A-COIL for UNITARY SIDE DISCHARGE SPLIT SYSTEM 24VAC CONTROL

24,000 BTU / H UNITARY HEAT PUMP SPLIT SYSTEM

SUBMITTAL DATA: TCAT24F/NaA TUD24W2/D-D(U)

Job Name	Location		Date	
Purchaser	Engineer			
Submitted To	For	Reference	Approval	Construction
Unit Designation	Schedule No.			

SYSTEM TYPE: HEAT PUMP



TUD24W2/D-D(U)



TCAT24F/NaA

GENERAL FEATURES

- High Efficiency DC Inverter Technology
- Compact and Quiet 47 dB(A) Outdoor Unit
- Zero Lot Line Design
- Compatible with 3rd party furnace or blower
- Designed for New Construction or Retrofit Market
- 24VAC Thermostat Compatible
- Low Ambient Cooling down to 5°F/-15°C
- Low Ambient Heating down to -5°F/-15°C
- Outdoor Coil has Copper Tube/Aluminum Fin with Acetal-Resin Coating (Golden Fin - 1500Hr Salt Spray)
- Indoor Coil has Copper Tube/Aluminum Fin with Acetal-Resin Coating (Blue Fin - 500Hr Salt Spray)
- Limited Warranty: 10 Year Parts, 10 Years Compressor
- Residential & Commercial

SYSTEM PERFORMANCE			
Cooling	Rated Capacity @ 95°F	Btu/h	24,000
	Min-Max Capacity	Btu/h	7,000-23,000
Heating	Rated Capacity @ 47°F	Btu/h	23,600
	Rated Capacity @ 17°F	Btu/h	13,200
	Rated Capacity @ 5°F	Btu/h	20,000
	Min-Max Capacity	Btu/h	5,100-23,000
SEER2 / EER2			15.2 / 11.0
HSPF2			7.5
COP @47°F			3.08
AHRI Number			214780386
Cooling Temperature Range		°F / °C	5 – 115 / -15 – 46
Heating Temperature Range		°F / °C	5 – 75 / -15 – 24
INDOOR UNIT			**TCAT24F/NaA**
Dehumidification		pt/hr	5.28
Condensate Drain Hose Size(OD)		in	3/4
Unit Dimension (WxHxD)		in	17-1/2 x 23 x 21-1/4
Refrigerant Pre-charged (R410A)		oz	8.8
Weight (Net / Gross)		lbs	64/75
OUTDOOR UNIT			**TUD24W2/D-D(U)**
Compressor Type			Inverter Rotary
Compressor RLA		A	10.0
Fan Motor Output Power		HP	1/12
Fan Motor		A	1.0
Sound Pressure Level		dB(A)	47 (43~49)
Unit Dimension (WxHxD)		in	35 x 13-3/8 x 25-7/8
Weight (Net / Gross)		lbs	99 / 108
Refrigerant Pre-charged (R410A)		oz	148
Coil Type (Golden Fin)			Copper Tube / Aluminum Fin
REFRIGERANT PIPING			
Line Set Size (Liquid - Gas)		in	3/8 - 3/4
Pre-charged Piping Length		ft	25
Additional Charge		oz/ft	0.32
Toal Pipe Length (Min - Max)		ft	10 – 100
Max. Pipe Elevation		ft	50
ELECTRICAL			
Power Supply			208/230V / 1Ph / 60 Hz
Outdoor Unit	Rated Current (Cooling / Heating)	A	15.5 / 15.5
	MCA / MOCP	A	19.5 / 30.0
Main Power Wire Size		AWG	Size Per Local Code
LIMITED WARRANTY	10 Year Parts, 10 Years Compressor - Residential & Commercial		

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FEATURES SUMMARY: TCAT24F/NaA TUD24W2/D-D(U)

SYSTEM FEATURES	
Compressor	Inverter
Ultra Low Frequency Torque Control	YES
Power Factor Correction	YES
Compressor Type	Rotary
Refrigerant Type	R410A
Outdooor Electronic Expansion Valve (EEV)	YES
Indoor TXV Control	YES
Basepan With Electric Heater	YES
Fin Coating (Outdoor & Indoor)	Acrylic Resin
Low Voltage Startup	YES
Memory/Power Failure Recovery	YES
Self Diagnosis	YES
Low Ambient Cooling	YES

