TICA®
www.ticachina.com

STANDARD AIR HANDLING UNIT

TICA CENTRAL AIR-CONDITIONING

TAD TFD

FORM NO. A5215G01

4008-601-601

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誠信者，天下之結也

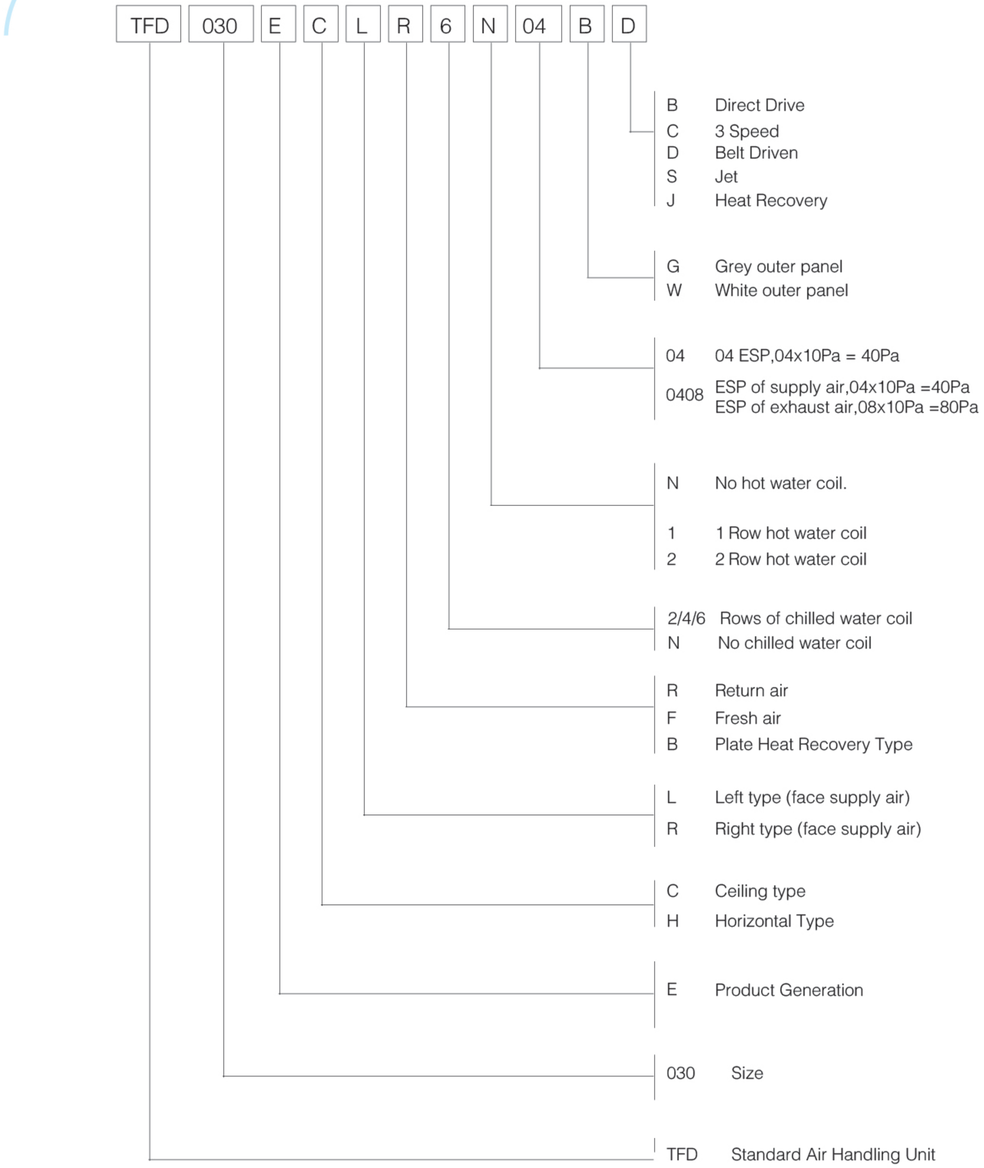
光阴荏苒，岁月如诗。

南京天加空调设备有限公司始终专注于中央空调的制造与销售，以专业的品质为人们创造舒适环境。

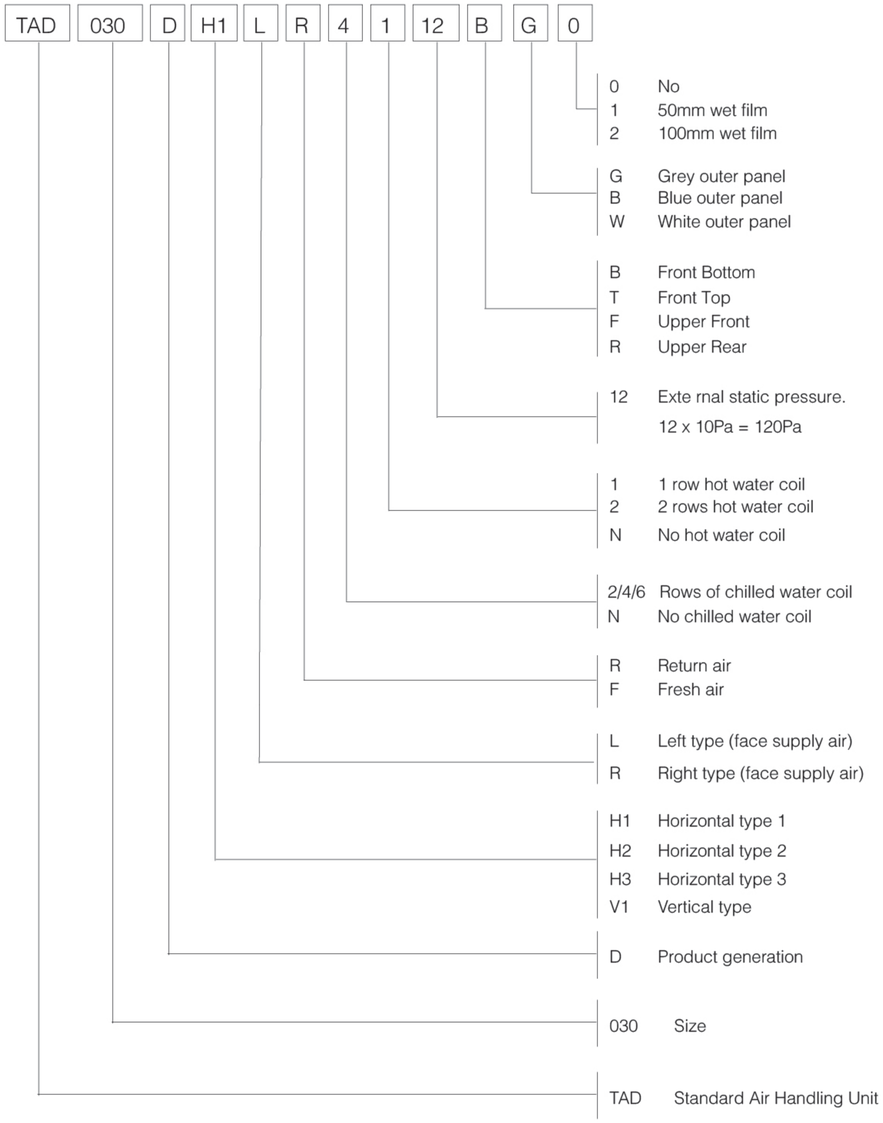
天加已成为中央空调行业中成长最迅速、发展最具活力的国际化企业之一。

DIRECTORY

Standard Air Handling Unit

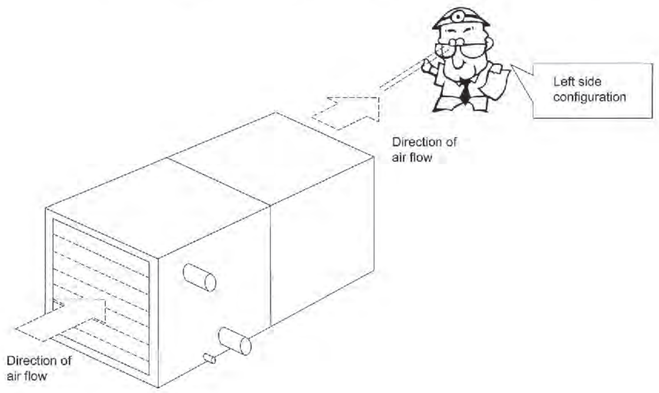


Standard Air Handling Unit



Method to determine the side of unit

Face the direction of air flow, water piping at left side indicates left type,otherwise, right type.



Features

Special Panel Structure Design

TFD' s and TAD' s panel is made of powder coated steel (outer) and galvanized steel (inner) with high pressure PU foam sandwiched in between, thus producing a rigid and robust panel. Structure of TFD and TAD is reinforced with specially designed hidden aluminum alloy frame that are being fastened to the panels with bolts and nuts. As a result, the structure is strong and lightweight, at the same time possesses superior thermal insulation and anti-rust property.

Low Air Leakage

Patented "Labyrinth" panel design featuring integrated frame and panel structure, proprietary aluminum profile fastened with bolts and nuts and ingeniously designed insulation method, reduces the connecting edges which produces a leading edge low air leakage panel structure.

No Cold Bridge

High pressure PU foam sandwiched between panels and specially designed insulation method is isolating all metal surfaces inside the air handling unit from outside air which eliminate the possibility of cold bridge. Thus, no condensation will happen and at the same time minimize loss of energy.

Wide Product Range

TFD' s and TAD' s design is adopting modular concept in both the length and width, making it flexible and robust to suite different site conditions. TFD is offering product range with air flow ranging from 564 - 15,000 m3/h and TAD is offering product range from 3,000-50,000 m3/h with 3 different ESP to choose from, making it versatile and able to fulfill various application requirements.

Computer Aided Coil Design

All cooling and heating coils are designed using professional computer selection software which is carefully formulated, designed and being fine tuned through laboratory testing and real life application.

Low Noise

Rigidly bolted panels, dynamically and statically balanced fan assembly with spring isolator and closely integrated sections reduces the vibrations and noise generated, thus, providing a quiet operation air handling unit.

ARI Performance Certified™ Coil *

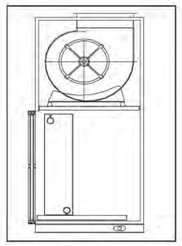
All cooling and heating coils are designed using professional computer selection software which is ARI Performance Certified™. The software is carefully formulated, designed and being fine tuned through laboratory testing and real life application to meet the highest standard of the HVAC industry.

ARI Performance Certified™ is the trusted mark of performance assurance for heating, ventilation, air conditioning and commercial refrigeration equipment. Products earning the mark undergo rigorous, independent annual evaluation to ensure that they perform according to the manufacturers' published claims. Certifying HVACR equipment and component performance allows consumers to compare products based on independently verified performance ratings. To find ARI Performance Certified™ products, go to www.aridirectory.org.

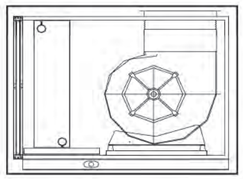
ARI PERFORMANCE CERTIFIED ™
ARI Standard 410
Air-Cooling and
Air-Heating Coils
www.aridirectory.org

*ARI Performance Certified™ is a trademark of the Air-Conditioning and Refrigeration Institute.

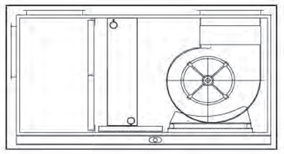
Unit Type Configuration (TAD)



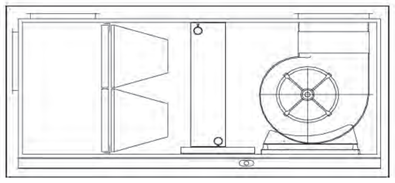
Vertical Type, V1
Pre-filter + Cooling coil + Fan section



Horizontal Type 1, H1
Pre-filter + Cooling coil + Fan section



Horizontal Type 2, H2
Mixing box + Pre-filter + Cooling coil + Fan section



Horizontal Type 3, H3
Mixing box + Pre-filter + Medium efficiency bag filter + Cooling coil + Fan section

Note:

1. Standard unit comes with flange opening. Damper (GI) is available as optional item.

TAD Standard Air Handling Unit
Return air condition

Model	Air Flow	4 rows						6 rows					
		Rated Cooling Capacity	Rated Heating Capacity	Water flow rate	Pressure drop	Chilled water pipe	Condensing water pipe	Rated Cooling Capacity	Rated Heating Capacity	Water flow rate	Pressure drop	Chilled water pipe	Condensing water pipe
TAD	m^3/h	kW	kW	l/s	kPa	DN	DN	kW	kW	l/S	kPa	DN	DN
020D	2000	11.0	22.8	0.5	7.5	32	25	14.8	27.6	0.7	18.1	32	25
030D	3000	17.2	35.1	0.8	13.8	32	25	22.7	41.9	1.1	32.4	32	25
040D	4000	23.4	47.1	1.1	20.7	32	25	29.6	54.6	1.4	44.9	32	25
050D	5000	28.2	57.0	1.3	19.9	32	25	34.5	64.5	1.6	40.3	32	25
060D	6000	35.1	69.1	1.7	27.0	40	25	42.4	78.2	2.0	53.5	40	25
070D	7000	41.0	80.7	2.0	31.9	50	25	48.8	92.5	2.3	23.4	50	25
080D	8000	48.2	93.7	2.3	46.9	50	25	57.2	106.7	2.7	34.0	50	25
090D	9000	52.3	102.6	2.5	42.4	50	25	65.1	120.6	3.1	30.0	50	25
105D	10500	59.7	115.7	2.8	60.0	50	25	74.2	138.1	3.5	42.4	50	25
120D	12000	69.8	136.8	3.3	46.0	50	25	89.9	165.3	4.3	32.3	50	25
135D	13500	79.1	158.1	3.8	20.8	65	32	104.1	187.7	5.0	46.7	65	32
150D	15000	90.4	172.7	4.3	61.5	65	32	115.0	207.6	5.5	50.3	65	32
180D	18000	107.0	210.8	5.1	31.8	65	32	136.4	252.5	6.5	21.0	65	32
210D	21000	126.6	247.3	6.0	36.3	65	32	157.4	289.4	7.5	26.4	65	32
240D	24000	148.8	285.6	7.1	53.4	65	32	181.9	332.2	8.7	37.7	65	32
270D	27000	167.5	321.3	8.0	55.1	65	32	204.7	372.0	9.8	39.0	65	32
300D	30000	186.1	357.0	8.9	56.8	65	32	226.1	413.4	10.8	39.8	65	32
330D	33000	204.7	392.7	9.8	72.3	80	32	253.0	456.8	12.1	52.2	80	32
350D	35000	220.1	416.5	10.5	85.6	80	32	271.3	486.9	12.9	61.6	80	32
400D	40000	230.8	451.0	11.0	69.2	80	32	299.8	546.1	14.3	52.5	80	32
450D	45000	248.1	484.8	11.8	71.5	80	32	341.1	617.2	16.3	59.8	80	32
500D	50000	275.6	538.5	13.1	79.1	80	32	379.0	685.9	18.1	65.9	80	32

Note:
1. Cooling capacity is based on the following:
a) Water temperature : 7° C (inlet)/12° C (outlet)
b) Air entering condition : 27° C DB/19.5° C WB
2. Heating capacity is based on the following (with same water flow rate as cooling cycle):
a) Water temperature : 60° C (inlet)
b) Air entering condition : 15° C DB
3. The manufacturer reserves the rights to make changes to the above specifications without prior notice.

