



SUBMITTAL DATA

TUD30W2/D-D(U) & TUD30AH2/D-D(U)
30000 BTU/H Single Zone Split AHU & Heat Pump System

Job Name

Location

Date

Purchaser

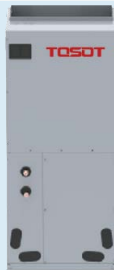
Engineer

Submitted to

For

Unit Designation

Schedule No.



TUD30AH2/D-D(U)



TUD30W2/D-D(U)

GENERAL FEATURES

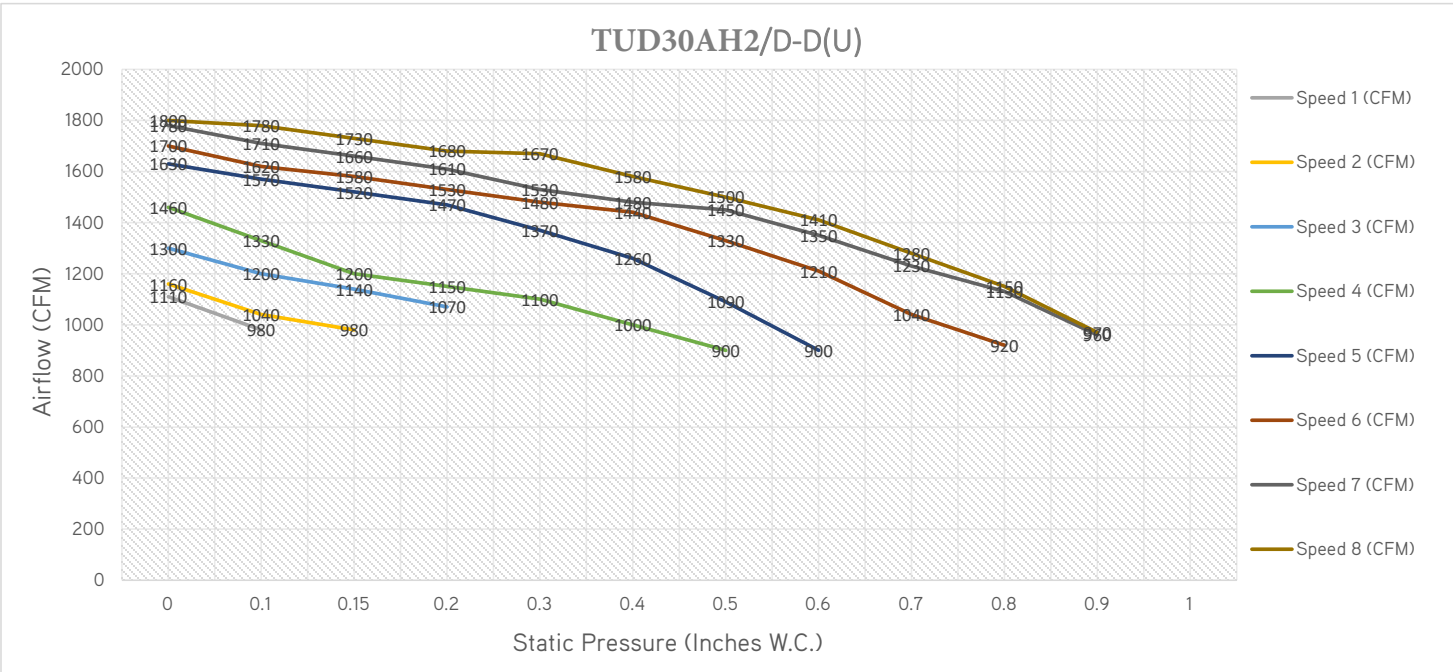
- AHRI Certificate: [210421033](#)
- High Efficiency DC Inverter Technology
- 24VAC Thermostat Compatible
- Zero Lot Line Design
- 8 Speed Fan Motor
- Matched with GREE Indoor Unit
- Designed for New Construction or Replacement Market
- Compact and Quiet, as low as 58 dB(A) Side Discharge Outdoor Unit
- 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		TUD30W2/D-D(U) & TUD30AH2/D-D(U)		FEATURES & FUNCTIONS SUMMARY		TUD30W2/D-D(U) & TUD30AH2/D-D(U)	
System Type		HEAT PUMP					
SYSTEM PERFORMANCE				SYSTEM FEATURES			
Cooling	Min - Max	Btu/h	23275 - 30000	Compressor		Inverter	
	Capacity @95°F	Btu/h	28600	Ultra Low Frequency Torque Control		Yes	
Heating	Min - Max	Btu/h	13680 - 31000	Power Factor Correction		Yes	
	Capacity @5°F	Btu/h	16100	Compressor Type		Rotary	
	Capacity @17°F	Btu/h	18600	Refrigerant Type		R410A	
	Capacity @47°F	Btu/h	28600	Outdoor Electronic Expansion Valve (EEV)		Yes	
SEER2		15.2		Indoor TXV Control		Yes	
EER2		10		Basepan With Electric Heater		Yes	
HSPF2		7.8		Compressor With Electric Heater		Yes	
COP @5°F		1.8		Fin Coating (Outdoor - Golden & Indoor - Blue)		Acrylic Resin	