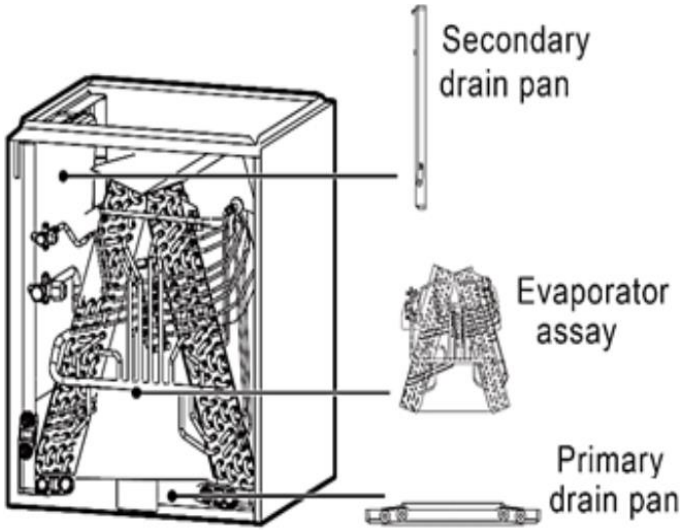
EXTERNAL STATIC PRESSURE

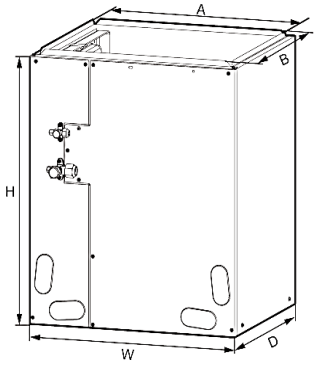
UNIT: inwc	STANDARD CFM											
	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700
TCAT24F/NaA	0.140	0.172	0.215	0.262	0.312	0.368	0.433	0.497	0.563			
TCAT36F/NaA	0.148	0.179	0.224	0.267	0.320	0.377	0.439	0.505	0.570			

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STRUCTURE & INSTALLATION INFORMATION: TCAT24F/NaA

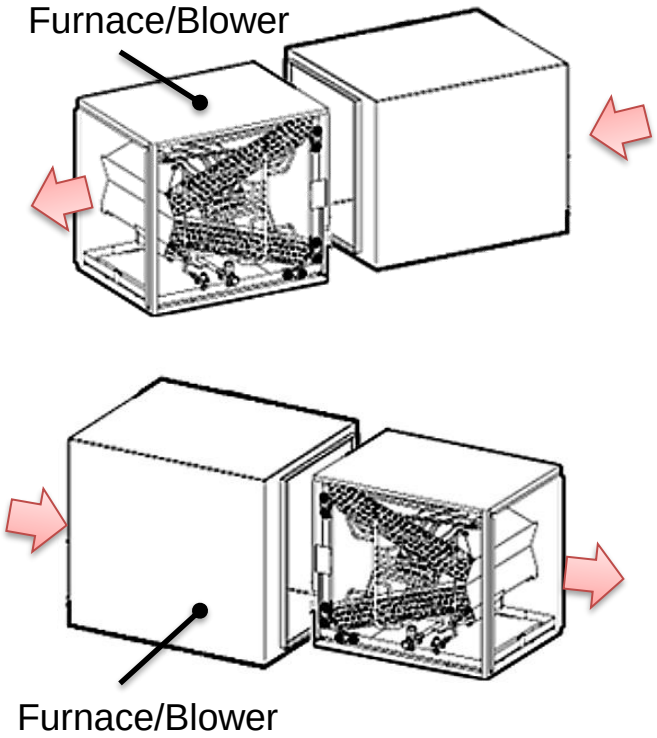




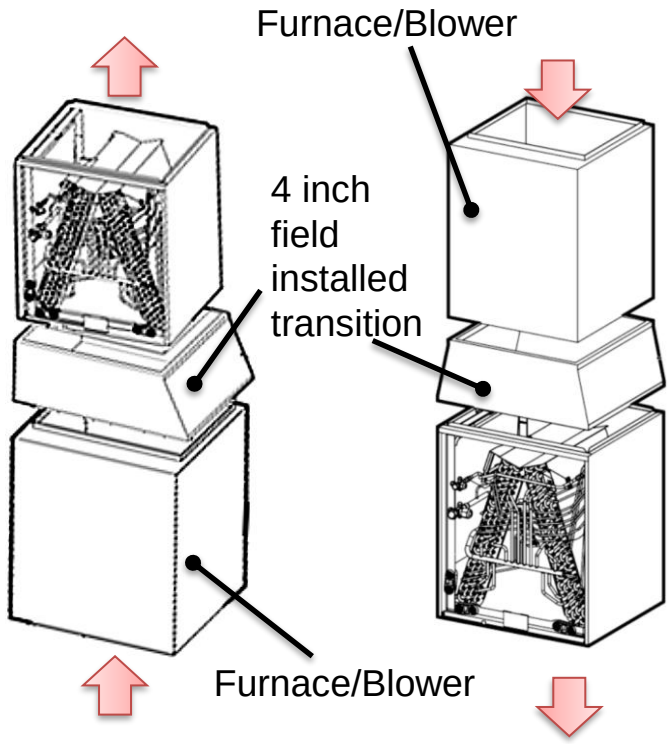
Unit: inch(mm)

