



THE "COM-Tec" CABINET AIR CONDITIONER

The Bard COM-Tec Cabinet Air Conditioner is the ideal product for virtually all types of cabinet applications. Typical applications would include telecommunication shelters, equipment buildings, instrumentation enclosures, security structures, numerous industrial applications, and many other applications requiring a commercial grade self-contained air conditioner. The many standard features combined with the optional features available make this product the ideal choice for the rugged requirements that commercial applications demand.

Standard Features

- Electrical rating 230/208-60-1
- Electric heat options - 0, 2 and 4 KW 1-Ph. and 0 or 3 KW 3 Ph.
- Energy efficient scroll compressor, Refrigerant 22
- Built-in circuit breaker, accessible through front access panel
- Thermal expansion valve
- 2-speed condenser fan motor with changeover thermostat (at 90°F) for quieter operation
- Oversized condenser for operation to 125°F outdoor temperature
- Slope top to shed rain
- Beige, 20-gauge pre-painted steel standard, which allows it to withstand 1000 hours of salt spray tests per ASTM B117-03
- Gray, White and Desert Brown color options (See model number nomenclature on page 3)
- Integrated condenser grilles for superior coil protection
- All installation and service access from front (fan) side
- Low ambient control (LAC)
 - Fan cycling - down to 0° is standard
- High and low pressure switches
- Advanced **compressor control module** includes:
 - Time delay relay, adjustable from 30-300 seconds delay on break (delay on make equal to 10% of delay on break).
 - High pressure switch lockout-soft and manual
 - Low pressure switch lockout-soft and manual (with 120 seconds bypass on start-up)
 - Alarm output signal
- Alarm relay (dry contacts)
- High and low pressure service ports, accessible from outside cabinet
- Easy access to electrical components
- Easy access to compressor and condenser fan assembly
- Unit mounts to wall using internal mounting holes
- Bottom support bracket included (not required for installation)
- Warranty - 1 year on parts and 5 years on compressor



Optional Accessories (Field Installed)

- SGC-2 supply grille 14 x 8, brushed aluminum
- RFGC-2 return air filter grille 14 x 12, brushed aluminum
- 7003-048 aluminum mesh 14 x 12 filter, (not included with RFGC-2)

Note: The following accessory items must be color coordinated with the basic unit. X is Beige (standard) color. See color option code below.

- MBC-2X side mounting brackets

Color Options
X - Beige (Standard)
4 - Buckeye Gray
5 - Desert Brown

- Complies with efficiency requirements of ASHRAE/IESNA 90.1-2004.
- Certified to ANSI/ARI Standard 390-2003 for SPVU (Single Package Vertical Units).
- Commercial Product - Not intended for Residential application.



Specifications

MODEL	CT242-A0Z	CT242-A02	CT242-A04
Cooling Capacity Btuh ①	24,000	24,000	24,000
EER ②	9.70	9.70	9.70
SEER ③	10.5	10.5	10.5
Heating Capacity Btuh 240/208 ④	None	6,800/5,100	13,650/10,230
Electrical Rating - 60 Hz	230/208-1	230/208-1	230/208-1
Operating Voltage Range	197 - 253	197 - 253	197 - 253
Compressor			
Volts	230/208	230/208	230/208
Rated Load Amps 230/208	10.5/11.0	10.5/11.0	10.5/11.0
Branch Circuit Selection Current	12.2	12.2	12.2
Locked Rotor Amps	63/63	63/63	63/63
Fan Motor & Condenser			
Fan Motor - HP/RPM	1/8 - 1,100	1/8 - 1,100	1/8 - 1,100
Fan Motor - Amps	0.8	0.8	0.8
Fan - DIA/CFM	16 - 1,400	16 - 1,400	16 - 1,400
Blower Motor & Evaporator			
Blower Motor - HP/RPM	1/4 - 1,100	1/4 - 1,100	1/4 - 1,100
Blower Motor - Amps	1.9	1.9	1.9
CFM Cooling & ESP ⑤	760 - .10	760 - .10	760 - .10
Electric Heaters			
Heater KW	None	2/1.5	4/3
Volts	-	240/208	240/208
Heater Amps	-	8.3/7.2	16.7/14.4
Electrical Ratings			
No. Field Power Circuits	1	1	1
Minimum Circuit Ampacity ⑥	18	18	24
Max. Fuse or Circuit Breaker ⑦	25	25	25
Field Wire Size ⑧	#12	#12	#10
Shipping Weight - Lbs.	250	250	250

① Capacity is certified in accordance with ANSI/ARI Standard 390-2003 and tested in accordance with ARI Standard 210/240-2003.