COP @47°F		2.9		Intelligent Defrosting		Yes	
Cooling Temperature Range		°F	5 - 118	Intelligent Preheating		Yes	
Heating Temperature Range		°F	5 - 75	Low Voltage Startup		Yes	
Refrigerant Type		R410A		Memory/Power Failure Recovery		Yes	
INDOOR UNIT				Self Diagnosis		Yes	
Power Supply		VAC	208-230V / 1Ph / 60 Hz	Low Ambient Cooling		No	
Sound Pressure Level		dB(A)	51	24VAC Thermostat Compatible		Yes	
Control Voltage		VAC	24	Indoor Fan Type		Centrifugal	
Rated Current Cooling		A	3	Multi Fan Speeds		8	
Rated Current Heating		A	3	Auxiliary Electrical Heater		Optional	
MCA		A	4.4				
MOCP		A	15				
Electric Heater (Optional)		kW	5, 8				
Air Flow		CFM	900				
External Static Pressure (Up to)		In W.c.	1.0				
Dehumidification		pt/hr	9.70				
External Dimensions (W x H x D)		in	18-1/8 x 43-1/2 x 21-1/4				
Package Dimension (W x H x D)		in	20-5/8 x 45-11/16 x 26				
Net Weight		lbs	125.7				
Gross Weight		lbs	134.5				
OUTDOOR UNIT							
Power Supply		VAC	208-230V / 1Ph / 60 Hz				
Sound Pressure Level		dB(A)	58				
Control Voltage		VAC	24				
Rated Current Cooling		A	15.3				
Rated Current Heating		A	16				
MCA		A	20				
MOCP		A	25				
External Dimensions (W x H x D)		in	36-3/8 x 29-3/8 x 14-5/8				
Package Dimension (W x H x D)		in	42-5/8 x 31-1/28 x 19				
Net Weight		lbs	119.0				
Gross Weight		lbs	127.9				
Refrigerant Charge - R410A		oz	77.6				
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 - 98.4				
Max. Pipe Elevation		ft	49.2				

