

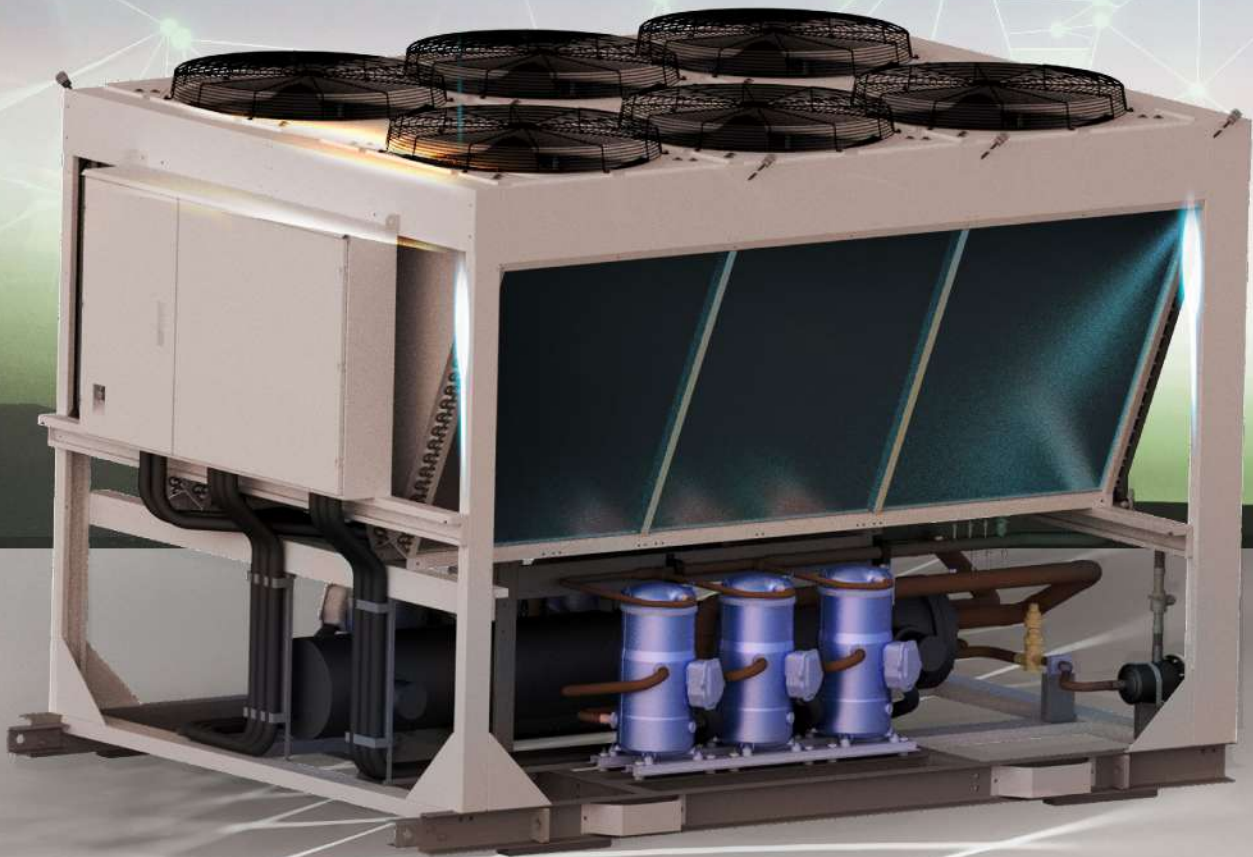
**DAIKIN**

**UAM**

**HFC-R410a**

**40~100RT**

AIR-COOLED  
SCROLL  
CHILLER  
COOLING ONLY



# COOLING EXPERT

PACKAGE AIR COOLED SCROLL CHILLER



**40-100<sup>RT</sup>** — **Nominal Capacity<sup>(1)</sup>**

UP TO  
**2.85 kW/kW**  
COP<sup>(1)</sup>



(1) Nominal Capacity, COP, and IPLV based on AHRI 551/591 conditions @ 12°C / 7°C EEWT/ELWT, 35°C Ambient Temperature

Daikin is known worldwide for its experience in the design and manufacturing of HVAC products. We have always been committed to deliver products beyond our customers' expectations.

