

V & H Series

Eubank[®]
NATIONAL COIL COMPANY

R410A Wallmounts

V Series Air Conditioners
H Series Heat Pumps

Performance

- Efficiency ratings 9.0 EER & 3.0 COP
- Sizes range from 1.5/2.0 to 5 tons
- Electric heat available from 5 kW to 20 kW
- Designed for ducted or non-ducted applications
- AHRI performance certified, ETL safety approved

Features

- R410A refrigerant
- All major components can be accessed from the front, offering the maximum serviceability
- Scroll compressors
- 16- and 20-gauge G-90 galvanized construction protected by a 1000-hour salt spray, baked-on polyester finish
- LP, HP switches (standard on all models)
- Plug-in control options and heaters receptacle minimize field wiring for control options and electric heaters (standard on all models)
- Built-in circuit breakers with lockable outside access door on all models (disconnet on 460 volt models)
- Factory-installed air filters: 1" disposable
- Permanently-lubricated indoor and outdoor motors; indoor blower assembly designed for quiet operation in ducted or free-blow applications
- Barometric damper with washable outside air filter (standard on all models)
- Phase monitor is standard in all 3-phase units
- Applications include telecom, schools, offices, and modular buildings



Table of Contents

Model Key	3
Options	3
V Series Air Conditioners Specifications	4
V Series Air Conditioners Electrical Data	5
V Series Electric Heaters	6
V Series Air Conditioners Cooling Performance	6
H Series Heat Pumps Specifications	7
H Series Heat Pumps Electrical Data	8
H Series Electric Heaters	9
H Series Heat Pumps Cooling Performance	9
H Series Heat Pumps Heating Performance	9
V & H Series Total Cooling Capacity vs. Ambient Temperature	10
Unit Dimensions & Model Schematics	11

Eubank is a dynamic manufacturer of air conditioning and refrigeration equipment, including Wallmount packaged air conditioners, Wallmount packaged heat pumps, refrigeration condensing units, refrigeration unit coolers, evaporator coils, condenser coils and other heat exchanger products, marketed under the Eubank and other brand names.

Eubank is a participating member in AHRI's certification programs. All Eubank products are certified to be applicable with UL safety standards.

Eubank is a technologically advanced, quality oriented and customer service focused premium supplier that you can count on.

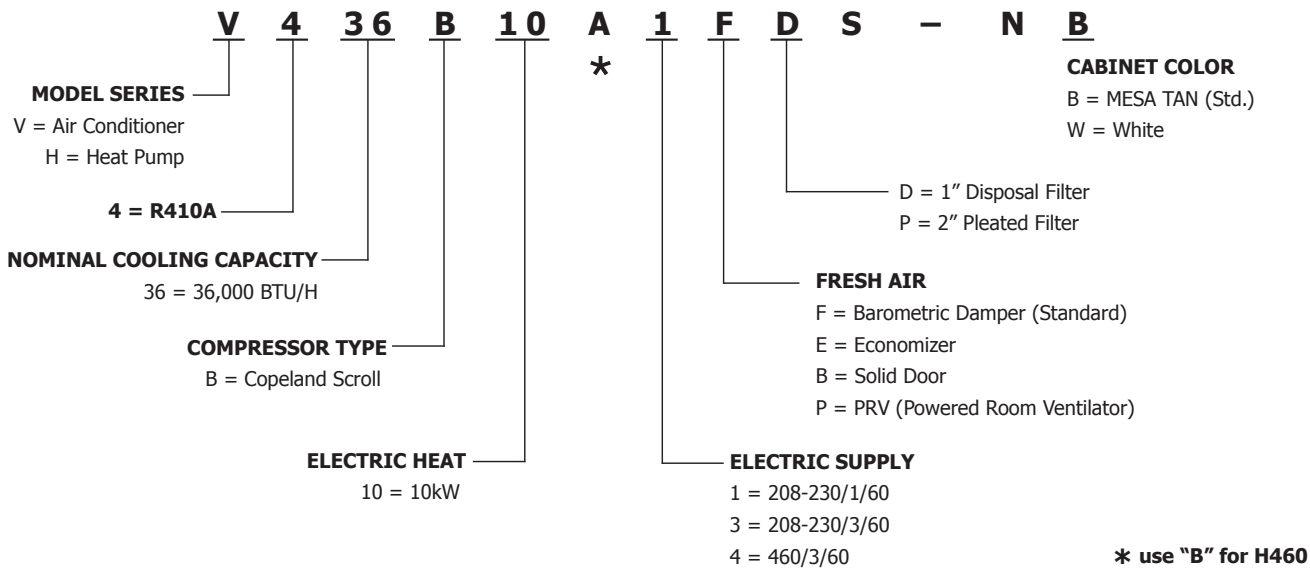
Eubank is a registered trademark of National Coil Company. Due to manufacturer's policy of continuous product improvement, the manufacturer reserves the right to make changes without notice. All product specifications reflect available information at the printing of this brochure.

