



SUBMITTAL DATA

TUD42W2/D-D(U) & TUD42AH2/D-D(U)
42000 BTU/H Single Zone Split AHU & Heat Pump System

Job Name

Location

Date

Purchaser

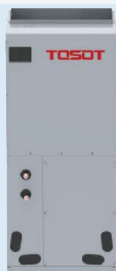
Engineer

Submitted to

For

Unit Designation

Schedule No.



TUD42AH2/D-D(U)



TUD42W2/D-D(U)

GENERAL FEATURES

- AHRI Certificate: [210421035](#)
- High Efficiency DC Inverter Technology
- 24VAC Thermostat Compatible
- Zero Lot Line Design
- 8 Speed Fan Motor
- Matched with GREE Indoor Unit
- Designed for New Construction or Replacement Market
- Compact and Quiet, as low as 62 dB(A) Side Discharge Outdoor Unit
- Cooling and Heating down to -15°C (5°F)
- Coil (Outdoor) Copper Tube/Aluminum Fin with Anti-Corrosion Coil Coating (Gold Colored Fin - 1500Hr Salt Spray Rating)
- Coil (Indoor) Copper Tube/Aluminum Fin with Anti-Corrosion Coil Coating (Blue Colored Fin - 500Hr Salt Spray Rating)

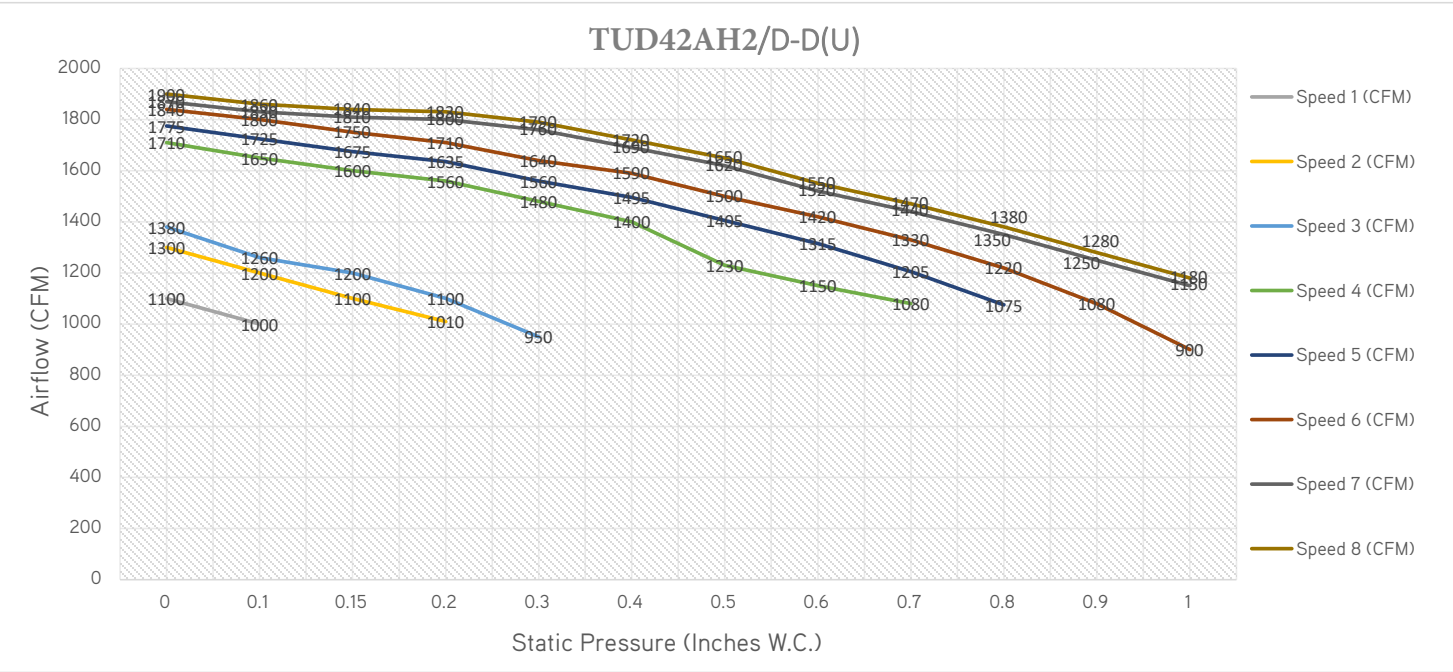
SPECIFICATIONS, FEATURES & FUNCTION SUMMARY

SPECIFICATIONS		TUD42W2/D-D(U) & TUD42AH2/D-D(U)	
System Type		HEAT PUMP	
SYSTEM PERFORMANCE			
Cooling	Min - Max	Btu/h	27550 - 43000
	Capacity @95°F	Btu/h	40000
Heating	Min - Max	Btu/h	19975 - 44000
	Capacity @5°F	Btu/h	23400
	Capacity @17°F	Btu/h	25000
	Capacity @47°F	Btu/h	40000
SEER2			15.5
EER2			10
HSPF2			7.8
COP @5°F			1.8
COP @47°F			2.8
Cooling Temperature Range		°F	5 - 118
Heating Temperature Range		°F	5 - 75
Refrigerant Type			R410A
INDOOR UNIT			
Power Supply		VAC	208-230V / 1Ph / 60 Hz
Sound Pressure Level		dB(A)	53
Control Voltage		VAC	24
Rated Current Cooling		A	5
Rated Current Heating		A	5
MCA		A	5