TAD Standard Air Handling Unit
Fresh air condition

Model	Air Flow	4 rows						6 rows					
		Rated Cooling Capacity	Rated Heating Capacity	Water flow rate	Pressure drop	Chilled water pipe	Condensing water pipe	Rated Cooling Capacity	Rated Heating Capacity	Water flow rate	Pressure drop	Chilled water pipe	Condensing water pipe
TAD	m^3/h	kW	kW	l/s	kPa	DN	DN	kW	kW	l/s	kPa	DN	DN
020D	2000	27.4	30.7	1.6	54.5	40	25	33.7	34.2	1.6	26.7	40	25
030D	3000	40.5	44.3	1.9	31.9	40	25	47.9	48.9	2.3	45.9	40	25
040D	4000	54.7	58.8	2.6	49.8	50	25	63.8	67.0	3.0	32.4	50	25
050D	5000	68.4	73.8	3.3	49.4	50	25	79.8	83.9	3.8	29.6	50	25
060D	6000	81.0	85.0	6.0	46.2	50	25	97.9	100.5	4.7	39.4	50	25
070D	7000	89.6	95.0	6.6	49.4	65	25	115.4	116.7	5.5	48.0	65	25
080D	8000	101.7	108.6	6.6	63.4	65	25	127.7	134.5	6.1	21.6	65	25
090D	9000	116.8	123.5	7.7	57.3	65	25	140.5	146.7	6.7	20.5	65	25
105D	10500	145.5	154.9	7.7	62.6	65	25	162.1	167.3	7.7	29.3	65	25
120D	12000	157.9	175.3	7.7	66.7	65	25	193.6	196.5	9.2	43.0	65	25
135D	13500	172.8	195.2	8.2	13.8	80	32	222.6	223.1	10.6	61.1	80	32
150D	15000	194.7	221.3	9.3	15.6	80	32	252.6	252.3	12.0	69.3	80	32
180D	18000	230.5	257.6	11.0	20.7	80	32	293.6	296.1	13.1	71.8	80	32
210D	21000	276.3	303.6	13.2	28.1	80	32	331.5	336.1	13.9	78.3	80	32
240D	24000	319.9	348.8	15.2	39.6	80	32	*366.2	*380.6	*12.5	*70.7	80	32
270D	27000	359.9	389.7	17.1	42.6	80	32	*409.6	*428.2	*13.9	*72.4	80	32
300D	30000	384.1	420.5	18.3	43.2	80	32	*455.2	*473.6	*15.5	*75.0	80	32
330D	33000	445.7	482.0	21.2	59.8	80	32	*503.6	*523.3	*17.1	*96.3	80	32
350D	35000	454.3	490.5	21.6	63.7	80	32	*552.5	*578.3	*15.5	*83.6	80	32
400D	40000	477.1	525.2	22.7	40.3	80	32	*589.3	*622.5	*18.7	*83.5	80	32
450D	45000	536.7	594.2	25.6	45.3	80	32	*647.2	*679.6	*19.3	*79.8	80	32
500D	50000	605.1	663.9	28.8	51.6	80	32	*727.9	*774.6	*21.7	*89.9	80	32

Note:
1. Cooling capacity is based on the following:
a) Water temperature : 7° C (inlet)/12° C (outlet)
b) Air entering condition : 35° C DB/28° C WB
2. Heating capacity is based on the following (with same water flow rate as cooling cycle):
a) Water temperature : 60° C (inlet)
b) Air entering condition : 7° C DB
3. The manufacturer reserves the rights to make changes to the above specifications without prior notice.
4. * In order to control chilled water pressure drop, differencial in entering and leaving chilled water temperature is above 5 ℃

TAD Standard Air Handling Unit---With Separate Heating Coil
Return air condition

Model	Air Flow	1 row				2 row			
		Rated Heating Capacity	Water flow rate	Pressure drop	Chilled water pipe	Rated Heating Capacity	Water flow rate	Pressure drop	Chilled water pipe
TAD	m^3/h	kW	l/s	kPa	DN	kW	l/s	kPa	DN
020D	2000	6.7	0.2	0.2	32	13.6	0.3	1.2	32
030D	3000	10.2	0.3	0.3	32	20.0	0.5	2.0	32
040D	4000	13.8	0.3	0.5	32	27.2	0.7	3.0	32
050D	5000	18.5	0.5	0.5	32	35.8	0.9	3.3	32
060D	6000	23.2	0.6	0.7	32	43.7	1.1	4.3	32
070D	7000	27.6	0.7	0.9	32	50.9	1.2	5.1	32
080D	8000	32.5	0.8	1.3	32	56.8	1.4	6.4	32
090D	9000	37.0	0.9	1.3	32	64.4	1.6	6.5	32
105D	10500	42.0	1.0	1.8	32	77.7	1.9	10.3	32
120D	12000	48.7	1.2	2.5	32	88.8	2.2	14.2	32
135D	13500	56.4	1.4	3.7	40	101.5	2.5	20.4	40
150D	15000	61.7	1.5	3.9	40	111.0	2.7	21.1	40
180D	18000	75.2	1.8	5.4	40	135.3	3.3	29.2	40
210D	21000	88.9	2.2	7.0	40	157.8	3.9	37.5	40
240D	24000	103.1	2.5	10.2	40	174.7	4.3	7.7	40
270D	27000	116.0	2.8	10.3	40	196.5	4.8	7.8	40
300D	30000	128.8	3.1	10.4	40	216.5	5.3	7.7	40
330D	33000	141.7	3.5	13.4	40	240.1	5.9	10.1	40
350D	35000	150.3	3.7	15.6	40	254.7	6.2	11.7	40
400D	40000	167.0	4.1	13.9	40	281.5	6.9	10.4	40
450D	45000	187.9	4.6	15.3	40	322.1	7.9	11.8	40
500D	50000	208.8	5.1	16.7	40	357.9	8.7	12.8	40

Note:

1. Heating capacity is based on the following:
a) Water temperature : 60° C (inlet)/50° C (outlet)
b) Air entering condition : 15° C DB
2. Pressure drop of heating coil is 25Pa per row, when add heating coil, please increase pressure drop.
3. The manufacturer reserves the rights to make changes to the above specifications without prior notice.

TAD Standard Air Handling Unit---With Separate Heating Coil
Fresh air condition

Model	Air Flow	1 row				2 row			
		Rated Heating Capacity	Water flow rate	Pressure drop	Chilled water pipe	Rated Heating Capacity	Water flow rate	Pressure drop	Chilled water pipe
TAD	m^3/h	kW	l/s	kPa	DN	kW	l/s	kPa	DN
020D	2000	9.0	0.2	0.3	32	16.6	0.4	1.7	32
030D	3000	13.5	0.3	0.5	32	25.7	0.6	3.1	32
040D	4000	18.6	0.5	0.8	32	33.2	0.8	4.2	32
050D	5000	23.2	0.6	0.8	32	43.6	1.1	4.6	32
060D	6000	28.7	0.7	1.0	32	50.6	1.2	5.5	32
070D	7000	33.9	0.8	1.3	32	63.0	1.5	7.2	32
080D	8000	39.9	1.0	1.9	32	73.1	1.8	10.5	32
090D	9000	45.5	1.1	1.8	32	78.4	1.9	9.1	32
105D	10500	51.6	1.3	2.5	32	92.9	2.3	14.0	32
120D	12000	59.0	1.4	3.5	32	106.2	2.6	19.2	32
135D	13500	69.2	1.7	5.3	40	123.3	3.0	28.4	40
150D	15000	75.9	1.9	5.5	40	134.9	3.3	29.4	40
180D	18000	92.3	2.3	7.6	40	161.9	3.9	39.7	40
210D	21000	109.2	2.7	10.0	40	182.9	4.5	7.4	40
240D	24000	124.8	3.0	14.1	40	212.4	5.2	10.7	40
270D	27000	140.4	3.4	14.3	40	237.1	5.8	10.7	40
300D	30000	156.0	3.8	14.4	40	261.3	6.4	10.7	40
330D	33000	173.9	4.2	19.0	40	292.1	7.1	14.1	40
350D	35000	184.4	4.5	22.1	40	309.8	7.6	16.4	40
400D	40000	202.3	4.9	19.2	40	342.8	8.4	14.5	40
450D	45000	227.6	5.6	21.2	40	385.7	9.4	16.0	40
500D	50000	256.1	6.2	23.6	40	423.6	10.3	17.1	40

Note:

1. Heating capacity is based on the following:
Water temperature : 60° C (inlet)/50° C (outlet)
b) Air entering condition : 7° C DB
2. Pressure drop of heating coil is 25Pa per row, when add heating coil, please increase pressure drop.
3. The manufacturer reserves the rights to make changes to the above specifications without prior notice.

Standard ESP and Power
TAD-DH1(Horizontal type 1)/DV1(Vertical type 1)

Model	Air Flow	ESP (Pa)				Motor power		Sound level
		DH1		DV1		DH1	DV1	
TAD	m^3/h	4 rows	6 rows	4 rows	6 rows	kW		dB(A)
020D	2000	220	170	220	170	0.55	0.55	55.0
030D	3000	220	170	220	170	0.75	0.75	58.0
040D	4000	220	170	220	170	1.1	1.1	59.0
050D	5000	220	170	220	170	1.1	1.1	61.0
060D	6000	220	170	220	170	1.5	1.5	62.0
070D	7000	270	220	270	220	2.2	2.2	64.0
080D	8000	270	220	270	220	2.2	2.2	64.0
090D	9000	270	220	270	220	2.2	2.2	65.0
105D	10500	270	220	270	220	3.0	3.0	66.0
120D	12000	270	220	270	220	3.0	3.0	67.0
135D	13500	270	220	270	220	4.0	4.0	68.0
150D	15000	270	220	270	220	4.0	4.0	68.0
180D	18000	320	270	320	270	5.5	5.5	69.0
210D	21000	320	270	320	270	7.5	7.5	70.0
240D	24000	320	270	320	270	7.5	7.5	71.0
270D	27000	420	370	420	370	11.0	11.0	72.0
300D	30000	420	370	420	370	11.0	11.0	73.0
330D	33000	420	370	420	370	15.0	15.0	73.0
350D	35000	470	420	470	420	15.0	15.0	73.5
400D	40000	420	370	420	370	15.0	15.0	73.5
450D	45000	420	370	420	370	18.5	18.5	74.0
500D	50000	420	370	420	370	22.0	22.0	74.0

Note:
ESP for option, if needed, please contact factory

Standard ESP and Power
TAD-DH2(Horizontal type 2)/DH3(Horizontal type 3)

Model	Air Flow	ESP (Pa)				Motor power		Sound level
		DH2		DH3		DH2	DH3	
TAD	m^3/h	4 rows	6 rows	4 rows	6 rows	kW		dB(A)
020D	2000	220	170	220	170	0.55	0.75	57.0
030D	3000	220	170	220	170	0.75	1.1	59.0
040D	4000	220	170	220	170	1.1	1.5	60.0
050D	5000	220	170	220	170	1.5	1.5	62.0
060D	6000	220	170	220	170	2.2	2.2	63.0
070D	7000	270	220	270	220	2.2	2.2	65.0
080D	8000	270	220	270	220	2.2	3.0	65.0
090D	9000	270	220	270	220	3.0	3.0	66.0
105D	10500	270	220	270	220	3.0	4.0	67.0
120D	12000	270	220	270	220	3.0	4.0	68.0
135D	13500	270	220	270	220	4.0	4.0	69.0
150D	15000	270	220	270	220	5.5	5.5	69.0
180D	18000	320	270	320	270	5.5	7.5	70.0
210D	21000	320	270	320	270	7.5	11.0	71.0
240D	24000	320	270	320	270	7.5	11.0	72.0
270D	27000	420	370	370	320	11.0	11.0	73.0
300D	30000	420	370	370	320	15.0	15.0	74.0
330D	33000	420	370	370	320	15.0	15.0	74.0
350D	35000	420	370	370	320	15.0	15.0	75.0
400D	40000	420	370	370	320	15.0	15.0	75.0
450D	45000	420	370	370	320	18.5	18.5	76.0
500D	50000	420	370	370	320	22.0	22.0	76.0

Note:
ESP for option, if needed, please contact factory

Unit ESP and Power (kW)
TAD-DH1(Horizontal type 1)/DV1(Vertical type 1)