The Air Cooled Scroll Chiller of the UAM series with a cooling capacity of 40 - 100RT [140 - 352 kW] utilizes the environmentally-sound HFC-R410A refrigerant. The chiller serves for cooling function only. The refrigerant circuits use a dual circuitry design for better redundancy. It comes with Microtech controller which can connect with high-level communication of BacNET/IP, Modbus TCP/IP or Modbus RTU as optional.

The UAM offers good energy efficiency, ease of installation, control flexibility, high reliability, compact footprint and advanced control.



# PREMIUM QUALITY

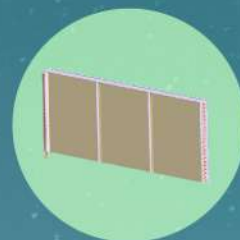
## CHILLER COMPONENTS



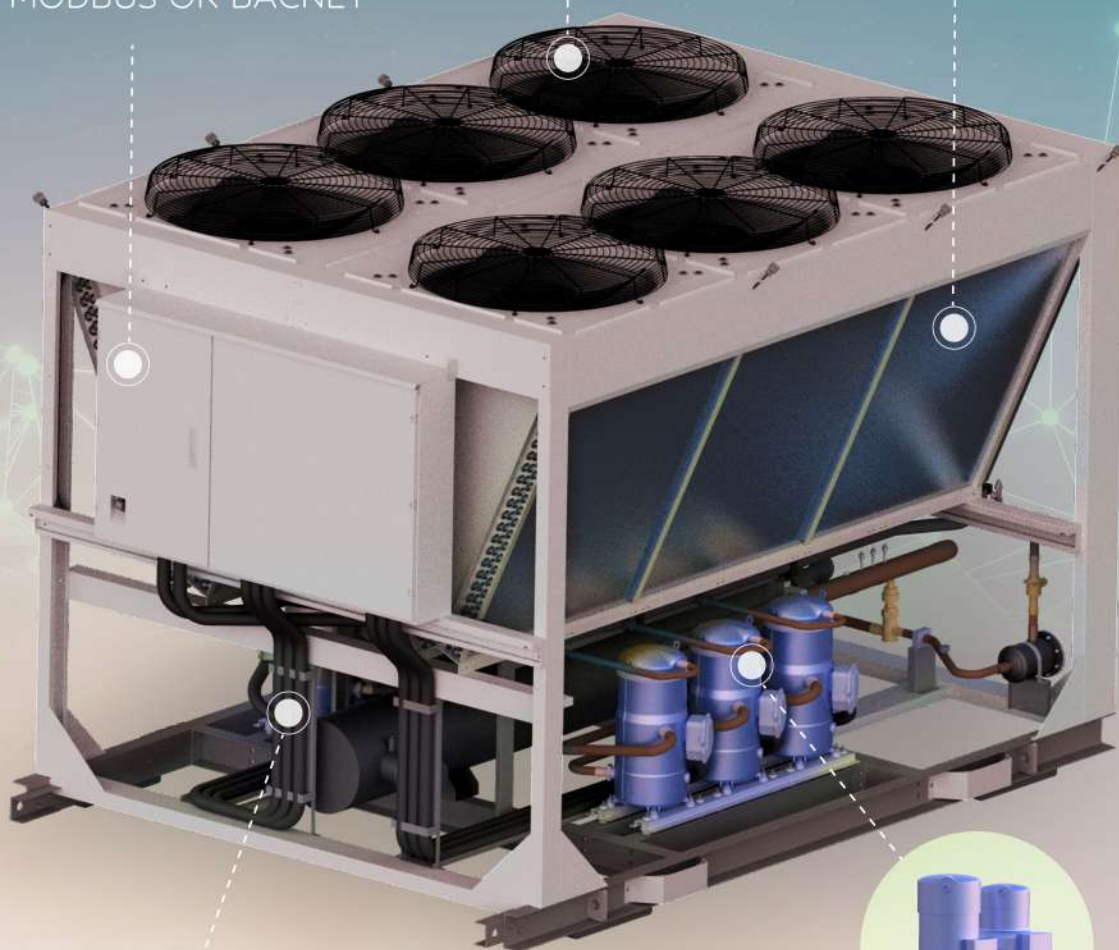