② EER = Energy Efficiency Ratio and is certified in accordance with ANSI/ARI Standard 390-2003.

③ SEER = Seasonal Energy Efficiency Ratio and is tested in accordance with ARI Standard 210/240-2003.

All ratings based on fresh air intake being 100% closed (no outside air introduction).

④ Does not include heat from indoor motor.

⑤ Deduct 30 CFM for 208V operation.

⑥ These "Minimum Circuit Ampacity" values are to be used for sizing the field power wiring conductors.

⑦ Maximum size of the time delay fuse or HACR type circuit breaker for protection of field wiring conductors.

⑧ Based on 75°C copper wire. All wiring must conform to the National Electrical Code and all local codes.

IMPORTANT: While this electrical data is presented as a guide, it is important to electrically connect properly sized fuses and conductor wires in accordance with the National Electrical Code and all existing local codes.

CT242 Blower Air Flow @ 230 Volts

No return filter grille or filter

ESP	Med. Speed	Med Speed	High Speed	High Speed
	Dry	Wet	Dry	Wet
0	1,012	980	1,070	1,038
0.1	925	893	982	950
0.2	859	827	924	892
0.3	794	763	855	823
0.4	722	690	775	743
0.5	642	610	694	662
0.6	537	505	598	566

With return filter grille and 1" washable filter

ESP	Med. Speed	Med Speed	High Speed	High Speed
	Dry	Wet	Dry	Wet
0	847	815	880	848
0.1	760	728	792	760
0.2	694	662	734	702
0.3	629	597	665	633
0.4	557	525	585	553
0.5	477	445	504	472
0.6	372	340	408	376

Note: Reduce airflow by 30 CFM for 208V operation.

Minimum Clearances Required to Combustible Materials (Inches)

Models	Supply Air Duct	Cabinet
CT242	0	0

Clearances Required for Service Access and Adequate Condenser Air Flow (Inches)

Models	Left Side	Right Side	Front
CT242	3	3	36

Application Data - Applies to All Models

Dry Bulb/① Wet Bulb °F	Cooling Capacity	All Temperature Entering Outdoor Coil °F										
		75°	80°	85°	90°	95°	100°	105°	110°	115°	120°	125°
75/57	Total Cooling	22,900	22,400	21,800	21,200	20,500	19,800	19,000	18,200	17,300	16,300	15,300
	Sensible Cooling	21,700	21,100	20,500	19,900	19,300	18,700	18,100	17,500	17,000	16,200	15,100
80/67	Total Cooling	28,700	27,900	27,000	26,000	24,000	23,000	22,800	21,700	20,500	19,200	17,900
	Sensible Cooling	18,300	17,800	17,200	16,700	16,200	15,600	15,100	14,600	14,200	13,700	13,200
85/72	Total Cooling	33,800	32,300	30,700	29,200	27,700	26,100	24,600	23,100	21,600	20,000	18,500
	Sensible Cooling	18,500	17,900	17,200	16,500	15,900	15,200	14,400	13,700	13,000	12,200	11,400