© 2011 National Coil Company. All rights reserved.



Model Key: Air Conditioners and Heat Pumps

NOMENCLATURE



Options

> Electric heaters

> High/low pressure alarm contacts

> Low ambient packages

> 2" pleated filters

> Return and supply grilles

> Coated coils

> Economizers

> Powered room ventilators (PRV)

> Lead-lag controllers
(not available for heat pumps models)

> 4 & 5 ton models with 3 ton back plates
(economizer not available with this option)

> Choice of skin color:
Mesa Tan (Standard), White

> Thermostats

V Series Air Conditioners Specifications

MODEL	V418B**A1	V424B**A1	V430B**A1	V430B**A3	V436B**A1	V436B**A3	V436B**A4
COOLING CAPACITY [J]	16,000	23,600	29,400	29,400	35,000	35,000	35,000
EER [J]	9.0						
VOLTS/PHASE/HERTZ	208-230/1/60		208-230/3/60		208-230/1/60	208-230/3/60	460/3/60
COMPRESSOR DATA							
TYPE	Scroll						
RATED LOAD AMPS	9.0	12.8	16.0	10.0	17.9	13.2	6.0
OUTDOOR FAN DATA							
HP, RPM	1/5, 1075						
FULL LOAD AMPS	1.5						0.7
FAN - DIA/CFM	20"/2000						
BLOWER DATA							
HP, RPM	1/6, 1075		1/3, 1075				
FULL LOAD AMPS	1.5		2.5				1.2
RATED CFM/ESP [K]	700/0.10	800/0.10	1250/0.15		1250/0.15		
VENTILATION PACKAGE							
BAROMETRIC DAMPER	ADJUSTABLE BAROMETRIC DAMPER STANDARD ON ALL						
BAROMETRIC FILTER	PERMANENT WASHABLE 7" X 29" X 1/4"						
MAX FRESH AIR - CFM% [L]	170/25%	200/25%	300/25%		300/25%		
RETURN AIR FILTER	25" X 16" X 1" DISPOSABLE						
WEIGHT - SHIPPING NET	205/282		349/321		352/324		

V Series Air Conditioners Continued

MODEL	V448B**A1	V448B**A3	V448B**A4	V460B**A1	V460B**A3	V460B**A4
COOLING CAPACITY [J]	44,000			55,000		
EER [J]	9.0					
VOLTS/PHASE/HERTZ	208-230/1/60	208-230/3/60	460/3/60	208-230/1/60	208-230/3/60	460/3/60
COMPRESSOR DATA						
TYPE	Scroll					
RATED LOAD AMPS	21.4	14.5	7.1	30.1	20.5	9.6
OUTDOOR FAN DATA						
HP, RPM	1/2, 1100					
FULL LOAD AMPS	1.5		1.5	2.5		1.5
FAN - DIA/CFM	22"/3000					
BLOWER DATA						
HP, RPM			1/2, 1100	3/4, 1100		
FULL LOAD AMPS	3.5		2.0	3.7		1.8
RATED CFM/ESP [K]	1800/0.20			2100/0.20		
VENTILATION PACKAGE						
BAROMETRIC DAMPER	ADJUSTABLE BAROMETRIC DAMPER STANDARD ON ALL					
BAROMETRIC FILTER	PERMANENT WASHABLE 7" X 29" X 1/4"					
MAX FRESH AIR - CFM% [L]	450/25%			525/25%		
RETURN AIR FILTER	20" X 30" X 1" DISPOSABLE					
WEIGHT - SHIPPING NET	450/494			525/515		