Model TAD	Air Flow (m^3/h)	Cooling Coil Rows	ESP(Pa)											
			120	170	220	270	320	370	420	470	520	570	620	670
020D	2000	4	0.55	0.55	0.55	0.55	0.55	0.75	0.75	0.75				
		6	0.55	0.55	0.55	0.55	0.75	0.75	0.75	1.1				
030D	3000	4	0.55	0.75	0.75	0.75	1.1	1.1	1.1	1.1				
		6	0.75	0.75	0.75	1.1	1.1	1.1	1.1	1.1				
040D	4000	4	1.1	1.1	1.1	1.1	1.1	1.5	1.5	1.5				
		6	1.1	1.1	1.1	1.1	1.5	1.5	1.5	1.5				
050D	5000	4	1.1	1.1	1.1	1.5	1.5	1.5	1.5	2.2				
		6	1.1	1.1	1.5	1.5	1.5	1.5	2.2	2.2				
060D	6000	4	1.5	1.5	1.5	2.2	2.2	2.2	2.2	2.2				
		6	1.5	1.5	2.2	2.2	2.2	2.2	2.2	3.0				
070D	7000	4	1.5	1.5	1.5	2.2	2.2	2.2	2.2	2.2	3.0	3.0		
		6	1.5	1.5	2.2	2.2	2.2	2.2	2.2	3.0	3.0	3.0		
080D	8000	4	2.2	2.2	2.2	2.2	2.2	3.0	3.0	3.0	3.0	3.0		
		6	2.2	2.2	2.2	2.2	3.0	3.0	3.0	3.0	3.0	4.0		
090D	9000	4	2.2	2.2	2.2	2.2	3.0	3.0	3.0	3.0	4.0	4.0		
		6	2.2	2.2	2.2	3.0	3.0	3.0	3.0	4.0	4.0	4.0		
105D	10500	4	2.2	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0		
		6	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	5.5		
120D	12000	4	2.2	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	5.5		
		6	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	5.5	5.5		
135D	13500	4	3.0	3.0	3.0	4.0	4.0	4.0	4.0	5.5	5.5	5.5		
		6	3.0	3.0	4.0	4.0	4.0	4.0	5.5	5.5	5.5	5.5		
150D	15000	4	3.0	4.0	4.0	4.0	5.5	5.5	5.5	5.5	5.5	7.5		
		6	4.0	4.0	4.0	5.5	5.5	5.5	5.5	5.5	7.5	7.5		
180D	18000	4	4.0	4.0	5.5	5.5	5.5	5.5	7.5	7.5	7.5	7.5		
		6	4.0	5.5	5.5	5.5	5.5	7.5	7.5	7.5	7.5	7.5		
210D	21000	4	5.5	5.5	5.5	7.5	7.5	7.5	7.5	11.0	11.0	11.0		
		6	5.5	5.5	7.5	7.5	7.5	7.5	11.0	11.0	11.0	11.0		
240D	24000	4	5.5	5.5	5.5	7.5	7.5	7.5	11.0	11.0	11.0	11.0		
		6	5.5	5.5	7.5	7.5	7.5	11.0	11.0	11.0	11.0	11.0		
270D	27000	4	7.5	7.5	7.5	7.5	11.0	11.0	11.0	11.0	11.0	11.0	15.0	15.0
		6	7.5	7.5	7.5	11.0	11.0	11.0	11.0	11.0	11.0	15.0	15.0	
300D	30000	4	7.5	11.0	11.0	11.0	11.0	11.0	11.0	15.0	15.0	15.0	15.0	
		6	11.0	11.0	11.0	11.0	11.0	11.0	15.0	15.0	15.0	15.0		
330D	33000	4	7.5	11.0	11.0	11.0	11.0	11.0	15.0	15.0	15.0	15.0	15.0	15.0
		6	11.0	11.0	11.0	11.0	11.0	15.0	15.0	15.0	15.0	15.0	15.0	18.5
350D	35000	4	7.5	7.5	11.0	11.0	11.0	11.0	11.0	15.0	15.0	15.0	15.0	15.0
		6	7.5	11.0	11.0	11.0	11.0	11.0	15.0	15.0	15.0	15.0	15.0	18.5
400D	40000	4	11.0	11.0	11.0	11.0	15.0	15.0	15.0	15.0	15.0	18.5	18.5	18.5
		6	11.0	11.0	11.0	15.0	15.0	15.0	15.0	15.0	18.5	18.5	18.5	18.5
450D	45000	4	15.0	15.0	15.0	15.0	15.0	15.0	18.5	18.5	18.5	18.5	22.0	22.0
		6	15.0	15.0	15.0	15.0	15.0	18.5	18.5	18.5	18.5	22.0	22.0	
500D	50000	4	15.0	15.0	18.5	18.5	18.5	18.5	22.0	22.0	22.0			
		6	15.0	18.5	18.5	18.5	18.5	22.0	22.0	22.0				

Note:
ESP for option, if needed, please contact factory

Unit ESP and Power (kW)
TAD-DH2(Horizontal type 2)

Model TAD	Air Flow (m^3/h)	Cooling Coil Rows	ESP(Pa)											
			120	170	220	270	320	370	420	470	520	570	620	670
020D	2000	4	0.55	0.55	0.55	0.75	0.75	0.75	0.75	1.1				
		6	0.55	0.55	0.75	0.75	0.75	0.75	1.1	1.1				
030D	3000	4	0.75	0.75	0.75	1.1	1.1	1.1	1.1	1.1				
		6	0.75	0.75	1.1	1.1	1.1	1.1	1.1	1.5				
040D	4000	4	1.1	1.1	1.1	1.1	1.5	1.5	1.5	2.2				
		6	1.1	1.1	1.1	1.5	1.5	1.5	2.2	2.2				
050D	5000	4	1.1	1.1	1.5	1.5	1.5	1.5	2.2	2.2				
		6	1.1	1.5	1.5	1.5	1.5	2.2	2.2	2.2				
060D	6000	4	1.5	1.5	2.2	2.2	2.2	2.2	2.2	3.0				
		6	1.5	2.2	2.2	2.2	2.2	2.2	3.0	3.0				
070D	7000	4	1.5	1.5	2.2	2.2	2.2	2.2	2.2	3.0	3.0	3.0		
		6	1.5	2.2	2.2	2.2	2.2	2.2	3.0	3.0	3.0	3.0		
080D	8000	4	2.2	2.2	2.2	2.2	3.0	3.0	3.0	3.0	3.0	4.0		
		6	2.2	2.2	2.2	3.0	3.0	3.0	3.0	3.0	4.0	4.0		
090D	9000	4	2.2	2.2	2.2	3.0	3.0	3.0	3.0	4.0	4.0	4.0		
		6	2.2	2.2	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0		
105D	10500	4	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	5.5		
		6	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5		
120D	12000	4	3.0	3.0	3.0	3.0	4.0	4.0	4.0	5.5	5.5	5.5		
		6	3.0	3.0	3.0	4.0	4.0	4.0	5.5	5.5	5.5	5.5		
135D	13500	4	3.0	3.0	4.0	4.0	4.0	4.0	5.5	5.5	5.5	5.5		
		6	3.0	4.0	4.0	4.0	4.0	5.5	5.5	5.5	5.5	7.5		
150D	15000	4	4.0	4.0	4.0	5.5	5.5	5.5	5.5	5.5	7.5	7.5		
		6	4.0	4.0	5.5	5.5	5.5	5.5	5.5	7.5	7.5	7.5		
180D	18000	4	4.0	5.5	5.5	5.5	5.5	7.5	7.5	7.5	7.5	7.5		
		6	5.5	5.5	5.5	5.5	7.5	7.5	7.5	7.5	7.5	11.0		
210D	21000	4	5.5	5.5	7.5	7.5	7.5	7.5	11.0	11.0	11.0	11.0		
		6	5.5	7.5	7.5	7.5	7.5	11.0	11.0	11.0	11.0	11.0		
240D	24000	4	5.5	5.5	7.5	7.5	7.5	11.0	11.0	11.0	11.0	11.0		
		6	5.5	7.5	7.5	7.5	11.0	11.0	11.0	11.0	11.0	11.0		
270D	27000	4	7.5	7.5	7.5	11.0	11.0	11.0	11.0	11.0	11.0	15.0	15.0	
		6	7.5	7.5	11.0	11.0	11.0	11.0	11.0	11.0	15.0	15.0		
300D	30000	4	11.0	11.0	11.0	11.0	11.0	11.0	15.0	15.0	15.0	15.0		
		6	11.0	11.0	11.0	11.0	11.0	15.0	15.0	15.0	15.0			
330D	33000	4	11.0	11.0	11.0	11.0	11.0	15.0	15.0	15.0	15.0	15.0	15.0	
		6	11.0	11.0	11.0	11.0	15.0	15.0	15.0	15.0	15.0	15.0	18.5	
350D	35000	4	7.5	11.0	11.0	11.0	11.0	15.0	15.0	15.0	15.0	15.0	15.0	
		6	11.0	11.0	11.0	11.0	15.0	15.0	15.0	15.0	15.0	15.0	18.5	
400D	40000	4	11.0	11.0	11.0	15.0	15.0	15.0	15.0	15.0	18.5	18.5	18.5	
		6	11.0	11.0	15.0	15.0	15.0	15.0	15.0	18.5	18.5	18.5	18.5	
450D	45000	4	15.0	15.0	15.0	15.0	15.0	18.5	18.5	18.5	18.5	22.0	22.0	
		6	15.0	15.0	15.0	15.0	18.5	18.5	18.5	18.5	22.0	22.0		
500D	50000	4	15.0	18.5	18.5	18.5	18.5	22.0	22.0	22.0				
		6	18.5	18.5	18.5	18.5	22.0	22.0	22.0					

Note:
ESP for option, if needed, please contact factory

Unit ESP and Power (kW)
TAD-DH3(Horizontal type 3)

Model TAD	Air Flow (m^3/h)	Cooling Coil Rows	ESP(Pa)											
			120	170	220	270	320	370	420	470	520	570	620	670
020D	2000	4	0.55	0.75	0.75	0.75	0.75	1.1	1.1	1.1				
		6	0.75	0.75	0.75	0.75	1.1	1.1	1.1	1.1				
030D	3000	4	0.75	1.1	1.1	1.1	1.1	1.1	1.5	1.5				
		6	1.1	1.1	1.1	1.1	1.1	1.5	1.5					
040D	4000	4	1.1	1.1	1.5	1.5	1.5	2.2	2.2	2.2				
		6	1.1	1.5	1.5	1.5	2.2	2.2	2.2	2.2				
050D	5000	4	1.5	1.5	1.5	1.5	2.2	2.2	2.2	2.2				
		6	1.5	1.5	1.5	2.2	2.2	2.2	2.2	2.2				
060D	6000	4	2.2	2.2	2.2	2.2	2.2	3.0	3.0	3.0				
		6	2.2	2.2	2.2	2.2	3.0	3.0	3.0					
070D	7000	4	2.2	2.2	2.2	2.2	2.2	3.0	3.0	3.0	3.0	3.0		
		6	2.2	2.2	2.2	2.2	3.0	3.0	3.0	3.0	3.0	4.0		
080D	8000	4	2.2	2.2	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0		
		6	2.2	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0		
090D	9000	4	2.2	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0		
		6	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	5.5		
105D	10500	4	3.0	3.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	5.5		
		6	3.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	5.5	5.5		
120D	12000	4	3.0	3.0	4.0	4.0	4.0	5.5	5.5	5.5	5.5			
		6	3.0	4.0	4.0	4.0	5.5	5.5	5.5	5.5				
135D	13500	4	4.0	4.0	4.0	4.0	5.5	5.5	5.5	5.5	7.5			
		6	4.0	4.0	4.0	5.5	5.5	5.5	5.5	7.5				
150D	15000	4	4.0	5.5	5.5	5.5	5.5	5.5	7.5	7.5	7.5	7.5		
		6	5.5	5.5	5.5	5.5	5.5	7.5	7.5	7.5	7.5			
180D	18000	4	5.5	5.5	5.5	7.5	7.5	7.5	7.5	7.5	11.0	11.0		
		6	5.5	5.5	7.5	7.5	7.5	7.5	7.5	11.0	11.0	11.0		
210D	21000	4	7.5	7.5	7.5	7.5	11.0	11.0	11.0	11.0	11.0	11.0		
		6	7.5	7.5	7.5	11.0	11.0	11.0	11.0	11.0	11.0	11.0		
240D	24000	4	7.5	7.5	7.5	11.0	11.0	11.0	11.0	11.0				
		6	7.5	7.5	11.0	11.0	11.0	11.0	11.0					
270D	27000	4	7.5	11.0	11.0	11.0	11.0	11.0	11.0	15.0	15.0			
		6	11.0	11.0	11.0	11.0	11.0	11.0	15.0	15.0				
300D	30000	4	11.0	11.0	11.0	11.0	15.0	15.0	15.0	15.0				
		6	11.0	11.0	11.0	15.0	15.0	15.0	15.0					
330D	33000	4	11.0	11.0	11.0	15.0	15.0	15.0	15.0	15.0	15.0	18.5		
		6	11.0	11.0	15.0	15.0	15.0	15.0	15.0	15.0	18.5	18.5		
350D	35000	4	11.0	11.0	11.0	15.0	15.0	15.0	15.0	15.0	15.0			
		6	11.0	11.0	15.0	15.0	15.0	15.0	15.0	15.0	18.5			
400D	40000	4	11.0	15.0	15.0	15.0	15.0	15.0	18.5	18.5	18.5	18.5		
		6	15.0	15.0	15.0	15.0	15.0	18.5	18.5	18.5	18.5			
450D	45000	4	15.0	15.0	15.0	18.5	18.5	18.5	18.5	22.0	22.0			
		6	15.0	15.0	18.5	18.5	18.5	18.5	22.0	22.0				
500D	50000	4	18.5	18.5	18.5	22.0	22.0	22.0						
		6	18.5	18.5	22.0	22.0	22.0							

Note:
ESP for option, if needed, please contact factory

TFD-B/D Standard Air Handling Unit--- Ceiling Type
Return air condition

Model	Air Flow	4 rows						6 rows						ESP	Sound Level	Chilled water pipe	Power supply	Driven type
		Rated cooling capacity	Rated heating capacity	Water flow rate	Pressure drop	Motor power	Chilled water pipe	Rated cooling capacity	Rated heating capacity	Water flow rate	Pressure drop	Motor power	Chilled water pipe					
TFD	m^3/h	kW	kW	l/s	kPa	kW	DN	kW	kW	l/S	kPa	kW	DN	Pa	dB(A)	DN		
010	1000	5.1	10.2	0.24	3.0	0.18	32	7.2	12.4	0.34	8.8	0.18	32	80	53	25	380V/ 3~/50HZ	Direct driven
015	1500	8.3	15.2	0.40	9.0	0.18	32	11.0	18.5	0.52	19.5	0.25	32	80	53	25		
020	2000	11.5	21.2	0.55	11.0	0.32	32	14.9	25.3	0.71	26.0	0.32	32	80	55	25		
025	2500	14.4	26.0	0.69	18.0	0.37	32	18.2	30.8	0.87	38.0	0.45	32	120	56	25		
030	3000	17.5	32.0	0.83	31.0	0.75	32	22.0	37.3	1.05	24.0	0.75	40	160	59	25		
040	4000	23.4	41.5	1.13	60.0	1.1	40	30.1	49.1	1.43	49.5	1.1	40	200	60	25		Belt driven
050	5000	28.3	51.4	1.37	40.0	1.5	40	35.2	61.8	1.68	32.0	1.5	40	200	62	25		
060	6000	34.5	61.7	1.64	43.8	1.5	40	43.7	73.9	2.08	44.0	2.2	40	200	63	25		
070	7000	40.3	71.3	1.92	58.0	2.2	40	49.4	85.3	2.35	59.0	2.2	50	240	64	25		
080	8000	46.2	83.1	2.20	26.0	2.2	40	57.6	98.3	2.74	56.0	3.0	50	240	64	25		
090	9000	52.1	93.1	2.48	34.0	3.0	40	64.8	110.3	3.09	25.4	3.0	50	280	66	25		
105	10500	59.9	108.1	2.85	51.0	3.0	50	75.1	135.3	3.58	35.8	3.0	50	280	67	25		
120	12000	69.3	131.7	3.30	54.0	4.0	50	85.8	161.1	4.09	41.6	4.0	50	280	68	25		
135	13500	76.8	146.6	3.66	43.8	4.0	50	102.3	176.4	4.87	36.3	4.0	65	320	68.5	32		
150	15000	85.3	162.8	4.06	38.1	5.5	50	108.5	189.7	5.17	34.3	5.5	65	320	69	32		

Note:
1. Cooling capacity is based on the following:
a) Water temperature : 7° C (inlet)/12° C (outlet)
b) Air entering condition : 27° C DB/19.5° C WB
2. Heating capacity is based on the following (with same water flow rate as cooling cycle):
a) Water temperature : 60° C (inlet)
b) Air entering condition : 15° C DB
3. The manufacturer reserves the rights to make changes to the above specifications without prior notice.

