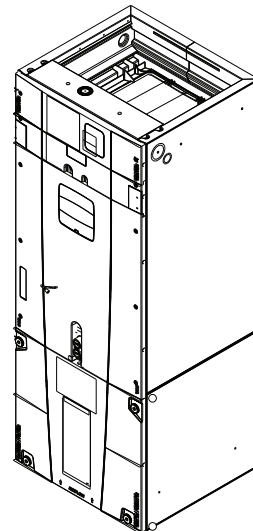


Submittal

Multi-Speed Air Handlers with Epoxy Coated Coil 1.5 – 2 Ton

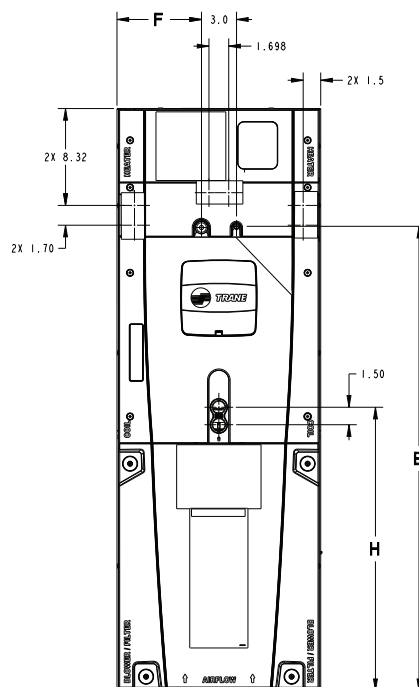
5TAM5B02AC21SA



Note: Graphics in this document are for representation only. Actual model may differ in appearance.

Note: For use with BAYEA series heaters ONLY.

2



NOTE:
THIS UNIT IS APPROVED FOR INSTALLATION CLEARANCES
TO COMBUSTIBLE MATERIAL AS STATED ON THE UNIT NAME
PLATE.

Model Number	A	B	C	D	E	F	H	FLOW CONTROL	GAS LINE BRAZE
5TAM5B02AC21SA	49.9	39.6	14.5	17.5	14.5	7.3	24.3	TXV	3/4"

Product Specifications

MODEL	5TAM5B02AC21SAA
Family Description	R-454B Multi-Speed Air Handler with Epoxy Coated Coil
Description	R-454B Multi-Speed Air Handler with Epoxy Coated Coil, Epoxy Coated All-Aluminum Plate Fin Coil, 4-Way Poise, 24V System Control, 208-230/1/60, 18K - 24K BTUH Capacity
Application Configuration	4-Way
RATED CAPACITY RANGE (BTUH)	18K - 24K
SYSTEM CONTROL TYPE	24V
POWER CONN. - V/PH/HZ	208-230/1/60
Max Breaker Size, Without Electric Heater (Amps)	15
Max Breaker Size, With Electric Heater (Amps) ^(a) ^(b)	60
Name Plate	See the name plate
COIL TYPE	Epoxy Coated All-Aluminum Plate Fin
Refrigerant Type	R-454B
Refrigerant Control	TXV
Refrigerant Line Connection - Gas (in.)	3/4
Refrigerant Line Connection - Liquid (in.)	3/8
BLOWER TYPE	Direct Drive Centrifugal
Configuration	Blow Through
Dimensions (Diameter x Width (in.))	11 x 8
Motor Type	Constant Torque
Nominal CFM ^(c)	800
Speed (RPM)	1050
Volts/Ph/Hz	208-230/1/60
Full Load Amps	2.6
FILTER RACK (YES, NO)	Yes
Dimensions (Length x Width (in.))	16 x 20 x 1
DUCT CONNECTIONS	L x W
Supply (in.)	14.5 x 14.35
Return (in.)	14.5 x 17.15
DRAIN CONN. SIZE (IN.)	3/4 NPT
DIMENSIONS	H x W x D
Uncrated (in.)	49-7/8 x 17-1/2 x 21-3/4
Crated (in.)	51-3/8 x 20-1/2 x 25-3/4
WEIGHT - SHIPPING/NET (LBS.)	126/120

^(a) Maximum overcurrent protection is dependent on which electric heater is installed. See Installation, Operation, and Maintenance manual or unit name plate.

^(b) For CFM versus external static pressure (in. w.c.), refer to Installation, Operation, and Maintenance manual.

^(c) If installing system outside of the United States, accessory electric heaters may not be installed.

