TAITECH
Climate Master

TAHD®

High static pressure
Fan coil unit

AC／DC Motor Software

➤ specifications

The TAHD high static pressure fan-coil unit is mainly used for ceiling ducted occasion. The airflow is from 1360 to 5100 m3/h; cooling capacity from 5.94kw to 30kw (sensible at medium speed).Project selection software is available for standard EUROVENT conditions, AHRI (ARI-440-2008) and district cooling conditions. Customerized requirements and OEM productions are available.

➤ advantages

- **Available Pressure: 75 to 150 Pa.**
- **Duct flange seal connection.**
- **Optional: Double-skin casing.**
- **AC/ DC motor is available.**

➤ range

- Air flow range:- max air volume 5100 m^3/h
  Cooling capacity:- max cooling capacity 30kw

- 3 versions : - 2 tubes + 4 rows (standard).
  - 2 tubes + 6 rows.
  - 4 tubes + 3+1 rows.
  - 4 tubes + 4+2 rows.

➤ application

- TALD unit for air conditioning of commercial buildings like Hotel rooms and offices of cooling and heating .

➤ construction / composition

- **Structure** :
  -Galvanized steel casing with corner reinforced hanging holes. Suspension by M8 nuts, crimped into the structure.
  -Powder coating of RAL color code is as option for high humidity and rust conditions.
  -Double-skin casing is also as option.
  Outer layer: 0.5mm thickness pre-painted G.I. sheet.
  Inner layer: 0.5mm thickness G.I. sheet.
  In between: Density of 40kg/m^3 PE insulation.
  Total thickness: 25mm

- **Fan :**
  - Forward curved centrifugal, double inlet with direct drive.
  - Fan and filter access by access door.

- **Motor** :
  - Built-in single-phase motor IP20/IP44.
  - Thermal protection.
  - DC Motor is available.

- **Heat Exchanger:**
  - Copper tubes 3/8”(9.52mm)of refrigeration quality.
  - Connection : 3/4" male.
  - Blades in aluminum, mechanically crimped.
  - Mounted on slides and interchangeable on site.
  - 100% leakage test of 350PSI.

- **Filters :**
  - Nylon filter with aluminum frame 8mm and G4
  - Different filter thickness (12.5mm/25mm) is available.

➤ packaging

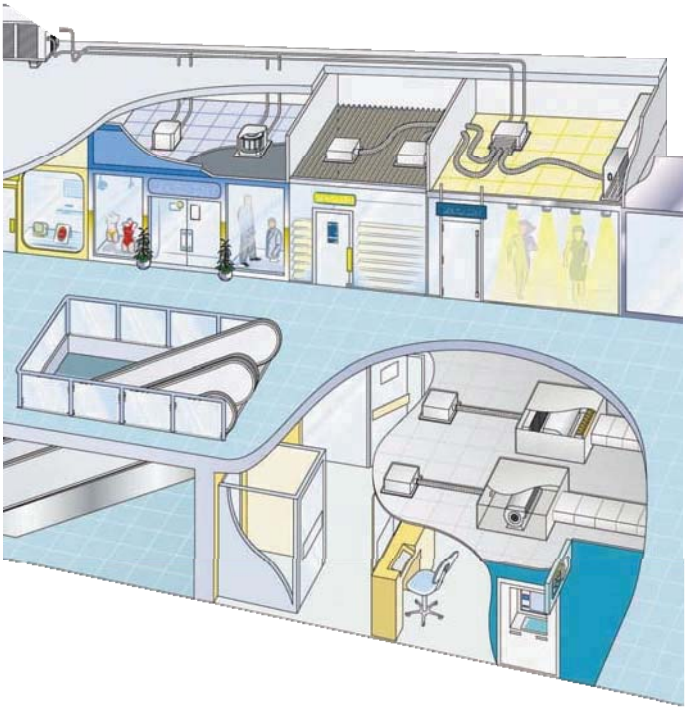
- Individual in carton of FCL sea shipment worthy quality.
- Extra pallet will be provided of LCL or air shipment. Pallet is with corner protection and forklift gap.