MOCP		A	15
Electric Heater (Optional)		kW	5, 8, 10
Air Flow		CFM	12300
External Static Pressure (Up to)		In W.c.	1.0
Dehumidification		pt/hr	12.13
External Dimensions (W x H x D)		in	21-1/4 x 48-1/4 x 21-1/4
Package Dimension (W x H x D)		in	26 x 50-7/16 x 23-3/4
Net Weight		lbs	154.3
Gross Weight		lbs	167.6
OUTDOOR UNIT			
Power Supply		VAC	208-230V / 1Ph / 60 Hz
Sound Pressure Level		dB(A)	62
Control Voltage		VAC	24
Rated Current Cooling		A	22
Rated Current Heating		A	20.8
MCA		A	25.5
MOCP		A	35
External Dimensions (W x H x D)		in	37-1/8 x 32-1/2 x 14-5/8
Package Dimension (W x H x D)		in	43 x 34-7/8 x 19-5/8
Net Weight		lbs	152.1
Gross Weight		lbs	163.1
Refrigerant Charge - R410A		oz	123.5
Additional Charge		oz/ft	0.32
REFRIGERANT PIPING			
Line Set Size (Liquid - Gas) - Flared Connections		in	3/8 - 3/4
Pre-Charge Length		ft	31
Pipe Length (Min - Max)		ft	10 - 164
Max. Pipe Elevation		ft	98.4

FEATURES & FUNCTIONS SUMMARY	TUD42W2/D-D(U) & TUD42AH2/D-D(U)
SYSTEM FEATURES	
Compressor	Inverter
Ultra Low Frequency Torque Control	Yes
Power Factor Correction	Yes
Compressor Type	Rotary
Refrigerant Type	R410A
Outdoor Electronic Expansion Valve (EEV)	Yes
Indoor TXV Control	Yes
Basepan With Electric Heater	Yes
Compressor With Electric Heater	Yes
Fin Coating (Outdoor - Golden & Indoor - Blue)	Acrylic Resin
Intelligent Defrosting	Yes
Intelligent Preheating	Yes
Low Voltage Startup	Yes
Memory/Power Failure Recovery	Yes
Self Diagnosis	Yes
Low Ambient Cooling	No
24VAC Thermostat Compatible	Yes
Indoor Fan Type	Centrifugal
Multi Fan Speeds	8
Auxiliary Electrical Heater	Optional

