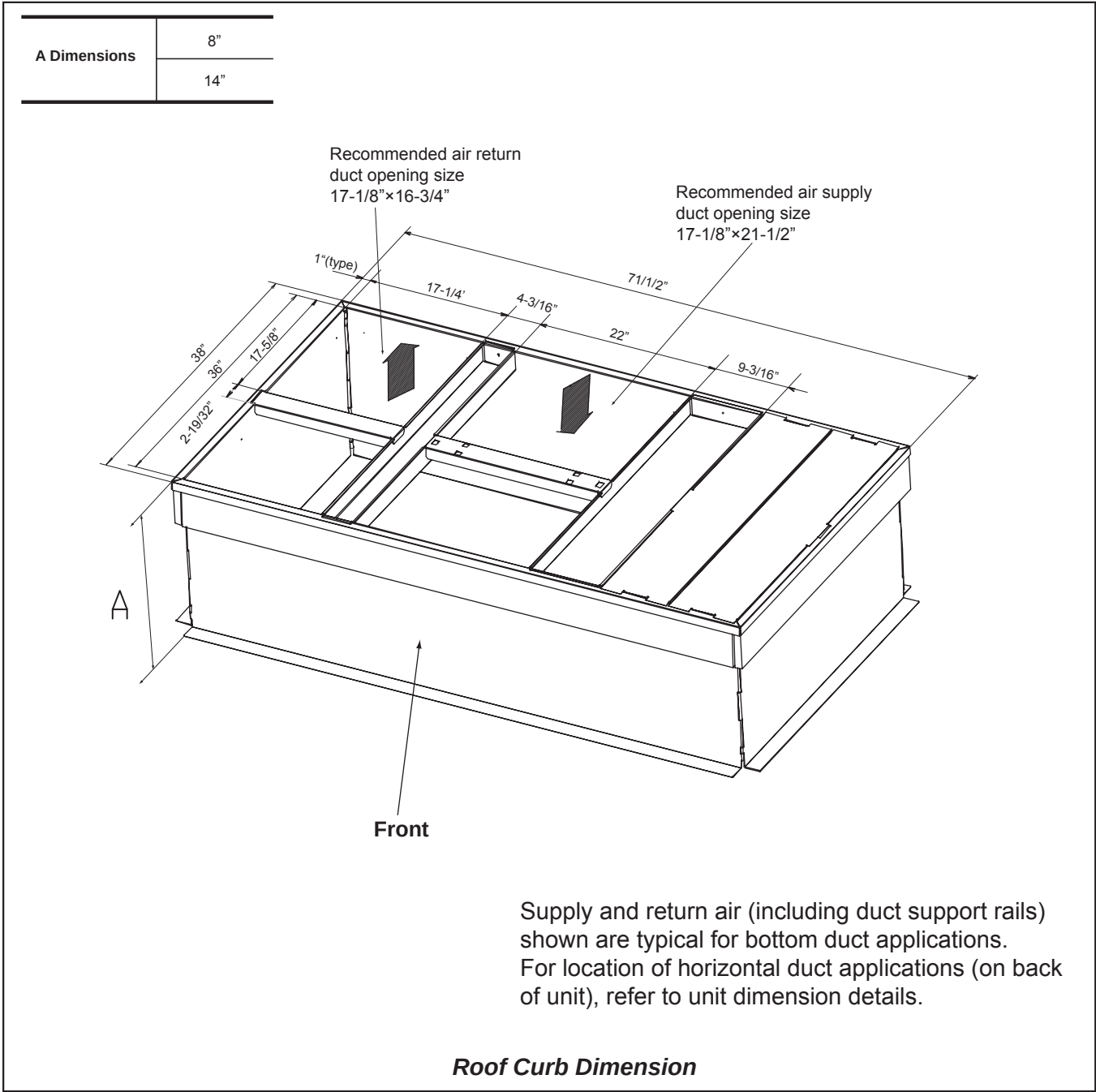


NOTE

For units applied with a roof curb, the minimum clearance may be reduced from 1 inch to 1/2 inch between combustible roof curb material and this supply air duct.



* The above figures for reference purpose only.