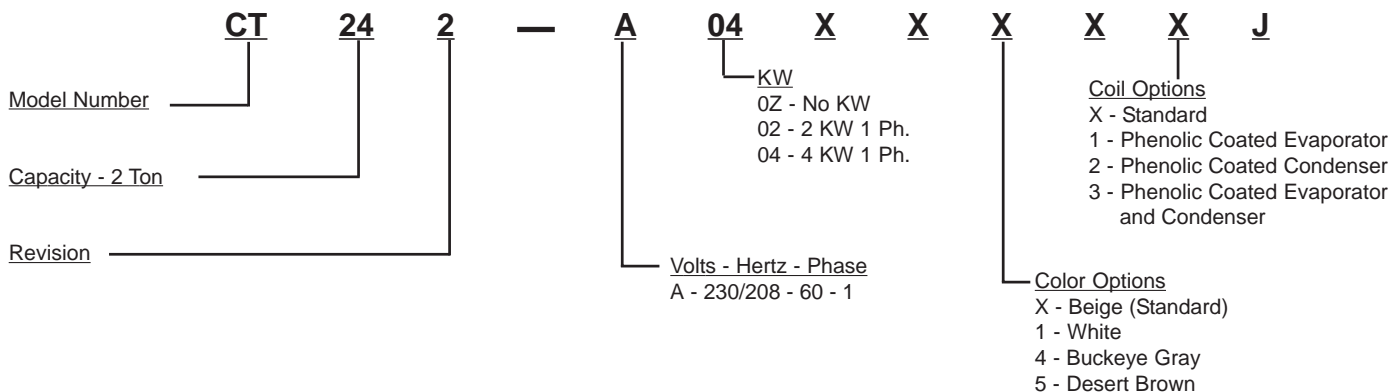
① Return air temperature °F.

Application Data - Applies Only to Refrigerant Based Low Ambient Control Versions

Dry Bulb/① Wet Bulb °F	Cooling Capacity	All Temperature Entering Outdoor Coil °F									
		-20°	-10°	0°	10°	20°	30°	40°	50°	60°	70°
75/57	Total Cooling	24,800	24,600	24,400	24,200	24,000	23,800	23,600	23,400	23,200	23,000
	Sensible Cooling	23,200	23,000	22,900	22,700	22,400	22,300	22,200	22,000	21,900	21,700
80/67	Total Cooling	30,700	30,500	30,300	30,100	29,900	29,700	29,500	29,300	29,100	28,900
	Sensible Cooling	19,900	19,700	19,600	19,400	19,200	19,100	19,000	18,800	18,700	18,500
85/72	Total Cooling	35,800	35,600	35,400	35,200	35,000	34,800	34,600	34,400	34,200	34,000
	Sensible Cooling	20,500	20,300	20,100	19,900	19,700	19,500	19,300	19,000	18,900	18,700

① Return air temperature °F.