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)	1110	980										
Speed 2 (CFM)	1160	1040	980									
Speed 3 (CFM)	1300	1200	1140	1070								
Speed 4 (CFM)	1460	1330	1200	1150	1100	1000	900					
Speed 5 (CFM)	1630	1570	1520	1470	1370	1260	1090	900				
Speed 6 (CFM)	1700	1620	1580	1530	1480	1440	1330	1210	1040	920		
Speed 7 (CFM)	1780	1710	1660	1610	1530	1480	1450	1350	1230	1130	960	
Speed 8 (CFM)	1800	1780	1730	1680	1670	1580	1500	1410	1280	1150	970	



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

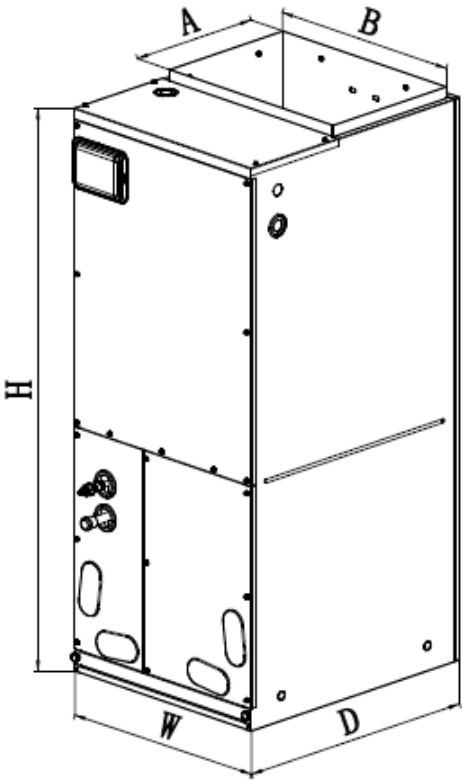
INDOOR UNIT

Unit: inch

DIMENSIONS	
A	11-5/8
B	16-3/4
H	43-1/2
W	18-1/8