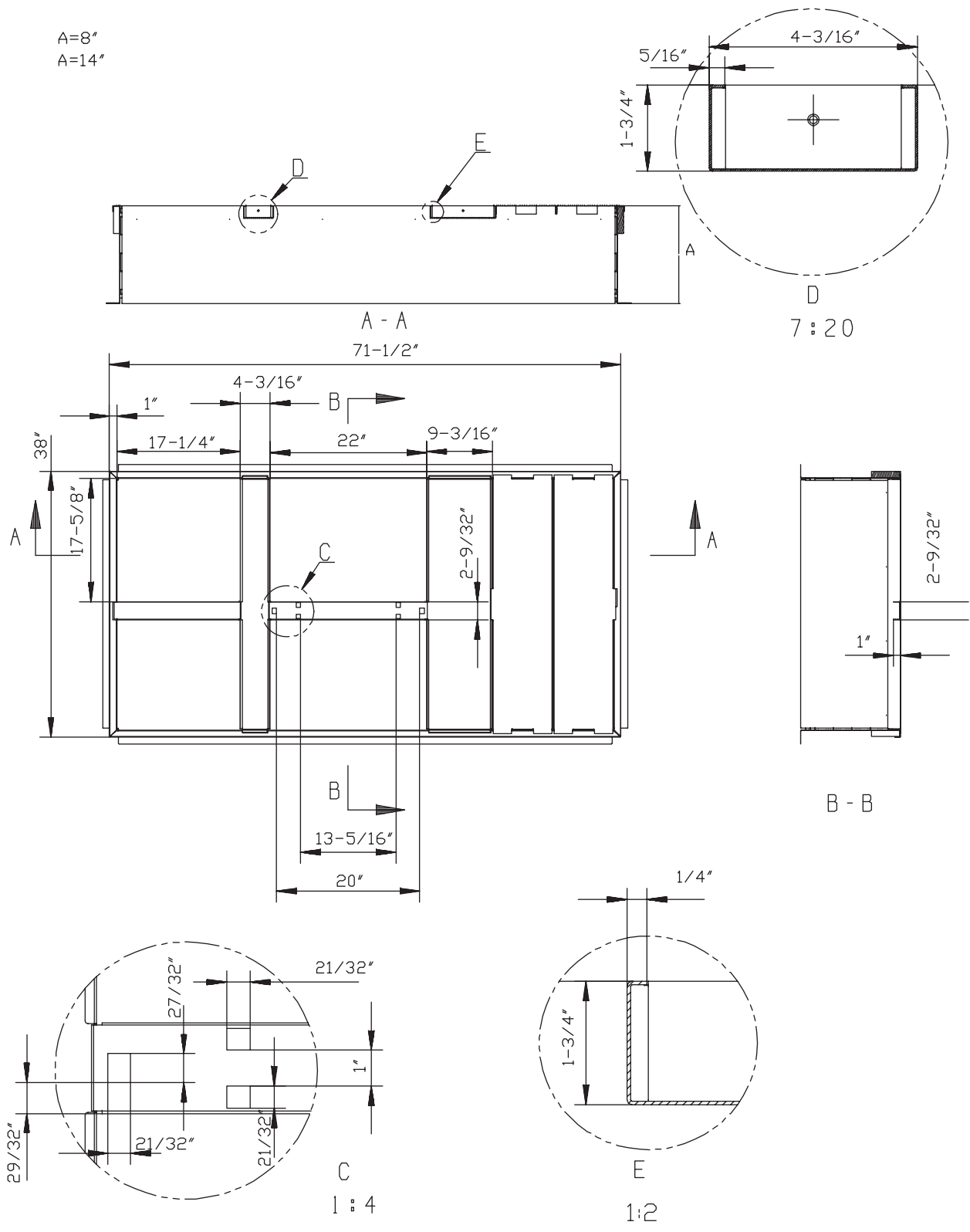


* The above figures for reference purpose only.

	NOTE
Be sure to note supply and return openings. Refer to the aboved pictures for information concerning rear and bottom supply and return air duct openings.	

ROOF CURB

On applications when a roof curb is used, the unit must be positioned on the curb so the front of the unit is tight against the curb.



Roof Curb Details