

# MODEL DAHH

DX OR CHILLED WATER

DOUBLE SKIN AIR HANDLING UNIT

CAPACITY RANGE FROM

39,000 to 1,590,000 BTUH

1,300 TO 53,000 CFM



EN 1886 : Air Handling Units - Mechanical performance  
EN 13053 : Air Handling Units - Rating and performance  
for units, components and sections

Find our product performance rating on EUROVENT website



## OPTIONS :

- 1" or 2" PU-Insulated Sandwich Panels
- Heat Pipe for Dehumidification Applications
- Heater
- Medium/ Hepa filter
- Mixing Box
- Plug Fan

## APPLICATIONS :

- Dedicated Outdoor Air System (DOAS)  
for IAQ improvement
- Office Buildings
- Hospitals/Operating Theaters
- Schools/Universities
- Clean Rooms
- Food/Pharmaceutical Factories
- Etc.



## Heat Pipe :

- Energy-saving Dehumidification Equipment**
- Remove humidity from air with NO external energy needed
- Maintenance-free-No moving part
- Licensed from Heat Pipe Technology (U.S.A)

# Features

## Casing

The corners and frame has been designed by bearing in mind the air tight and cold bridge of the construction. All panels are tightly fitted on rigid frame. The casing are put on the base frame with frame height vary according to the size of casing.

Panels can be 1" or 2" thick with injected polyurethane foam insulation. The outer wall is made of galvanized steel painted with baked polyester powder paint. The inner wall shall be galvanized steel.

## Cooling Coil

Uni-Aire's expertise in coil manufacturing is a great advantage for choosing our AHU. The coils are available both in DX and Chilled-water applications. Each coil is constructed from aluminum fins and mechanically expanded into the copper tubes. Fin spacing is available from 6 fins per inch to 12 fins per inch depending on requirement. All coils are pressurized tested under water at 350 psig.

## Blower & Drive

Standard Fan is Forward-curved double inlet and is constructed of Galvanized iron sheet and statically and dynamically balanced to ensure smooth performance and quiet operation. Backward-curved wheels, Plug fan, and EC fan also available for special requirements.

## Filters

Standard 1" thick washable aluminum panel air filters are included. Separated Medium or HEPA air filters are available upon request.

### Guide Line Selection

- Step 1: Choose whether the system is Chilled Water or DX
- Step 2: Determine the design air flow, cooling capacity, and external static
- Step 3: Choose Panel thickness (1" or 2")
- Step 4: Other options upon customer's request (HEPA, Heatpipes, Heater, Mixing Box, etc.)

## PROJECT : DAHH (DX) SPECIFICATION FOR DAHH

MODEL DAHH	UNIT	01	02	03	04	05	06	07	08	09	10	11
Capacity (Total)	kW	13.70	20.08	31.42	41.87	51.26	63.47	72.24	87.44	94.45	133.80	307.00
Capacity (Sensible)	kW	10.03	14.73	23.08	30.59	37.58	46.78	53.73	64.45	70.39	97.86	88.80
Air Flow	m <sup>3</sup> /h	2,209	3,398	5,097	6,796	8,495	10,619	12,912	14,442	16,990	22,087	26,165
External Static	Pa	249.10	249.10	298.90	298.90	298.90	498.00	498.00	498.00	498.00	498.00	498.00
<b>COIL SET</b>	Type	Aluminum Louver Fins and Inner Groove Copper tube										
Qty. Coil	Set	1										
Row	-	4	4	4	4							4
FPI	-	14	14	14	14							14
Tube Size	-	3/8										
Face Area	m <sup>2</sup>	23.53	34.53	51.46	69.61	82.80	99.50	123.44	138.43	159.73	217.73	250.61
<b>BLOWER SET</b>	Type	Forward Curve Centrifugal										
Driven Method	Type	Belt Drive										
<b>BLOWER MOTOR</b>												
Motor	kW	1.5	1.5	3	4	4	5.5	7.5	7.5	11	15	15
Power Supply	V./Ph./Hz.	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
<b>FILTER SET</b>												
Pre. Filter	-	G4 (87-92 % EFF)										
Medium. Filter	-	F8 (90-95 % EFF)										
Metering Device	Type	Thermostatic Expansion Valve										
<b>Air Outlet</b>												
DB	°C	26.67										
WB	°C	19.44										
<b>Pressure Drop (Air Side)</b>	Pa	95.00	102.00	104.00	102.00	110.00	118.00	111.00	114.00	114.00	108.00	205.00
Outlet Header	inch	1-1/8"		1-3/8"	1-5/8"		2-1/8"		1-5/8" X 2		2-1/8" X 2	
Liquid Header	inch	5/8"		3/4"	7/8"		1-1/8"		3/4" X 2		7/8" X 2	
Connection Size	inch			2-1/2	3		4		4		4	
<b>OVERALL DIMENSION</b>												
Width	mm.	1,000	1,250	1,650	1,550	1,750	1,850	2,170	1,950	2,170	2,170	2,300
Height	mm.	900	900	800	1,130	1,130	1,250	1,250	1,520	1,520	1,900	2,050
Length	mm.	2,355	2,355	2,355	2,505	2,505	2,655	2,655	2,655	2,505	2,955	2,955
Weight	kgs.	354	407	436	555	597	700	811	824	931	1,194	1,286

