

### 10AC DIPLOMAT™ SERIES CONDENSING UNITS RFC™ SYSTEMS 10.05 to 10.55 SEER

\*11,100 to 60,000 Btuh (3.3 to 17.6 kW) Cooling Capacity  
1 thru 5 Tons (3.5 to 17.6 kW)

\*ARI and DOE Certified Ratings

Bulletin No. 210044

April 1994

Supersedes September 1993



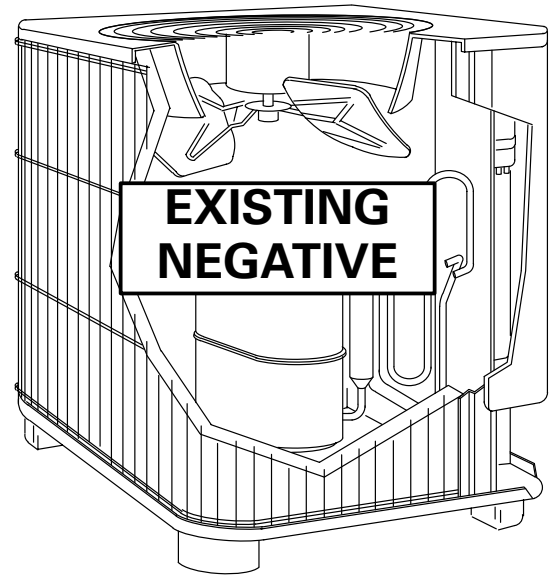
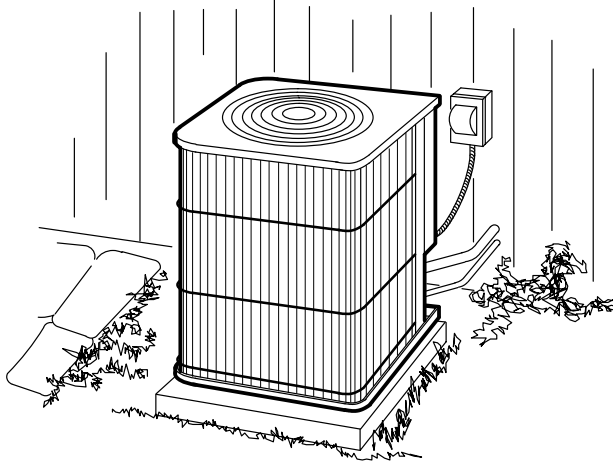
CERTIFICATION APPLIES ONLY  
WHEN THE COMPLETE  
SYSTEM IS LISTED  
WITH ARI



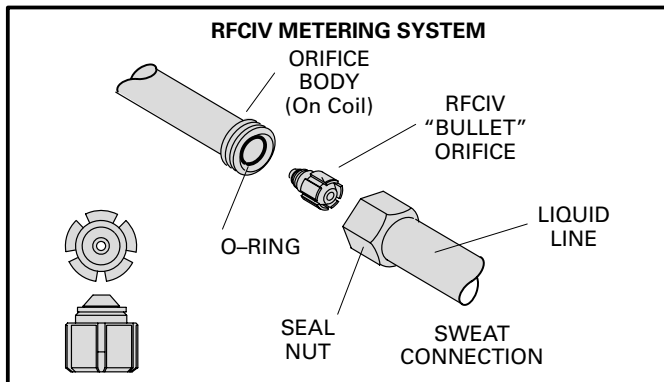
CERTIFICATION APPLIES ONLY  
WHEN USED WITH PROPER  
COMPONENTS AS LISTED  
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#### Typical Application



#### FEATURES



**Refrigerant Flow Control (RFC)** — 10AC units are applicable to RFCIV systems when matched with specific indoor coils. RFC™ (Refrigerant Flow Control) is a very accurate means of metering refrigerant in a system. Metering control is accomplished by the exact sizing of the refrigerant metering orifice located in the distributor on the coil. The entire principle of the RFC system involves the matching of the indoor coil with the proper size orifice in the metering device. The RFC system equalizes pressures instantly after the compressor stops, eliminating the need for any extra controls and allowing the compressor to start unloaded.

**Application** — 10AC series model condensing units feature high efficiency with minimum operating sound levels. Extra large condensing coil, coil circuiting and high condenser air volume result in high SEER's. Units are applicable to RFC systems only and may be installed at ground level or on a roof. Units match up to a variety of blower powered or add-on evaporators for a wide selection of cooling capacities for selective sizing and application versatility. For evaporator unit data, see tab Coils — Blower Coil Units in this section. Units are shipped completely assembled, piped and wired. Each unit is test operated at the factory to insure proper operation. Installer has only to set unit in desired location, connect refrigerant lines and make electrical connections to complete a low cost installation.

