# BARD Q-TEC<sup>™</sup> Single Stage Heat Pumps 2 to 4 Ton Capacity Q24H - Q48H Unit Models 208V - 460V Single and Three Phase 60hz

# OH Series O-TEC™ Indoor Heat Pump

The Bard QH Series interior cooling and heating solution is an energy efficient self contained system. The QH is designed to offer maximum indoor temperature and humidity control. Installed on an interior wall surface, the QH Series provides cooling and heating at very low sound levels by using components designed for quiet operation. Exterior walls, ground areas, and roofs are free from heating and air conditioning equipment. Unit wall openings are covered with a architecturally friendly wall louver. These products are ideal for classrooms, offices, cafeterias, and light commercial applications.

### **QH Series Features:**

- 2 to 4 ton cooling capacity uses energy efficient components including today's newest compressor designs. Heat is provided using the refrigeration system to save energy costs.
- Multi-speed Electronically commutated indoor motor (ECM) technology.
- Enclosed outdoor fan motor with ball bearing construction.
- Copper/Aluminum finned coils, and refrigerant system includes filter drier. Evaporator coil includes green fin coil protection.
- R-454B A2L Refrigerant that meets the global objectives outlined in the Montreal Protocol and the Kigali Amendment.
- Factory installed ventilation options including economizers and energy recovery ventilators.
- Multiple cabinet finishes including vinyl coated steel.
- Coil coating options for additional corrosion protection.
- Optional factory installed electric heater options from 5kw up to 15kw.
- Circuit breakers standard for 208/230V single and three phase units.
- Filter options up to MERV13.
- Indoor air quality options including UVC-LED and NPBI devices.
- Controls include short cycle protection and phase monitoring. Hi and low pressure switch refrigerant system protection standard.
- Optional hot gas reheat dehumidification is available for most models.



# **OH Series Compliance:**

- Complies with efficiency requirements of ANSI/ASHRAE/IES 90.1-2019.
- Certified to ANSI/AHRI Standard 390-2021 for SPVU (Single Package Vertical Units).
- Intertek ETL Listed to Standard for Safety of Household and Similar Electrical Appliances ANSI/UL STD 60335-1 & ANSI/UL STD 60335-2-40/CSA STD C22.2 No. 60335-1 & CSA STD C22.2 No. 60335-2-40 Fourth Edition.
- Commercial Product Not intended for residential applications.
- Bard is an ISO 9001:2015 Certified Manufacturer.
- The AHRI Certified® mark indicates Bard Manufacturing Company participation in the AHRI Certification program. For verification of individual certified products, go to www.









www.BardHVAC.com

### ////// QTEC QH SERIES INTERIOR SOLUTION HEAT PUMP NOMENCLATURE

MODEL #	Q	36	C	F	-	A	<b>0 Z</b>	X	P	X	X	X	E
DIGIT #	1	2,3	4	5	6	7	8,9	10	11	12	13	14	15

- 1. Series Single Stage Compressor

  Q Bard Interior Cooling and Heating Unit
- 2,3 2-3. Nominal Capacity
  24 2.0 Ton 43 3.5 Ton
  30 2.5 Ton 48 4.0 Ton
  36 3.0 Ton
- 4. Unit Type Controls Location

  H Heat Pump
- 5. Revision
  F Revision (R-454B Refrigerant)
- 6 6. Special Feature Placeholder
   Standard Unit
  D HGR Dehumidification
- 8,9
  8-9. Electric Heater Options
  OZ OKw with Breaker or Disconnect
  O5-15 5-15Kw Heat w/breaker or Disc.
- 10 10. Ventilation Package Options

  X Barometric Air Damper (Intake)

  B Blank Off Plate (No Vent)

  V Powered Comm. Vent, On/Off/Mod.

  R Energy Recovery Ventilator

  S Partial Flow Economizer, Enthalpy JADE

1 11. Filter and IAQ Options  X Standard 1" MERV2 Disposable Filter.			
·	1	11.	Filter and IAQ Options
F 2" MEDV2 Weekelle Filter		X	Standard 1" MERV2 Disposable Filter.
		F	2" MERV2 Washable Filter.
P 2" MERV8 Disposable Filter.		P	2" MERV8 Disposable Filter.
N 2" MERV13 Disposable Filter.		N	2" MERV13 Disposable Filter.
A 2" MERV13 Filter with UVC-LED Light.		A	2" MERV13 Filter with UVC-LED Light.
B 2" MERV13 Filter with NPBI Device.		В	2" MERV13 Filter with NPBI Device.
C 2" MERV8 Filter with NPBI Device.		C	2" MERV8 Filter with NPBI Device.

- 14. Coil and Cabinet Coatings

  X Standard Copper/Aluminum evap and cond coils.

  1 Coated indoor evap coil, std outdoor cond. coil.

  2 Coated outdoor cond coil, std indoor evap coil.

  3 Coated indoor evap and outdoor cond coil.
- 15. Unit Mounted Controls Options
  Standard: Hi/Lo Pressure and Ref. Leak (RDS) Sensor

  X Standard Controls

  E X + Low Ambient Control (LAC)

  Q X + Outdoor Thermostat

  R X + LAC, Outdoor Thermostat

INTERACTIVE TABLE OF CONTENTS (SELECT IN ICON WITH CURSOR TO GO TO LOCATION, PICK (2) TO RETURN)

# ////// QH SERIES AHRI CAPACITY AND EFFICIENCY RATINGS

MODELS	Q24HF	Q30HF	Q36HF	Q43HF	Q48HF
Cooling Capacity BTUH®	25,400	28,800	34,600	43,200	48,500
Unit Cooling efficiency EER	11.0	11.0	11.0	11.0	11.0
Heating Capacity BTUH①	22,800	26,200	31,400	37,800	42,200
Unit Heating efficiency COP	3.3	3.3	3.3	3.3	3.3

① Capacity is certified in accordance with ANSI/ARI Standard 390-2021.