TFD-B/D Standard Air Handling Unit--- Ceiling Type
Fresh air condition

Model	Air Flow	4 rows						6 rows						ESP	Sound Level	Chilled water pipe	Power supply	Driven type
		Rated cooling capacity	Rated heating capacity	Water flow rate	Pressure drop	Motor power	Chilled water pipe	Rated cooling capacity	Rated heating capacity	Water flow rate	Pressure drop	Motor power	Chilled water pipe					
TFD	m^3/h	kW	kW	l/s	kPa	kW	DN	kW	kW	l/S	kPa	kW	DN	Pa	dB(A)	DN		
010	1000	13.9	13.2	0.66	16.0	0.18	32	15.8	15.6	0.75	24.7	0.18	32	80	53	25	380V/ 3~/50HZ	Direct driven
015	1500	18.7	18.4	0.93	33.0	0.18	32	24.5	23.7	1.17	66.0	0.25	32	80	53	25		
020	2000	27.0	27.5	1.29	43.0	0.32	32	31.2	31.3	1.49	31.4	0.32	32	80	55	25		
025	2500	30.8	31.8	1.47	26.0	0.37	32	40.3	39.3	1.92	47.9	0.45	40	120	56	25		
030	3000	39.9	40.9	1.90	48.0	0.75	40	45.8	45.1	2.18	33.0	0.75	40	160	59	25		
040	4000	49.7	51.1	2.37	32.0	1.1	40	63.8	61.8	3.04	65.5	1.1	50	200	60	25		Belt driven
050	5000	64.5	64.0	3.07	63.0	1.5	50	75.4	70.3	3.59	41.0	1.5	50	200	62	25		
060	6000	72.7	75.5	3.46	11.0	1.5	50	92.6	91.9	4.41	47.7	2.2	50	200	63	25		
070	7000	84.1	87.1	4.00	15.1	2.2	50	105.6	104.8	5.03	68.4	2.2	65	240	64	25		
080	8000	99.0	101.7	4.71	14.4	2.2	50	120.7	119.7	5.75	63.3	3.0	65	240	64	25		
090	9000	111.0	113.8	5.29	19.0	2.2	65	137.3	135.3	6.54	37.5	3.0	65	280	66	25		
105	10500	133.1	133.4	6.34	29.5	3.0	65	160.2	157.9	7.63	57.9	3.0	80	280	67	25		
120	12000	149.4	155.1	7.12	32.5	4.0	65	185.2	180.4	8.20	68.8	4.0	80	280	68	25		
135	13500	165.8	180.2	7.90	27.7	4.0	80	222.6	213.4	9.84	57.4	4.0	80	320	68.5	32		
150	15000	184.2	200.2	8.77	27.2	5.5	80	244.7	237.1	10.65	56.6	5.5	80	320	69	32		

Note:
1. Cooling capacity is based on the following:
a) Water temperature : 7° C (inlet)/12° C (outlet)
b) Air entering condition : 35° C DB/28° C WB
2. Heating capacity is based on the following (with same water flow rate as cooling cycle):
a) Water temperature : 60° C (inlet)
b) Air entering condition : 7° C DB
3. The manufacturer reserves the rights to make changes to the above specifications without prior notice.

TFD Standard Air Handling Unit--- Ceiling Type Separate Heating Coil
Return air condition

Model	Air Flow	1 row				2 row			
		Rated heating capacity	Water flow rate	Pressure drop	Hot water pipe	Rated heating capacity	Water flow rate	Pressure drop	Hot water pipe
TFD	m³/h	kW	l/s	kPa	DN	kW	l/s	kPa	DN
010	1000	3.0	0.1	0.17	32	6.2	0.2	0.87	32
015	1500	4.3	0.1	0.19	32	9.9	0.3	2.1	32
020	2000	6.7	0.2	0.59	32	13.4	0.4	3.0	32
025	2500	8.2	0.2	0.63	32	16.4	0.4	3.3	32
030	3000	10.9	0.3	1.4	32	20.2	0.5	5.3	32
040	4000	14.8	0.4	1.5	32	27.7	0.7	6.5	32
050	5000	19.1	0.5	2.5	32	35.2	0.9	11.6	32
060	6000	23.2	0.6	3.0	32	43.0	1.1	14.2	32
070	7000	27.6	0.7	4.3	32	49.7	1.2	18.2	32
080	8000	31.5	0.8	4.0	32	57.3	1.4	18.2	32
090	9000	36.0	0.9	5.3	32	65.0	1.6	24.9	32
105	10500	42.6	1.1	8.4	32	76.4	1.8	34.0	32
120	12000	49.4	1.3	9.9	32	87.3	2.1	38.8	32
135	13500	55.6	1.5	9.8	32	98.2	2.4	36.2	32
150	15000	60.8	1.6	10.0	32	108.3	2.6	37.7	32

Note:
1. Heating capacity is based on the following:
a) Water temperature : 60° C (inlet)/50° C (outlet)
b) Air entering condition : 15° C DB
2. Pressure drop of heating coil is 25Pa per row, when add heating coil, please increase pressure drop.
3. The manufacturer reserves the rights to make changes to the above specifications without prior notice.

TFD Standard Air Handling Unit--- Ceiling Type Separate Heating Coil
Fresh air condition

Model	Air Flow	1 row				2 row			
		Rated heating capacity	Water flow rate	Pressure drop	Hot water pipe	Rated heating capacity	Water flow rate	Pressure drop	Hot water pipe
TFD	m³/h	kW	l/s	kPa	DN	kW	l/s	kPa	DN
010	1000	4.3	0.2	0.64	32	7.3	0.2	0.87	32
015	1500	6.3	0.2	0.69	32	11.6	0.3	2.1	32
020	2000	8.9	0.3	1.3	32	16.5	0.5	4.5	32
025	2500	10.9	0.3	1.4	32	20.2	0.5	4.9	32
030	3000	13.7	0.4	2.5	32	25.3	0.7	9.9	32
040	4000	18.3	0.5	2.3	32	33.7	0.9	10.3	32
050	5000	24.2	0.7	4.7	32	42.9	1.1	16.7	32
060	6000	29.1	0.8	5.1	32	51.4	1.3	19.2	32
070	7000	33.9	0.9	6.9	32	61.0	1.5	27.1	32
080	8000	39.3	1.1	7.2	32	69.7	1.7	25.7	32
090	9000	44.3	1.2	9.0	32	78.4	1.9	33.8	32
105	10500	52.4	1.4	13.0	32	93.0	2.3	52.5	32
120	12000	60.7	1.6	14.5	32	106.2	2.6	56.7	32
135	13500	67.3	1.8	13.6	32	119.5	3.0	54.0	32
150	15000	73.8	1.9	13.7	32	130.7	3.2	54.7	32

Note:
1. Heating capacity is based on the following:
a) Water temperature : 60° C (inlet)/50° C (outlet)
b) Air entering condition : 7° C DB
2. Pressure drop of heating coil is 25Pa per row, when add heating coil, please increase pressure drop.
3. The manufacturer reserves the rights to make changes to the above specifications without prior notice.

TFD-C Standard Air Handling Unit--- Ceiling Type 3 Speed
Return air condition

Model		Air Flow	4 rows						6 rows						Sound level	Condensing water pipe	High power input	Rated current	Power supply	Driven type
			Rated cooling capacity	Rated heating capacity	Water flow rate	Pressure drop	ESP	Chilled water pipe	Rated cooling capacity	Rated heating capacity	Water flow rate	Pressure drop	ESP	Chilled water pipe						
TFD		m³/h	kW	kW	l/s	kPa	Pa	DN	kW	kW	l/s	kPa	Pa	DN	dB(A)	DN	kW	A		
010	High	1000	5.1	10.2	0.24	3.0	140	32	7.2	12.4	0.34	8.8	80	32	52	25	0.35	1.4	220V/1~/50Hz	3-speed
	Medium	830	4.2	8.6	0.20	2.3	110		6.0	10.5	0.28	6.8	65							
	Low	564	3.5	6.5	0.17	1.8	90		4.9	7.6	0.23	5.2	50							
015	High	1500	8.3	15.2	0.40	9.0	140	32	11.0	18.5	0.52	19.5	80	32	52	25	0.45	1.7		
	Medium	1245	6.8	12.9	0.32	6.9	110		9.1	15.9	0.43	15.0	65							
	Low	847	5.6	10.0	0.26	5.3	90		7.5	11.5	0.36	11.5	50							
020	High	2000	11.5	21.2	0.55	11.0	140	32	14.9	25.3	0.71	26.0	80	32	54	25	0.5	3.2		
	Medium	1660	9.5	18.2	0.45	8.5	110		12.2	21.8	0.58	20.0	65							
	Low	1129	7.8	13.6	0.37	6.5	90		10.1	15.7	0.48	15.3	50							
025	High	2500	14.4	26.0	0.69	18.0	190	32	18.2	30.8	0.87	38.0	130	32	55	25	0.7	3.5		
	Medium	2075	12.0	22.6	0.57	13.9	150		15.1	26.5	0.72	29.3	105							
	Low	1411	9.8	16.9	0.47	10.6	120		12.4	19.4	0.59	22.4	85							
030	High	3000	17.5	32.0	0.83	31.0	190	32	22.0	37.3	1.05	24.0	130	40	57	25	0.7	3.5		
	Medium	2490	14.4	27.8	0.68	23.9	150		18.3	32.1	0.87	18.5	105							
	Low	1693	11.9	20.8	0.57	18.3	120		15.0	23.1	0.71	14.2	85							
040	High	4000	23.4	41.5	1.13	60.0	160	40	30.1	49.1	1.43	49.5	100	40	58	25	1.0	5.0		
	Medium	3320	19.4	36.1	0.92	46.2	130		25.0	42.2	1.19	38.1	80							
	Low	2258	15.9	27.0	0.76	35.4	100		20.5	30.9	0.97	29.2	65							
050	High	5000	28.3	51.4	1.37	40.0	160	40	35.2	61.8	1.68	32.0	100	40	60	25	1.4	7.0		
	Medium	4150	23.2	43.7	1.11	30.8	130		29.2	52.5	1.39	24.6	80							
	Low	2822	19.2	33.4	0.92	23.6	100		23.9	38.9	1.14	18.9	65							
060	High	6000	34.5	61.7	1.64	43.8	220	40	43.7	73.9	2.08	44.0	160	40	62	25	2.3	9.0		
	Medium	4980	28.6	53.7	1.36	33.7	175		36.3	62.8	1.73	33.9	130							
	Low	3386	23.5	40.1	1.12	25.8	140		29.7	46.6	1.42	26.0	105							
070	High	7000	40.3	71.3	1.92	58.0	260	40	49.4	85.3	2.35	59.0	200	50	62	25	2.7	12.0		
	Medium	5810	33.4	61.3	1.59	75.3	210		40.5	73.4	1.93	45.4	160							
	Low	3951	27.4	46.3	1.30	34.2	165		33.6	52.9	1.60	34.8	130							

Note:
1. Cooling capacity is based on the following:
a) Water temperature : 7° C (inlet)/12° C (outlet)
b) Air entering condition : 27° C DB/19.5° C WB
2. Heating capacity is based on the following :
a) Water temperature : 60° C (inlet)/50° C (outlet)
b) Air entering condition : 7° C DB
3. The manufacturer reserves the rights to make changes to the above specifications without prior notice.

TFD-C Standard Air Handling Unit--- Ceiling Type 3 Speed
Fresh air condition

Model		Air Flow	4 rows						6 rows						Sound level	Condensing water pipe	High power input	Rated current	Power supply	Driven type
			Rated cooling capacity	Rated heating capacity	Water flow rate	Pressure drop	ESP	Chilled water pipe	Rated cooling capacity	Rated heating capacity	Water flow rate	Pressure drop	ESP	Chilled water pipe						
TFD		m^3/h	kW	kW	l/s	kPa	Pa	DN	kW	kW	l/s	kPa	Pa	DN	dB(A)	DN	kW	A		
010	High	1000	13.9	13.2	0.66	16.0	140	32	15.8	15.6	0.75	24.7	80	32	52	25	0.35	1.4	220V/1~/50Hz	3-speed
	Medium	830	11.4	11.5	0.54	12.3	110		13.1	13.1	0.62	18.3	65							
	Low	564	9.5	8.4	0.45	9.4	90		10.7	9.0	0.51	13.4	50							
015	High	1500	18.7	18.4	0.93	33.0	140	32	24.5	23.7	1.17	66.0	80	32	52	25	0.45	1.7		
	Medium	1245	15.5	15.2	0.77	25.4	110		20.3	19.9	0.97	48.9	65							
	Low	847	12.7	12.5	0.63	19.5	90		16.7	14.0	0.79	35.3	50							
020	High	2000	27.0	27.5	1.29	43.0	140	32	31.2	31.3	1.49	31.4	80	32	54	25	0.5	3.2		
	Medium	1660	22.4	23.7	1.07	33.1	110		25.9	26.6	1.23	23.2	65							
	Low	1129	18.4	17.3	0.87	25.4	90		21.2	18.8	1.01	17.0	50							
025	High	2500	30.8	31.8	1.47	26.0	190	32	40.3	39.3	1.92	47.9	130	40	55	25	0.7	3.5		
	Medium	2075	25.6	27.7	1.22	20.0	150		33.4	33.4	1.59	35.5	105							
	Low	1411	20.9	20.4	1.00	15.3	120		27.4	24.0	1.30	25.8	85							
030	High	3000	39.9	40.9	1.90	48.0	190	40	45.8	45.1	2.18	33.0	130	40	57	25	0.7	3.5		
	Medium	2490	33.1	35.6	1.58	37.0	150		38.0	38.3	1.81	24.5	105							
	Low	1693	27.1	26.2	1.29	28.3	120		31.1	27.5	1.48	17.8	85							
040	High	4000	49.7	51.1	2.37	32.0	160	40	63.8	61.8	3.04	65.5	100	50	58	25	1.0	5.0		
	Medium	3320	41.3	44.5	1.96	24.6	130		53.0	52.5	2.52	48.6	80							
	Low	2258	33.8	33.2	1.61	18.9	100		42.7	37.1	2.04	34.7	65							
050	High	5000	64.5	64.0	3.07	63.0	160	50	75.4	70.3	3.59	41.0	100	50	60	25	1.4	7.0		
	Medium	4150	53.5	55.7	2.55	48.5	130		62.6	58.4	2.98	30.5	80							
	Low	2822	43.9	41.0	2.09	37.2	100		51.3	47.8	2.44	22.2	65							
060	High	6000	72.7	75.5	3.46	11.0	220	50	92.6	91.9	4.41	47.7	160	50	62	25	2.3	9.0		
	Medium	4980	60.3	65.7	2.87	8.5	175		76.9	78.1	3.66	35.4	130							
	Low	3386	49.4	48.3	2.35	6.5	140		63.0	55.1	3.00	25.8	105							
070	High	7000	84.1	87.1	4.00	15.1	260	50	105.6	104.8	5.03	68.4	200	65	62	25	2.7	12.0		
	Medium	5810	69.0	75.8	3.28	11.6	210		87.6	89.1	4.17	50.7	160							
	Low	3951	57.2	55.7	2.72	8.9	165		71.8	62.9	3.42	37.0	130							

Note:
1. Cooling capacity is based on the following:
a) Water temperature : 7° C (inlet)/12° C (outlet)
b) Air entering condition : 35° C DB/28° C WB
2. Heating capacity is based on the following :
a) Water temperature : 60° C (inlet)/50° C (outlet)
b) Air entering condition : 7° C DB
3. The manufacturer reserves the rights to make changes to the above specifications without prior notice.