**Approvals** — Condensing units have been tested in the rated according to U.S. Department of Energy (DOE) test procedures and in accordance with ARI Standard 210/240-89. Units have been sound rated in reverberant sound test room in accordance with ARI Standard 270-84. Condensing units and components within are bonded for grounding to meet safety standards for servicing required by U.L., N.E.C. and C.E.C. Units are U.L. listed and C.S.A. certified.

**Equipment Warranty** — Compressor has a limited warranty for five years. All other components have a limited warranty for one year. Refer to the Diplomat Equipment Limited Warranty certificate included with the unit for details.

**Weather Resistant Cabinet and Base Section** — Heavy gauge galvanized steel cabinet and base section are subjected to a five station metal wash process prior to a finish coat application of baked-on outdoor enamel. Attractive enamel finish provides the cabinet and base section with long lasting protection from rust and corrosion. Drainage holes are provided in the base section for moisture removal. High density polyethylene base supports raise the unit off of the mounting surface away from damaging moisture.

**Copper Tube/Enhanced Fin Outdoor Coil** — Coil is constructed of precisely spaced ripple-edged aluminum fins machine fitted to seamless copper tubes. Four-sided wrap-around coil configuration provides extra large surface area with low air resistance. Lanced fins provide maximum exposure of the fin surface to air stream resulting in excellent heat transfer. Fins are equipped with collars that grip the tubing for maximum contact area. Precise circuiting provides uniform refrigerant distribution for high efficiency. Flared shoulder tubing connections and silver soldering result in tight, leakproof joints. Long-life copper tubing is corrosion-resistant and easy to field service. Coil is factory tested under high pressure to insure leakproof construction. Entire coil is accessible for cleaning. Corrosion-resistant PVC coated steel wire condenser coil guard is furnished as standard.

**Refrigerant Line Connections, Electrical Inlets and Service Valves** — Suction and liquid line connections are located outside of the unit cabinet and are made with sweat connections. Fully serviceable brass service valves prevent corrosion and provide easy access to refrigerant system. Suction valve can be fully shut off, while the liquid valve may be backseated to manage refrigerant charge while servicing the system. Field installed thermometer well is furnished for installation in the liquid line. Valves and gauge ports are accessible outside of the unit cabinet. See dimension drawing.

## FEATURES (Continued)

**Dependable and Quiet Compressor** — Compressor is hermetically sealed and provides trouble-free operation and long service life. Built-in protection devices assure protection from excessive current and temperatures. Refrigeration cooled and overload protected. 10AC12 is equipped with a rotary compressor. 10AC42, 10AC48 and 10AC60 models are furnished with a crankcase heater as standard equipment to ensure proper compressor lubrication at all times. Heater is temperature actuated to operate only when required. The compressor components are spring mounted within the sealed housing. Also, the compressor is installed in the unit on resilient rubber mounts for quiet and vibration free operation. Muffler, factory installed in discharge line, reduces operating sound levels on 10AC36, 10AC42, 10AC48 and 10AC60 models.

## OPTIONAL EQUIPMENT (Must Be Ordered Extra)

**Crankcase Heater (Optional)** — Available for 10AC18 thru 10AC36 models. Crankcase heaters P-8-8852 (68887) are not furnished and must be ordered extra. Heater prevents migration of liquid refrigerant into the compressor and ensures proper compressor lubrication. 10AC42, 10AC48 and 10AC60 model compressors are equipped with crankcase heaters furnished as standard.

**Mounting Base (Optional)** — Mounting base provides a permanent foundation for condensing units. High density polyethylene structural material is lightweight, sturdy, sound absorbing and will withstand the effects of sun, heat, cold, moisture, oil and refrigerant. Will not mildew or decompose. Can be shipped singly or in packages of six to a carton. Use MB1-24 (78H50) 32" x 34" x 3" (813 mm x 864 mm x 76 mm), shipping weight 15 lbs. (7 kg) each.

☞ **Compressor Monitor (Optional)** — Compressor monitor T6-1469 (45F08) is available for field installation. Non-adjustable switch (low ambient cut-out) prevents compressor operation when outdoor temperature is below 35°F (2°C).

**Powerful Condenser Fan** — Efficient direct drive fan moves large air volumes uniformly through the entire condenser coil resulting in high refrigerant cooling capacity. Vertical discharge of air minimizes operating sounds and eliminates hot air damage to lawn and shrubs. Fan motor is inherently protected and totally enclosed for maximum protection from weather, dust and corrosion. Rain shield on motor provides additional protection from moisture. Fan service access is provided by removal of fan the guard. Corrosion-resistant PVC coated steel wire fan guard is furnished as standard.

**Accessible Control Box** — Conveniently located for easy access. All controls are pre-wired at the factory.

**Thermostat (Optional)** — Thermostat is not furnished with the unit and must be ordered extra.

**Refrigerant Line Kits (Optional)** — Lines are available in several lengths. See Refrigerant Line Kit table. Lines (suction and liquid) are shipped refrigeration clean. Lines are cleaned, dried and pressurized and sealed at the factory. Suction line is fully insulated. Lines are furnished with a flare fitting (evaporator unit connection) at one end and stubbed (no fitting) at the opposite end for connection to condensing unit. Kits are not available for the 10AC12 and 10AC60 models and must be furnished by the installer.