D	21-1/4

FILTER SIZE	
Supplied*	16-1/2 x 20-3/8 x 5/8
Suggested	16-1/2 x 20-3/8 x 1

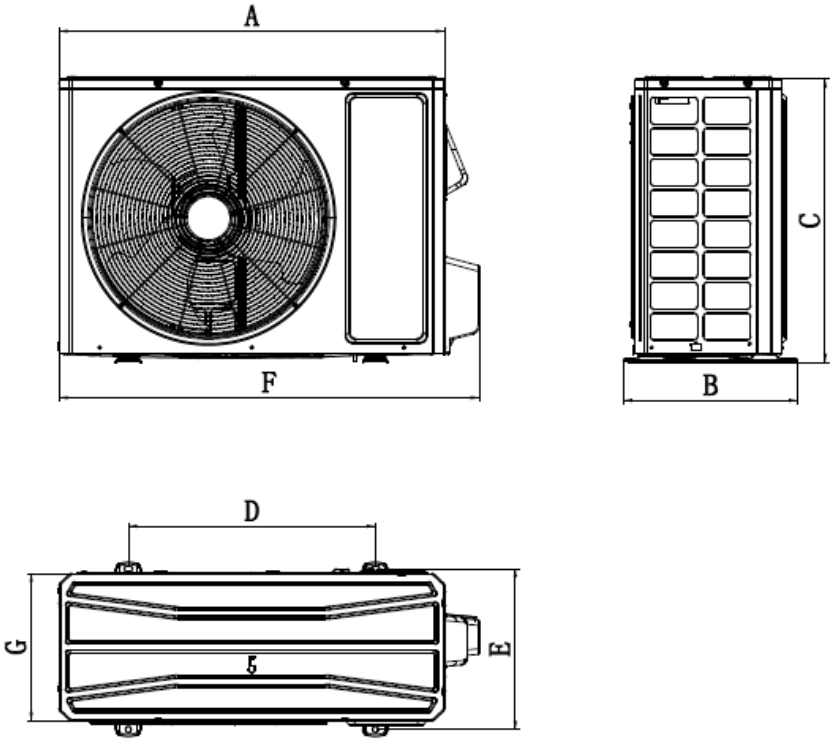
*Supplied filter is metal mesh



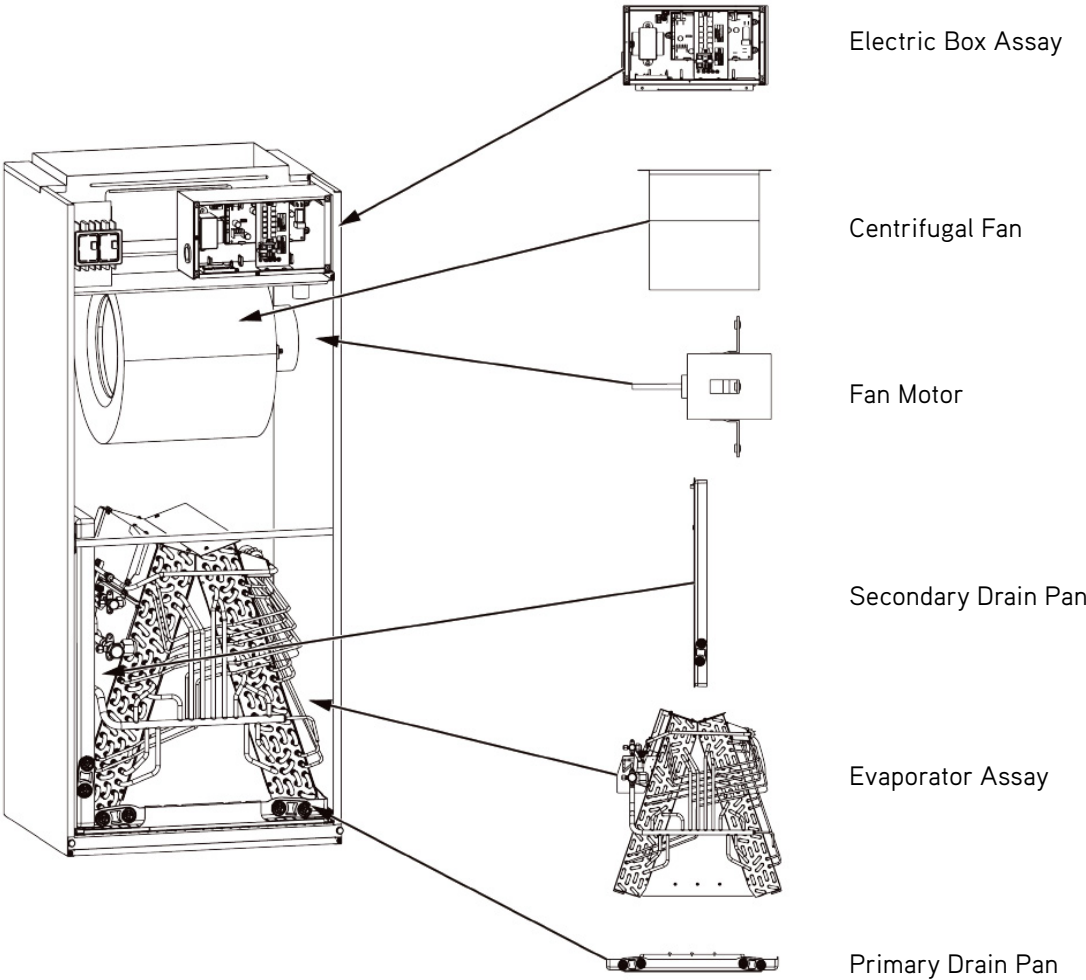
OUTDOOR UNIT

Unit: inch

DIMENSIONS	
A	36-3/8
B	15-13/16
C	29-3/8
D	22-7/16
E	14-9/16
F	38-1/4
G	14-5/8



ACCESSORY HEATER AND GENERAL INFORMATION



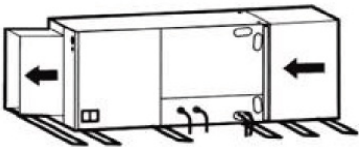
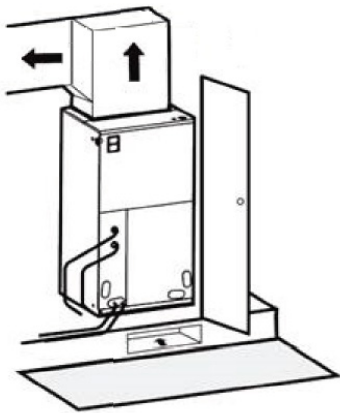
Model	Heat Kit Model	Electric Heat (kW)		Min. Circuit Ampacity (A)		Max Fuse or Breaker (A)	
		208V	230V	208V	230V	208V	230V
TUD30AH2/D-D(U)	ELEMHT16-5KW	3.74	4.6	31	33	35	35
	ELEMHT16-8KW	6.03	7.36	44	48	45	50