TFD-S Standard Air Handling Unit---Jet Type
Return air condition

Model	Air Flow	4 rows						6 rows						Condensate water pipe	Power supply	Driven type
		Rated cooling capacity	Rated heating capacity	Water flow rate	Pressure drop	Motor power	Chilled water pipe	Rated cooling capacity	Rated heating capacity	Water flow rate	Pressure drop	Motor power	Chilled water pipe			
TFD	m^3/h	kW	kW	l/s	kPa	kW	DN	kW	kW	l/S	kPa	kW	DN	DN		
010	1000	5.1	10.2	0.24	3.0	0.25	32	7.2	12.4	0.34	8.8	0.25	32	25	380V/3~/50HZ	Direct driven
020	2000	11.5	21.2	0.55	11.0	0.32	32	14.9	25.3	0.71	26.0	0.32	32	25		
030	3000	17.5	32.0	0.83	31.0	1.1	32	22.0	37.3	1.05	24.0	1.1	32	25		Belt driven
040	4000	23.4	41.5	1.13	60.0	1.1	40	30.1	49.1	1.43	49.5	1.1	40	25		
050	5000	28.3	51.4	1.37	40.0	1.5	40	35.2	61.8	1.68	32.0	2.2	40	25		
060	6000	34.5	61.7	1.64	43.8	1.5	40	43.7	73.9	2.08	44.0	2.2	40	25		
070	7000	40.3	71.3	1.92	58.0	1.5	40	49.4	85.3	2.35	59.0	2.2	50	25		
080	8000	46.2	83.1	2.20	26.0	2.2	40	57.6	98.3	2.74	56.0	3.0	50	25		
090	9000	52.1	93.1	2.48	34.0	2.2	40	64.8	110.3	3.09	25.4	3.0	50	25		
105	10500	59.9	108.1	2.85	51.0	3.0	50	75.1	135.3	3.58	35.8	3.0	50	25		
120	12000	69.3	131.7	3.30	54.0	4.0	50	85.8	161.1	4.09	41.6	4.0	50	25		

Note:
1. Cooling capacity is based on the following:
a) Water temperature : 7° C (inlet)/12° C (outlet)
b) Air entering condition : 27° C DB/19.5° C WB
2. Heating capacity is based on the following :
a) Water temperature : 60° C (inlet)/50° C (outlet)
b) Air entering condition : 7° C DB
3. The manufacturer reserves the rights to make changes to the above specifications without prior notice.
4. ESP is 0

TFD-S Standard Air Handling Unit---Jet Type
Fresh air condition

Model	Air Flow	4 rows						6 rows						Condensate water pipe	Power supply	Driven type
		Rated cooling capacity	Rated heating capacity	Water flow rate	Pressure drop	Motor power	Chilled water pipe	Rated cooling capacity	Rated heating capacity	Water flow rate	Pressure drop	Motor power	Chilled water pipe			
TFD	m^3/h	kW	kW	l/s	kPa	kW	DN	kW	kW	l/S	kPa	kW	DN	DN		
010	1000	13.9	13.2	0.66	16.0	0.25	32	15.8	15.6	0.75	24.7	0.25	32	25	380V/3~/50HZ	Direct driven
020	2000	27.0	27.5	1.29	43.0	0.32	32	31.2	31.3	1.49	31.4	0.32	32	25		
030	3000	39.9	40.9	1.90	48.0	1.1	40	45.8	45.1	2.18	33.0	1.1	40	25		Belt driven
040	4000	49.7	51.1	2.37	32.0	1.1	40	63.8	61.8	3.04	65.5	1.1	50	25		
050	5000	64.5	64.0	3.07	63.0	1.5	50	75.4	70.3	3.59	41.0	2.2	50	25		
060	6000	72.7	75.5	3.46	11.0	1.5	50	92.6	91.9	4.41	47.7	2.2	50	25		
070	7000	84.1	87.1	4.00	15.1	1.5	50	105.6	104.8	5.03	68.4	2.2	65	25		
080	8000	99.0	101.7	4.71	14.4	2.2	50	120.7	119.7	5.75	63.3	3.0	65	25		
090	9000	111.0	113.8	5.29	19.0	2.2	65	137.3	135.3	6.54	37.5	3.0	65	25		
105	10500	133.1	133.4	6.34	29.5	3.0	65	160.2	157.9	7.63	57.9	3.0	65	25		
120	12000	149.4	155.1	7.12	32.5	4.0	65	185.2	180.4	8.20	68.8	4.0	65	25		

Note:
1. Cooling capacity is based on the following:
a) Water temperature : 7° C (inlet)/12° C (outlet)
b) Air entering condition : 35° C DB/28° C WB
2. Heating capacity is based on the following :
a) Water temperature : 60° C (inlet)/50° C (outlet)
b) Air entering condition : 7° C DB
3. The manufacturer reserves the rights to make changes to the above specifications without prior notice.
4. ESP is 0

TFD-J Standard Air Handling Unit---Heat Recovery Type with 2 rows coil

Model	Air Flow	Cooling Capacity			Heating Capacity			Water flow rate	Water Pressure drop	ESP		Rated Power			Sound level
		Q1	Q2	Q3	Q1	Q2	Q3			Supply	Exaust	Supply	Exaust	Voltage	
TFD-EC	m³/h	kW	kW	kW	kW	kW	kW	l/s	kPa	Pa		kW		V	dB(A)
010EC	1000	11.0	6.8	4.2	12.0	6.4	5.7	0.2	13	40	80	0.25	0.32	380	53
015EC	1500	16.7	10.2	6.5	18.3	9.5	8.8	0.3	15	80	80	0.25	0.25		53
020EC	2000	22.7	13.6	9.1	25.0	12.7	12.3	0.4	13	110	60	0.32	0.32		55
025EC	2500	27.8	17.0	10.8	30.5	15.9	14.6	0.5	29	80	60	0.55	0.55		56
030EC	3000	35.2	20.4	14.8	39.1	19.1	20.0	0.7	56	170	50	0.75	0.75		58
040EC	4000	47.6	27.2	20.4	53.0	25.5	27.5	1.0	55	170	50	1.00	0.90		60
050EH	5000	59.1	34.0	25.1	65.7	31.8	33.9	1.2	58	190	50	1.50	1.50		62
060EH	6000	70.4	40.8	29.6	78.2	38.2	40.0	1.4	56	170	50	0.75*2	0.75*2		61
080EH	8000	95.2	54.4	40.8	106.0	50.9	55.1	2.0	55	170	50	1.0*2	1.0*2		62
105EH	10500	124.1	71.4	52.7	138.0	66.8	71.2	2.5	58	190	50	1.5*2	1.5*2		65

Note

1. Cooling condition: Fresh air 35℃ DB/ 28℃ WB, return air 27℃ DB/ 19.5℃ WB, chilled water entering and leaving 7/12℃;
2. Heating condition: Fresh air –7℃ DB, return air 20℃ DB, hot water entering and leaving 60/50 ℃;
3. Q1=Q2+Q3, Q1: Total load, Q2: Recovery Load, Q3: Capacity from chiller or boiler;
4. The manufacturer reserves the rights to make changes to the above specifications without prior notice.

TFD-J Standard Air Handling Unit---Heat Recovery Type with 4 rows coil

Model	Air Flow	Cooling Capacity			Heating Capacity			Water flow rate	Water Pressure drop	ESP		Rated Power			Sound level
		Q1	Q2	Q3	Q1	Q2	Q3			Supply	Exaust	Supply	Exaust	Voltage	
TFD	m³/h	kW	kW	kW	kW	kW	kW	l/s	kPa	Pa		kW		V	dB(A)
015EC	1500	21.3	10.2	11.1	24.5	9.5	14.9	0.5	32	80	60	0.32	0.25	380	53
020EC	2000	29.1	13.6	15.5	33.6	12.7	20.9	0.7	25	120	60	0.55	0.32		55
025EC	2500	35.4	17.0	18.4	40.7	15.9	24.8	0.9	43	100	100	1.00	1.00		56
030EC	3000	45.6	20.4	25.2	53.1	19.1	34.0	1.2	54	120	120	0.75	0.75		58
040EC	4000	61.9	27.2	34.7	72.3	25.5	46.8	1.7	58	120	120	1.00	1.00		60
050EH	5000	76.7	34.0	42.7	89.4	31.8	57.6	2.0	59	140	140	1.50	1.50		62
060EH	6000	91.1	40.8	50.3	106.1	38.2	67.9	2.4	54	120	120	0.75*2	0.75*2		61
080EH	8000	123.8	54.4	69.4	144.5	50.9	93.6	3.4	58	120	120	1.0*2	1.0*2		62
105EH	10500	161.0	71.4	89.6	187.8	66.8	121.0	4.3	59	140	140	1.5*2	1.5*2		65

Note

1. Cooling condition: Fresh air 35℃ DB/ 28℃ WB, return air 27℃ DB/ 19.5℃ WB, chilled water entering and leaving 7/12℃;
2. Heating condition: Fresh air –7℃ DB, return air 20℃ DB, hot water entering and leaving 60/50 ℃;
3. Q1=Q2+Q3, Q1: Total load, Q2: Recovery Load, Q3: Capacity from chiller or boiler;
4. The manufacturer reserves the rights to make changes to the above specifications without prior notice.

TFD-J Standard Air Handling Unit---Heat Recovery Type without coil

Model	Air Flow	Cooling Capacity	Heating Capacity	ESP		Rated Power			Sound level
				Supply	Exaust	Supply	Exaust	Voltage	
TFD	m³/h	kW	kW	Pa		kW		V	dB(A)
010EC	1000	6.8	6.7	90	80	0.25	0.25	380	53
015EC	1500	10.2	10.1	90	70	0.25	0.25		53
020EC	2000	13.6	13.5	110	60	0.32	0.32		55
025EC	2500	17.0	16.8	110	60	0.55	0.45		56
030EC	3000	20.4	20.2	100	80	0.75	0.55		58
040EC	4000	27.2	26.9	110	80	0.90	1.00		59
050EH	5000	34.0	33.7	100	70	1.50	1.10		62
060EH	6000	40.8	40.4	110	80	1.50	1.10		62
080EH	8000	54.4	53.9	110	80	1.80	2.00		63
105EH	10500	71.4	70.7	100	70	3.00	2.20		66

Note

1. Cooling condition: Fresh air 35℃ DB/ 28℃ WB, return air 27℃ DB/ 19.5℃ WB, chilled water entering and leaving 7/12℃;
2. Heating condition: Fresh air –7℃ DB, return air 20℃ DB, hot water entering and leaving 60/50 ℃;
3. The manufacturer reserves the rights to make changes to the above specifications without prior notice.

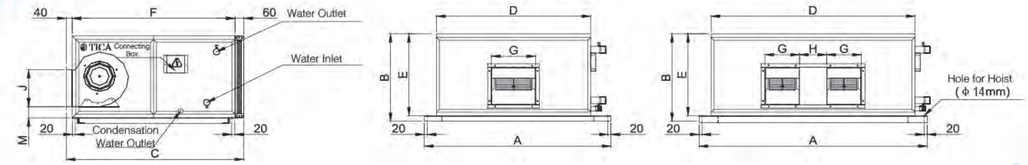
TFD-B/D Unit ESP and Power (kW)

Model TFD	Air Flow (m^3/h)	Cooling Coil Rows	ESP(Pa)						
			80	120	160	200	240	280	320
010	1000	4	0.18	0.18	0.25	0.25			
		6	0.18	0.25	0.25	0.25			
015	1500	4	0.18	0.25	0.25	0.25	0.25		
		6	0.25	0.25	0.25	0.25	0.32		
020	2000	4	0.32	0.32	0.32	0.32	0.32	0.32	
		6	0.32	0.32	0.32	0.32	0.32	0.37	
025	2500	4	0.32	0.37	0.45	0.45	0.45	0.55	
		6	0.37	0.45	0.45	0.45	0.55	0.55	
030	3000	4	0.55	0.75	0.75	0.75	0.75	1.1	1.1
		6	0.75	0.75	0.75	0.75	1.1	1.1	1.1
040	4000	4	1.1	1.1	1.1	1.1	1.1	1.1	1.5
		6	1.1	1.1	1.1	1.1	1.1	1.5	1.5
050	5000	4	1.1	1.5	1.5	1.5	1.5	2.2	2.2
		6	1.5	1.5	1.5	1.5	2.2	2.2	2.2
060	6000	4	1.5	1.5	1.5	1.5	2.2	2.2	2.2
		6	1.5	1.5	1.5	2.2	2.2	2.2	2.2
070	7000	4	1.5	1.5	2.2	2.2	2.2	2.2	2.2
		6	1.5	2.2	2.2	2.2	2.2	2.2	3.0
080	8000	4	2.2	2.2	2.2	2.2	2.2	3.0	3.0
		6	2.2	2.2	2.2	2.2	3.0	3.0	3.0
090	9000	4	2.2	2.2	2.2	2.2	2.2	3.0	3.0
		6	2.2	2.2	2.2	2.2	3.0	3.0	3.0
105	10500	4	3.0	3.0	3.0	3.0	3.0	3.0	4
		6	3.0	3.0	3.0	3.0	3.0	4.0	4.0
120	12000	4		3.0	3.0	3.0	4.0	4.0	4.0
		6		3.0	3.0	4.0	4.0	4.0	5.5
135	13500	4				3.0	3.0	4.0	4.0
		6				3.0	4.0	4.0	4.0
150	15000	4				4.0	4.0	4.0	5.5
		6				4.0	4.0	5.5	5.5