**Timed-Off Control (Optional)** — Timed off control LB-61378A (47J35) prevents compressor short-cycling and also allows time for suction and discharge pressure to equalize, permitting the compressor to start in an unloaded condition. Automatic reset control provides a five minute time delay between compressor shutoff and start-up. (Standard on 10AC60)

## SPECIFICATIONS

Model No.			10AC12	10AC18	10AC24	10AC30
Condenser Coil	Net face area - sq. ft. (m <sup>2</sup> )	Outer coil	12.60 (1.17)	12.60 (1.17)	12.60 (1.17)	14.70 (1.37)
		Inner coil	----	----	----	----
	Tube diameter — in. (mm) & no. of rows		3/8 (9.5) — 1	3/8 (9.5) — 1	3/8 (9.5) — 1	3/8 (9.5) — 1
	Fins per inch (m)		20 (787)	20 (787)	20 (787)	20 (787)
Condenser Fan	Diameter — in. (mm) & no. of blades		20 (508) — 3	20 (508) — 3	20 (508) — 3	20 (508) — 3
	Motor hp (W)		1/6 (124)	1/6 (124)	1/6 (124)	1/6 (124)
	Cfm (L/s)		2500 (1180)	2500 (1180)	2500 (1180)	2700 (1275)
	Rpm		850	850	850	850
	Watts		200	200	200	205
*Refrigerant charge furnished (HCFC-22)			4 lbs. 4 oz. (1.93 kg)	4 lbs. 12 oz. (2.15 kg)	5 lbs. 5 oz. (2.41 kg)	5 lbs. 9 oz. (2.52 kg)
Liquid line — in. (mm) o.d. connection (sweat)			**3/8 (9.5)	***3/8 (9.5)	***3/8 (9.5)	3/8 (9.5)
Suction line — in. (mm) o.d. connection (sweat)			1/2 (12.7)	5/8 (15.8)	5/8 (15.8)	3/4 (19)
Shipping weight — lbs. (kg) 1 package			121 (55)	153 (69)	154 (70)	168 (76)

\*Refrigerant charge sufficient for 20 ft. (6.1 m) length of refrigerant lines.

\*\*Furnished with 3/8 in. x 1/4 in. (9.5mm x 6.4 mm) reducer adaptor for refrigerant line connections.

\*\*\*Furnished with 3/8 in. x 5/16 in. (9.5 mm x 8 mm) reducer adaptor for refrigerant line connections.

## SPECIFICATIONS

Model No.			10AC36	10AC42	10AC48	10AC60
Condenser Coil	Net face area - sq. ft. (m <sup>2</sup> )	Outer coil	14.70 (1.37)	14.70 (1.37)	20.00 (1.86)	20.00 (1.86)
		Inner coil	----	9.80 (0.91)	----	15.40 (1.43)
	Tube diameter — in. (mm) & no. of rows		3/8 (9.5) — 1	3/8 (9.5) — 1.67	3/8 (9.5) — 1	3/8 (9.5) — 1.77
	Fins per inch (m)		20 (787)	20 (787)	20 (787)	20 (787)
Condenser Fan	Diameter — in. (mm) & no. of blades		20 (508) — 3	24 (610) — 4	24 (610) — 4	24 (610) — 4
	Motor hp (W)		1/6 (124)	1/4 (187)	1/4 (187)	1/4 (187)
	Cfm (L/s)		2700 (1275)	3900 (1840)	3900 (1840)	4000 (1885)
	Rpm		840	835	835	830
	Watts		205	340	340	355
*Refrigerant charge furnished (HCFC-22)			6 lbs. 3 oz. (2.81 kg)	7 lbs. 5 oz. (3.32 kg)	8 lbs. 13 oz. (4.00 kg)	11 lbs. 2 oz. (5.05 kg)
Liquid line — in. (mm) in. o.d. connection (sweat)			3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
Suction line — in. (mm) o.d. connection (sweat)			3/4 (19)	7/8 (22.2)	7/8 (22.2)	1-1/8 (28.5)
Shipping weight lbs. (kg) 1 package			182 (83)	238 (108)	238 (108)	271 (123)

\*Refrigerant charge sufficient for 20 ft. (6.1 m) length of refrigerant lines.

## ELECTRICAL DATA

Model No.		10AC12	10AC18	10AC24	10AC30
Line voltage data — 60 hz		208/230v 1ph	208/230v 1ph	208/230v 1ph	208/230v 1ph
Compressor	Rated load amps	5.0	8.6	9.8	13.7
	Power factor	.97	.97	.96	.99
	Locked rotor amps	26.3	49.0	56.0	75.0
Condenser Coil Fan Motor	Full load amps	1.1	1.1	1.1	1.1
	Locked rotor amps	1.7	1.7	1.7	1.7
Rec. maximum fuse or circuit breaker size (amps)		15	20	20	30
*Minimum circuit ampacity		7.4	12.0	13.4	18.2

\*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

NOTE — Extremes of operating range are plus 10% and minus 5% of line voltage.