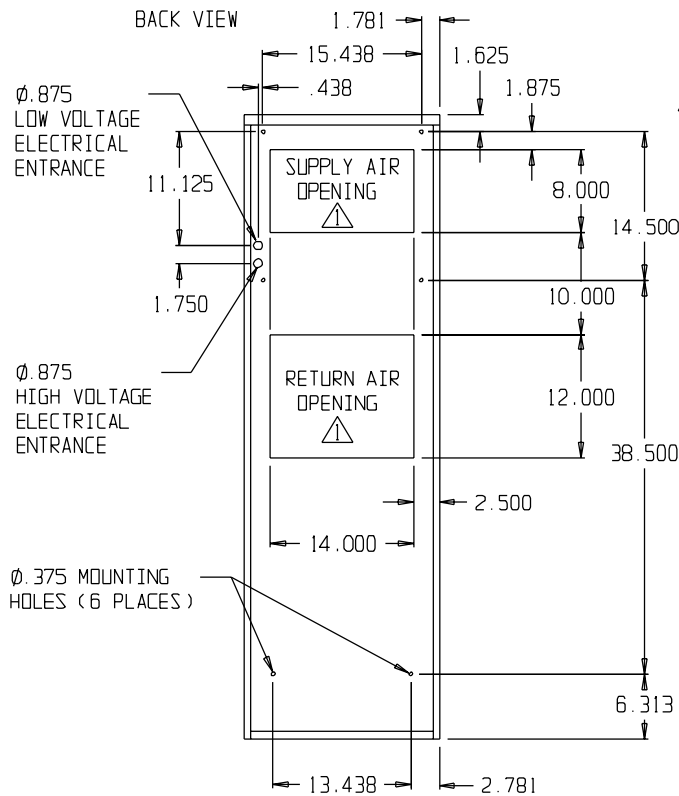
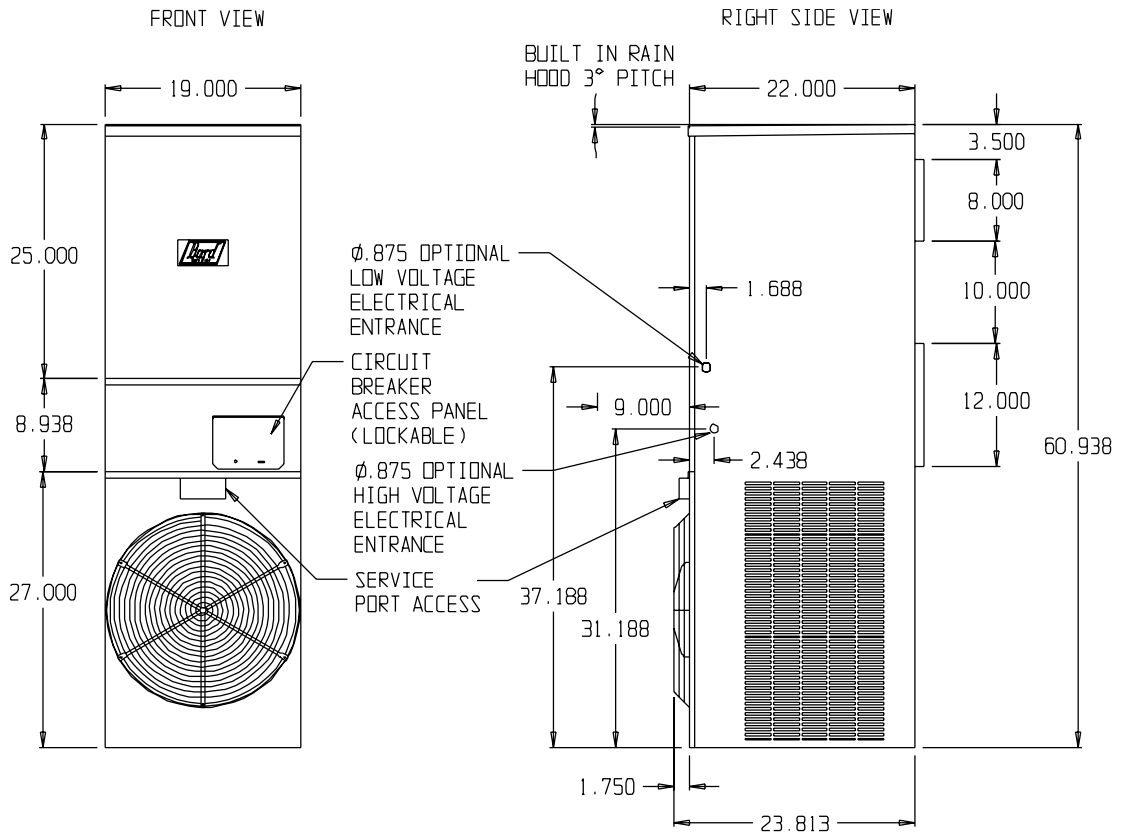
Model Number Nomenclature



Factory Built-In Electric Heat Table---Refer to Electrical Specifications for Availability by Unit Model

Nominal KW	At 240V			At 208V		
	KW	Amps	Btuh	KW	Amps	Btuh
2.0	2.0	8.3	6,826	1.50	7.2	5,120
3.0	3.0	12.5	10,239	2.25	10.8	7,679
4.0	4.0	16.7	13,652	3.00	14.4	10,239

Cabinet Dimensions



⚠ OPENINGS IN WALL SHOULD BE OVERSIZED BY .250" TO ALLOW FOR EASE OF UNIT INSERTION

MIS-1034 A



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Due to our continuous product improvement policy,
 all specifications subject to change without notice.

Before purchasing this appliance, read important energy
 cost and efficiency information available from your retailer.

Form No.
 S3327
 August, 2007

Supersedes S3327-206