Model	Dimension				
	W	D	H	A	B
TCAT24F/NaA	17-1/2(445)	21-1/4(540)	23(584)	15-7/8(403)	19-3/8(492)
TCAT36F/NaA	17-1/2(445)	21-1/4(540)	23(584)	15-7/8(403)	19-3/8(492)
TCAT48H/NaA	24-1/2(622)	21-1/4(540)	28-1/2(724)	22-7/8(581)	19-3/8(492)
TCAT60H/NaA	24-1/2(622)	21-1/4(540)	28-1/2(724)	22-7/8(581)	19-3/8(492)

❑ Horizontal Installation



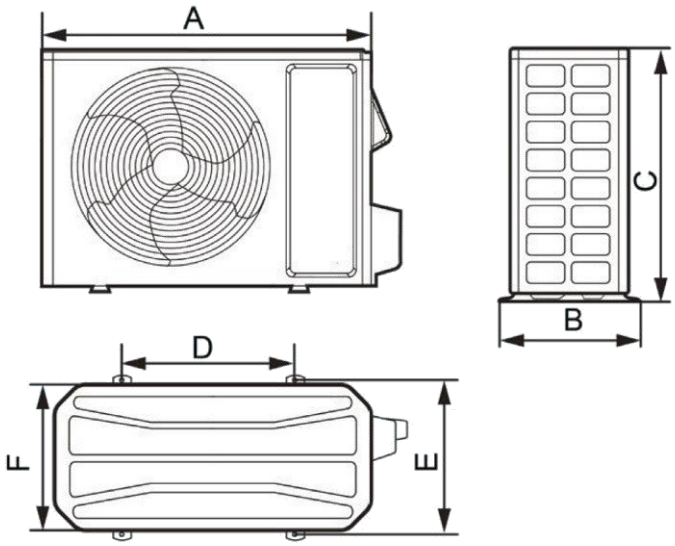
❑ Vertical Installation



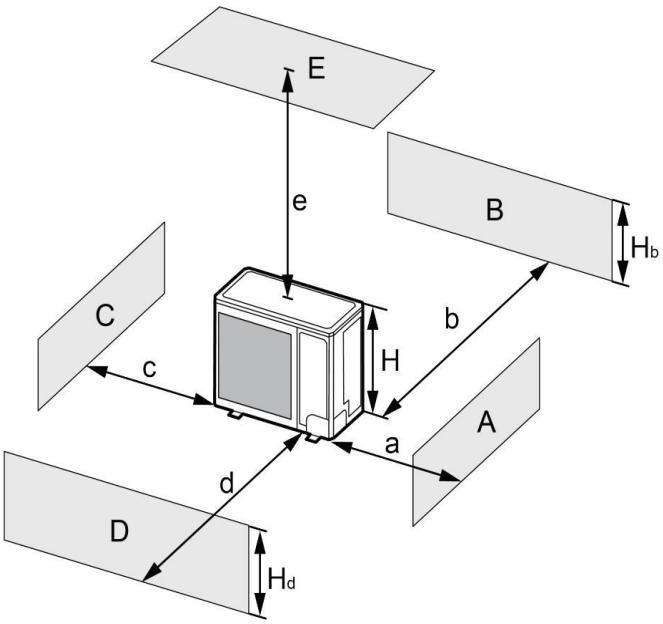
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DIMENSIONS & CLEARANCES: TUD24W2/D-D(U)



Dimensions	
A	35
B	15-13/16
C	25-7/8
D	22-7/16
E	14-9/16
F	13-3/8



Obstacle/Wall A~E	Obstacle/Wall Hb Hd H		Clearance (in)				
			A	b	c	d	e
B	—		-	⩾4	-	-	-
A,B,C,	—		⩾12	⩾4	⩾4	-	-
B,E	—		-	⩾4	-	-	⩾10
A,B,C,E	—		⩾12	⩾6	⩾6	-	⩾40
A,C,E	—		⩾8	-	⩾20	-	⩾10
D	—		-	-	-	⩾40	-
D,E	—		-	-	-	⩾40	⩾40
B,D	Hb < Hd	Hd > H	-	⩾4	-	⩾40	-
	Hb > Hd	Hd < H	-	⩾4	-	⩾40	-
B,D,E	Hb < Hd	Hb⩽1/2H	-	⩾10	-	⩾80	⩾40
		1/2H < Hb⩽H	-	⩾10	-	⩾80	⩾40
		Hb > H	Prohibited				
	Hb > Hd	Hd⩽1/2H	-	⩾4	-	⩾80	⩾40
		1/2H < Hd⩽H	-	⩾8	-	⩾80	⩾40
		Hd > H	Prohibited				

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