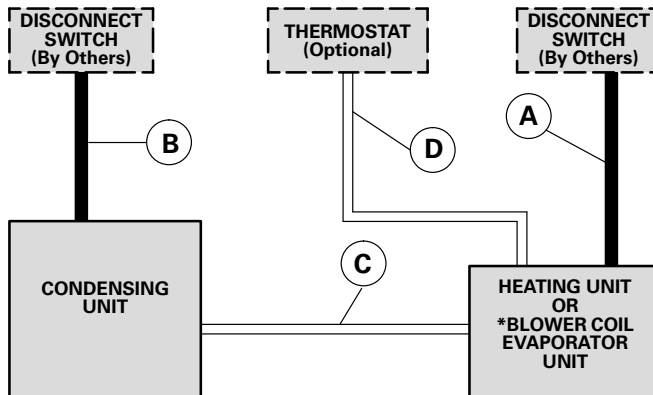
## ELECTRICAL DATA

Model No.		10AC36	10AC42	10AC48	10AC60
Line voltage data — 60 hz		208/230v 1ph	208/230v 1ph	208/230v 1ph	208/230v 1ph
Compressor	Rated load amps	16.2	18.3	22.5	30.8
	Power factor	.91	.94	.97	.98
	Locked rotor amps	96.0	102.0	110.0	147.0
Condenser Coil Fan Motor	Full load amps	1.1	1.7	1.7	1.7
	Locked rotor amps	1.7	3.1	3.1	3.1
Rec. maximum fuse or circuit breaker size (amps)		35	40	50	60
*Minimum circuit ampacity		21.3	24.6	30.0	40.2

\*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

NOTE — Extremes of operating range are plus 10% and minus 5% of line voltage.

## FIELD WIRING



A — Two Wire Power

B — Two Wire Power — See Electrical Data

C — Two Wire Low Voltage — 18 ga. minimum

D — Four Wire Low Voltage (Electro-Mechanical) 18 ga. minimum

Five Wire Low Voltage (Electronic) 18 ga. minimum

NOTE — Field Wiring Not Furnished

All wiring must conform to NEC or CEC and local electrical codes.

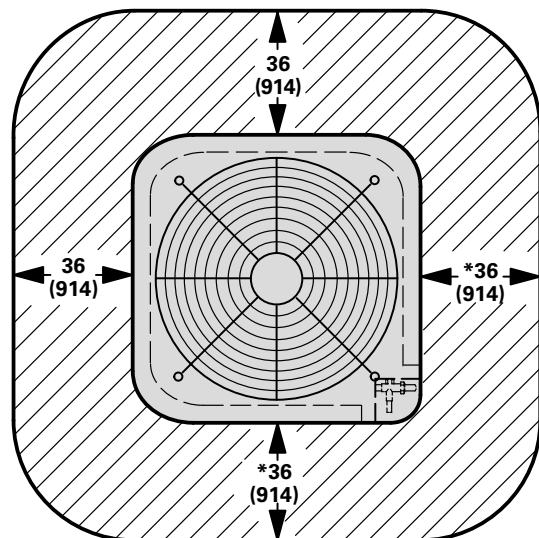
## REFRIGERANT LINE KITS

Condensing Unit Model No.	Line Set Model No.	Length of Lines		Liquid Line Outside Dia.		Suction Line Outside Dia.	
		ft.	m	in.	mm	in.	mm
**10AC12	*Not avail.	----	----	**1/4	**6.4	1/2	2.7
**10AC18 **10AC24	L10-21-20	20	6	**5/16	**8	5/8	15.8
	L10-21-25	25	8				
	L10-21-35	35	11				
10AC30 10AC36	L10-41-20	20	6	3/8	9.5	3/4	19
	L10-41-30	30	9				
	L10-41-40	40	12				
10AC42 10AC48	L10-65-30	30	9	3/8	9.5	7/8	22.2
	L10-65-40	40	12				
	L10-65-50	50	15				
10AC60	*Not avail.	----	----	3/8	9.5	1-1/8	28.5

\*Field fabricate.

\*\*10AC12, 10AC18, & 10AC24 units will accept 3/8 in. (9.5 mm) liquid lines. Adaptors furnished with condensing units will allow use with 1/4 in. (6.4 mm) liquid line (10AC12) and 5/16 in. (8 mm) liquid line (10AC18 & 10AC24).

## INSTALLATION CLEARANCES — inches (mm)



NOTE—48 in. (1219 mm) clearance required on top of unit.

\*NOTE—One side must be 36 in. (914 mm) for service.

Two of the remaining three sides may be 12 in. (305 mm).