[J] Rated in accordance with ANSI/ARI Standard 390-2003

[K] Includes factory-installed filters and wet coils

[L] CFM with standard return air filter grille in place

V410A Series Air Conditioners Electrical Data

MODEL NO. & ELECTRIC HEATER kW [1]	VOLT/ PHASE 60 Hz	NO. OF FIELD POWER CKTS.	SINGLE-FIELD CIRCUIT				DUAL-FIELD CIRCUIT											
			MINIMUM CIRCUIT AMPACITY	MAX FUSE OR HVACR BREAKER SIZE 2	FIELD POWER WIRE SIZE [3], [4], [5]	GROUND WIRE SIZE	MIN. WIRE AMPACITY		MAX FUSE OR HVACR BREAKER		FIELD POWER WIRE SIZE [3], [4], [5]		GROUND WIRE SIZE					
							CKT1	CKT2	CKT1	CKT2	CKT1	CKT2	CKT1	CKT2				
V418B00A1 5 10	208-230/1	1	16	30	14	14												
		1	28	30	10	10												
		1	54	60	6	10												
V424B00A1 5 10	208-230/1	1	18	30	14	14												
		1	28	30	10	10												
		1	54	60	6	10												
V424B00A3 6 9	208-230/3	1	15	30	14	14												
		1	20	30	14	14												
		1	29	30	10	10												
V430B00A1 5 10 15	208-230/1	1	24	30	12	12												
		1	29	30	10	10												
		1	55	60	6	10												
		1 OR 2	81	90	4	8	29	52	30	60	10	6	10	10				
V430B00A3 6 9 15	208-230/3	1	16	30	14	14												
		1	21	30	12	12												
		1	30	60	10	10												
		1	48	60	8	10												
V436B00A1 5 10 15	208-230/1	1	26	30	10	10												
		1	29	30	10	10												
		1	55	60	6	10												
		1 OR 2	81	90	4	8	26	52	30	60	10	6	10	10				
V436B00A3 6 9 15	208/230/3	1	20	30	12	12												
		1	21	30	12	12												
		1	30	60	10	10												
		1	48	60	8	10												
V436B00A4 6 9 15	460/3	1	9	15	14	14												
		1	10	15	14	14												
		1	14	15	14	14												
		1	23	30	12	12												
V448B00A1 5 10 15 20	208-230/1	1	32	60	10	10												
		1	32	60	10	10												
		1	55	60	6	10												
		1 OR 2	81	90	4	8	29	52	30	60	10	6	10	10				
		1 OR 2	107	125	2	6	55	52	60	60	6	6	10	10				
V448B00A3 6 9 15 18	208-230/3	1	24	30	12	12												
		1	24	30	12	12												
		1	30	60	10	10												
		1	48	60	8	10												
		1	57	60	6	10												
V448B00A4 6 9 15	460/3	1	12	15	14	14												
		1	12	15	14	14												
		1	16	30	14	14												
		1	25	30	10	10												
V460B00B1 5 10 15 20	208-230/1	1	41	60	8	10												
		1	41	60	8	10												
		1	57	60	6	10												
		1 OR 2	83	90	4	8	31	52	60	60	10	6	10	10				
		1 OR 2	109	125	2	6	57	52	60	60	6	6	10	10				
V460B00B3 6 9 15 18	208-230/3	1	29	30	10	10												
		1	29	30	10	10												
		1	32	60	10	10												
		1	50	60	6	10												
		1	59	60	6	10												
V460B00B4 6 9 15	460/3	1	15	15	14	14												
		1	15	15	14	14												
		1	16	30	14	14												
		1	25	30	10	10												

[1] Heater data were based on 240 or 480V AC respectively.
 [2] Maximum recommended size for "Time Delay" fuse or HACR circuit breaker.
 [3] Power supply wire size and ground wire sizes were based on AWG 75C rise, NEC Article 310 and Table 310-16.