FAN PERFORMANCE

Static Pressure (Inches W.C.)	0	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
Speed 1 (CFM)	1100	1000										
Speed 2 (CFM)	1300	1200	1100	1010								
Speed 3 (CFM)	1380	1260	1200	1100	950							
Speed 4 (CFM)	1710	1650	1600	1560	1480	1400	1230	1150	1080			
Speed 5 (CFM)	1775	1725	1675	1635	1560	1495	1405	1315	1205	1075		
Speed 6 (CFM)	1840	1800	1750	1710	1640	1590	1500	1420	1330	1220	1080	900
Speed 7 (CFM)	1870	1830	1810	1800	1760	1690	1620	1520	1440	1350	1250	1150
Speed 8 (CFM)	1900	1860	1840	1830	1790	1720	1650	1550	1470	1380	1280	1180



NOTE:

1. Above chart CFM ratings are based on dry coil with factory filter installed.
2. For wet coil CFM ratings, multiply the CFM by 0.96 correction factor.

DIMENSIONS

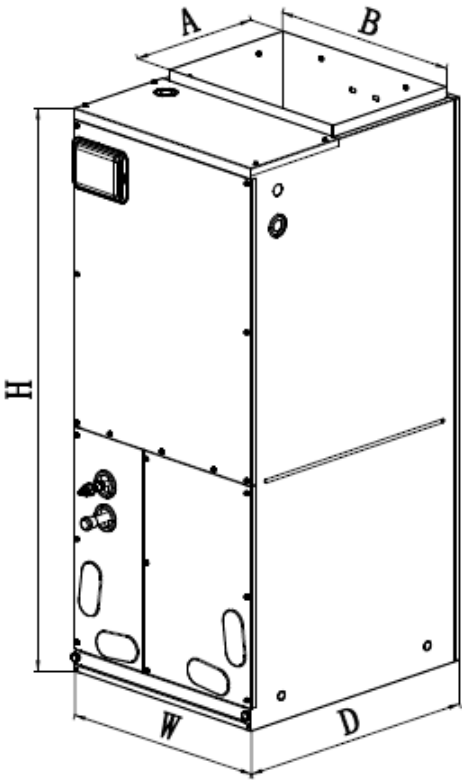
INDOOR UNIT

Unit: inch

TUD42AH2/D-D(U)	