### ///// UNIT COOLING CAPACITY AT VARIOUS INDOOR AND OUTDOOR CONDITIONS

MODEL	INDOOR RETURN	COOLING CAPACITY		DRY E	BULB OUT	DOOR AIF	R TEMPER	ATURE E	NTERING	UNIT CON	IDENSER	AREA	
WODEL	AIR (DB/WB)	(BTUH)	75°F 23.9°C	80°F 26.6°C	85°F 29.4°C	90°F 32.2°C	95°F 35°C	100°F 37.8°C	105°F 40.5°C	110°F 43.3°C	115°F 46.1°C	120°F 48.8°C	125°F 51.6°C
	75/62	Total Cooling	25000	24400	23700	22900	22100	21400	20500	19600	18700	17800	16800
	73/62	Sensible Cooling	19800	19600	19400	19100	18900	18500	18300	17800	17500	17100	16800
Q24HF	80/67	Total Cooling	26600	26500	26300	25900	25400	24900	24200	23400	22500	21500	20400
QZ4FF	80/07	Sensible Cooling	19200	19200	19200	19100	19000	18800	18700	18400	18200	17900	17600
	85/72	Total Cooling	31700	31000	30200	29300	28200	27300	26100	24900	23700	22400	21000
	03/72	Sensible Cooling	19700	19500	19300	19000	18700	18200	17900	17300	16800	16200	15600
	75/62	Total Cooling	29200	28100	27100	26100	25100	24100	23200	22200	21200	20200	19300
	75/02	Sensible Cooling	22500	22100	21700	21300	20900	20600	20200	19900	19400	19100	18700
Q30HF	80/67	Total Cooling	31100	30600	30100	29500	28800	28100	27300	26500	25500	24500	23500
QSUNF	80/07	Sensible Cooling	21800	21600	21500	21300	21100	20900	20700	20500	20200	20000	19700
	85/72	Total Cooling	37100	35800	34600	33300	32000	30800	29500	28200	26800	25500	24200
	03/72	Sensible Cooling	22400	22000	21600	21200	20700	20300	19800	19200	18600	18100	17500
	75/62	Total Cooling	37600	35600	33700	31900	30200	28600	27100	25800	24500	23200	22100
	75/02	Sensible Cooling	27600	26900	26200	25500	24800	24200	23600	23100	22400	21900	21400
Q36HF	80/67	Total Cooling	40100	38800	37400	36000	34600	33300	32000	30700	29400	28100	26900
Q30HF	80/07	Sensible Cooling	26700	26300	25900	25500	25000	24600	24200	23800	23300	22900	22500
	85/72	Total Cooling	47800	45400	43000	40700	38500	36400	34500	32700	30900	29200	27700
	03/72	Sensible Cooling	27400	26700	26000	25400	24500	23800	23100	22300	21500	20700	19900
	75/62	Total Cooling	40900	40300	39600	38700	37600	36500	35200	33800	32300	30600	28800
	75/02	Sensible Cooling	31700	31400	31200	30900	30500	30100	29700	29000	28500	27800	27100
Q43HF	80/67	Total Cooling	43600	43900	43900	43700	43200	42500	41500	40300	38800	37100	35100
Q43HF	80/07	Sensible Cooling	30700	30800	30900	30900	30800	30600	30400	30000	29600	29100	28500
	85/72	Total Cooling	52000	51300	50400	49400	48000	46500	44800	42900	40800	38600	36100
	03/72	Sensible Cooling	31500	31300	31100	30700	30200	29600	29000	28100	27300	26300	25200
	75/62	Total Cooling	50400	48300	46200	44200	42200	40400	38700	37100	35500	33900	32400
	75102	Sensible Cooling	39400	38100	36900	35700	34600	33600	32800	32000	31300	30800	30200
Q48HF	80/67	Total Cooling	53800	52600	51300	49900	48500	47100	45700	44200	42700	41100	39500
QHONF	30/07	Sensible Cooling	38200	37300	36500	35700	34900	34200	33600	33100	32600	32200	31800
	85/72	Total Cooling	64100	61500	58900	56300	53900	51500	49300	47000	44900	42700	40600
	03/72	Sensible Cooling	39100	37900	36700	35500	34300	33100	32000	31100	30000	29100	28200

Notes: • L

- Unit compressor cooling operation below 60°F requires a Low Ambient Control (LAC).
- 1000 BTUH = .29307 kW
- Outdoor air temperatures provided are an average of the condenser inlet air temperature.



<sup>©</sup> EER = Energy Efficiency Ratio and is certified in accordance with ANSI/ARI Standard 390-2021. All ratings based on no outside air introduction).

### ////// UNIT HEAT PUMP HEATING CAPACITY AT VARIOUS OUTDOOR CONDITIONS

MODEL UN	UNITS	DRY BULB OUTDOOR AIR TEMPERATURE ENTERING UNIT CONDENSER AREA													
WODEL	UNITS	0°F -17.7°C	5°F -15°C	10°F -12.2°C	15°F -9.4°C	20°F -6.6°C	25°F -3.8°C	30°F -1.1°C	35°F 1.6°C	40°F 4.4°C	45°F 7.2°C	50°F 10°C	55°F 12.7°C	60°F 15.5°C	65°F 18.3°C
	BTUH	4300	6500	8600	10700	12700	14700	16600	18500	20300	22100	23900	25600	27300	28900
Q24HF	WATTS	1580	1610	1630	1660	1680	1710	1730	1750	1770	1790	1810	1830	1850	1870
	COP	0.80	1.18	1.55	1.89	2.22	2.52	2.81	3.10	3.36	3.62	3.87	4.10	4.32	4.53
	BTUH	11600	12900	14400	15800	17300	18900	20500	22100	23800	25500	27300	29100	31000	32900
Q30HF	WATTS	1860	1890	1920	1950	1980	2000	2030	2060	2090	2120	2150	2170	2200	2230
	COP	1.83	2.00	2.20	2.37	2.56	2.77	2.96	3.14	3.34	3.53	3.72	3.93	4.13	4.32
	BTUH	13400	15200	16900	18700	20600	22500	24500	26500	28500	30600	32700	34900	37200	39400
Q36HF	WATTS	2360	2380	2400	2430	2450	2480	2510	2540	2570	2600	2630	2670	2700	2740
	COP	1.66	1.87	2.06	2.26	2.46	2.66	2.86	3.06	3.25	3.45	3.64	3.83	4.04	4.21
	BTUH	16200	18400	20600	22800	25000	27300	29700	32000	34400	36900	39300	41800	44400	47000
Q43HF	WATTS	2530	2600	2670	2730	2790	2850	2900	2950	2990	3040	3070	3110	3140	3160
	COP	1.88	2.07	2.26	2.45	2.63	2.81	3.00	3.18	3.37	3.56	3.75	3.94	4.14	4.36
	BTUH	11300	15100	18700	22200	25600	29000	32200	35300	38200	41100	43900	46600	49100	51600
Q48HF	WATTS	3160	3210	3270	3320	3370	3420	3460	3500	3540	3580	3620	3650	3680	3710
	COP	1.05	1.38	1.68	1.96	2.23	2.49	2.73	2.96	3.16	3.36	3.55	3.74	3.91	4.08

Performance given for 70°F DB indoor return air at Notes: • rated CFM. Data includes defrost operation below 45° outdoor temperature.

- Supplemental Electric heaters are recommended for applications requiring heating below a 15°F outdoor temperature.
- 1000 BTUH = .29307 kW
- Outdoor air temperatures provided are an average of the condenser inlet air temperature.

# ////// CONSTANT AIRFLOW INDOOR FAN CFM

UNIT MODEL	MAXIMUM ESP	COMPRESSOR COOLING MODE	COMPRESSOR HEATING MODE	ELECTRIC HEAT MODE	INDOOR FAN ONLY	DEHUMIDIFICATION MODE
Q24	UP TO .5" WC	830	830	830	830	600
Q30	UP TO .5" WC	900	900	900	900	650
Q36	UP TO .5" WC	1125	1125	1125	1125	900
Q43	UP TO .5" WC	1300	1300	1300	1300	910
Q48	UP TO .5" WC	1500	1500	1500	1500	1050