## ARI RATINGS – RFCIV

Condensing Unit Model No. *ARI Standard 270 SRN (bels)	★ARI Standard 210/240 Ratings					Evaporator Unit			●RFCIV Metering Orifice Size Required
	†SEER (Btuh/ Watts)	EER (Btuh/ Watts)	Cooling Capacity		Total Unit Watts	Up-Flo	Down-Flo	Horizontal	
			Btuh	kW					
10AC12 (7.4)	10.05	9.35	11,100	3.3	1185	C24-21FC/B24	----	CH24-21	0.047 (70J12)
	10.30	10.00	11,600	3.4	1160	C23-26(FC), C23-26W(FC)	----	----	
						C24-26FC/B24, C24-26WFC/B24			
	10.30	10.00	12,000	3.5	1200	----	CR18-21	----	
	10.30	10.00	12,100	3.5	1200	C22-21(FC)/B24	----	CH22-21	
10.30	10.30	12,400	3.6	1205	C22-26(FC)/B24	----	----		
10AC18 (7.6)	10.00	9.45	18,200	5.3	1925	----	----	CH24-21	0.055 (70J13)
	10.05	9.85	18,500	5.4	1880	C24-21FC/B24	----	----	
	10.05	9.70	18,500	5.4	1905	----	----	CH22-21	
	10.05	9.85	18,600	5.4	1890	----	CR18-21	----	
	10.05	9.95	19,000	5.6	1910	C22-21(FC)/B24	----	----	
	10.05	9.95	19,000	5.6	1910	C23-26(FC), C23-26W(FC)	----	----	
						C24-26FC/B24, C24-26WFC/B24			
10.55	10.40	20,000	5.9	1925	C22-26(FC)/B24	----	----		
10AC24 (7.6)	10.00	9.65	23,400	6.9	2425	----	----	CH24-31	0.062 (70J14)
	10.05	9.55	23,600	6.9	2470	C23-26(FC), C23-26W(FC)	----	----	
						C24-26FC/B24, C24-26WFC/B24			
	10.05	9.50	23,800	7.0	2505	----	CR18-31	----	
	10.05	9.70	24,000	7.0	2475	C23-31(FC), C23-31W(FC) C24-31FC/B24, C24-31WFC/B24	----	----	
	10.05	9.65	24,000	7.0	2485	C22-26(FC)/B24	----	----	
	10.05	9.70	24,200	7.1	2495	----	----	CH22-31	
10.55	9.75	24,600	7.2	2525	C22-31(FC)/B24	----	----		
10AC30 (7.6)	10.05	9.60	28,400	8.3	2960	----	----	CH24-31	0.070 (70J15)
	10.05	9.35	28,600	8.4	3060	----	CR18-31	----	
	10.05	9.40	29,000	8.5	3085	C23-31(FC), C23-31W(FC)	----	----	
						C24-31FC/B24, C24-31WFC/B24			
	10.05	9.50	29,000	8.5	3055	----	----	CH22-31	
	10.05	9.50	29,400	8.6	3095	C23-41(FC), C23-41W(FC) C24-41FC/B24, C24-41WFC/B24	----	CH24-41	
	10.55	9.85	30,000	8.8	3045	C22-31(FC)/B24	----	----	
	10.55	9.75	30,600	9.0	3140	C22-41(FC)/B24	----	----	
10.10	9.85	30,600	9.0	3105	----	----	CH22-41		

★Rated in accordance with ARI Standard 210/240; 95°F (35°C) outdoor air temperature, 80°F (27°C) db / 67°F (19°C) wb entering evaporator air with 20 ft. (6.1 m) of connecting refrigerant lines.

\*Sound Rating Number in accordance with ARI Standard 270.

†Seasonal Energy Efficiency Ratio (Btuh/Watt).

●RFCIV metering device furnished with 10AC condensing unit for field installation in evaporator coil.

♻ Canadian usage only.

NOTE — B24 Blowers are not included with ratings for C22/24 and CR22 series coils. B24 is shown for matching purposes only.

NOTE — Shaded area denotes most popular evaporator coil.