CLEARANCES

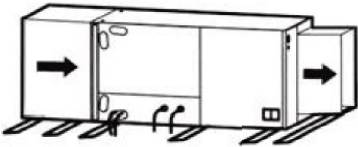
INDOOR UNIT

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

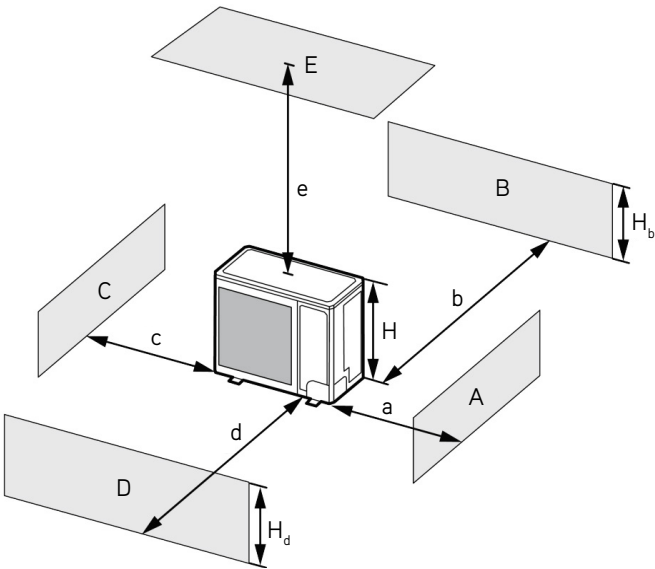
Minimum clearance

NOTE:

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

1. When one outdoor unit is to be installed.

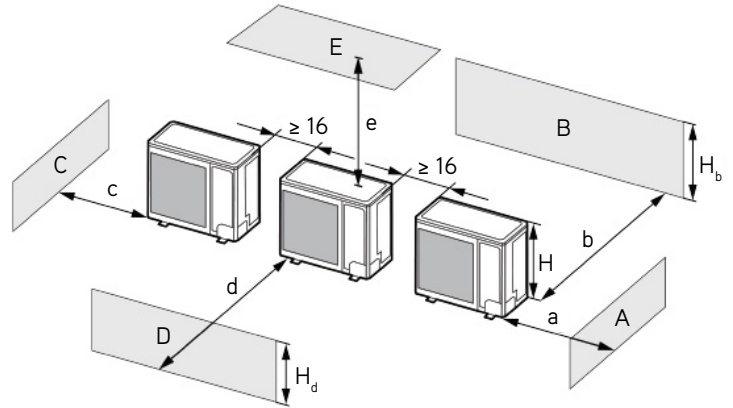
A - E	H_b H_d H		(in)				
			a	b	c	d	e
B	-	-	-	≥ 4	-	-	-
A, B, C	-	-	≥ 12	≥ 4	≥ 4	-	-
B, E	-	-	-	≥ 4	-	-	≥ 40
A, B, C, E	-	-	≥ 12	≥ 6	≥ 6	-	≥ 40
D	-	-	-	-	-	≥ 40	-
D, E	-	-	-	-	-	≥ 40	≥ 40
B, D	$H_b < H_d$	$H_d < H$	-	≥ 4	-	≥ 40	-
	$H_b > H_d$	$H_d > H$	-	≥ 4	-	≥ 40	-
B, D, E	$H_b \leq 1/2H$		-	≥ 10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

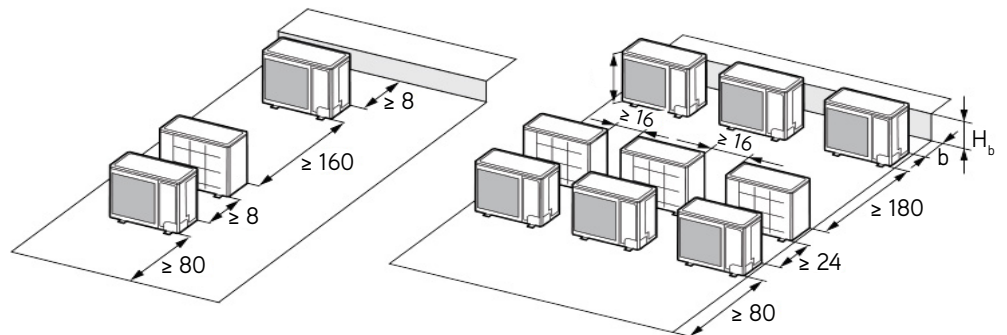
2. When two or more outdoor units are to be installed side by side.

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.