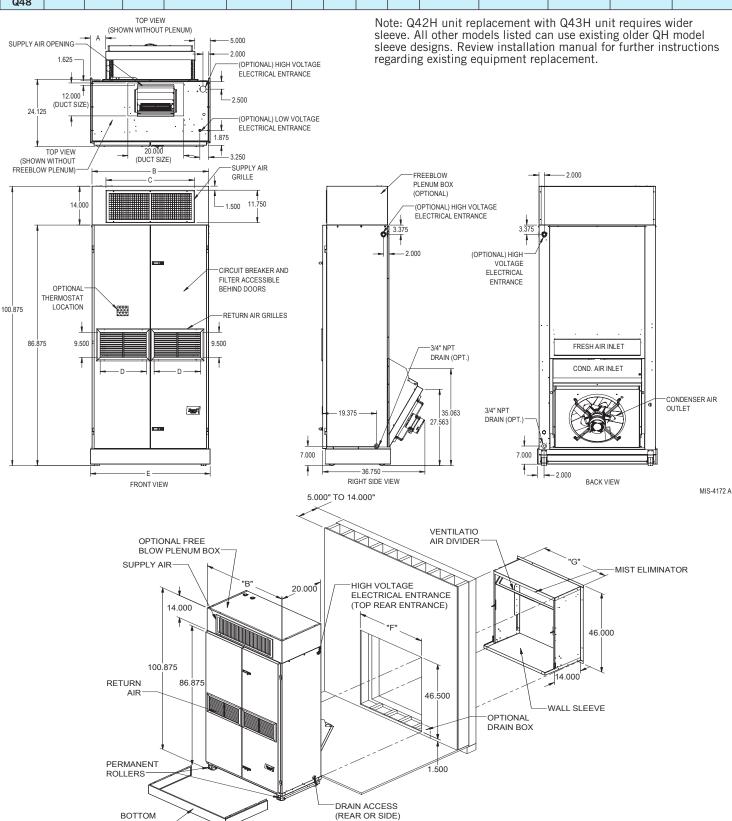
# ////// GENERAL UNIT REFRIGERANT AND MECHANICAL SPECIFICATIONS

		REFRIGE	RANT SYSTEM		INDO	OR EVAPORATOR B	LOWER	OUTDOOR CONDENSER FAN			
UNIT MODEL	CHARGE TYPE	STANDARD UNIT CHARGE RATE	DEHUMIDIFICATION UNIT CHARGE RATE	COMPRES- SOR TYPE	INDOOR MOTOR -SPEEDS	INDOOR FAN	INDOOR CFM - RATED ESP	OUTDOOR MOTOR	OUTDOOR FAN	OUTDOOR FAN CFM	
Q24	R-454B	7.38 lbs.	5.88 lbs.	Scroll	ECM-VAR.	Single Blower	83010	ECM	20" Axial	1700	
Q30	R-454B	5.44 lbs.	5.44 lbs.	Scroll	ECM-VAR.	Single Blower	90010	ECM	20" Axial	1700	
Q36	R-454B	6.75 lbs.	7.00 lbs.	Scroll	ECM-VAR.	Single Blower	112515	ECM	20" Axial	1700	
Q43	R-454B	8.00 lbs.	7.25 lbs.	Scroll	ECM-VAR.	Single Blower	130015	ECM	20" Axial	2100	
Q48	R-454B	8.38 lbs	7.88 lbs	Scroll	ECM-VAR.	Single Blower	150020	ECM	20" Axial	2100	



# ////// QH CABINET, WALL OPENING, AND WALL SLEEVE DIMENSIONS

DIMENS	DIMENSIONS OF BASIC UNIT FOR ARCHITECTURAL & INSTALLATION REQUIREMENTS (NOMINAL)														
				UNIT (	CABINET						WALL OPENING	3	WALL S	SLEEVE	
MODEL	WIDTH (E)	DEPTH	HEIGHT	DUCTED SUPPLY	RETURN AREA	А	В	С	D	WIDTH (F)	HEIGHT	OPENING TO FLOOR	WIDTH (G)	HEIGHT	
Q24 Q30 Q36	43.00	24.13	88.88	12.0 X 20.0	9.5 X 34.0	5.00	42.00	30.00	17.00	35.00	46.50	1.50	34.00	46.00	
Q43 Q48	49.00	24.13	88.88	12.0 X 20.0	9.5 X 40.0	3.00	48.00	40.00	20.00	43.00	46.50	1.50	32.00	46.00	



TRIM PIECE

MIS-4271

### ////// GENERAL UNIT ELECTRICAL SPECIFICATIONS

MODELS	CONTROL PANEL CABINET LOCATION	NOMINAL VOLTAGE VAC	PH	HZ	VOLTAGE RANGE VAC	RATED LOAD AMPS (RLA)	BRANCH CIRCUIT SELECTION CURRENT (BCSC)	LOCKED ROTOR AMPS (LRA)	INDOOR MOTOR VOLTAGE	INDOOR MOTOR AMPS	IN- DOOR MOTOR HP	OUTDOOR MOTOR VOLTAGE	OUT- DOOR MOTOR AMPS	OUT- DOOR MOTOR HP
Q24HF-A	Unit Front	230/208V	1	60	197-253V	11.4/12.7	11.4	64.4	230/208V	1.9/2.0	1/3	230/208V	2.8/2.9	1/2
Q24HF-B	Unit Front	230/208V	3	60	197-253V	7.7/8.6	7.7	59.9	230/208V	1.9/2.0	1/3	230/208V	2.8/2.9	1/2
Q24HF-C	Unit Front	460V	3	60	414-506V	3.8/4.3	3.8	32.4	230/208V	2	1/3	460V	1.5	1/2
Q30HF-A	Unit Front	230/208V	1	60	197-253V	12.7/14.1	12.7	75.6	230/208V	1.9/2.0	1/3	230/208V	2.7/2.9	1/2
Q30HF-B	Unit Front	230/208V	3	60	197-253V	9.6/10.7	9.6	67.7	230/208V	1.9/2.0	1/3	230/208V	2.7/2.9	1/2
Q30HF-C	Unit Front	460V	3	60	414-506V	4.5/5.0	4.5	38.1	230/208V	2	1/3	460V	1.5	1/2
Q36HF-A	Unit Front	230/208V	1	60	197-253V	16.7/18.6	16.7	93.5	230/208V	2.7/2.9	1/2	230/208V	2.8/2.9	1/2
Q36HF-B	Unit Front	230/208V	3	60	197-253V	12.2/13.6	12.2	97.5	230/208V	2.7/2.9	1/2	230/208V	2.8/2.9	1/2
Q36HF-C	Unit Front	460V	3	60	414-506V	5.8/6.4	5.8	44.3	230/208V	2.9	1/2	460V	1.5	1/2
Q43HF-A	Unit Front	230/208V	1	60	197-253V	18.6/20.7	18.6	123	230/208V	2.0/2.1	1/2	230/208V	2.1/2.3	1/2
Q43HF-B	Unit Front	230/208V	3	60	197-253V	12.8/14.3	12.8	102.8	230/208V	2.0/2.1	1/2	230/208V	2.1/2.3	1/2
Q43HF-C	Unit Front	460V	3	60	414-506V	5.8/6.4	5.8	50	230/208V	2.1	1/2	460V	1.2	1/2
Q48HF-A	Unit Front	230/208V	1	60	197-253V	22.4/25	22.4	126	230/208V	2.2/2.3	3/4	230/208V	2.2/2.3	1/2
Q48HF-B	Unit Front	230/208V	3	60	197-253V	12.8/14.3	12.8	120.4	230/208V	2.2/2.3	3/4	230/208V	2.2/2.3	1/2
Q48HF-C	Unit Front	460V	3	60	414-506V	6.0/6.7	6	49.4	230/208V	2.3	3/4	460V	1.2	1/2

Note: All units have a Short Circuit Current Protection Rating (SCCR) of 5kA RMS Symmetrical.