[4] For single power conductor, sized per NEC Table 310-16.
 [5] Power supply wire minimum 75°C rated COPPER CONDUCTOR ONLY.

V Series Electric Heaters (Factory or Field-installed)

HEATER MODEL	BTU* OUTPUT	* AMPS	SHIP	APPROVED UNIT AND HEATER COMBINATION						
			WT.	18-1	24-1	30-1	36-1	48-1	60-1	24-3
EGA05B1	17,000	20.8	15	X	X	X	X	X	X	
EGA10B1	34,000	41.6	16	X	X	X	X	X	X	
EGH15B1	51,000	62.5	18			X	X	X	X	
EGH06B3	20,000	14.4	15							X
EGH09B3	31,000	21.7	18							X
EGH18B3	61,000	43.3	18							
EGH06D4	20,000	7.2	15							
EGH09D4	31,000	10.8	18							
EGH15D4	51,000	18.0	18							

HEATER MODEL	BTU* OUTPUT	* AMPS	SHIP	APPROVED UNIT AND HEATER COMBINATION						
			WT.	30-3	36-3	48-3	60-3	36-4	48-4	60-4
EGA05B1	17,000	20.8	15							
EGA10B1	34,000	41.6	16							
EGH15B1	51,000	62.5	18							
EGH06B3	20,000	14.4	15	X	X	X	X			
EGH09B3	31,000	21.7	18	X	X	X	X			
EGH18B3	61,000	43.3	18			X	X			
EGH06D4	20,000	7.2	15					X	X	X
EGH09D4	31,000	10.8	18					X	X	X
EGH15D4	51,000	18.0	18						X	X

* BTU output and current based on 240 volts operation for 208 to 230 volts models and 480 volts for 460 volt models.
 * BTU multiplier for 230 volts operation — multiply the listed output by 0.92; for 208 volts operation multiply by 0.75; for 460 volts operation multiply by 0.92.
 * Current multiplier — for 230 volts operation multiply the listed amps by 0.96; for 208 volts operation multiply by 0.87; for 460 volts operation multiply by 0.96.

V Series Air Conditioners Cooling Performance

MODEL	AMBIENT TEMPERATURE (°F)			
	95		80	
	TOTAL	SENSIBLE	TOTAL	SENSIBLE
418	16,000	12,000	18,000	13,000
424	23,600	17,000	25,200	17,000
430	29,400	21,100	31,300	22,000
436	35,000	26,000	37,300	25,000
448	44,000	34,200	50,000	34,000
460	55,000	40,000	58,400	40,500

H Series Heat Pumps Specifications

MODEL	H424B**A1	H424B**A3	H430B**A1	H430B**A3	H436B**A1	H436B**A3	H436B**A4
COOLING CAPACITY [J]	23,600		29,400		35,000		
EER [J]	9.0						
HEATING CAPACITY [J]	23,000		28,000		34,000		
COP [J]	3.0						
VOLTS/PHASE/HERTZ	208-230/1/60	208-230/3/60	208-230/1/60	208-230/3/60	208-230/1/60	208-230/3/60	460/3/60
COMPRESSOR DATA							
TYPE	Scroll						
RATED LOAD AMPS	12.8	10.4	16	10	17.9	13.2	6.0
OUTDOOR FAN DATA							
HP, RPM	1/5, 1075						
FULL LOAD AMPS	1.5					0.7	
FAN - DIA/CFM	20"/2000						
BLOWER DATA							
HP, RPM	1/6, 1075		1/3, 1075				
FULL LOAD AMPS	1.5		2.5				1.2
RATED CFM/ESP [K]	800/0.10		1250/0.15				
VENTILATION PACKAGE							
BAROMETRIC DAMPER	ADJUSTABLE BAROMETRIC DAMPER STANDARD ON ALL						
BAROMETRIC FILTER	PERMANENT WASHABLE 7" X 29" X 1/4"						
MAX FRESH AIR - CFM% [L]	195/25%		288/25%			353/25%	
RETURN AIR FILTER	25" X 16" X 1" DISPOSABLE						
WEIGHT - SHIPPING NET	305/282		349/321			352/324	

