

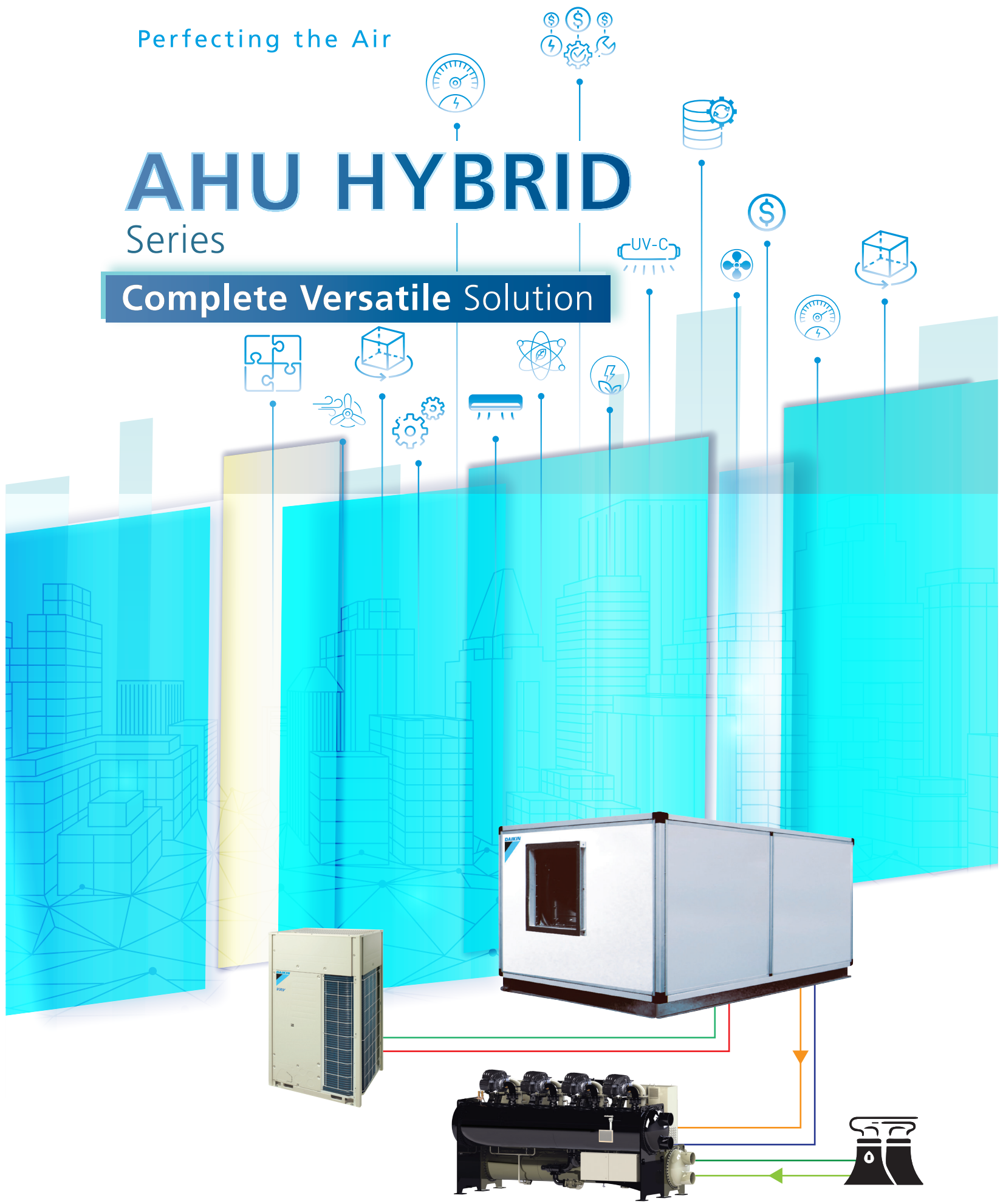


Perfecting the Air

# AHU HYBRID

Series

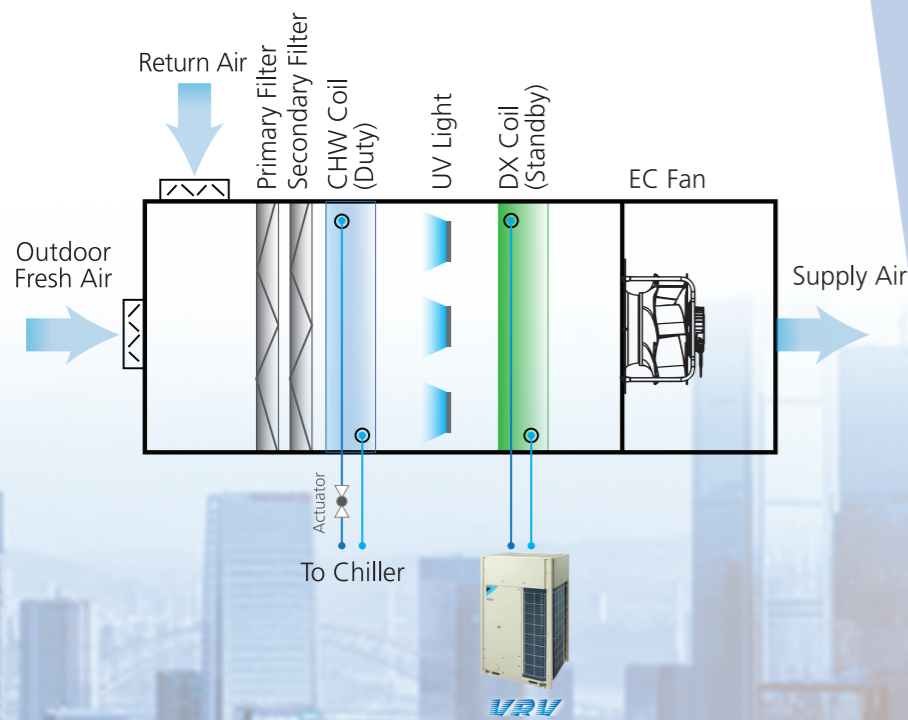
Complete Versatile Solution



# AHU HYBRID SERIES

Daikin offers intelligent solutions combining DX systems with chilled water system through our Air Handling Unit (AHU) Hybrid Series. AHU Hybrid series is eco-friendly and is specially designed to achieve cost effectiveness. It enables users to schedule operation by switching to DX systems during off peak hour or as **standby unit** in case of breakdown.

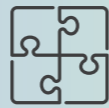
AHU Hybrid series comes with built-in control system for hassle free installation and operation. Furthermore, AHU Hybrid series can be interfaced with Building Management System (BMS).



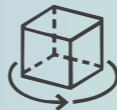
## BENEFITS



**High System Efficiency**



**Flexibility in Design**



**Space Saving**



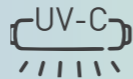
**Cost Saving**

- Equipment cost
- Installation cost
- Operation cost
- Maintenance cost



**Back-up Operation**

- Scheduling and Changeover
- Maintenance Back up
- Off peak demand



**Built-in UV-C Light System**

- Improve Indoor Air Quality (IAQ) through
- Eliminating bacteria & other allergens
- Destroying Pathogens

## APPLICATIONS



Offices



Office Server Rooms



Small Data Centre  
(Backup purpose)