DIMENSIONS	
A	11-5/8
B	20
H	48-1/4
W	21-1/4
D	21-1/4

FILTER SIZE	
Supplied*	19-1/4 x 20-3/8 x 5/8
Suggested	19-1/4 x 20-3/8 x 1

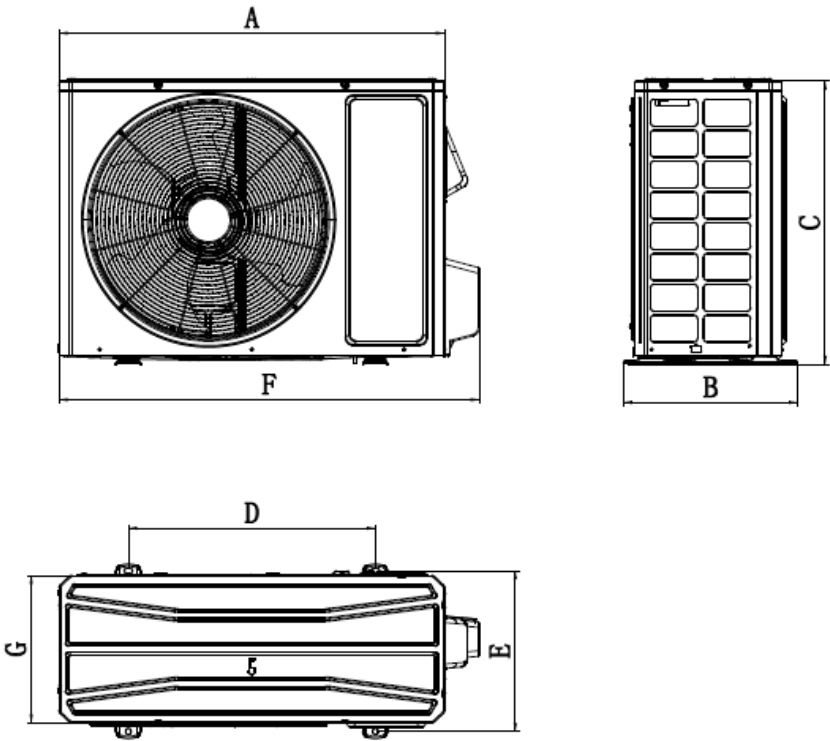
*Supplied filter is metal mesh



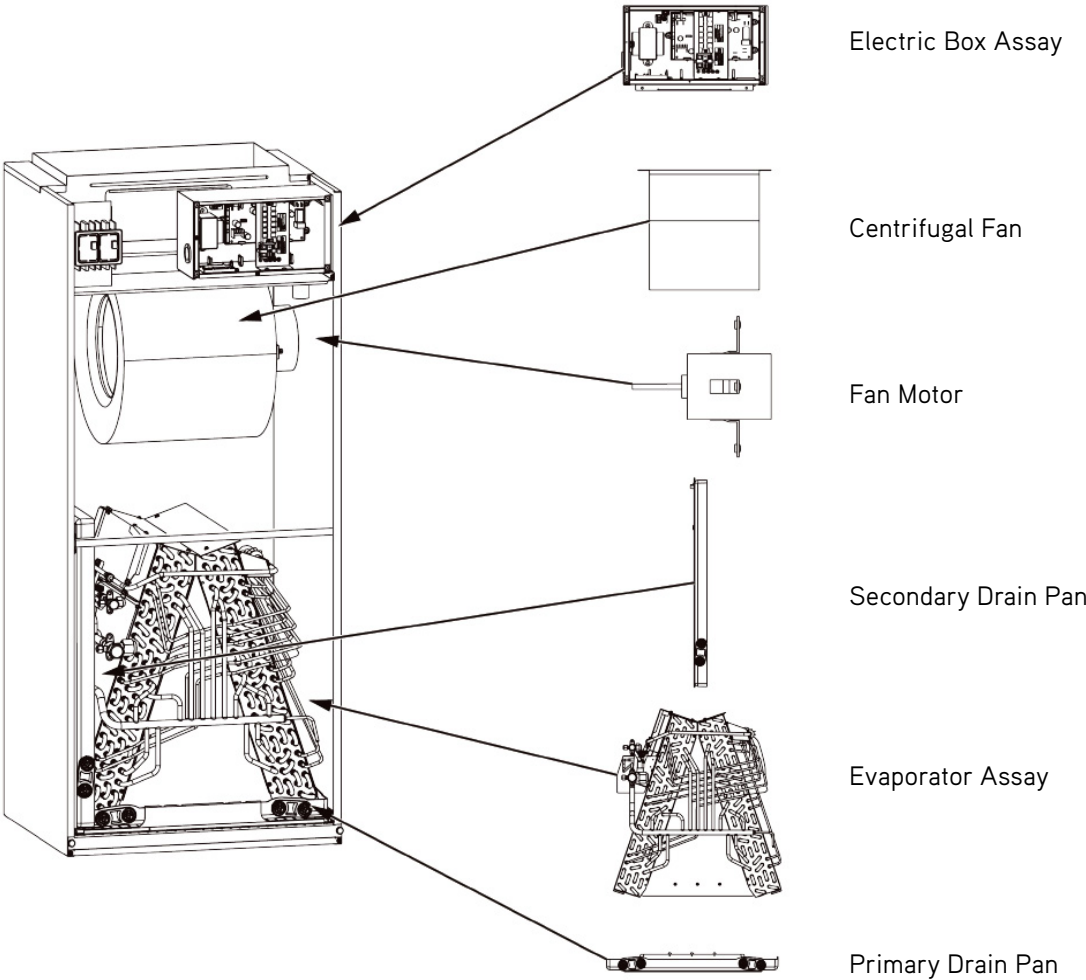
OUTDOOR UNIT

Unit: inch

TUD42W2/D-D(U)	
DIMENSIONS	
A	37-1/8
B	15-13/16
C	32-1/2
D	22-7/16
E	14-9/16
F	38-1/4
G	14-5/8



ACCESSORY HEATER AND GENERAL INFORMATION



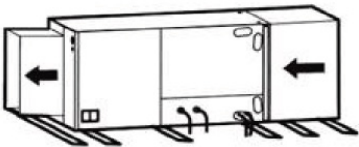
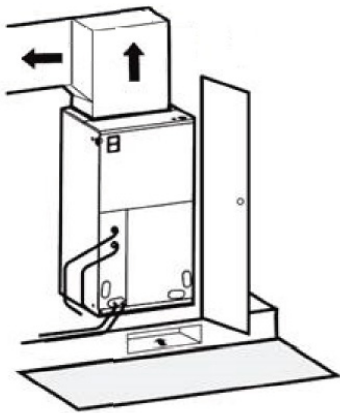
Model	Heat Kit Model	Electric Heat (kW)		Min. Circuit Ampacity (A)		Max Fuse or Breaker (A)	
		208V	230V	208V	230V	208V	230V
TUD42AH2/D-D(U)	ELEMHT16-5KW	3.74	4.6	31	33	35	35
	ELEMHT16-8KW	6.03	7.36	44	48	45	50
	ELEMHT16-10KW	7.49	9.2	53	58	60	60

CLEARANCES

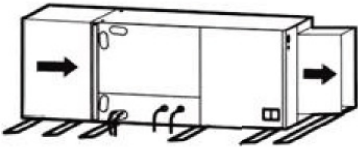
INDOOR UNIT

Minimum clearance

FRONT	> 24