## ARI RATINGS — RFCIV

Condensing Unit Model No. *ARI Standard 270 SRN (bels)	★ARI Standard 210/240 Ratings					Evaporator Unit			●RFCIV Metering Orifice Size Required	
	†SEER (Btuh/ Watts)	EER (Btuh/ Watts)	Cooling Capacity		Total Unit Watts	Up-Flo	Down-Flo	Horizontal		
			Btuh	kW						
10AC36 (7.6)	10.00	9.35	34,400	10.1	3680	----	----	CH24-41	0.073 (51J38)	
	10.00	9.40	35,000	10.3	3725	----	----	CH22-41		
	10.00	9.35	35,000	10.3	3745	----	CR18-41	----		
	10.00	9.45	35,000	10.3	3700	C23-41(FC), C23-41W(FC)		----		----
						C24-41FC/B24, C24-41WFC/B24				
	10.00	9.45	35,400	10.4	3745	C23-46(FC) C24-46FC/B24		----		----
10.00	9.65	36,400	10.7	3770	C22-41(FC)/B24		----	----		
10AC42 (8.0)	10.05	9.25	38,000	11.1	4110	----	----	CH24-41	0.082 (51J39)	
	10.05	9.45	39,000	11.4	4125	C24-41FC/B24, C24-41WFC/B24		----		
	10.05	9.25	39,500	11.6	4270	C23-41(FC), C23-41W(FC)		----		
	10.05	9.20	40,500	11.9	4410	----	CR18-41	----		
	10.05	9.50	41,000	12.0	4315	C23-46(FC)		----		----
						C24-46FC/B24				
	10.05	9.50	41,000	12.0	4315	----	----	CH24-51		
	10.05	9.65	41,000	12.0	4250	----	----	CH22-41		
	10.05	9.95	42,000	12.3	4220	C22-41(FC)/B24		----		----
10.05	9.65	42,000	12.3	4350	C23-51(FC) C24-51FC/B24		----	----		
10AC48 (8.0)	10.05	8.95	46,000	13.5	5140	C23-46(FC)		----	0.086 (70J16)	
	10.05	9.00	48,000	14.1	5335	C23-51(FC)		----		
	10.05	8.95	48,000	14.1	5365	C24-51FC/B24		CH24-51		
	10.05	9.10	48,500	14.2	5330	C23-51/65(FC)		----		
	10.05	9.00	48,500	14.2	5390	C24-65FC/B24		CH24-65		
	10.05	9.00	48,500	14.2	5390	----	CR18-51	----		
10AC60 (8.2)	10.05	9.20	60,000	17.6	6520	C23-51/65(FC)		----	0.098 (70J17)	
	10.05	9.25	60,000	17.6	6485	C24-65FC/B24		CH24-65		
	10.05	9.45	60,000	17.6	6350	----	CR18-65	----		

★Rated in accordance with ARI Standard 210/240; 95°F (35°C) outdoor air temperature, 80°F (27°C) db / 67°F (19°C) wb entering evaporator air with 20 ft. (6.1 m) of connecting refrigerant lines.

\*Sound Rating Number in accordance with ARI Standard 270.

†Seasonal Energy Efficiency Ratio (Btuh/Watt).

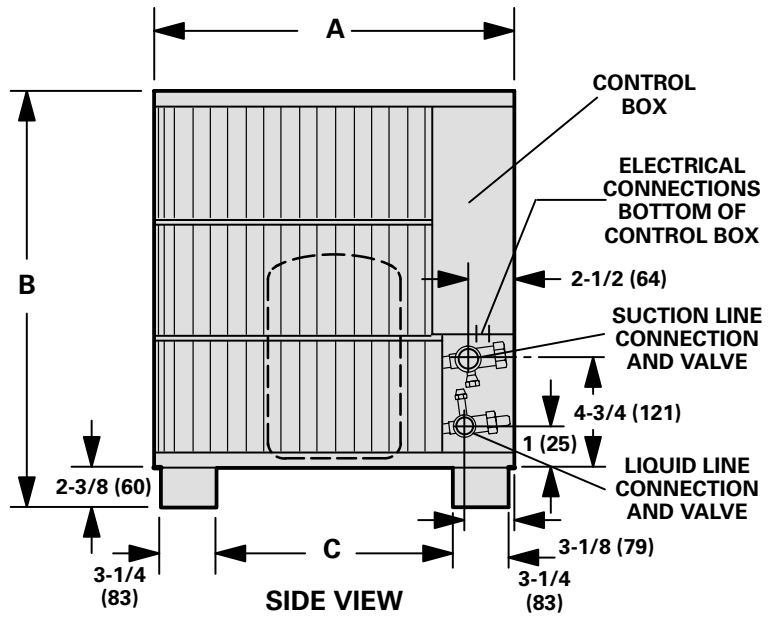
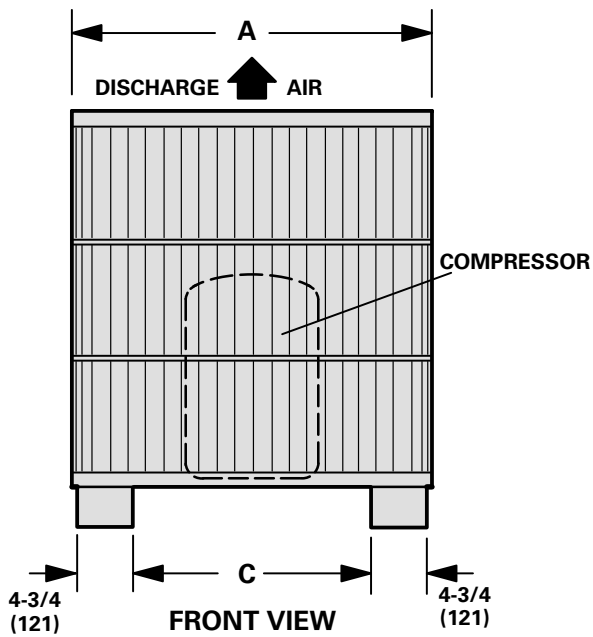
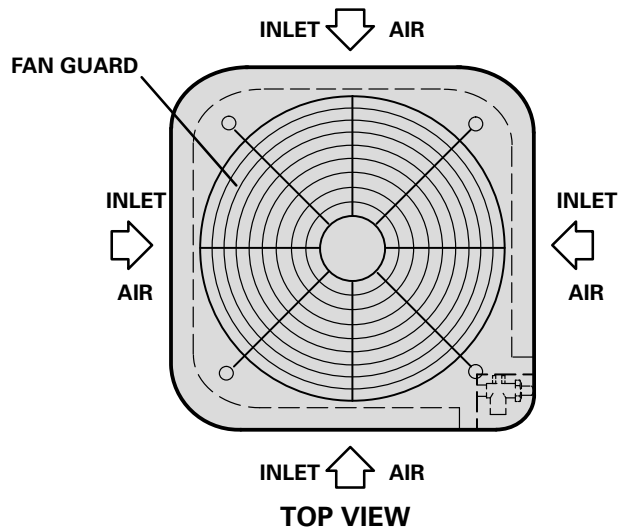
●RFCIV metering device furnished with 10AC condensing unit for field installation in evaporator coil.