MODEL	H448B**A1	H448B**A3	H448B**A4	H460B**A1	H460B**A3	H460B**A4
COOLING CAPACITY [J]	35,000		44,000			54,000
EER [J]	9.0					
HEATING CAPACITY [J]	34,300		45,000			54,000
COP [J]	3.0					
VOLTS/PHASE/HERTZ	208-230/1/60	208-230/3/60	460/3/60	208-230/1/60	208-230/3/60	460/3/60
COMPRESSOR DATA						
TYPE	SCROLL					
RATED LOAD AMPS	21.4	14.5	7.1	26.3	15.6	7.8
OUTDOOR FAN DATA						
HP, RPM	1/5, 1075		1/2, 1100			
FULL LOAD AMPS	2.5		1.5	2.5		1.5
FAN - DIA/CFM	20"/2000		22"/3000			
BLOWER DATA						
HP, RPM	1/3, 1075		1/2, 1100		3/4, 1100	
FULL LOAD AMPS	3.5		2.0		4.0	
RATED CFM/ESP [K]	1250/0.15		1800/0.20		2100/0.20	
VENTILATION PACKAGE						
BAROMETRIC DAMPER	ADJUSTABLE BAROMETRIC DAMPER STANDARD ON ALL					
BAROMETRIC FILTER	PERMANENT WASHABLE 7" X 29" X 1/4"					
MAX FRESH AIR - CFM% [L]	353/25%		425/25%		495/25%	
RETURN AIR FILTER	25" X 16" X 1" DISPOSABLE		20" X 30" X 1" DISPOSABLE			
WEIGHT - SHIPPING NET	524/494				545/515	

[J] Rated in accordance with ANSI/ARI Standard 390-2003

[K] Includes factory-installed filters and wet coils

[L] CFM with standard return air filter grille in place

V410A Series Heat Pumps Electrical Data

Model No. & Electric Heater Kw [1]	VOLT/PHASE 60 Hz	NO. OF FIELD POWER CKTS.	SINGLE-FIELD CIRCUIT				DUAL-FIELD CIRCUIT								
			MINIMUM CIRCUIT AMPACITY	MAX FUSE OR HVACR BREAKER SIZE [2]	FIELD POWER WIRE SIZE [3], [4], [5]	GROUND WIRE SIZE	MINIMUM WIRE AMPACITY		MAX FUSE OR HVACR BREAKER [2]		FIELD POWER WIRE SIZE [3], [4], [5]		GROUND WIRE SIZE		
							CKT1	CKT2	CKT1	CKT2	CKT1	CKT2	CKT1	CKT2	
H424B00A1 5 10	208-230/1	1	18	30	14	14									
		1	44	60	8	10									
		1 OR 2	70	90	4	8	18	52	30	60	14	6	14	10	
H424B00A3 6 9	208-230/3	1	15	30	14	14									
		1	33	60	10	10									
		1	42	60	8	10									
H430B00A1 5 10	208-230/1	1	24	30	12	12									
		1	50	60	8	10									
		1 OR 2	76	90	4	8	24	52	30	60	12	6	12	10	
H430B00A3 6 9	208-230/3	1	16	30	14	14									
		1	34	60	10	10									
		1	43	60	8	10									
H436B00A1 5 10	208-230/1	1	26	30	10	10									
		1	52	60	6	10									
		1 OR 2	78	90	4	8	26	52	30	60	10	6	10	10	
H436B00A3 6 9	208-230/3	1	20	30	12	12									
		1	38	60	8	10									
		1	47	60	8	10									
H436B00A4 6 9	460/3	1	9	15	14	14									
		1	18	30	14	14									
		1	23	30	12	12									
H448B00A1 5 10	208-230/1	1	32	60	10	10									
		1	58	60	6	10									
		1 OR 2	84	90	4	8	32	52	60	60	10	6	10	10	
H448B00A3 6 9	208-230/3	1	24	30	12	12									
		1	42	60	8	10									
		1	51	60	6	10									
H448B00A4 6 9	460/3	1	11	15	14	14									
		1	20	30	12	12									
		1	25	30	10	10									
H460B00B1 5 10	208-230/1	1	41	60	8	10									
		1 OR 2	67	90	4	8	41	26	60	30	8	10	10	10	
		1 OR 2	93	100	3	8	41	52	60	60	8	6	10	10	
H460B00B3 6 9	208-230/3	1	29	30	10	10									
		1	47	60	8	10									
		1	56	60	6	10									
H460B00B4 6 9	460/3	1	15	15	14	14									
		1	24	30	12	12									
		1	28	30	10	10									