### ////// AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA – STANDARD UNITS

		RATED			SINGLE	CIRCUIT
UNIT MODEL	KW OPTION	VOLTAGE AND PHASE (60HZ)	CONNECTION POINT	NO. OF FIELD CIRCUITS	MINIMUM CIRCUIT AMPACITY (MCA)	MAX. OVER CURRENT PROTECTION (MOCP)
Q24HF-A	OZ	230/208-1	C BREAKER	1	22	25
	05	230/208-1	C BREAKER	1	48	50
Q24HF-B	OZ	230/208-3	C BREAKER	1	17	20
	06	230/208-3	C BREAKER	1	35	35
	09	230/208-3	C BREAKER	1	44	45
Q24HF-C	0Z	460-3	DISCONNECT	1	9	15
	06	460-3	DISCONNECT	1	18	20
	09	460-3	DISCONNECT	1	22	25
Q30HF-A	0Z	230/208-1	C BREAKER	1	23	30
	05	230/208-1	C BREAKER	1	49	50
Q30HF-B	OZ	230/208-3	C BREAKER	1	20	25
	06	230/208-3	C BREAKER	1	38	40
	09	230/208-3	C BREAKER	1	47	50
Q30HF-C	0Z	460-3	DISCONNECT	1	10	15
	06	460-3	DISCONNECT	1	19	20
	09	460-3	DISCONNECT	1	23	25

CAUTION: When more than one field power circuit is run through one conduit, the conductors must be de-rated. Pay special attention to Note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three current carrying conductors are in a raceway.

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 local codes. MOCP (Maximum Over-current Protection) value listed is the maximum value as per UL 60335 calculations for MOCP (branch-circuit conductor sizes in this chart are based on this MOCP). The actual factory installed Over-current Protective Device (Circuit Breaker) in this model may be lower than the maximum UL 60335 allowable MOCP value, but still above the UL 60335 minimum calculated value or Minimum Circuit Ampacity (MCA) listed. Refer to the National Electrical code (latest version), Article 310 for power conductor sizing. Review all wiring and safety information provided in the installation manual for the product.

### ////// AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA – STANDARD UNITS

					SINGLE	CIRCUIT		DUAL (	CIRCUIT	
UNIT	KW	RATED VOLTAGE	CONNECTION	NO. OF	MINIMUM	MAX. OVER	М	CA	MC	СР
MODEL	OPTION	AND PHASE (60HZ)	POINT	FIELD CIRCUITS	CIRCUIT AMPACITY (MCA)	CURRENT PROTECTION (MOCP)	CKT. A	СКТ. В	CKT. A	СКТ. В
Q36HF-A	OZ	230/208-1	C BREAKER	1	29	35				
	05	230/208-1	C BREAKER	1	55	60				
	10	230/208-1	C BREAKER	1 or 2	81	90	29	52	35	60
Q36HF-B	OZ	230/208-3	C BREAKER	1	24	30				
	06	230/208-3	C BREAKER	1	42	45				
	09	230/208-3	C BREAKER	1	51	60				
	15	230/208-3	C BREAKER	1	52	60				
Q36HF-C	OZ	460-3	DISCONNECT	1	12	15				
	06	460-3	DISCONNECT	1	21	25				
	09	460-3	DISCONNECT	1	25	25				
	15	460-3	DISCONNECT	1	26	30				
Q43HF-A	0Z	230/208-1	C BREAKER	1	30	35				
	05	230/208-1	C BREAKER	1	56	60				
	10	230/208-1	C BREAKER	1 or 2	82	90	30	52	35	60
Q43HF-B	OZ	230/208-3	C BREAKER	1	23	30				
	06	230/208-3	C BREAKER	1	41	45				
	09	230/208-3	C BREAKER	1	50	50				
	15	230/208-3	C BREAKER	1	51	60				
Q43HF-C	OZ	460-3	DISCONNECT	1	11	15				
	06	460-3	DISCONNECT	1	20	20				
	09	460-3	DISCONNECT	1	25	25				
	15	460-3	DISCONNECT	1	26	30				
Q48HF-A	OZ	230/208-1	C BREAKER	1	35	45				
	05	230/208-1	C BREAKER	1 or 2	61	70	35	26	45	30
	10	230/208-1	C BREAKER	1 or 2	87	90	35	52	45	60
	15	230/208-1	C BREAKER	1 or 2	87	90	35	52	45	60
Q48HF-B	OZ	230/208-3	C BREAKER	1	23	30				
	06	230/208-3	C BREAKER	1	41	45				
	09	230/208-3	C BREAKER	1	50	50				
	15	230/208-3	C BREAKER	1	51	60				
Q48HF-C	OZ	460-3	DISCONNECT	1	11	15				
	06	460-3	DISCONNECT	1	20	20				
	09	460-3	DISCONNECT	1	25	25				
	15	460-3	DISCONNECT	1	26	30				

CAUTION: When more than one field power circuit is run through one conduit, the conductors must be de-rated. Pay special attention to Note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three current carrying conductors are in a raceway.

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 local codes. MOCP (Maximum Over-current Protection) value listed is the maximum value as per UL 60335 calculations for MOCP (branch-circuit conductor sizes in this chart are based on this MOCP). The actual factory installed Over-current Protective Device (Circuit Breaker) in this model may be lower than the maximum UL 60335 allowable MOCP value, but still above the UL 60335 minimum calculated value or Minimum Circuit Ampacity (MCA) listed. Refer to the National Electrical code (latest version), Article 310 for power conductor sizing. Review all wiring and safety information provided in the installation manual for the product.

# ////// AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - DEHUMIDIFICATION UNITS

					SINGLE	CIRCUIT		DUAL C	CIRCUIT	
	KW	RATED VOLTAGE	CONNECTION	NO. OF	MINIMUM	MAX. OVER	M	CA	MO	СР
UNIT MODEL	OPTION	AND PHASE (60HZ)	POINT	FIELD CIRCUITS	CIRCUIT AMPACITY (MCA)	CURRENT PROTECTION (MOCP)	СКТ. А	СКТ. В	СКТ. А	СКТ. В
Q24HFDA	0Z	230/208-1	C BREAKER	1	22	25				
	05	230/208-1	C BREAKER	1	48	50				
Q24HFDB	0Z	230/208-3	C BREAKER	1	17	20				
	06	230/208-3	C BREAKER	1	35	35				
	09	230/208-3	C BREAKER	1	44	45				
Q24HFDC	0Z	460-3	DISCONNECT	1	9	15				
	06	460-3	DISCONNECT	1	18	20				
	09	460-3	DISCONNECT	1	22	25				
Q30HFDA	0Z	230/208-1	C BREAKER	1	22	25				
	05	230/208-1	C BREAKER	1	48	50				
Q30HFDB	OZ	230/208-3	C BREAKER	1	18	25				
	06	230/208-3	C BREAKER	1	36	40				
	09	230/208-3	C BREAKER	1	45	45				
Q30HFDC	OZ	460-3	DISCONNECT	1	9	15				
	06	460-3	DISCONNECT	1	18	20				
	09	460-3	DISCONNECT	1	23	25				
Q36HFDA	0Z	230/208-1	C BREAKER	1	29	35				
	05	230/208-1	C BREAKER	1	55	60				
	10	230/208-1	C BREAKER	1 or 2	81	90	29	52	35	60
Q36HFDB	OZ	230/208-3	C BREAKER	1	23	30				
	06	230/208-3	C BREAKER	1	41	45				
	09	230/208-3	C BREAKER	1	50	50				
	15	230/208-3	C BREAKER	1	52	60				
Q36HFDC	OZ	460-3	DISCONNECT	1	12	15				
	06	460-3	DISCONNECT	1	21	25				
	09	460-3	DISCONNECT	1	25	25				
	15	460-3	DISCONNECT	1	26	30				

CAUTION: When more than one field power circuit is run through one conduit, the conductors must be de-rated. Pay special attention to Note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three current carrying conductors are in a raceway.