Institutions



Industrial Premises

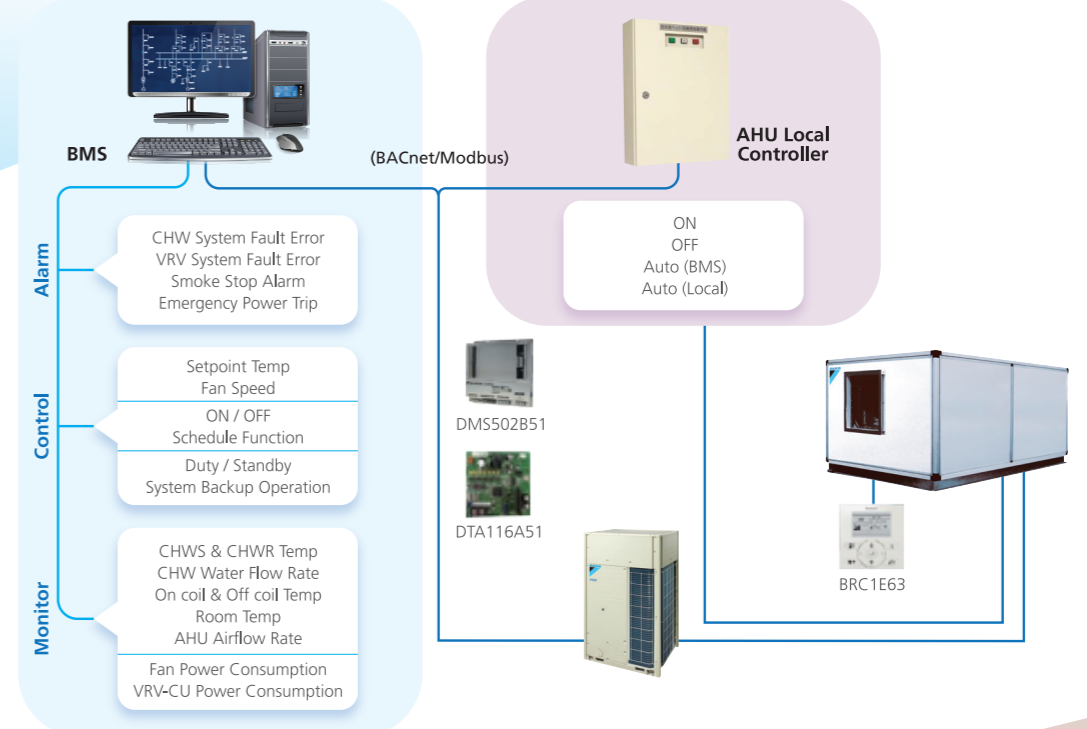
## SPECIFICATION

Model	AHU-HB 25 EC	AHU-HB 50 EC	AHU-HB 75 EC	AHU-HB 100 EC	AHU-HB 125 EC	AHU-HB 150 EC	
Dimension (H x W x D) mm	1300 x 1400 x 4450	1450 x 1600 x 4450	1450 x 2300 x 4550	1700 x 2500 x 4550	2350 x 2300 x 4550	2700 x 2500 x 4550	
Power Supply	400V / 3Ph / 50Hz						
Total Cooling Capacity	Net (kW) 25.0	52.0	77.0	106.0	133.0	155.0	
Sensible Capacity	16.9	33.0	49.2	67.5	84.3	97.3	
Air Flow Rate	(CMH) 5,000	10,000	15,000	20,000	25,000	30,000	
External Static Pressure	(Pa) 300	300	400	400	500	500	
Total Static Pressure	(Pa) 847	855	922	908	957	907	
Air Filter (Primary)	2" Washable Filter (G3)						
Air Filter (Secondary)	15" Bag Filter (F8)						
Fan	Fan Model	K3G400P19205 x 1	K3G450PB2405 x 1	K3G450PB2405 x 2	K3G500PB3305 x 2	K3G450PB2405 x 4	K3G500PB3305 x 4
	Motor Capacity (kW)	2.50	5.25	5.25 x 2	5.70 x 2	5.25 x 4	5.70 x 4
	Power Input (kW)	1.84	3.76	5.79	7.64	10.07	11.54
	Running Ampere (A)	2.80	5.80	9.10	11.80	15.90	18.20
	Fan Efficiency (W/CMH)	0.37	0.38	0.39	0.38	0.40	0.38
	Unit Efficiency (kW/RT)	0.24	0.24	0.25	0.24	0.25	0.24
Chilled Water Cooling Coil	Cooling Capacity (kW)	26.8	55.7	82.7	113.6	143.1	166.6
	Sensible Capacity (kW)	18.7	36.8	55.0	75.2	94.3	108.8
	Ent. Air Temp °CDB / °CWB	24.0 / 18.6					
	Lev. Air Temp °CDB / °CWB	13.5 / 13.0	13.3 / 12.8	13.2 / 12.8	13.1 / 12.6	13.0 / 12.6	13.5 / 12.8
	Ent. Water Temp °C	7.0					
	Lev. Water Temp °C	12.0					
	Air Pressure Drop (Pa)	153.3	157.6	140.9	134.0	120.5	83.7
	Water Pressure Drop (kPa)	24.3	41.4	18.6	26.1	17.7	19.7
	Water Flow Rate (l/s)	1.29	2.66	3.94	5.46	6.84	7.95
	Face Area (m <sup>2</sup> )	0.57	1.12	1.82	2.54	3.42	4.56
	Face Velocity (m/s)	2.43	2.49	2.27	2.19	2.02	1.82