[1] Heater data was based on 240V or 480V AC respectively.
 [2] Maximum recommended size for "Time Delay" fuse or HACR circuit breaker.
 [3] Power supply wire size and ground wire sizes were based on AWG 75C rise, NEC Article 310 and Table 310-16.
 [4] For single power conductor, sized per NEC Table 310-16.
 [5] Power supply wire minimum 75C rated COPPER CONDUCTOR ONLY.
 [6] Max 10kW Heat with heat pump operation. Full electric heat available in emergency heat mode.

H Series Electric Heaters (Factory or Field-Installed)

HEATER MODEL	BTU* OUTPUT	* AMPS	SHIP	APPROVED UNIT AND HEATER COMBINATION						
			WT.	24-1	30-1	36-1	48-1	60-1	24-3	30-3
EGH05B1	17,000	20.8	15	X	X	X	X	X		
EGH10B1	34,000	41.6	16	X	X	X	X	X		
EGH06B3	20,000	14.4	15						X	X
EGH09B3	31,000	21.7	18						X	X
EGH06D4	20,000	7.2	15							
EGH09D4	31,000	10.8	18							

HEATER MODEL	BTU* OUTPUT	* AMPS	SHIP	APPROVED UNIT AND HEATER COMBINATION						
			WT.	36-3	48-3	60-3	36-4	48-4	60-4	
EGH05B1	17,000	20.8	15							
EGH10B1	34,000	41.6	16							
EGH06B3	20,000	14.4	15	X	X	X				
EGH09B3	31,000	21.7	18	X	X	X				
EGH06D4	20,000	7.2	15				X	X	X	
EGH09D4	31,000	10.8	18				X	X	X	

* BTU output and current based on 240 volts operation for 208 to 230 volts models and 480 volts for 460 volt models.
 * BTU multiplier for 230 volts operation — multiply the listed output by 0.92; for 208 volts operation multiply by 0.75; for 460 volts operation multiply by 0.92.
 * Current multiplier — for 230 volts operation multiply the listed amps by 0.96; for 208 volts operation multiply by 0.87; for 460 volts operation multiply by 0.96.

H Series Heat Pumps Cooling Performance

MODEL	AMBIENT TEMPERATURE (°F)			
	95		80	
	TOTAL	SENSIBLE	TOTAL	SENSIBLE
H424	23,600	17,000	25,200	17,000
H430	29,400	21,000	31,300	22,000
H436	35,000	26,000	37,300	25,000
H448	44,000	34,200	50,000	34,000
H460	54,000	39,000	57,400	39,500

H Series Heat Pumps Heating Performance

MODEL	AMBIENT TEMPERATURE (°F)	
	47	17
H424	23,600	15,000
H430	28,000	18,000
H436	34,000	21,000
H448	45,000	27,000
H460	54,000	32,000