MICROTECH CONTROLLER WITH OPTIONAL SUPPORT FOR MODBUS OR BACNET



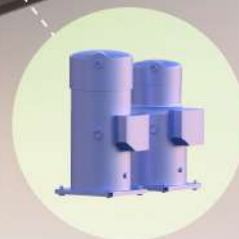
DIRECT-DRIVEN AXIAL FANS



CONDENSER COIL WITH COPPER TUBE ALUMINUM FINNS



DX SHELL & TUBE (FOR 60~100RT UNIT)  
BPHE FOR 40RT UNIT



FIXED SPEED SCROLL COMPRESSOR

# BEING DIFFERENT IS BEING AHEAD

## KEY FEATURES

### 1 COMPACT FOOTPRINT; LOGISTICAL ADVANTAGE



- UAM is designed light and easy to transfer. UAM40 is able to move by forklift.
- UAM only require standard height containers instead of High Cube Containers.

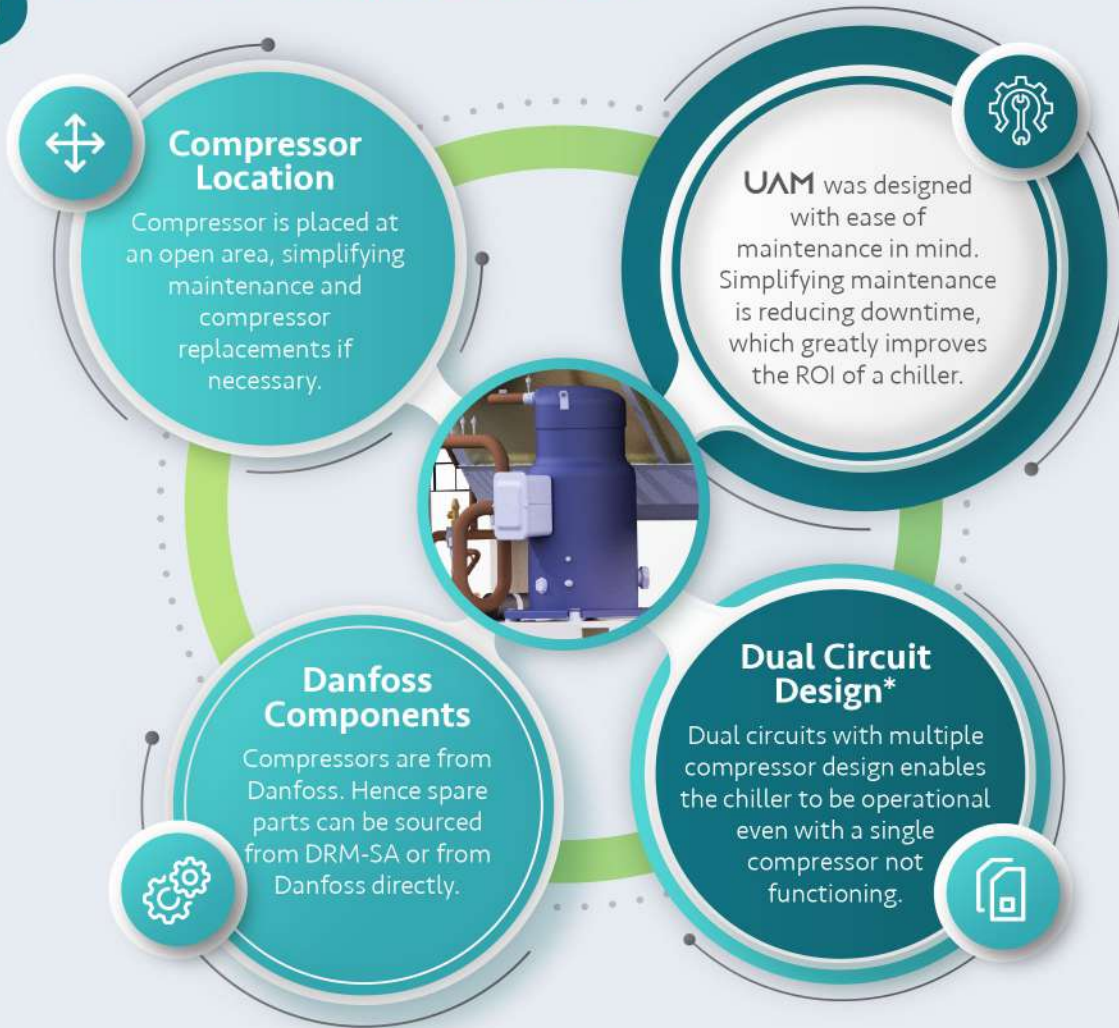
	Quantity of Chillers	
	20ft Standard Container	40ft Standard Container
UAM40	2	6
UAM60	1	3
UAM80	1	3
UAM100	1	2