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 local codes. MOCP (Maximum Over-current Protection) value listed is the maximum value as per UL 60335 calculations for MOCP (branch-circuit conductor sizes in this chart are based on this MOCP). The actual factory installed Over-current Protective Device (Circuit Breaker) in this model may be lower than the maximum UL 60335 allowable MOCP value, but still above the UL 60335 minimum calculated value or Minimum Circuit Ampacity (MCA) listed. Refer to the National Electrical code (latest version), Article 310 for power conductor sizing. Review all wiring and safety information provided in the installation manual for the product.

# ////// AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - DEHUMIDIFICATION UNITS

					SINGLE	CIRCUIT		DUAL (	CIRCUIT	
UNIT	KW	RATED VOLTAGE	CONNECTION	NO. OF	MINIMUM	MAX. OVER	М	CA	МС	CP
MODEL	OPTION	AND PHASE (60HZ)	POINT	FIELD CIRCUITS	CIRCUIT AMPACITY (MCA)	CURRENT PROTECTION (MOCP)	CKT. A	СКТ. В	CKT. A	СКТ. В
Q43HFDA	OZ	230/208-1	C BREAKER	1	31	40				
	05	230/208-1	C BREAKER	1	57	60				
	10	230/208-1	C BREAKER	1 or 2	83	90	31	52	40	60
Q43HFDB	OZ	230/208-3	C BREAKER	1	24	30				
	06	230/208-3	C BREAKER	1	42	45				
	09	230/208-3	C BREAKER	1	51	60				
	15	230/208-3	C BREAKER	1	51	60				
Q43HFDC	0Z	460-3	DISCONNECT	1	12	15				
	06	460-3	DISCONNECT	1	21	25				
	09	460-3	DISCONNECT	1	25	25				
	15	460-3	DISCONNECT	1	26	30				
Q48HFDA	OZ	230/208-1	C BREAKER	1	36	45				
	05	230/208-1	C BREAKER	1 or 2	62	70	36	26	45	30
	10	230/208-1	C BREAKER	1 or 2	88	90	36	52	45	60
	15	230/208-1	C BREAKER	1 or 2	88	90	36	52	45	60
Q48HFDB	OZ	230/208-3	C BREAKER	1	24	30				
	06	230/208-3	C BREAKER	1	42	45				
	09	230/208-3	C BREAKER	1	51	60				
	15	230/208-3	C BREAKER	1	51	60				
Q48HFDC	OZ	460-3	DISCONNECT	1	12	15				
	06	460-3	DISCONNECT	1	21	25				
	09	460-3	DISCONNECT	1	25	25				
	15	460-3	DISCONNECT	1	26	30				

CAUTION: When more than one field power circuit is run through one conduit, the conductors must be de-rated. Pay special attention to Note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three current carrying conductors are in a raceway.

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 local codes.

MOCP (Maximum Over-current Protection) value listed is the maximum value as per UL 60335 calculations for MOCP (branch-circuit conductor sizes in this chart are based on this MOCP). The actual factory installed Over-current Protective Device (Circuit Breaker) in this model may be lower than the maximum UL 60335 allowable MOCP value, but still above the UL 60335 minimum calculated value or Minimum Circuit Ampacity (MCA) listed. Refer to the National Electrical code (latest version), Article 310 for power conductor sizing. Review all wiring and safety information provided in the installation manual for the product.

### ////// ELECTRIC HEAT KW AND BTUH CHART AT FIELD SUPPLIED VOLTAGE

	Total KW and BTUH @ Field-Supplied Voltage											
Electric Heat		@ 2	3 <b>0V</b> (1)			@ 208V (1)				@ 460V		
Nomenclature	KW	1-PH Amps	3-PH Amps	втин	KW	1-PH Amps	3-PH Amps	втин	KW	3-PH Amps	втин	
05	4.6	20.0	11.5	15,700	3.8	18.0	10.4	12,800	4.6	5.8	15,700	
06	5.5		13.9	18,800	4.5		12.5	15,400	5.5	6.9	18,800	
09	8.3		20.8	28,300	6.8		18.7	23,000	8.3	10.4	28,300	
10	9.2	40.0		31,400	7.5	36.1		25,600				
15	13.8	60.0	34.6	47,100	11.3	54.1	31.2	38,400	13.8	17.3	47,100	

# ////// VENTILATION OPTIONS FOR OUTDOOR AIR INTAKE AND ROOM EXHAUST

	VENT CODE	UNIT	INSTALLED WEIGHT	VENTILATION OPERATION	OCCUPANCY VENTILATION INPUT SIGNAL	VENT AIRFLOW	VENT USE
Bar. Damper	X	Q24-Q36	4.0 (1.8)	Barometric Damper with pin to set maximum	None	Up to 25% of rated intake air. No exhaust.	The Barometric Intake Damper opens when the indoor fan is operating. Pins provide an easy way to set up the damper assembly.
Bar. D		Q43-Q48	5.0 (2.3)	position.	None		
No Vent	В	Q24-Q36	1.0 (.5)	No Ventilation.	None	None, Air paths are sealed with block off plates.	The No Vent option provides plates over the intake and exhaust ventilation openings.
No	<b>D</b>	Q43-Q48		None			
Commercial Vent	v	Q24-Q36	Single blade N		24VAC or 2-10VDC	Up to 50% of rated intake air with room exhaust.	Provides outdoor intake and room exhaust air with improved damper sealing. Opens with either a 24VAC signal or DC voltage is applied.
Commer	V	Q43-Q48	35.0 (15.9)	Spring Return	244/10 01 2 104/20		
Economizer	s	Q24-Q36	37.0 (16.8)	Motor with Spring	24VAC or 0-10VDC	Up to 75% of rated intake air with room exhaust.	Economizer with JADE controller. User defined economizing based on enthalpy curves.
Econo	3	Q43-Q48	37.0 (16.8)	Return	24 VAC 01 0-10 VDC		
ecovery	R	Q24-Q36	54.0 (24.4)	Independent Intake and	24VAC - 3 Indepen-	Intake Blower Settings: 300cfm, 375cfm, 450cfm.	Energy Recovery Ventilator with independently adjustable intake and exhaust fans. Heat exchange wheel used to transfer heat from outdoor intake and room exhaust air paths.
Energy Recovery	ĸ	Q43-Q48	54.0 (24.4)	Exhaust Blowers	dent blower speeds	Exhaust Blower Settings: 300cfm, 375cfm, 450cfm.	

# ////// SOUND DATA - DBA @ 5 FT. AND 10 FT.\*

UNIT	DUCT FREE IN- DOOR COOLING OPERATION @ 5 FT.	DUCT FREE INDOOR COOLING OPERA- TION @ 10 FT.	DUCTED INDOOR COOLING OPERA- TION @ 5 FT.	DUCTED INDOOR COOLING OPERA- TION @ 10 FT.	OUTDOOR @ 10 FT.
Q24	52.4	50.4	51.9	48.9	62.3
Q30	53.9	52.9	54.5	47.3	67.1
Q36	53.9	52.9	54.5	47.3	67.1
Q43	56.1	51.7	56.3	51.1	68.6
Q48	57	52.7	57.8	52.8	69

Integrated values calculated per ANSI/ASA S12.60-2009/Part 2, Section 5.2.2.1.