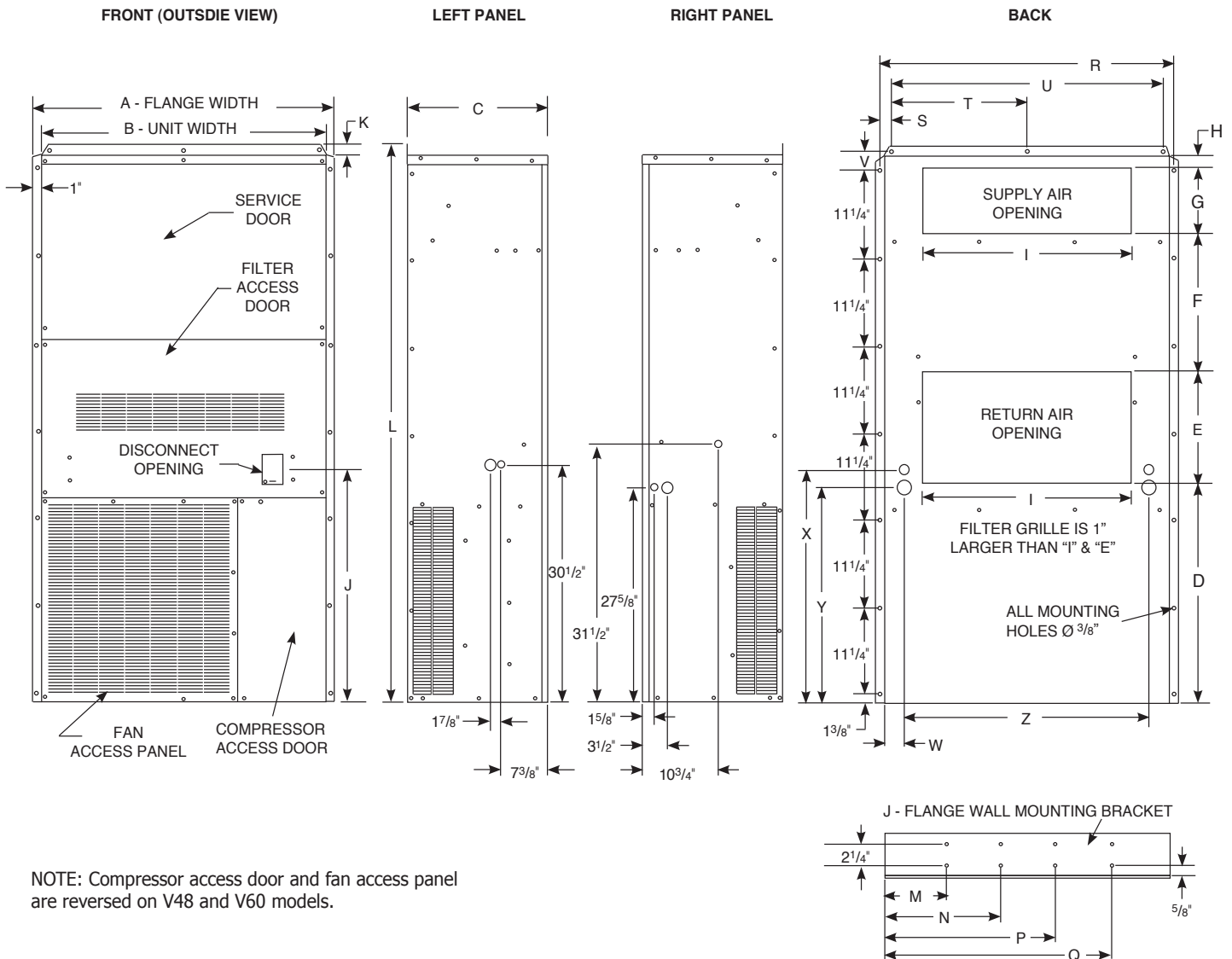
V & H Series Total Cooling Capacity Vs. Ambient Temperature