### 2 LOW NOISE LEVEL





# 3 EASE OF MAINTENANCE



# 4 OPTIONAL ITEMS LIST



CONDENSER  
OPTION

### Gold Fin

Hydrophilic Gold Fins for slightly better corrosion resistance

### Heresite Coating

Baked Phenolic Epoxy Coating for superb corrosion resistance against large variety of atmosphere



EVAPORATOR  
OPTION

### Flow Switch

Paddle Flow Switch can be added

### Shell & Tube\*

BPHE to be converted to S&T upon request (valid for UAM40 only currently)



CHILLER  
OPTION

### Spring Isolators

Reduces vibration of the chiller

### Coil Guard

**Bottom Cover**  
Improves outlook and protects chiller's coil



ELECTRICAL  
OPTION

### Softstarter

Instead of DOL starter to reduce starting current



CONTROLLER  
OPTION

### Communication



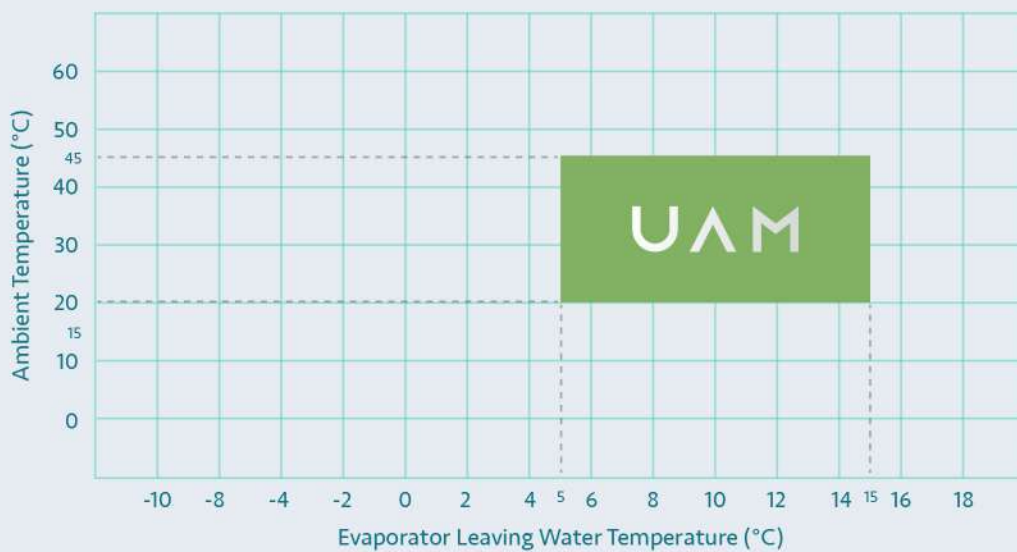
# 5 TEMPERATURE PROFILE & LEAVING WATER TEMPERATURE SETTING

## Temperature Profile

Operation outside these limits can cause the protective devices to intervene and interrupt unit operation. In extreme condition, damage to the equipment may occur. If in doubt, consult the manufacturer.