⊕ Canadian usage only.

NOTE — B24 Blowers are not included with ratings for C22/24 and CR22 series coils. B24 is shown for matching purposes only.

NOTE — Shaded area denotes most popular evaporator coil.

**DIMENSIONS – inches (mm)**



Model No.		A	B	C
10AC12, 10AC18, 10AC24	in.	26-3/8	26-3/4	16-7/8
	mm	670	679	429
10AC30, 10AC36	in.	26-3/8	30-3/4	16-7/8
	mm	670	781	429
10AC42, 10AC48, 10AC60	in.	31-5/16	34-3/4	21-3/16
	mm	795	883	538

**RFC RATINGS**

NOTE — For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

**10AC12 WITH C24-21FC/B24 EVAPORATOR UNIT**

Table with 20 columns: Entering Wet Bulb Temperature, Total Air Volume (L/s, cfm), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F/24°C, 80°F/27°C, 85°F/29°C), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F/24°C, 80°F/27°C, 85°F/29°C), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F/24°C, 80°F/27°C, 85°F/29°C), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F/24°C, 80°F/27°C, 85°F/29°C).

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

**10AC12 WITH CH24-21 EVAPORATOR UNIT**

Table with 20 columns: Entering Wet Bulb Temperature, Total Air Volume (L/s, cfm), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F/24°C, 80°F/27°C, 85°F/29°C), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F/24°C, 80°F/27°C, 85°F/29°C), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F/24°C, 80°F/27°C, 85°F/29°C), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F/24°C, 80°F/27°C, 85°F/29°C).

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

**10AC12 WITH C23-26(FC), C23-26W(FC), C24-26FC/B24 OR C24-26WFC/B24 EVAPORATOR UNIT**

Table with 20 columns: Entering Wet Bulb Temperature, Total Air Volume (L/s, cfm), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F/24°C, 80°F/27°C, 85°F/29°C), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F/24°C, 80°F/27°C, 85°F/29°C), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F/24°C, 80°F/27°C, 85°F/29°C), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F/24°C, 80°F/27°C, 85°F/29°C).

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

**10AC12 WITH CR18-21 EVAPORATOR UNIT**

Table with 20 columns: Entering Wet Bulb Temperature, Total Air Volume (L/s, cfm), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F/24°C, 80°F/27°C, 85°F/29°C), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F/24°C, 80°F/27°C, 85°F/29°C), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F/24°C, 80°F/27°C, 85°F/29°C), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F/24°C, 80°F/27°C, 85°F/29°C).

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.















**RFC RATINGS**

NOTE — For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

**10AC30 WITH C22-41(FC)/B24 EVAPORATOR UNIT**

Table with 21 columns: Entering Wet Bulb Temperature (L/s, cfm), Total Air Volume (kW, Btuh), Outdoor Air Temperature Entering Condenser Coil (85°F, 95°F, 105°F, 115°F), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F, 80°F, 85°F 24°C, 27°C, 29°C). Data rows for 63°F, 67°F, 71°F.

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

**10AC30 WITH CH22-41 EVAPORATOR UNIT**

Table with 21 columns: Entering Wet Bulb Temperature (L/s, cfm), Total Air Volume (kW, Btuh), Outdoor Air Temperature Entering Condenser Coil (85°F, 95°F, 105°F, 115°F), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F, 80°F, 85°F 24°C, 27°C, 29°C). Data rows for 63°F, 67°F, 71°F.