# ////// INDOOR AIR STREAM FILTRATION OPTIONS

UNIT MODEL	FILTER CODE	FILTER MERV RATING	NUMBER OF FILTERS USED	BARD PART NUMBER	FILTER SIZE INCHES (CM)	FILTER ESP	FILTRATION LEVEL	
	X MERV 2 2 70		7004-009	16x16x1 (41x41x3)	0" WC	Low Filtration, 1" Thickness Disposable Media.		
Q24, Q30,	F	MERV 2	2	7004-032	16x16x2 (41x41x6)	O" WC	Low Filtration, 2" Thickness Disposable Media.	
Q36	P, C	MERV 8	2	7004-034	16x16x2 (41x41x6)	.03" WC	Average Filtration, 2" Thickness Pleated Disposable Media.	
	A, B, N	MERV 13	2	7004-069	16x16x2 (41x41x6)	.08" WC	High Filtration, 2" Thickness Pleated Disposable Media.	
	Х	MERV 2	1 of 2	7004-009	16x16x1 (41x41x3)	0" WC	Low Filtration, 1" Thickness Disposable Media.	
	^		2 of 2	7004-010	16x20x1 (41x51x3)	O WC	Low I Ittlation, 1 Thickness Disposable Media.	
	F	F MERV 2	1 of 2	7004-032	16x16x2 (41x41x6)	o" wc	Law Filhestian Of Thistoness Disposable Madia	
Q43,	r	WIERV Z	2 of 2	7004-033	16x20x2 (41x51x6)	O WC	Low Filtration, 2" Thickness Disposable Media.	
Q48	P, C	MERV 8	1 of 2	7004-034	16x16x2 (41x41x6)	.03" WC	Average Filtration 2" Thickness Pleated Dispessible Media	
	P, C	IVIERVO	2 of 2	7004-035	16x20x2 (41x51x6)	.US WC	Average Filtration, 2" Thickness Pleated Disposable Media.	
	A D N	MEDV 12	1 of 2	7004-069	16x16x2 (41x41x6)	00" WC	Lligh Filtration 9" Thiskness Bloated Disposable Media	
	A, B, N	, N   MERV 13	2 of 2	7004-070	16x20x2 (41x51x6)	.08" WC	High Filtration, 2" Thickness Pleated Disposable Media.	

# ////// CABINET COLOR AND FINISH OPTIONS

UNIT MODEL	CABINET COLOR AND FINISH CODE	COLOR AND FINISH	Description
ALL MODELS	X	Beige Painted Steel	This cabinet option uses zinc coated steel panels that are cleaned, rinsed, sealed and dried before a polyurethane primer is applied. The cabinet paint coating is comprised of a textured enamel. The resulting finish is designed to withstand over 1000 hours of salt spray tests per
	4	Buckeye Gray Painted Steel	ASTM B117-03. Cabinet components are insulated with a non-fiberglass formaldehyde free insulation that has a high "R" value, is easy to clean with a FSK foil backing, and resists delamination.
	V	Vinyl Coated Steel	This cabinet option uses zinc coated steel panels that are cleaned, rinsed, sealed and dried before a polyurethane primer is applied. Panels are textured with vinyl pattern. Front panels are a dark slate, and sides are a light platinum color for a premium appearance similar to furniture. Surface is easily cleanable. Cabinet components are insulated with a non-fiberglass formaldehyde free insulation that has a high "R" value, is easy to clean with a FSK foil backing, and resists delamination.





Slate - Front Panels

Platinum - Side Panels

V-Vinyl Coated Steel

# ////// ADDITIONAL CORROSION COATED EVAPORATOR COIL, CONDENSER COIL, AND CABINET OPTIONS

UNIT MODEL	COIL AND CABINET COATING OPTION	EVAPORATOR COIL	CONDENSER COIL	INTERIOR CONDENSER SECTION	EXTERIOR AND INTERIOR CABINET	DESCRIPTION
ALL MODELS	X	STANDARD	STANDARD	STANDARD	STANDARD	Standard green fin evaporator coil and copper aluminum condenser coil. Cabinet is not coated.
	1	COATED	STANDARD	STANDARD	STANDARD	Corrosion coated evaporator coil and copper aluminum condenser coil. Cabinet is not coated.
	2	STANDARD	COATED	STANDARD	STANDARD	Standard green fin evaporator coil and corrosion coated condenser coil. Cabinet is not coated.
	3	COATED	COATED	STANDARD	STANDARD	Evaporator coil and condenser coil are both corrosion coated. Cabinet is not coated.

### FACTORY CONTROLS OPTIONS CHART INCLUDING SWITCHES, SENSORS, RELAYS, AND START KITS

Factory installed controls are provided by Bard to enhance a Wall-Mount product before it is shipped. All Wall-Mount products are shipped with a auto-reset high pressure switch and an auto-reset low pressure switch to help protect refrigeration components. A compressor control module with adjustable voltage protection, delay on make and break, and high/low pressure diagnostics is also standard

CONTROL CODE STANDARD MODELS	CONTROL CODE DEHUMIDIFICATION MODELS	DESCRIPTION OF FACTORY INSTALLED COMPONENTS
Х	X	Standard Hi Pressure Switch, Low Pressure Switch, Compressor Control Module, and Refrigerant leak detector (RDS). These controls are standard for all models.
E	E	Standard controls and Low Ambient Control.
Q	Q	Standard controls, Low Ambient Control and PTCR Start Kit.
R	R	Standard controls, Low Ambient Control, Outdoor Thermostat.

#### Q-TEC UNIT WALL TRIM KITS

The Q-TEC plenum box extension kits allow enclosing the top of the Q-TEC free blow or ducted plenum box options. The front and sides are finished to match the unit and plenum finish and are available in both prepaint and vinyl. The kit can be field modified for various ceiling heights, but a separate kit for 9'-6" ceilings and 10'-2" ceilings is available. Each Q-TEC unit ships with a 4" trim kit from the factory.

UNIT	SIDE EXTENSION	TRIM WIDTH	DESCRIPTION
	Factory Supplied	4"	Side trim will cover 4" gap between unit and finished wall. Available in -X Beige, -4 Gray, -V Vinyl.
ALL	QSTX42A-*-S10	10"	Side trim will cover 9.5" gap between unit and finished wall. Available in -X Beige, -4 Gray, -V Vinyl.
MODELS	QSTX42A-*-S13	13"	Side trim will cover 12.5" gap between unit and finished wall. Available in -X Beige, -4 Gray, -V Vinyl.
	QSTX42A-*-S16	16"	Side trim will cover 15.5" gap between unit and finished wall. Available in -X Beige, -4 Gray, -V Vinyl.

### **Q-TEC UNIT TOP CABINET EXTENSION KITS**

The Q-TEC cabinet extension kits allow enclosing the top of the Q-TEC unit when duct work is to be used. The front and sides are finished to match the unit finish and are available in both prepaint and vinyl. The kit also contains height extension angles that can be used to extend the kit to the ceiling. Offset on bottom of extension pieces fits inside top of unit. Offset not compatible with top of supply plenum boxes, see plenum box extensions.