technical description

➤ General features

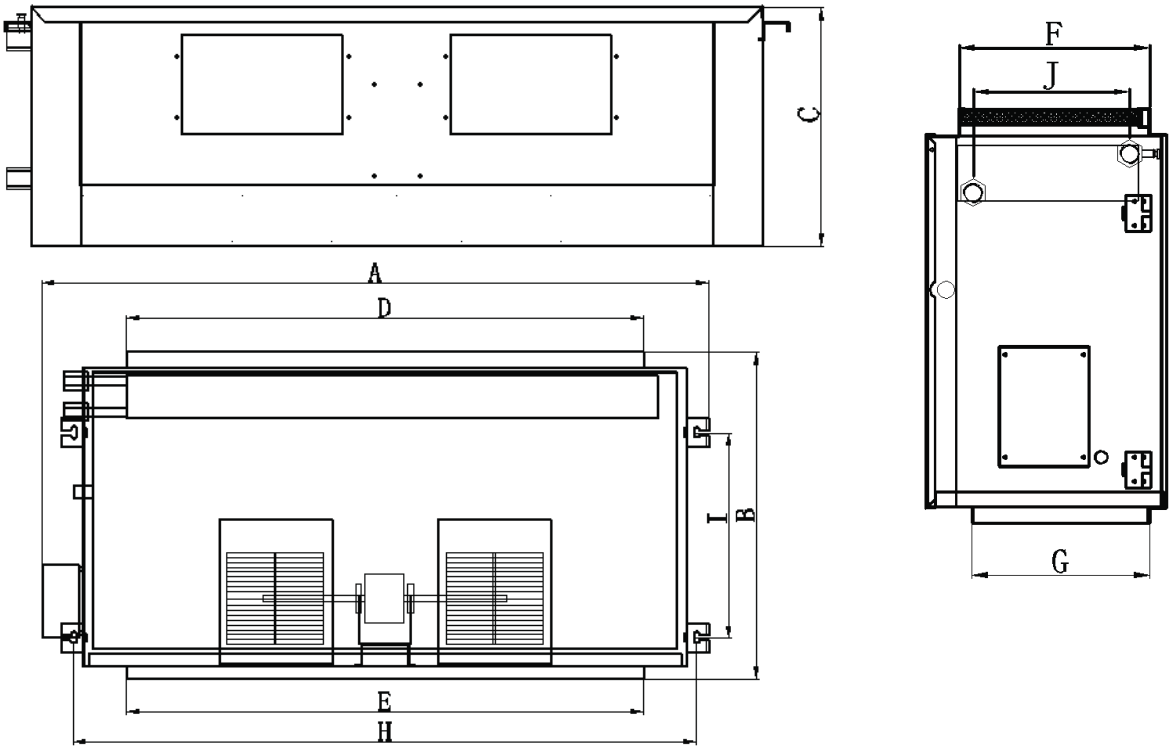
Model		08	10	12	14	18
Coil	Tube	3/8”(9.52mm) diameter copper tube				
	Fin	12pcs/inch corrugated aluminum blue fin				
	L(mm)	800	900	1000	1160	1200
	H(mm)	200	200	200	200	200
Fan		GI wheel direct driven double inlet centrifugal fan				
Power Input(W)		368	460	564	650	845
Noise dB(A)		44	45	46	49	49
Coil Connector		3/4”F	3/4”F	1”F	1”F	1”F
Drain Connector		3/4”(male connection)				
Net Weight(kg)		42	50	55	72	76

20	24	30
3/8”(9.52mm) diameter copper tube		
12pcs/inch corrugated aluminum blue fin		
1330	1350	1680
200	200	200
GI wheel direct driven double inlet centrifugal fan		
934	1128	1445
51	53	57
1”F	1”F	1”F
3/4”(male connection)		
83	93	108



technical description

➢ Drawings



➢ Dimensions List

ITEM mm	A	B	C	D	E	F	G	H	I	J
TAHD08	1090	568	340	780	780	255	255	1000	280	213
TAHD10	1190	568	340	880	880	255	255	1100	280	213
TAHD12	1290	568	390	980	980	305	305	1200	280	260
TAHD14	1450	688	390	1140	1000	305	305	1360	425	260
TAHD18	1490	688	450	1180	1100	365	305	1400	425	310
TAHD20	1620	863	450	1310	1200	365	305	1530	425	310
TAHD24	1640	863	500	1330	1200	415	355	1550	575	360
TAHD30	1970	863	500	1660	1500	415	355	1880	575	360