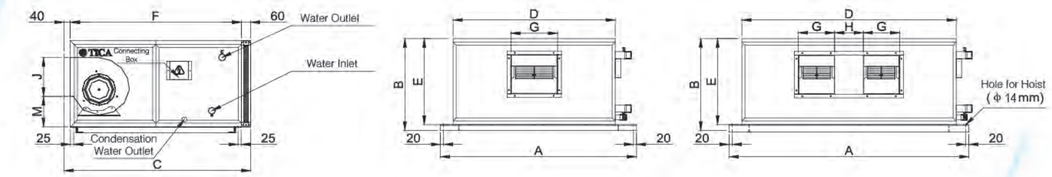
Note:
ESP for option, if needed, please contact factory

Unit Dimension

3 Speeds



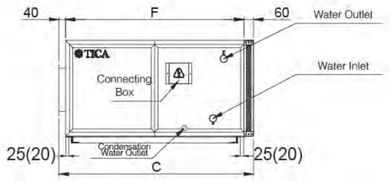
Model TFD	A	B	C	D	E	F	G	H	J	M	Return Air Flange (Length x Width)	Supply Air Flange (Length x Width)	Unit Weight(kg)	
													4Row	6Row
010	787	545	950	623	505	850	300	–	262	88	563x 445	300x260	48	50
015	912	545	950	748	505	850	300	–	262	88	688 x 445	300x260	52	55
020	992	620	950	828	580	850	300	–	262	88	768 x 520	300x260	72	77
025	1058	620	950	894	580	850	300	–	262	88	834 x 520	300x260	74	79
030	1207	620	1000	1043	580	900	232	275	262	88	983x 520	740x262	85	90
040	1405	620	1000	1241	580	900	300	205	262	88	1181x 520	805x262	95	98

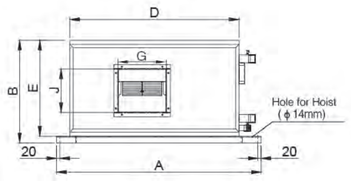


Model TFD	A	B	C	D	E	F	G	H	J	M	Return Air Flange (Length x Width)	Supply Air Flange (Length x Width)	Unit Weight(kg)	
													4Row	6Row
050	1657	630	1000	1493	580	900	300	330	262	89	1433x 520	930x262	124	128
060	1734	690	1000	1570	640	900	331	308	289	234	1510x 580	970x291	140	143
070	1859	690	1000	1695	640	900	331	308	289	234	1635x580	970x291	146	151

Unit Dimension

Direct Drive



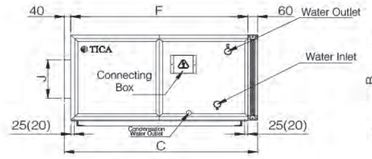


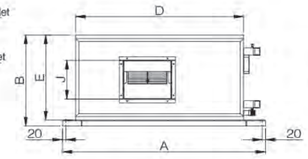
Model TFD	A	B	C	D	E	F	G	J	Return Air Flange (Length x Width)	Supply Air Flange (Length x Width)	Unit Weight(kg)	
											4Row	6Row
010	787	545	950	623	505	850	259	222	563x 445	259x222	50	57
015	912	545	950	748	505	850	300	222	688 x 445	300x222	57	63
020	992	620	950	828	580	850	300	240	768 x 520	300x240	71	81
025	1058	620	950	894	580	850	300	240	834 x 520	300x240	76	86

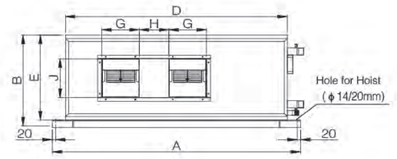
Note:The unit dimension is not include the hot water coil.

Unit Dimension

Belt Driven



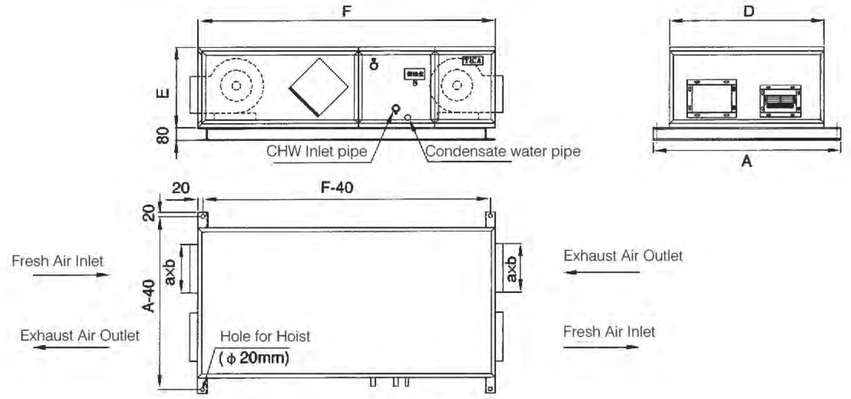




Model TFD	A	B	C	D	E	F	G	H	J	Return Air Flange (Length x Width)	Supply Air Flange (Length x Width)	Unit Weight(kg)	
												4Row	6Row
030	1207	620	1000	1043	580	900	298	–	262	983x 520	298 x 262	90	121
040	1405	620	1000	1241	580	900	331	–	289	1181x 520	331 x 289	99	129
050	1657	630	1000	1493	580	900	232	184	262	1433x 520	648 x 262	128	158
060	1734	690	1000	1570	640	900	265	214	289	1510x 580	744 x 289	139	180
070	1859	690	1000	1695	640	900	331	264	289	1635x580	926 x 289	192	222
080	1859	780	1000	1695	730	900	331	264	289	1635x 670	926 x 289	231	271
090	1988	780	1100	1824	730	1000	309	244	341	1764x 670	862 x 341	270	305
105	2248	780	1100	2084	730	1000	309	244	341	2024x 670	862 x 341	279	309
120	2298	820	1100	2134	770	1000	395	324	341	2074x 710	1114 x 341	287	311
135	2241	1027	1300	2041	947	1200	373	294	404	1981x887	1040x404	368	398
150	2241	1155	1300	2041	1075	1200	373	294	404	1981x1015	1040x404	372	414

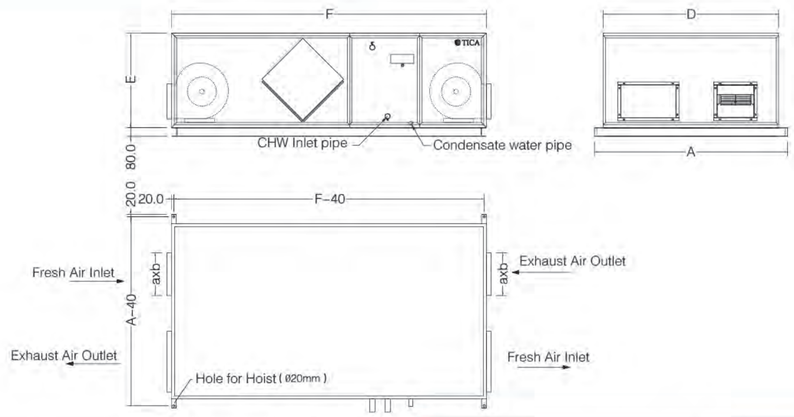
Note：25 (20) shows that the size of the hole for hoist apart trom the outside,040 and under 040 is 20,above 040 is 25,135/150 hole for hoist is 20.
The unit dimension is not include the hot water coil.

Heat Recovery Fresh Air Handing Unit
Unit Dimension----Ceiling Type



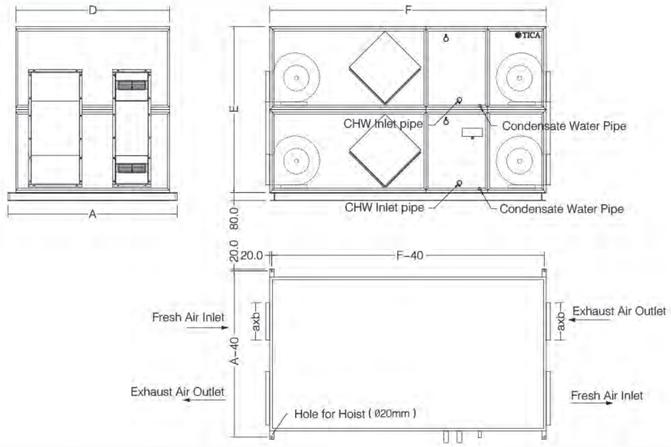
Model	Dimension (mm)					CHW Pipe Diameter	Condensate Water Diameter	Unit Weight (2/4Row)
TFD	A	D	E	F	a x b	DN	DN	(kg)
010ECXXXXXXXJ	1107	947	500	1889	220x190	40	25	144
015ECXXXXXXXJ	1400	1240	500	2046	350x190	40	25	178/202
020ECXXXXXXXJ	1400	1240	580	2046	380x220	40	25	186/214
025ECXXXXXXXJ	1400	1240	660	2360	400x250	40	25	209/240
030ECXXXXXXXJ	1735	1575	660	2360	500x250	40	25	242/280
040ECXXXXXXXJ	2049	1889	660	2360	650x250	40	25	318/355

Heat Recovery Fresh Air Handing Unit
Unit Dimension----Horizontal Type 1



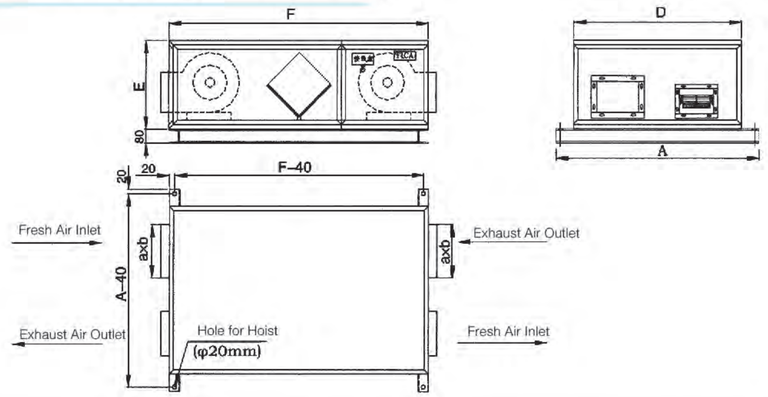
Model	Dimension (mm)					CHW Pipe Diameter	Condensate Water Diameter	Unit Weight (2/4Row)
TFD	A	D	E	F	a x b	DN	DN	(kg)
050EHXXXXXXXJ	1735	1575	850	2831	550x350	40	25	347/376

Heat Recovery Fresh Air Handing Unit
Unit Dimension----Horizontal Type 2



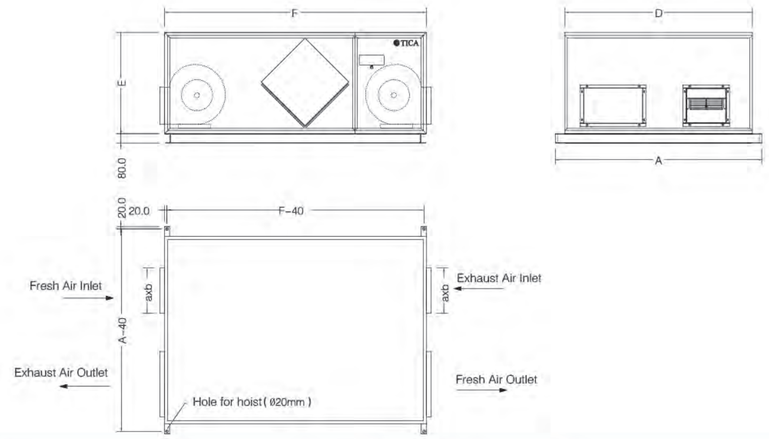
Model	Dimension (mm)					CHW Pipe Diameter	Condensate Water Diameter	Unit Weight (2/4Row)
TFD	A	D	E	F	a x b	DN	DN	(kg)
060EHXXXXXXXJ	1735	1575	1320	2360	500 × 910	40	25	484/560
080EHXXXXXXXJ	2049	1889	1320	2360	650 × 910	40	25	636/710
105EHXXXXXXXJ	1735	1575	1700	2831	550x1200	40	25	690/741

Fresh Air Handling Unit(without Coil)



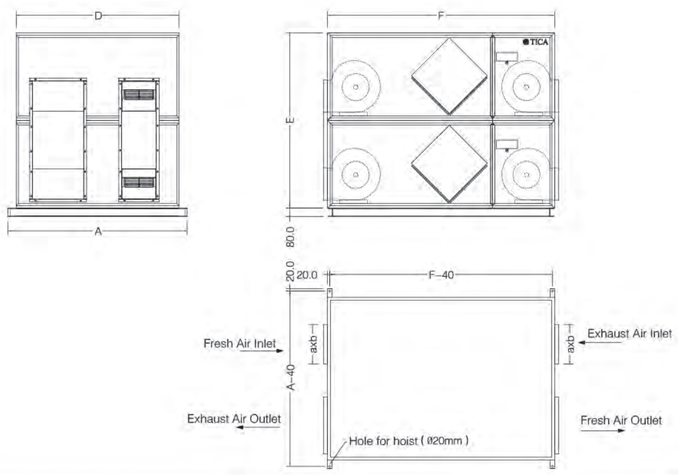
Model	Dimension (mm)					Unit Weight
TFD	A	D	E	F	a x b	(kg)
010ECXXXXXXXJ	1107	947	500	1261	220x190	122
015ECXXXXXXXJ	1400	1240	500	1418	350x190	151
020ECXXXXXXXJ	1400	1240	580	1418	380x220	166
025ECXXXXXXXJ	1400	1240	660	1732	400x250	193
030ECXXXXXXXJ	1735	1575	660	1732	500x250	222
040ECXXXXXXXJ	2049	1889	660	1732	650x250	252

Fresh Air Handling Unit(without Coil)



Model	Dimension (mm)					Unit Weight
TFD	A	D	E	F	a x b	(kg)
050EHXXXXXXXJ	1735	1575	850	2360	550x350	282