UNIT	PLENUM BOX	TOP EXTENSION HEIGHT	DESCRIPTION
Q24, Q30, Q36	Q4CX10A-*	21" + 5"	21" Tall top extension kit extends above unit to enclose top when supply duct is used instead of a top supply plenum box. Additional overlapping top trim extensions allow for additional 5"
Q43, Q48	Q4CX15A-*	21" + 5"	above main extension box. Available in colors to match unitX Beige, -4 Gray, -V Vinyl.

### **Q-TEC UNIT FRONT SOUND PLENUM KITS**

///////

The Q-TEC sound plenum reduces sound of unit during operation offering a even quieter experience for the occupied space. Return airpath is redirected through 8" deep plenum that attaches to the front of the unit. Hinged cabinet doors attach to sound plenum front for easy access and unit servicability.

UNIT	PLENUM BOX	PLENUM DEPTH	DESCRIPTION
Q24, Q30, Q36	Q4SP3-*	8"	Easy to assemble kit. Available in colors to match unitX Beige, -4 Gray, -V Vinyl.
Q43, Q48	Q4SP5-*	8"	Easy to assemble kit. Available in colors to match unitX Beige, -4 Gray, -V Vinyl.



### **Q-TEC WALL SLEEVE OPTIONS**

///////

///////

The Q-TEC wall sleeve is a required accessory for the QH unit. It allows for condenser fan air intake and exhaust used during cooling and heating operation. It also provides a path for outdoor ventilation air intake and room air exhaust when using the QH optional ventilation options. It is important to use Bard approved wall sleeve and louver designs to ensure proper condenser airflow and ventilation airflow occurs. Various wall sleeve depths are available to match the building wall depth or to allow QH installation in buildings where the unit will need to have a gap between the wall and the unit.

UNIT	WALL SLEEVE	WALL LOUVER	WALL DEPTH	DESCRIPTION
	QWS42A	QLS2-**	14"	Sleeve designed for 35" x 46.5" wall opening with a wall depth of 14" or less.
	QWS42A-16	QLS2-**	16"	Sleeve designed for 35" x 46.5" wall opening with a wall depth of 16" or less.
	QWS42A-19	QLS2-**	19"	Sleeve designed for 35" x 46.5" wall opening with a wall depth of 19" or less.
Q24, Q30,	QWS42A-20	QLS2-**	20"	Sleeve designed for 35" x 46.5" wall opening with a wall depth of 20" or less.
Q36	QWS42A-23	QLS2-**	23"	Sleeve designed for 35" x 46.5" wall opening with a wall depth of 23" or less.
	QWS42A-30	QLS2-**	30"	Sleeve designed for 35" x 46.5" wall opening with a wall depth of 30" or less.
	QWS42A-H19	QLG-30-4H (Dark Bronze)	19"	Special sleeve and louver design for hurricane rated applications. See 2100-446 for further details.
	QWS48A	QLS4-**	14"	Sleeve designed for 35" x 46.5" wall opening with a wall depth of 14" or less.
	QWS48A-16	QLS4-**	16"	Sleeve designed for 35" x 46.5" wall opening with a wall depth of 16" or less.
	QWS48A-19	QLS4-**	19"	Sleeve designed for 35" x 46.5" wall opening with a wall depth of 19" or less.
Q43, Q48	QWS48A-20	QLS4-**	20"	Sleeve designed for 35" x 46.5" wall opening with a wall depth of 20" or less.
	QWS48A-23	QLS4-**	23"	Sleeve designed for 35" x 46.5" wall opening with a wall depth of 23" or less.
	QWS48A-30	QLS4-**	30"	Sleeve designed for 35" x 46.5" wall opening with a wall depth of 30" or less.
	QWS48A-H19	QLG-35-4H (Dark Bronze)	19"	Special sleeve and louver design for hurricane rated applications. See 2100-446 for further details.

<sup>\*\*</sup> Insert digits for wall louver colors: -10 Aluminum, -20 Med. Bronze, -30 Dark Bronze, -12 Arctic White, -14 Storm White, -18 Milano Beige, -40 School Bus Yellow, -42 Florida Orange, -44 School House Red, -46 Chili Red, -50 Deep Sea Blue, -52 Bahama Blue, -54 lvy Green, -56 Sage Green, -32 Jet Black, -36 Graphite Gray, -75 Custom Colors/special order.

### **Q-TEC DIVIDER PLATES FOR EXISTING WALL SLEEVES**

When performing a replacement QH unit installation where you intend to reuse an existing wall sleeve a condenser section blank off plate is required to ensure adequate seal between the condenser inlet and the outdoor louver.

UNIT	DIVIDER PLATE KIT	WALL SLEEVE DEPTH	DESCRIPTION
	Not Needed.	14"	
	Q3TBOP-16	16"	
024 020 026	Q3TB0P-20	19"	Divider plate to separate condenser inlet and exhaust airpath when using an existing wall sleeve. Ths plate is provided with new QWS wall sleeves, but needed when an
Q24, Q30, Q36	Q3TBOP-20	20"	existing older unit model (series 3 or older) is being replaced and the existing wall sleeve is being re-used.
	Q3TBOP-23	23"	5.55.5 15 55.11g 15 4554.
	Q3TBOP-30	30"	
	Not Needed.	14"	
	Q4TBOP-16	16"	
042 049	Q4TB0P-20	19"	Divider plate to separate condenser inlet and exhaust airpath when using an existing wall sleeve. Ths plate is provided with new QWS wall sleeves, but needed when an
Q43, Q48	Q4TB0P-20	20"	existing older unit model (series 3 or older) is being replaced and the existing wall sleeve is being re-used.
	Q4TB0P-23	23"	5.55.5 .5 55.11 .5 5555.
	Q4TBOP-30	30"	

### **DUCT FREE SUPPLY PLENUM BOXES**

The Q-TEC duct free plenum boxes allow for conditioned supply air distribution throughout a room without the use of duct work. The duct free plenum boxes are designed to provide quiet operation by using non-fiberglass sound reducing insulation. A 4 front way deflection grille is standard, and side grilles are optional. An 8" plenum box height is available, but the standard 14" plenum box height is recommended for the best sound reduction characteristics.

UNIT	PLENUM BOX	PLENUM HEIGHT	SUPPLY GRILLES	DESCRIPTION	
	QPB36-*	14"	4-Way Front Grille		
Q24, Q30, Q36	QPBS36-*	14"	4-Way Front and Side Grilles	Sound reducing top supply air plenum box. Available in colors to match unit cabinetX Beige, -4 Gray, -V Vinyl.	
	QPBS36-*-8	8"	4-Way Front and Side Grilles		
	QPB49-*	14"	4-Way Front Grille		
Q43, Q48	QPBS49-*	14"	4-Way Front and Side Grilles	Sound reducing top supply air plenum box. Available in colors to match unit cabinetX Beige, -4 Gray, -V Vinyl.	
	QPBS49-*-8	8"	4-Way Front and Side Grilles		

#### HOT WATER SUPPLY PLENUM BOXES

///////

The Q-TEC plenum boxes with hot water heating allow for conditioned supply air distribution throughout a room. They also include a water coil that can be used as a primary or secondary heating source. Optional 3-way ON/OFF valve for heating activation or water bypass when not being used. The duct free plenum boxes are designed to provide quiet operation by using non-fiberglass sound reducing insulation. A duct free version is available with a 4 way deflection grille. A ducted version is also available that uses a top discharge 8" x 30" supply opening.