➢ Performance Data

Conditions Reference:

A. Entering air temperature: +27°C DB; 19.5°C WB; Water Inlet/Outlet: +7/12°C; Standard Reference: EUROVENT.

B. District Cooling Rating: Entering air temperature: +24.4°C DB; 17.2°C WB; Water Inlet/Outlet: +5.5/14.4°C.

C. Entering air temperature: +80°F DB; +67°F WB; Water Inlet/Outlet: +45/55°F; Standard Reference: ARI-440:2008.

This catalogue performance data is only based on condition A and standard 2-pipe and 4-row coil fan coil unit. please contact taitech-ac@vip.163.com for more careful data.

-Air Flow (m^3/h)

Model	08	10	12	14	18	20	24	30
Nominal	1001	1516	2053	2406	3267	3590	4108	5070
H	892	1213	1643	1925	2613	2684	3286	3802
M	669	910	1232	1444	1960	2013	2465	2851
L	1001	1516	2053	2406	3267	3590	4108	5070

technical description

-Cooling (kw)

Model		08	10	12	14	18	20	24	30
H	Total	6.44	9.12	12.56	15.06	19.82	22.20	25.56	32.57
M		5.94	7.82	10.76	12.89	16.99	18.11	21.87	26.55
L		4.83	6.38	8.76	10.47	13.83	14.70	17.78	21.48
H	Sensible	4.53	6.48	8.84	10.50	13.88	15.43	17.74	22.33
M		4.14	5.47	7.47	8.87	11.74	12.39	15.00	17.95
L		3.30	4.37	5.97	7.08	9.40	9.90	12.00	14.31

-Heating (kw)

Model	08	10	12	14	18	20	24	30
H	7.67	10.90	14.80	17.47	23.05	25.53	29.34	36.68
M	7.00	9.20	12.51	14.77	19.52	20.52	24.82	29.50
L	5.58	7.35	10.01	11.79	15.64	16.39	19.87	23.53

-Water Flow (l/s)

Model	08	10	12	14	18	20	24	30
H	0.31	0.44	0.60	0.72	0.95	1.06	1.22	1.56
M	0.28	0.37	0.51	0.62	0.81	0.86	1.04	1.27
L	0.23	0.30	0.42	0.50	0.66	0.70	0.85	1.03

-Water Pressure Drop (kpa)

Model	02	03	04	05	06	08	10	12
H	11.24	19.17	25.08	36.16	43.19	54.83	56.14	93.36
M	10.21	15.94	20.86	30.01	35.93	42.99	46.60	73.09
L	7.96	12.48	16.30	23.41	28.09	33.50	36.39	56.73

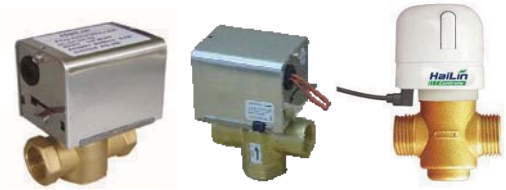
➤ Accessories

-Thermostat

Mechanical or Digital Thermostat can be equipped as control parts. Various types of thermostats can be selected.

-Control Valve

Mechanical or thermal types of valve can be selected. DN15(1/2”), 20(3/4”) and 25(1”) are the most frequently used type. Valve kit can be factory assembled for easy project site installation.



-Electrical Heater

Electrical heater can be as optional requirement for projects need high heating capacity. All heaters are with thermal protection under safety approval. Heating capacity ranges from 1.0kw to 6kw. Wiring of the electrical heater is in the same terminal box of fan coil units.

-Auxiliary Drain Tray

G.I. material with power coating. This accessory is mainly used for condensate water from valve kit.

-Control Relay

Control relay can be added into the TAHD terminal box for project site easy connection of the thermostat because the TAHD units is with big capacity and the current in the circuit might over standard thermostat limited current.