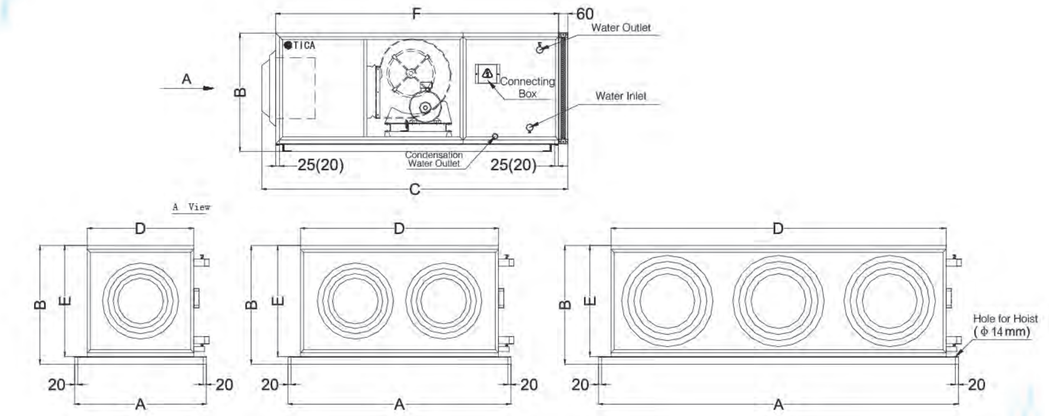
Fresh Air Handling Unit(without Coil)



Model	Dimension (mm)					Unit Weight
TFD	A	D	E	F	a x b	(kg)
060EHXXXXXXXJ	1735	1575	1320	1732	500 x 910	444
080EHXXXXXXXJ	2049	1889	1320	1732	650 x 910	504
105EHXXXXXXXJ	1735	1575	1700	2360	550x1200	558

Unit Dimension

Jet

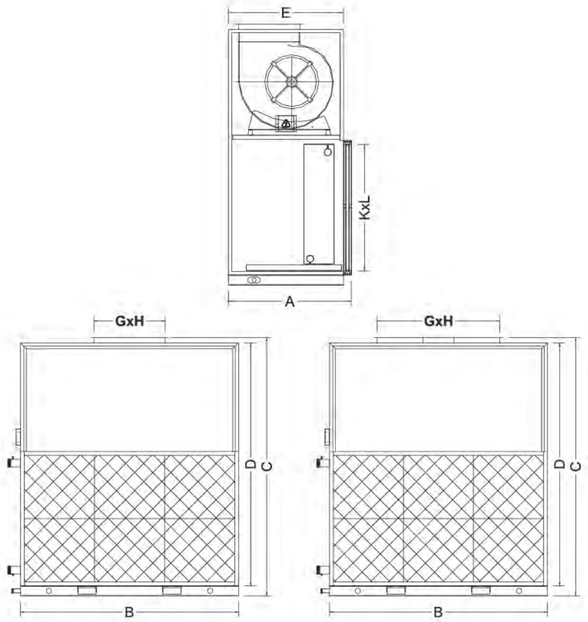


Model TFD	A	B	C	D	E	F	Diffuser Quantity	Jet Diffuser Specification	External Diameter	Inter Diameter	Unit Weight(kg)	
											4Row	6Row
010	787	545	1555	623	505	1450	1	315	384	190	69	76
020	992	620	1590	828	580	1450	1	400	467	230	93	103
030	1207	620	1605	1043	580	1500	2	315	384	190	108	138
040	1405	620	1640	1241	580	1500	2	400	467	230	121	152
050	1657	630	1640	1493	580	1500	2	400	467	230	151	181
060	1734	690	1650	1570	640	1500	2	500	600	275	162	204
070	1859	690	1650	1695	640	1500	2	500	600	275	218	249
080	1859	780	1650	1695	730	1500	2	500	600	275	260	300
090	1988	780	1740	1824	730	1600	3	400	467	230	300	335
105	2248	780	1750	2084	730	1600	3	500	600	275	320	350
120	2298	820	1750	2134	770	1600	3	500	600	275	330	358

Note：25 (20) shows that the size of the hole for hoist apart from the outside,040 and under 040 is 20,above 040 is 25.

Unit Dimension

Vertical Type

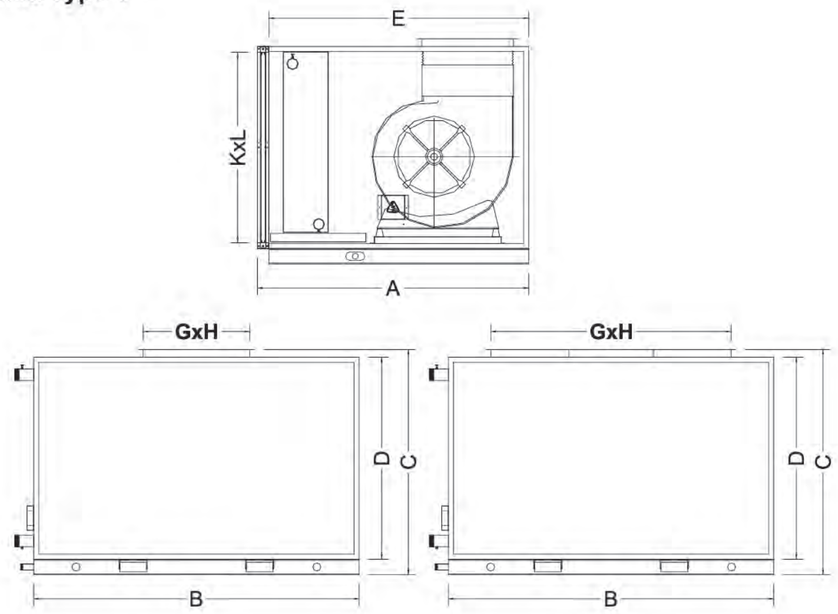


Model TAD	A	B	C	D	E	G	H	K	L	Unit(kg)	
										4Row	6Row
020D	710	853	1170	1050	650	232	262	793	440	137	143
030D	710	953	1220	1100	650	298	262	893	490	153	160
040D	710	1053	1420	1300	650	331	289	993	590	175	183
050D	810	1053	1570	1450	750	309	341	993	720	206	216
060D	810	1153	1620	1500	750	395	341	1093	790	231	244
070D	810	1203	1770	1650	750	373	404	1143	840	257	272
080D	810	1353	1770	1650	750	373	404	1293	840	272	289
090D	960	1353	2020	1900	900	430	478	1293	970	326	344
105D	960	1553	2020	1900	900	430	478	1493	970	360	376
120D	960	1703	2020	1900	900	557	478	1643	970	367	394
135D	960	1953	2020	1900	900	1040	404	1893	990	481	518
150D	960	1953	2070	1950	900	1040	404	1893	1040	491	520
180D	960	2153	2220	2100	900	1203	478	2093	1140	570	611
210D	960	2353	2270	2150	900	1203	478	2293	1190	631	673
240D	960	2653	2290	2150	900	1572	478	2593	1190	682	730
270D	960	2653	2440	2300	900	1572	478	2593	1320	735	789
300D	960	2653	2540	2400	900	1572	478	2593	1440	786	845
330D	1160	2903	2640	2500	1100	1588	569	2843	1440	952	1018
350D	1160	3053	2690	2550	1100	1776	638	2993	1440	1020	1089
400D	1160	3053	2940	2800	1100	1776	638	2993	1690	1067	1181
450D	1160	3053	3090	2950	1100	1776	638	2993	1840	1112	1129
500D	1160	3153	3240	3100	1100	1776	638	3093	1940	1194	1330

Note：The type of shipping about 400 and above 400 is CKD.

Unit Dimension

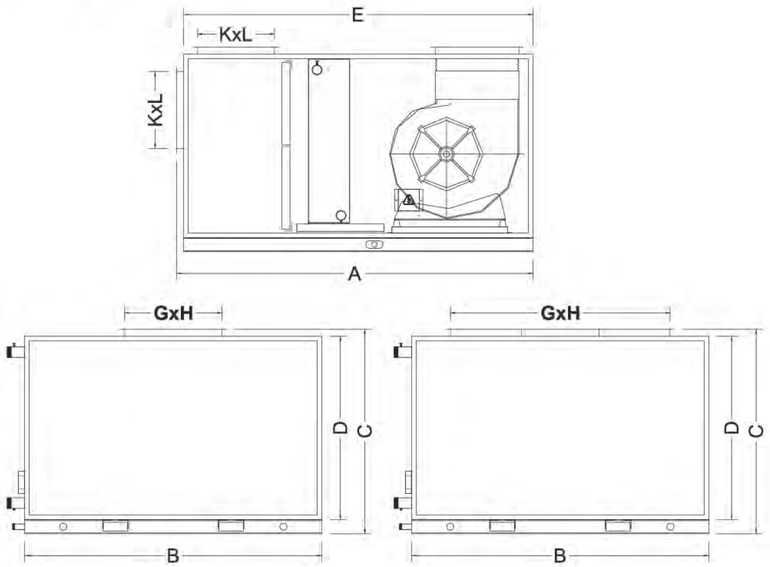
Horizontal Type 1



Model TAD	A	B	C	D	E	G	H	K	L	Weight(kg)	
										4Row	6Row
020D	1060	853	720	600	1000	232	262	793	540	129	138
030D	1160	953	720	600	1100	298	262	893	540	148	155
040D	1160	1053	790	670	1100	331	289	993	610	167	175
050D	1160	1053	920	800	1100	309	341	993	740	186	197
060D	1160	1153	990	870	1100	395	341	1093	810	211	223
070D	1260	1203	1070	950	1200	373	404	1143	890	242	257
080D	1260	1353	1070	950	1200	373	404	1293	890	256	272
090D	1410	1353	1170	1050	1350	430	478	1293	990	299	318
105D	1410	1553	1170	1050	1350	430	478	1493	990	325	342
120D	1460	1703	1170	1050	1400	557	478	1643	990	350	376
135D	1360	1953	1170	1050	1300	1040	404	1893	990	442	459
150D	1360	1953	1270	1150	1300	1040	404	1893	1090	447	470
180D	1510	2153	1320	1200	1450	1203	478	2093	1140	539	580
210D	1510	2353	1370	1250	1450	1203	478	2293	1190	584	626
240D	1510	2653	1390	1250	1450	1572	478	2593	1190	644	692
270D	1510	2653	1520	1380	1450	1572	478	2593	1320	728	781
300D	1560	2653	1640	1500	1500	1572	478	2593	1440	761	813
330D	1610	2903	1640	1500	1550	1588	569	2843	1440	882	947
350D	1710	3053	1640	1500	1650	1776	638	2993	1440	953	1022
400D	1760	3053	1893	1753	1700	1776	638	2993	1693	986	1099
450D	1760	3053	2020	1880	1700	1776	638	2993	1820	1070	1187
500D	1760	3153	2150	2010	1700	1776	638	3093	1950	1097	1231

Unit Dimension

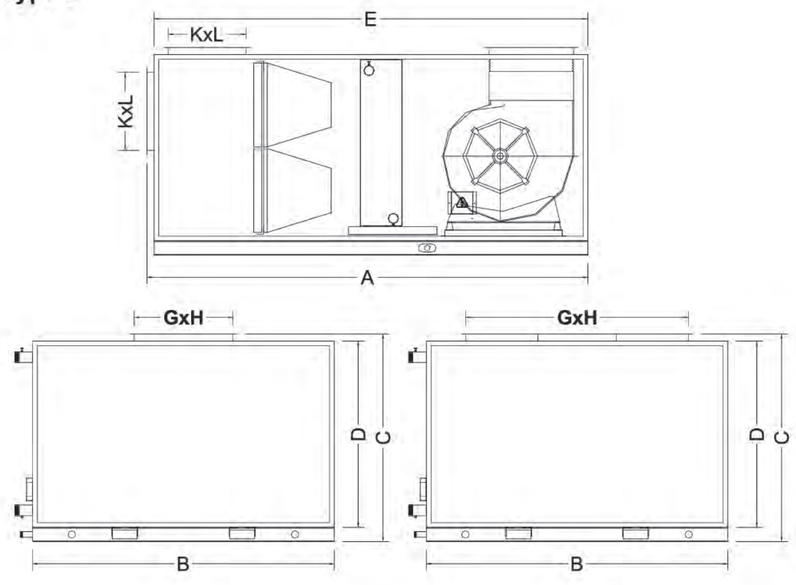
Horizontal Type 2



Model TAD	A	B	C	D	E	G	H	K	L	Weight(kg)	
										4Row	6Row
020D	1540	853	720	600	1500	232	262	600	160	158	164
030D	1640	953	720	600	1600	298	262	600	300	177	184
040D	1640	1053	790	670	1600	331	289	700	300	201	208
050D	1640	1053	920	800	1600	309	341	800	300	230	240
060D	1640	1153	990	870	1600	395	341	900	300	261	274
070D	1740	1203	1070	950	1700	373	404	1000	300	288	303
080D	1740	1353	1070	950	1700	373	404	1100	300	319	335
090D	1990	1353	1170	1050	1950	430	478	1000	440	343	362
105D	1990	1553	1170	1050	1950	430	478	1100	440	392	408
120D	2040	1703	1170	1050	2000	557	478	1200	440	426	452
135D	1940	1953	1170	1050	1900	1040	404	1300	440	525	554
150D	1940	1953	1270	1150	1900	1040	404	1500	440	569	597
180D	2090	2153	1320	1200	2050	1203	478	1700	440	652	693
210D	2090	2353	1370	1250	2050	1203	478	1900	440	707	750
240D	2090	2653	1390	1250	2050	1572	478	2200	440	780	829
270D	2290	2653	1520	1380	2250	1572	478	2200	580	912	965
300D	2340	2653	1640	1500	2300	1572	478	2300	580	958	1017
330D	2390	2903	1640	1500	2350	1588	569	2400	580	1084	1149
350D	2490	3053	1640	1500	2450	1776	638	2400	580	1170	1239
400D	2540	3053	1893	1753	2500	1776	638	2600	580	1202	1315
450D	2540	3053	2020	1880	2500	1776	638	2800	580	1285	1403
500D	2640	3153	2150	2010	2600	1776	638	2800	630	1324	1459