UNIT	PLENUM BOX	PLENUM HEIGHT	SUPPLY DISCHARGE	VALVE	DESCRIPTION	
	QPBHW36-F-*	14"	4-Way Front Grille	3-Way ON/OFF	Sound reducing top plenum box with hot water coil.	
Q24, Q30, Q36	QPBHW36-D-*	14"	Top 8" x 30" Duct	3-Way ON/OFF	Copper connections .875 O.D. Available in colors to match unit cabinetX Beige, -4 Gray, -V Vinyl.	
	QPBHW36-F-*-NV	14"	4-Way Front Grille	None		
042 040	QPBHW49-F-*	14"	4-Way Front Grille	3-Way ON/OFF	Sound reducing top plenum box with hot water coil.	
Q43, Q48	QPBHW49-D-*	14"	Top 8" x 30" Duct	3-Way ON/OFF	Copper connections .875 O.D. Available in colors to match unit cabinetX Beige, -4 Gray, -V Vinyl.	

### ////// HOT WATER HEATING COIL PERFORMANCE

CDM	СFМ									
GPM	800	900	1000	1100	1200	1300	1400	1500	1600	1700
1.5	32,000	32,667	33,333	34,000	34,500	35,000	35,500	36,000	36,400	36,750
2	42,000	43,200	44,400	45,600	46,400	47,200	48,000	48,500	49,000	49,500
3	49,000	51,667	53,750	57,000	59,400	61,750	64,000	65,200	66,000	67,000
4	56,000	59,000	62,000	65,000	69,000	73,000	77,000	79,500	82,000	84,000
5	59,000	62,583	66,167	69,750	72,833	75,917	79,000	81,000	83,000	85,000
6	62,000	66,167	70,333	74,500	77,000	79,500	82,000	83,500	85,000	86,500
7	63,500	67,708	71,917	76,125	78,917	81,708	84,500	86,500	88,000	89,200
8	65,000	69,250	73,500	77,750	80,833	83,917	87,000	88,900	90,500	91,750
9	66,000	70,525	75,050	79,575	82,883	86,192	89,500	91,500	93,000	94,500
10	67,000	71,800	76,600	81,400	84,933	88,467	92,000	94,500	96,000	97,500

### Q-TEC PLENUM BOX EXTENSION KITS

The Q-TEC plenum box extension kits allow enclosing the top of the Q-TEC free blow or ducted plenum box options. The front and sides are finished to match the unit and plenum finish and are available in both prepaint and vinyl. The kit can be field modified for various ceiling heights, but a separate kit for 9'-6" ceilings and 10'-2" ceilings is available.

UNIT	PLENUM BOX	TOP EXTENSION HEIGHT	DESCRIPTION	
Q24, Q30, Q36	QPBX36-9-*	14"	Easy to assemble extension kit encloses top area above a supply plenum box. Available in	
u24, u30, u30	QPBX36-10-*	22"	colors to match unitX Beige, -4 Gray, -V Vinyl.	
Q43, Q48	QPBX49-9-*	14"	Easy to assemble extension kit encloses top area above a supply plenum box. Available	
Q43, Q46	QPBX49-10-*	22"	colors to match unitX Beige, -4 Gray, -V Vinyl.	



### **Q-TEC OPTIONAL DRAIN KITS**

//////

///////

The Q-TEC unit drain kits are designed to allow the rear condensate drain to be used while not hindering the ability to disconnect the unit from the wall sleeve and pull the unit away from the wall for servicability. The drain kit box is mounted inside the wall cavity and the unit drain is enclosed by the box during normal operation.

UNIT DRAIN KIT		DESCRIPTION	
	QCDS48A	Rear Condensate drain system for easy removal of unit from wall sleeve.	
ALL MODELS	QCDS48H	Rear Condensate drain system with 115VAC 20W heated drain for freezing climates. Requires separate electrical circuit.	

#### DOOR MOUNTED THERMOSTAT KITS

The Q-TEC door mounted thermostat kit provides installation instructions and required wiring to mount a standard thermostat on the left front door.

UNIT	THERMOSTAT KIT	DESCRIPTION
ALL MODELS	QDMCK	The kit provides a 15 pin male / female connector with wires. The kit also includes wire ties, grommets, bushings, and edge guards.

# CONTROLLER, THERMOSTAT, HUMIDISTAT AND CO2 VENTILATION CONTROL OPTIONS

Bard provides a wide variety of controllers for equipment cooling, thermostats, for equipment and comfort cooling, humidistats for dehumidification units, and CO2 sensors for ventilation control. Lockable thermostat covers are available for applications where security or supervisory control is desired.

THERMOSTAT	OPERATION	DESCRIPTION	
		Programmable or Nonprogrammable, ventilation output, dehumidification operation	
		Temp. Settings per Day 4, 2, 1, 0 Programs per Week 7, 5-2, 5-1-1 or Nonprogrammable	
8403-090	2 Heat/2 Cool	Temp. Settings per Day 4, 2, 1, 0 Programs per Week 7, 5-2, 5-1-1 or Nonprogrammable	
8403-091 1 Heat/1 Cool		Easy to use, Nonprogrammable. FEMA use	
8403-092 2 Heat/2 Cool 8403-095 2 Heat/1 Cool		Programmable or Nonprogrammable, ventilation output, Wi-Fi	
		Temp. Settings per Day 4, 2, 1, 0 Programs per Week 7, 5-2, 5-1-1 or Nonprogrammable	
8403-081	3 Heat/3 Cool	BrightStat Advanced Controller with Temperature, Humidity, BACnet, Modbus, and Motion.	
8403-083 3 Heat/3 Cool		BrightStat Advanced Controller with Temperature, Humidity, BACnet and Modbus.	
8403-086	CO2 Card	Plug-in CO2 Card for the BrightStat.	

HUMIDISTAT	OPERATION	DESCRIPTION	
8403-047 Humidity %RH		Electronic with display, lockable keypad, humidity sensor calibration (Viconics)	
8403-100	Humidity %RH	Electronic with display, lockable keypad, humidity sensor calibration (Honeywell)	

CO2 CONTROL	OPERATION	DESCRIPTION
\$8403-096	CO2 PPM	CO2 ventilation control with digital display. On/Off or modulating ventilation operation

THERMOSTAT COVER*	SIZE	DESCRIPTION
8405-003	(Inside) 5-1/16" H x 6-1/16" W (Outside) 6-1/2" H x 7-1/2" W x 2-15/16" D	Clear acrylic with ventilation. Fits all thermostats except 8403-060
8405-005	(Inside) 5-7/8" H x 8-3/8" W (Outside) 7-1/4" H x 9-3/4" W x 3-3/8" D	Clear acrylic with ventilation. Fits all thermostats.
8405-006	(Inside) 5-1/16" H x 6-1/16" W (Outside) 6-3/8" H x 7-3/8" W x 2-7/8" D	Clear acrylic with ventilation. Fits all thermostats except 8403-060
8405-007	(Inside) 5-7/8" H x 8-3/8" W (Outside) 7-1/8" H x 9-5/8" W x 3-1/4" D	Beige painted steel cover with ventilation. Fits all thermostats.

PAGE **15** OF 15

<sup>\*</sup> Thermostat covers include ventilation, but may effect temperature control reaction time. If security control lockout is needed, the 8403-060 thermostat provides input control lockout features.



Bard Manufacturing Company, Inc. 1914 Randolph Dr., Bryan, OH 43506 419-636-1194

www.bardhvac.com

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