MODEL	I.D. (°F) DB/WB	AMBIENT TEMPERATURE (°F)								
		75	80	85	90	95	100	105	110	115
418	75/62	17,000	16,600	16,300	15,900	15,600	15,200	14,800	14,300	13,900
	80/67	18,000	17,600	17,300	16,900	16,000	15,800	15,500	15,200	14,800
	85/72	19,000	18,600	18,300	17,900	17,500	17,000	16,600		
424	75/62	24,400	23,900	23,400	22,900	22,300	21,800	21,100	20,500	19,800
	80/67	25,700	25,200	24,700	24,200	23,600	23,000	22,400	21,700	21,000
	85/72	27,000	26,500	26,000	25,400	24,900	24,300	23,600		
430	75/62	30,100	29,600	29,000	28,400	27,700	27,100	26,400	25,700	24,900
	80/67	31,900	31,300	30,700	30,100	29,400	28,700	28,000	27,300	26,500
	85/72	33,700	33,000	32,400	31,800	31,100	30,400	29,600		
436	75/62	36,000	35,300	34,600	33,900	33,100	32,300	31,500	30,600	29,800
	80/67	37,900	37,300	36,500	35,800	35,000	34,200	33,300	32,400	31,500
	85/72	40,000	39,300	38,500	37,700	36,900	36,100	35,200		
448	75/62	48,100	47,200	46,300	45,400	43,500	42,800	41,500	41,000	40,000
	80/67	50,900	50,000	49,000	48,000	44,000	43,500	42,500	42,000	41,000
	85/72	53,700	52,800	51,800	50,800	49,700	48,600	47,400		
460	75/62	55,300	54,300	53,200	52,200	50,900	49,700	48,400	47,000	41,600
	80/67	58,400	57,400	56,300	55,200	55,000	52,700	51,400	49,900	44,000
	85/72	61,600	60,700	59,500	58,300	57,100	55,800	54,400		

Unit Dimensions

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M
18/24	36	34	18 ⁵ / ₈	28 ¹ / ₁₆	12	20 ¹ / ₂	8	1 ⁷ / ₈	20	28 ⁹ / ₁₆	1 ¹ / ₈	71 ¹ / ₂	2 ¹ / ₂
30/36	40	38	18 ⁵ / ₈	28 ¹ / ₂	14	18	8	1 ⁷ / ₈	28	28 ⁹ / ₁₆	1 ¹ / ₈	71 ¹ / ₂	2 ¹ / ₂
48/60	43 ¹ / ₈	41	24	27 ¹ / ₂	16	30	10	2 ¹ / ₄	30	36 ¹ / ₂	1 ¹ / ₈	87	2 ¹ / ₂

MODEL	N	P	Q	R	S	T	U	V	W	X	Y	Z
18/24	10 ¹ / ₂	18 ¹ / ₂	26 ¹ / ₂	34 ⁷ / ₈	1 ¹ / ₈	16	32	1 ¹⁵ / ₁₆	2 ⁹ / ₁₆	29 ¹ / ₂	27 ¹ / ₈	27 ⁵ / ₈
30/36	10 ¹ / ₂	18 ¹ / ₂	26 ¹ / ₂	39	1 ¹ / ₄	18 ¹ / ₄	36 ³ / ₈	2	2 ⁹ / ₁₆	29 ¹ / ₂	27 ¹ / ₈	31 ⁵ / ₈
48/60	10 ¹ / ₂	18 ¹ / ₂	26 ¹ / ₂	42	1 ¹ / ₈	19 ³ / ₄	39 ¹ / ₂	6 ¹ / ₂	3 ¹ / ₄	29 ¹ / ₂	27 ¹ / ₈	33 ¹ / ₂



NOTE: Compressor access door and fan access panel are reversed on V48 and V60 models.

Eubank[®]

Eubank is a registered trademark of National Coil Company. Due to manufacturer's policy of continuous product improvement, the manufacturer reserves the right to make changes without notice. All product specifications reflect available information at the printing of this brochure.

All rights reserved.



Eubank 12/13