MODEL DAHH	UNIT	12	13	14	15	16	17	18	19	20	21	22	
Capacity (Total)	kW	189.20	207.40	242.60	279.00	320.00	376.00	409.00	451.00	489.00	537.00	519.00	
Capacity (Sensible)	kW	139.40	155.60	179.50	205.40	235.60	275.80	301.00	331.00	359.00	397.00	400.00	
Air Flow	m <sup>3</sup> /h	31,432	36,529	40,776	45,873	52,669	60,315	65,412	71,358	77,305	84,951	90,048	
External Static	Pa	498.00	498.00	498.00	498.00	498.00	498.00	498.00	498.00	498.00	498.00	498.00	
<b>COIL SET</b>		Aluminum Corrugated Fins and Copper tube											
Qty. Coil	Set	1											
Row	-	4	4	4	4	4	4	4	4	4	4	4	
FPI	-	14	14	14	14	14	14	14	14	14	14	14	
Tube Size	-	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	
Face Area	m <sup>2</sup>	328.04	415.61	495.60	558.29	638.85	742.03	796.91	896.52	958.27	1044.71	1477.71	
<b>BLOWER SET</b>	Type	Forward Curve Centrifugal											
Driven Method	Type	Belt Drive											
<b>BLOWER MOTOR</b>													
Motor	kW	18.54	18.5	18.5	22	30	30	37	37	37	45	45	
Power Supply	V./Ph./Hz.	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	
<b>FILTER SET</b>													
Pre. Filter	-	G4 (87-92 % EFF)											
Medium. Filter	-	F8 (90-95 % EFF)											
Metering Device	Type	Thermostatic Expansion Valve											
<b>Air Outlet</b>													
DB	°C	26.67											
WB	°C	19.44											
<b>Pressure Drop (Air Side)</b>	Pa	98.00	128.00	115.00	116.00	117.00	115.00	117.00	111.00	114.00	116.00	100.00	
Outlet Header	inch	2-1/8" X 2				2-5/8" X 2				3-1/8" X 2			
Liquid Header	inch	1-1/8" X 2				1-3/8" X 2				1-5/8" X 2			
Connection Size	inch	4	4	4	4	4	4	4	4	4	4	4	
<b>OVERALL DIMENSION</b>													
Width	mm.	2,850	2,850	3,100	3,430	3,430	3,900	4,150	4,150	4,400	4,750	5,050	
Height	mm.	2,050	2,050	2,175	2,175	2,475	2,475	2,475	2,675	2,675	2,675	2,675	
Length	mm.	3,000	3,150	3,300	3,300	3,450	3,450	3,600	3,600	3,600	3,900	3,900	
Weight	kgs.	1,513	1,629	1,932	2,087	2,362	2,553	2,785	2,907	3,028	3,670	4,213	

\*Cooling capacity based on 80 °F Db, 67°F Wb air on entering coil  
95°F Db, 83°F Wb ambient temp.  
Specification are subjected to change without notice for future improvement



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