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

**10AC36 WITH CH24-41 EVAPORATOR UNIT**

Table with 21 columns: Entering Wet Bulb Temperature (L/s, cfm), Total Air Volume (kW, Btuh), Outdoor Air Temperature Entering Condenser Coil (85°F, 95°F, 105°F, 115°F), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F, 80°F, 85°F 24°C, 27°C, 29°C). Data rows for 63°F, 67°F, 71°F.

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

**10AC36 WITH CH22-41 EVAPORATOR UNIT**

Table with 21 columns: Entering Wet Bulb Temperature (L/s, cfm), Total Air Volume (kW, Btuh), Outdoor Air Temperature Entering Condenser Coil (85°F, 95°F, 105°F, 115°F), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, Sensible To Total Ratio (S/T) Dry Bulb (75°F, 80°F, 85°F 24°C, 27°C, 29°C). Data rows for 63°F, 67°F, 71°F.

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.







**RFC RATINGS**

NOTE — For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

**10AC42 WITH CH24-51 EVAPORATOR UNIT**

Table with columns for Entering Wet Bulb Temperature, Total Air Volume (L/s, cfm), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, and Sensible To Total Ratio (S/T) Dry Bulb for temperatures 85°F, 95°F, 105°F, and 115°F. Rows include data for 63°F, 67°F, and 71°F entering temperatures.

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

**10AC42 WITH CH22-41 EVAPORATOR UNIT**

Table with columns for Entering Wet Bulb Temperature, Total Air Volume (L/s, cfm), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, and Sensible To Total Ratio (S/T) Dry Bulb for temperatures 85°F, 95°F, 105°F, and 115°F. Rows include data for 63°F, 67°F, and 71°F entering temperatures.

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

**10AC42 WITH C22-41(FC)/B24 EVAPORATOR UNIT**

Table with columns for Entering Wet Bulb Temperature, Total Air Volume (L/s, cfm), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, and Sensible To Total Ratio (S/T) Dry Bulb for temperatures 85°F, 95°F, 105°F, and 115°F. Rows include data for 63°F, 67°F, and 71°F entering temperatures.

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

**10AC42 WITH C23-51(FC) OR C24-51FC/B24 EVAPORATOR UNIT**

Table with columns for Entering Wet Bulb Temperature, Total Air Volume (L/s, cfm), Total Cooling Capacity (kW, Btuh), Compressor Motor Watts Input, and Sensible To Total Ratio (S/T) Dry Bulb for temperatures 85°F, 95°F, 105°F, and 115°F. Rows include data for 63°F, 67°F, and 71°F entering temperatures.

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.





# RFC RATINGS

NOTE — For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

## 10AC60 WITH CR18-65 EVAPORATOR UNIT

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Condenser Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
			L/s	cfm	kW	Btuh	Watts	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	Watts	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	Watts	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	Watts	75°F 24°C
63°F (17.2°C)	800	1700	17.5	59,800	4740	.72	.84	.95	17.1	58,400	5230	.73	.86	.97	16.4	55,900	5570	.74	.88	.98	15.6	53,100	5900	.75	.90	1.00
	945	2000	18.2	62,000	4810	.74	.88	.99	17.8	60,600	5300	.76	.90	1.00	17.0	57,900	5660	.77	.92	1.00	16.1	55,100	6000	.79	.94	1.00
	1085	2300	18.7	63,800	4870	.77	.92	1.00	18.3	62,400	5370	.79	.94	1.00	17.5	59,700	5730	.80	.95	1.00	16.6	56,600	6070	.82	.97	1.00
67°F (19.4°C)	800	1700	18.5	63,300	4850	.57	.69	.81	18.2	62,000	5350	.58	.70	.82	17.3	59,200	5710	.58	.71	.84	16.5	56,400	6060	.59	.73	.86
	945	2000	19.2	65,600	4930	.59	.72	.85	18.8	64,200	5430	.60	.73	.87	18.0	61,300	5800	.60	.75	.89	17.1	58,300	6150	.61	.76	.90
	1085	2300	19.7	67,400	4980	.61	.75	.89	19.3	65,900	5490	.61	.76	.90	18.4	62,800	5860	.62	.78	.92	17.5	59,700	6230	.64	.80	.94
71°F (21.7°C)	800	1700	19.5	66,700	4960	.44	.55	.66	19.2	65,400	5480	.44	.56	.68	18.3	62,600	5850	.44	.57	.69	17.5	59,600	6220	.45	.58	.70
	945	2000	20.2	69,000	5040	.44	.57	.70	19.8	67,600	5560	.45	.58	.71	19.0	64,700	5940	.45	.59	.72	18.0	61,600	6320	.45	.60	.74
	1085	2300	20.8	70,900	5090	.45	.59	.72	20.3	69,400	5620	.45	.60	.74	19.4	66,300	6010	.46	.61	.75	18.5	63,200	6390	.46	.62	.77

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.