## Leaving Water Temperature Setting

The workload of a Daikin water chiller is controlled by the Evaporator Leaving Water Temperature (ELWT) which can be set by using the equipment controller. By default, the ELWT is set to 7°C. It can be set from 5~15°C. Out of this range, some other parameters are needed to be changed as well. Please contact local Daikin office or distributor to have qualified technician to do the setting accordingly.



## NOMENCLATURE

U A M 4 0 C F M





# TECHNICAL DATA

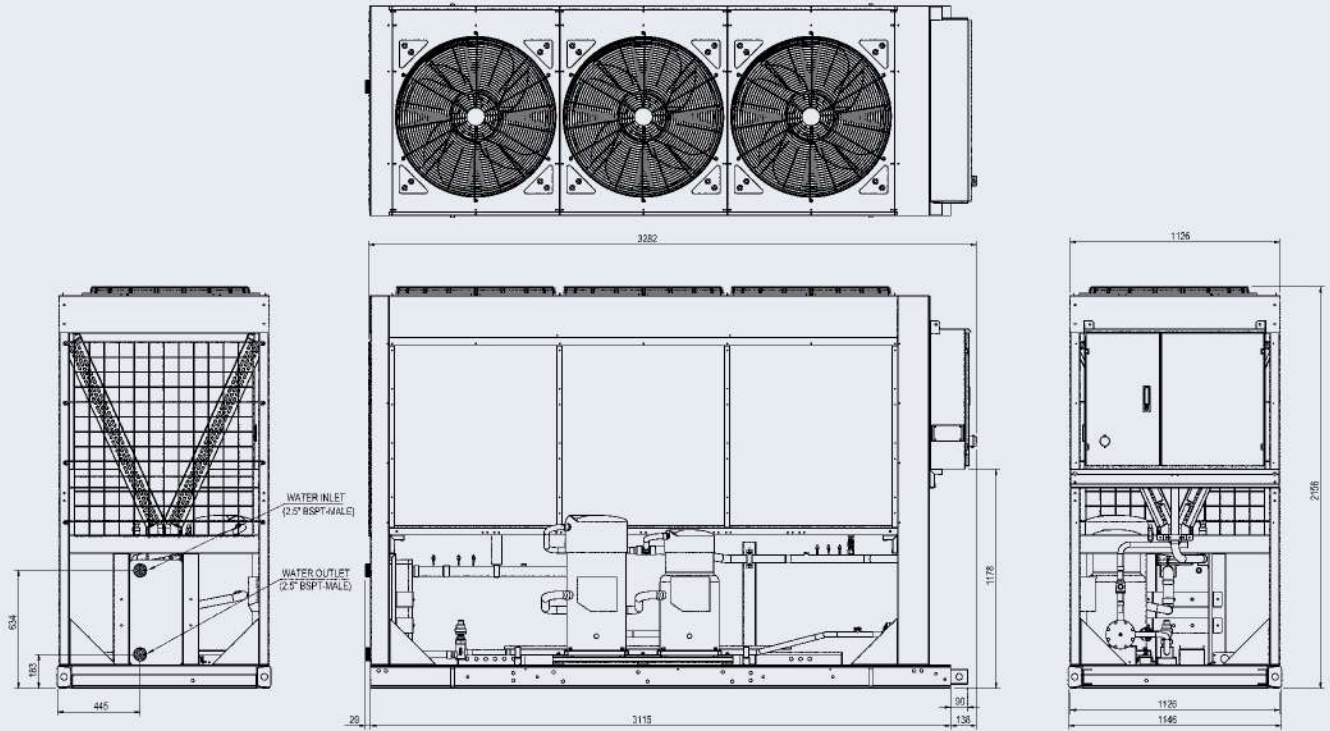
UAM TECHNICAL DATA		UAMCFM				UAMCUM				UAMCRM			
MODEL	UAM	40	60	80	100	40	60	80	100	40	60	80	100
<b>GENERAL</b>													
NOMINAL COOLING CAPACITY (R410A)	TR	40.00	59.32	79.00	100.0	40.00	60.00	80.00	98.80	39.84	60.00	79.68	97.98
Power Supply	V/PH/Hz	38-415 / 3N ~ / 50				380 / 3N ~ / 60				460 / 3N ~ / 60			
Nominal kW Input (Total)	kW	52.10	79.2	104.2	132.4	49.32	79.62	98.64	124.2	51.99	84.70	104.0	130.6
COP	kW/kW	2.700	2.634	2.666	2.656	2.852	2.65	2.852	2.798	2.695	2.491	2.695	2.638
RLA (Total)	A	*Note 3 / Installation-Manual (Electric Data)				*Note 3 / Installation-Manual (Electric Data)				*Note 3 / Installation-Manual (Electric Data)			
No of Refrigerant Circuit	Circuit	1	2			1	2			1	2		
Unit Capacity Control	Steps	2	4			3	4	6	4	2	4		
Nominal Refrigerant Charge / Circuit	kg	25	21	25	35	25	21	25	35	25	21	25	35
<b>COMPRESSOR</b>													
Type	-	Hermetic-sealed (Scroll)				Hermetic-sealed (Scroll)				Hermetic-sealed (Scroll)			
Quantity / Unit	-	2	4			3	5	6	4	2	4		
Max. Operating Current (each comp max)	A	56.00/72.00	49.00	56.00/72.00	72.00/91.00	41.00	41.00/58.00	41.00	69.00/88.00	49.00/56.00	34.00/49.00	49.00/56.00	56.00/72.00
Oil Charge (each comp)	Litre	6.7				3.6	3.6/6.7	3.6	6.7	6.7			