	Coil Material	Cu Tube / Al Fin					
	Cooling Medium	Water					
	Piping CHWS (mm)	38.1			50.8		
	Connections CHWR (mm)	38.1			50.8		
DX - Cooling Coil	Cooling Capacity (kW)	28.0	56.0	84.0	112.0	140.0	168.0
	Sensible Capacity (kW)	17.0	34.1	51.2	68.5	83.6	101.1
	Ent. Air Temp °CDB / °CWB	24.0 / 18.6					
	Lev. Air Temp °CDB / °CWB	14.0 / 12.7	13.9 / 12.7	13.9 / 12.7	13.9 / 12.8	14.1 / 12.7	14.0 / 12.7
	Air Pressure Drop (Pa)	153.3	157.6	140.9	134.0	96.4	83.7
	Face Area (m <sup>2</sup> )	0.57	1.12	1.82	2.54	3.42	4.56
	Face Velocity (m/s)	2.43	2.49	2.27	2.19	2.02	1.82
	Coil Material	Cu Tube / Al Fin					
	Cooling Medium	Refrigerant R410A					
	Piping Liquid Pipes (mm)	9.5 x 1	15.9 x 1	12.7 x 2	15.9 x 2	15.9 x 3	15.9 x 3
	Connections Gas Pipes (mm)	22.2 x 1	28.6 x 1	28.6 x 2	28.6 x 2	28.6 x 3	28.6 x 3
	DX - Condensing Unit (Model)	RXQ10AYM x 1	RXQ20AYM x 1	RXQ16AYM x 2	RXQ20AYM x 2	RXQ18AYM x 3	RXQ20AYM x 3

Note:

1. Cooling capacity based on nominal on-coil condition 24.0°CDB/18.6°CWB, Chilled Water Temp (inlet/outlet): 7°C / 12°C
2. Capacity are net, includes deduction of fan motor heat
3. Power input values are based on rated external static pressure
4. UV-light equipped as standard accessory

## AHU-HB CONTROL





## Perfecting the Air

**Warning**



- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorised parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the user's manual carefully before using this product. The user's manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any enquiries, please contact your local importer, distributor and/or retailer.

### **Cautions on product corrosion**

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.

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