Unit Dimension

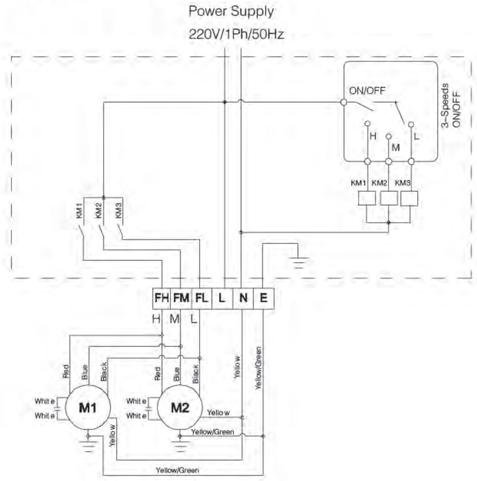
Horizontal Type 3



Model TAD	A	B	C	D	E	G	H	K	L	Weight(kg)	
										4Row	6Row
020D	1990	853	720	600	1950	232	262	600	160	176	181
030D	2040	953	720	600	2000	298	262	600	300	197	201
040D	2090	1053	790	670	2050	331	289	700	300	224	232
050D	2090	1053	920	800	2050	309	341	800	300	249	259
060D	2090	1153	990	870	2050	395	341	900	300	282	295
070D	2190	1203	1070	950	2150	373	404	1000	300	310	324
080D	2190	1353	1070	950	2150	373	404	1100	300	345	362
090D	2440	1353	1170	1050	2400	430	478	1000	440	394	412
105D	2440	1553	1170	1050	2400	430	478	1100	440	433	450
120D	2490	1703	1170	1050	2450	557	478	1200	440	471	494
135D	2390	1953	1170	1050	2350	1040	404	1300	440	574	598
150D	2390	1953	1270	1150	2350	1040	404	1500	440	622	645
180D	2540	2153	1320	1200	2500	1203	478	1700	440	727	759
210D	2540	2353	1370	1250	2500	1203	478	1900	440	809	842
240D	2540	2653	1390	1250	2500	1572	478	2200	440	885	922
270D	2740	2653	1520	1380	2700	1572	478	2200	580	978	1022
300D	2790	2653	1640	1500	2750	1572	478	2300	580	1033	1092
330D	2840	2903	1640	1500	2800	1588	569	2400	580	1185	1250
350D	2940	3053	1640	1500	2900	1776	638	2400	580	1246	1316
400D	2940	3053	1893	1753	2900	1776	638	2600	580	1306	1400
450D	2940	3053	2020	1880	2900	1776	638	2800	580	1421	1539
500D	3040	3153	2150	2010	3000	1776	638	2800	630	1462	1597

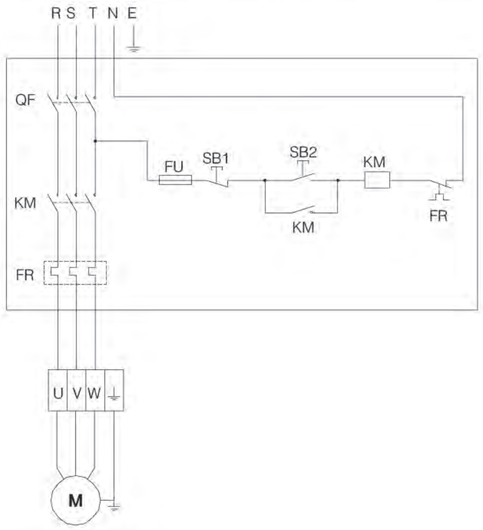
Wiring Diagrams

Model : TFD 010C - 070C (3 Speeds)

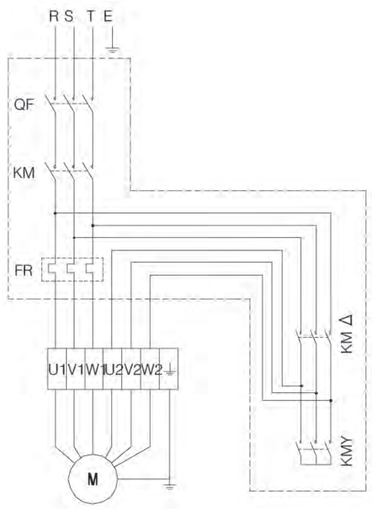


Note : The components emclosed in dotted line is optional.

Model : TFD 010 - 150 (Belt Driven/Direct Driven/Jet)



DOL Starter

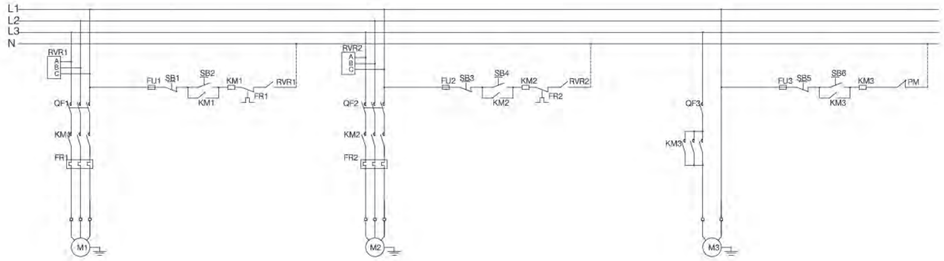


Y – △Starter

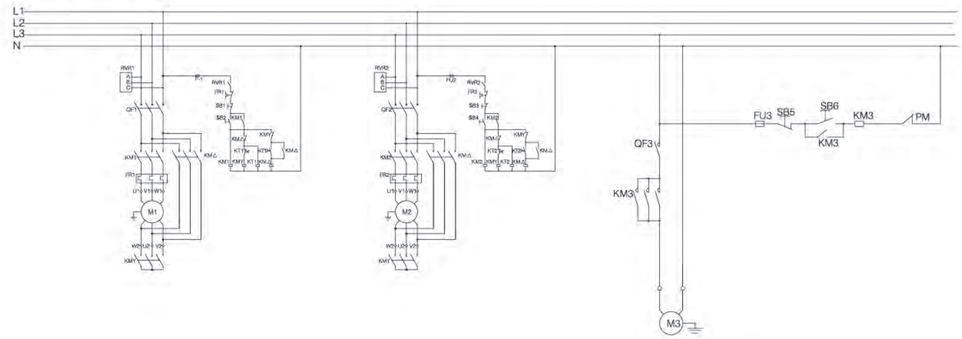
Note :
For unit < 11kW – DOL Starter.
For unit ≥ 11kW – Star–Delta Starter.
Overload, fuse and thermal protection is to be installed at field.

Model:TFD-J(Heat Recovery)

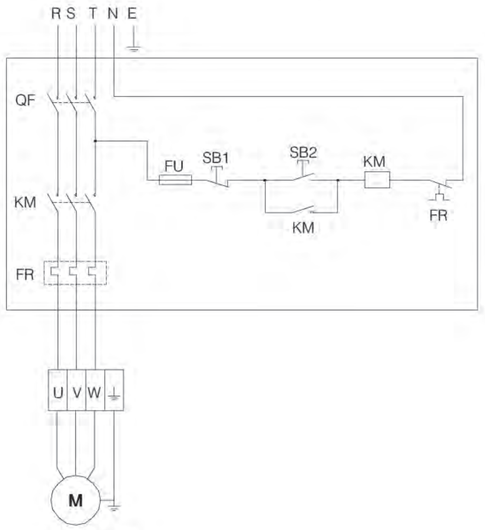
DOL Starter



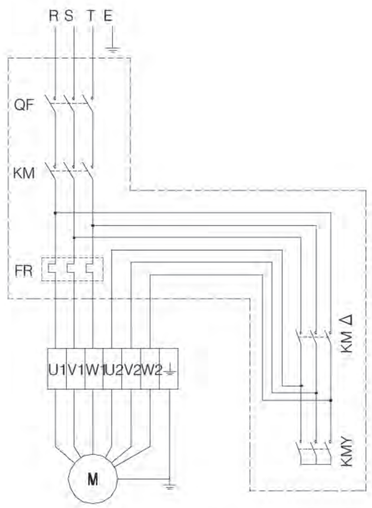
Y- △Starter



Model : TAD 020 - 500



DOL Starter

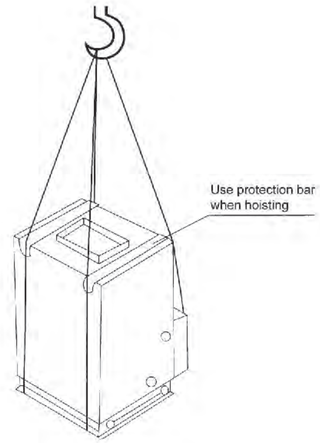


Y – △Starter

Note :
For unit < 11kW – DOL Starter.
For unit ≥ 11kW – Star–Delta Starter.
Overload, fuse and thermal protection is to be installed at field.

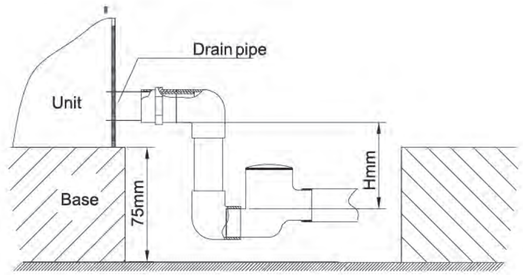
Installation

● For safety consideration, the hanging rod for ceiling hung type must be firmly fitted and the unit must be hoisted according to the diagram as shown as folllowing. The hoist must be strong enough to withstand the weight of the unit and maintain level while hoisting.



● Before connecting the wiring, make sure the electrical rating is correct and the fluctuation in voltage should not exceed 10% of the rated voltage.

● Before startup, the fan blower should be physically checked by rotating the blade manually to make sure there is no excessive friction and no abnormal sound. During commissioning, make sure the direction of rotation of fan blower is correct.



H=Unit inside static pressure(mmH_2O)+20

● Ensure water pipes are cleaned before connection. Chilled/hot water connection must be connected according to the name plate on the unit and must install valve and filter on the water entering direction of pipes.

● All pipes must be insulated to prevent heat loss/gain and condensation of water.

● When connecting inlet/outlet water pipe, make sure they are free of torsional force during operation (under 250 Nm). The condensate water must be discharged through the U–trap as above.

● Ensure there is no leaking after installation.

● Ensure that the unit do not support the weight of the duct and the water pipes.

● All the electrical connections must adhere to the LOCAL CODES AND REGULATION.

● For unit with fresh air, it is recommended to install air vent at fresh air section to control the amount of fresh air entering the unit.

Servicing and Maintenance

Caution : Make sure the unit is OFF before any service and maintenance work being carriedout!

Check unit operation regularly. Scheduled and efficient maintenance will greatly improve the unit reliability and increase its lifespan.

1.When the unit is not in operation, make sure the heat exchanger is filled with water to avoid rust. During winter, when the ambient temperature is under 0°C, the water inside the pipes need to be discharged to avoid freezing. (The water discharge valve is located at the bottom of water entering pipes.)

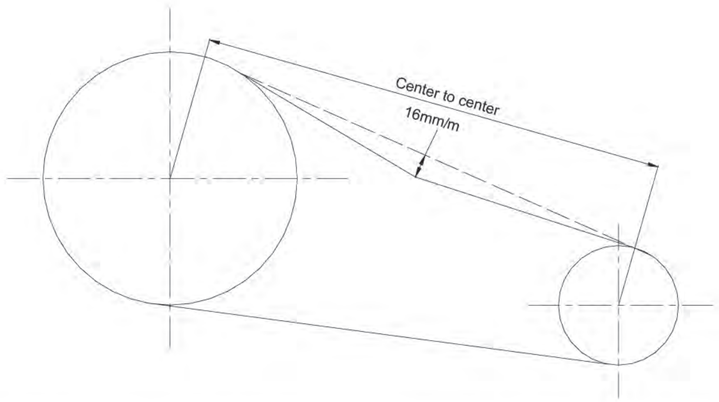
2. To ensure the high efficiency of heat exchanger, the air filter should be cleaned once a month.If the environment is dirty, the filter needs to be washed once a week.

3. The heat exchanger should be cleaned regularly. Clean the internal part of coil after 2~3 years. If it is permitted, use soft water for heat exchanger.

4. The drain pan and elbow should be cleaned once a year.

5. Check the flexible connector of air duct regularly. If found any air leakage, repair immediately.

6. Adjust the tension of belt regularly. Proper belt tension is important for proper unit operation and reduce the down time. If the belt is too tight, the belt and bearing may be overloaded, subsequently reduce the lifespan. If the belt is too loose, the belt may slip and produce unnecessary friction, which will create excessive noise and reduce belt lifespan.



Belt Section Area	Diameter of small pulley (mm)	Force of pushing the be lt down for 16mm/m	
		N	kgf
SPZ	56 – 95	13 – 20	1.3 – 2.0
	100 – 140	20 – 25	2.0 – 2.5
SPA	80 – 132	25 – 35	2.5 – 3.6
	140 – 200	35 – 45	3.6 – 4.6
SPB	112 – 224	45 – 65	4.6 – 6.6
	236 – 315	65 – 85	6.6 – 8.7
SPC	224 – 335	85 – 115	8.7 – 11.7
	375 – 560	115 – 150	11.7 – 15.3

Troubleshooting Guide

Fault	Possible Cause	Solution
Abnormal Noise	1. Blower blade or blower shaft loose.	1. Tighten the shaft.
	2. Blower or blower housing dirty.	2. Clean blower.
	3. Duct or modulating valve loose.	3. Repair duct and modulating valve.
	4. Fan belts not align or loose.	4. Align or tighten fan belt.
	5. Flexible duct at intake/discharge too tight.	5. Readjust the flexible duct. Change if necessary.
	6. Fan operating point is not optimum.	6. Re–select fan motor or pulleys.
	7. Lubrication is bad or no lubrication.	7. Clean the bearing and apply lubrication oil. Change to a suitable grade of oil if
	8. Bolts and nuts for motor or fan loose.	8. Tighten the bolts and nuts.
	9. Fan is too small.	9. Reselect fan.
Supply Air too Low	1. Dirty filter.	1. Clean or change filter.
	2. Leakages in duct.	2. Check and seal the leakages.
	3. Air duct is blocked or air vent is not opened.	3. Clear the air duct or open the air vent.
	4. Fan rotate in wrong direction.	4. Reverse the phase of power supply.
	5. Fan or fan motor undersized.	5. Reselect fan or fan motor.
	6. RPM too low.	6. Change fan motor or pulleys.
Supply Air too High	1. Oversized fan or fan motor.	1. Reselect fan or fan motor.
	2. RPM too high.	6. Change fan motor or pulleys.
Water Leaking	1. Air velocity too high, water carry over.	1. Reduce air velocity.
	2. Condensate water not being discharged properly.	2. Check the U–trap and clean any blockage of pipe.
	3. Air leakage causing condensation.	3. Find out the seal the air leakage spots.
Not Enough Cooling Capacity	1. Chilled water temperature too high.	1. Adjust the temperature of incoming chilled water.
	2. Heat exchanger dirty.	2. Clean heat exchanger.
	3. Unit undersized.	3. Reselect unit.
Air Speed too High	1. Air velocity too high at discharge.	1. Increase the air outlet area.

DATE	NOTE

DATE	NOTE