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Horizontal Left Configuration - No Modification Needed



Horizontal Right Configuration - Must Relocate Drain Pan

NOTE:

Allow a minimum of 24” in front of the unit for service clearance. When installing in an area directly over a finished ceiling (such as an attic), an emergency drain pan is required directly under the unit. **See local and state codes for requirements.** When installing this unit in an area that may become wet, elevate the unit with a sturdy, non-porous material. In installations that may lead to physical damage (i.e. a garage) it is advised to install a protective barrier to prevent such damage. This air handler is designed for a complete supply and return ductwork system.

OUTDOOR UNIT

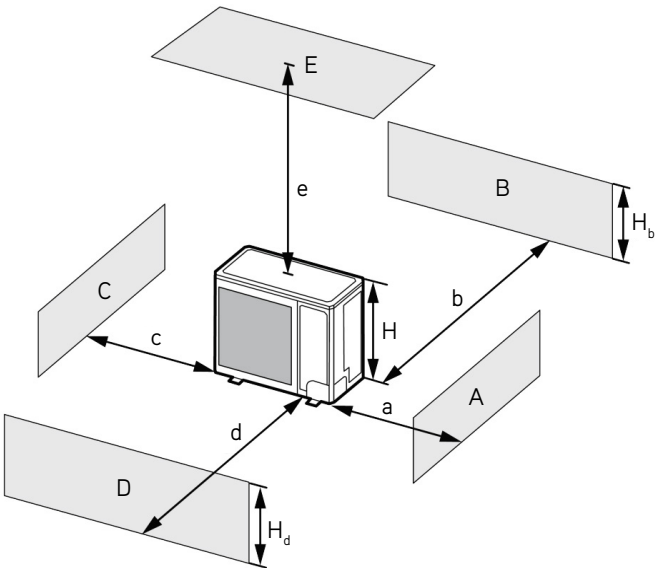
Minimum clearance

NOTE:

Install the Outdoor Unit **2 Inches** Above the Expected Snow Line

1. When one outdoor unit is to be installed.

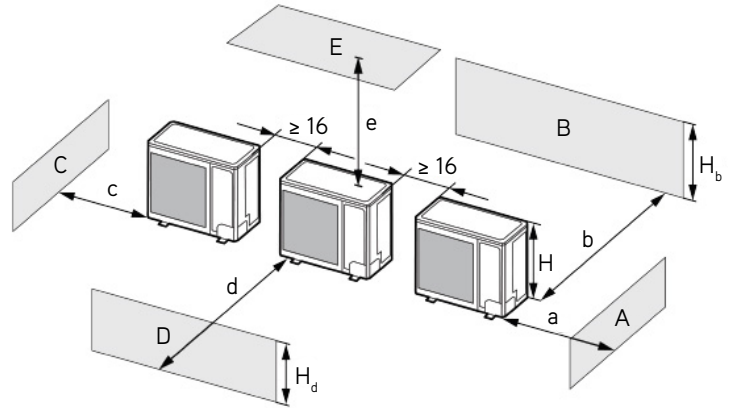
A - E	H_b H_d H		(in)				
			a	b	c	d	e
B	-	-	-	≥ 4	-	-	-
A, B, C	-	-	≥ 12	≥ 4	≥ 4	-	-
B, E	-	-	-	≥ 4	-	-	≥ 40
A, B, C, E	-	-	≥ 12	≥ 6	≥ 6	-	≥ 40
D	-	-	-	-	-	≥ 40	-
D, E	-	-	-	-	-	≥ 40	≥ 40
B, D	$H_b < H_d$	$H_d < H$	-	≥ 4	-	≥ 40	-
	$H_b > H_d$	$H_d > H$	-	≥ 4	-	≥ 40	-
B, D, E	$H_b \leq 1/2H$		-	≥ 10	-	≥ 80	≥ 40
	$H_b < H_d$	$1/2H < H_b \leq H$	-	≥ 10	-	≥ 80	≥ 40
	$H_b > H$		Prohibited				
	$H_b > H_d$	$H_d \leq 1/2H$	-	≥ 4	-	≥ 80	≥ 40
	$H_b > H_d$	$1/2H < H_d \leq H$	-	≥ 8	-	≥ 80	≥ 40
	$H_d > H$		Prohibited				



CLEARANCES

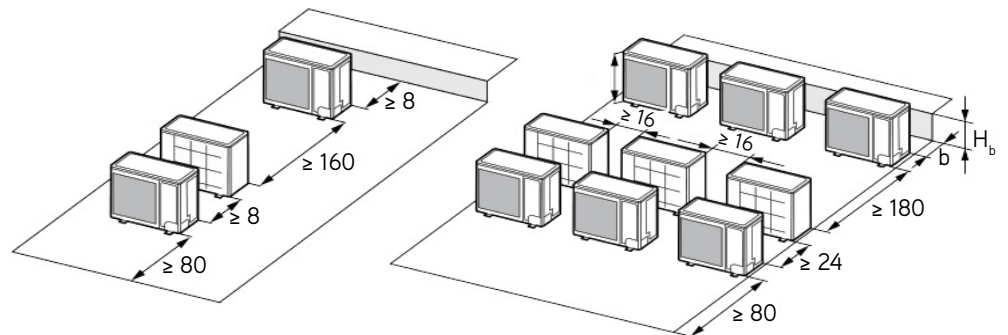
2. When two or more outdoor units are to be installed side by side.

A - E	H_b H_d H		(in)				
			a	b	c	d	e
A, B, C	-	-	≥ 12	≥ 12	≥ 40	-	-
A, B, C, E	-	-	≥ 12	≥ 12	≥ 40	-	≥ 40
D	-	-	-	-	-	≥ 80	-
D, E	-	-	-	-	-	≥ 80	≥ 40
B, D	$H_b < H_d$	$H_d > H$	-	≥ 12	-	≥ 80	-
	$H_b > H_d$	$H_d \leq 1/2H$	-	≥ 10	-	≥ 80	-
B, D, E	$H_b > H_d$	$1/2H < H_d \leq H$	-	≥ 12	-	≥ 100	-
		$H_b \leq 1/2H$	-	≥ 12	-	≥ 80	≥ 40
	$H_b < H_d$	$1/2H < H_b \leq H$	-	≥ 12	-	≥ 100	≥ 40
		$H_b > H$	Prohibited				
	$H_b > H_d$	$H_d \leq 1/2H$	-	≥ 10	-	≥ 100	≥ 40
		$1/2H < H_d \leq H$	-	≥ 12	-	≥ 100	≥ 40
		$H_d > H$	Prohibited				



3. When outdoor units are installed in rows.

H_b H_d	(in)
$H_b \leq 1/2H$	$b \leq 10$
$1/2H < H_b \leq H$	$b \leq 12$
$H_b > H_d$	Prohibited



4. When outdoor units are installed one above another.