Heater Attribute Data

5TAM5B02AC21SA											
Heater Model No.	No. of Circuits	240 Volt					208 Volt				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
No Heater	-	-	-	3.8*	5	15	-	-	3.8*	5	15
BAYEA(13/AC)04BK1 BAYEA(13/AC)04LG1	1	3.84	13100	16.0	25	25	2.88	9800	13.8	22	25
BAYEA(13/AC)05BK1 BAYEA(13/AC)05LG1	1	4.80	16400	20.0	30	30	3.60	12300	17.3	26	30
BAYEA(13/AC)08BK1 BAYEA(13/AC)08LG1	1	7.68	26200	32.0	45	45	5.76	19700	27.7	39	40
BAYEA(13/AC)10BK1 BAYEA(13/AC)10LG1	1	9.60	32800	40.0	55	60	7.20	24600	34.6	48	50
BAYEA(13/AC)10LG3	1-3 PH	9.60	32800	23.1	33	35	7.20	24600	20.0	29	30
BAYEA(23/BC)15LG3 ①	1-3 PH	14.40	49200	34.6	47	50	10.80	36900	30.0	42	45
BAYEA(23/BC)15BK1 - Circuit 1 ②	2	9.60	32800	40.0	55	60	7.20	24600	34.6	48	50
BAYEA(23/BC)15BK1 - Circuit 2		4.80	16400	20.0	25	25	3.60	12300	17.3	22	25
Note: * Motor Amps ① 208 V not approved for upflow installations ② MCA and MOP for circuit 1 contains the motor amps											

Note: See Product Data or Air Handler nameplate for approved combinations of Air Handlers and Heaters.

Note: Heater model numbers may have additional suffix digits.

Airflow Performance Tables

5TAM5B02AC21SA				
EXTERNAL STATIC (in w.g.)	AIRFLOW (CFM)			
	Speed Taps: 208 - 230 VOLTS			
	TAP 5	TAP 4	TAP 3†	TAP 2
0.1	1039	955	855	793
0.2	1010	930	822	760
0.3	984	900	789	729
0.4	956	873	764	700
0.5	931	848	735	667
0.6	906	824	702	628
0.7	884	794	667	589
0.8	855	762	631	554
0.9	823	731	597	524
In horizontal and downflow applications, airflow should be limited to 800 CFM due to condensate blowoff.				

Notes:

- TAP 1 is not an airflow selection. Black wire must always be on TAP 1.
- Values are with wet coil and no filter. Contact filter manufacturer for pressure drop data.
- Electric heater pressure drop is negligible and is included within the airflow data.
- Add 3% for dry coil CFM correction.
- † is Factory Setting.

Minimum Airflow Setting

5TAM5B02AC21SA		
Heater	Minimum Heat Speed Tap	
	Without Heat Pump	With Heat Pump
BAYEA(AC/13)04++1, BAYEA(AC/13)05++1, BAYEA(AC/13)08++1	TAP 3	TAP 4
BAYEA(AC/13)10++1	TAP 3 ^(a)	TAP 5
BAYEA(AC/13)10LG3	TAP 5	TAP 5 ^(b)

Note: Heater model number digits “++” are LG or BK.

Note: Heater model numbers may have either of the pairs of characters in parenthesis.

^(a) Heater not qualified for downflow installations.

^(b) Approved for 240V only.

Features and Benefits

- Unique cabinet design
 - Double Wall Foamed and Formed Cabinet System
 - Water Proof Cabinet Design
 - R-4.2 Insulating Value (Avg Insulating Value R-8.2)
 - Composite Cabinet Doors
 - Sweat Eliminating Cabinet Design
 - Loose Fiber Eliminating Cabinet Design
 - Smooth Cleanable Cabinet Design
 - 2% or Less Air Leakage
 - Precision Durable Door Seals
 - Modular Cabinet
- Multi-position up/down flow horizontal left/right
- Phillips head door fasteners
- Side Return Option
- Refrigerant Connections
- Condensate Connections
- Premarked Conduit Connection Locations
- **Vortica®** Blower with Integrated Slide Deck for Easy Removal
- Polarized Plug connections on Blower
- Aluminum Coil with Integrated Slide Deck for Easy Removal
- Slide in Electric Heaters with polarized plug connections (sold as accessory)
- Polarized Plug connections for Electric Heater
- UVC light kit with safety switch and polarized plug connections (sold as accessory)
- Labeled Panels and connections
- 1 1/4" to 1" And 3/4" to 1/2" Conduit connection on Left, Right and Top
- Molded in 1" Standard Filter rail
- R-454B Thermal Expansion Valve
- Low Voltage Pigtail Connections
- Enhanced Coil Fin Patented
- Blow Through Design
- High Efficiency ECM Motor
- Maximum Width of 23.5"
- Compact 20.8" depth with doors removed
- Integrated Horizontal Drain pans
- Soft start fan motor operation
- Single Color
- Fused 24V Power
- **5 Year Warranty**
- **10 Year Warranty Registered**
- **Optional Extended Warranty Available**

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