<b>EVAPORATOR</b>													
Type	-	Plate Heat Exchanger	Shell and Tube			Plate Heat Exchanger	Shell and Tube			Plate Heat Exchanger	Shell and Tube		
Water Connection Size	Type	2.5" Male BSPT	4" Victaulic Joint	5" Victaulic Joint		2.5" Male BSPT	4" Victaulic Joint	5" Victaulic Joint		2.5" Male BSPT	4" Victaulic Joint	5" Victaulic Joint	
Nominal Water Flow Rate	m³/h	24.23	35.93	47.85	60.56	24.23	36.34	48.45	59.84	24.13	36.34	48.26	59.34
Nominal Water Pressure Drop	kPa	51.2	38.0	36.7	63.0	51.2	38.7	68.0	61.9	50.8	38.7	37.1	61.0
Fouling Factor	m²K/kW	0.018				0.018				0.018			
<b>CONDENSER COIL</b>													
Tube Type	-	Copper Tube				Copper Tube				Copper Tube			
Tube Size / Thickness	mm	0.35				0.35				0.35			
Fin Type / Thickness	mm	Aluminium Fin / 0.11mm				Aluminium Fin / 0.11mm				Aluminium Fin / 0.11mm			
Quantity (Number of Straight Coil)	Qty	2	4			2	4			2	4		
Number of Column/Coil	-	3			4	3			4	3			4
Fins per Inch	-	12				12				12			
Surface Area	m²	5.76	11.52	11.52	15.36	5.76	11.52	11.52	15.36	5.76	11.52	11.52	15.36
<b>CONDENSER FAN</b>													
Type / Drive	-	Axial / Direct				Axial / Direct				Axial / Direct			
Size	mm	800				800				800			
Quantity / Unit	-	3	6	6	8	3	6	6	8	3	6	6	8
Motor kW / Each Design Motor Size	kW	2				1.5				2.4			
Total Nominal Air Flow / Fan	m³/h	16,990				15,630				16,990			
Nominal Motor FLA / Each	A	3.00				3.50				4			
<b>UNIT DIMENSION</b>													
Width	mm	1,146	2,237			1,146	2,237			1,146	2,237		
Depth	mm	3,282	3,263	3,263	4,163	3,282	3,263	3,263	4,163	3,282	3,263	3,263	4,163
Height	mm	2,156				2,156				2,290			
Shipping Weight	kg	1,130	2,052	2,917	3,048	1,078	1,979	2,819	2,920	1,079	2,052	2,815	2,920
Operating Weight	kg	1,139	2,174	3,039	3,239	1,087	2,101	2,941	3,111	1,088	2,174	2,937	3,111

## NOTES:

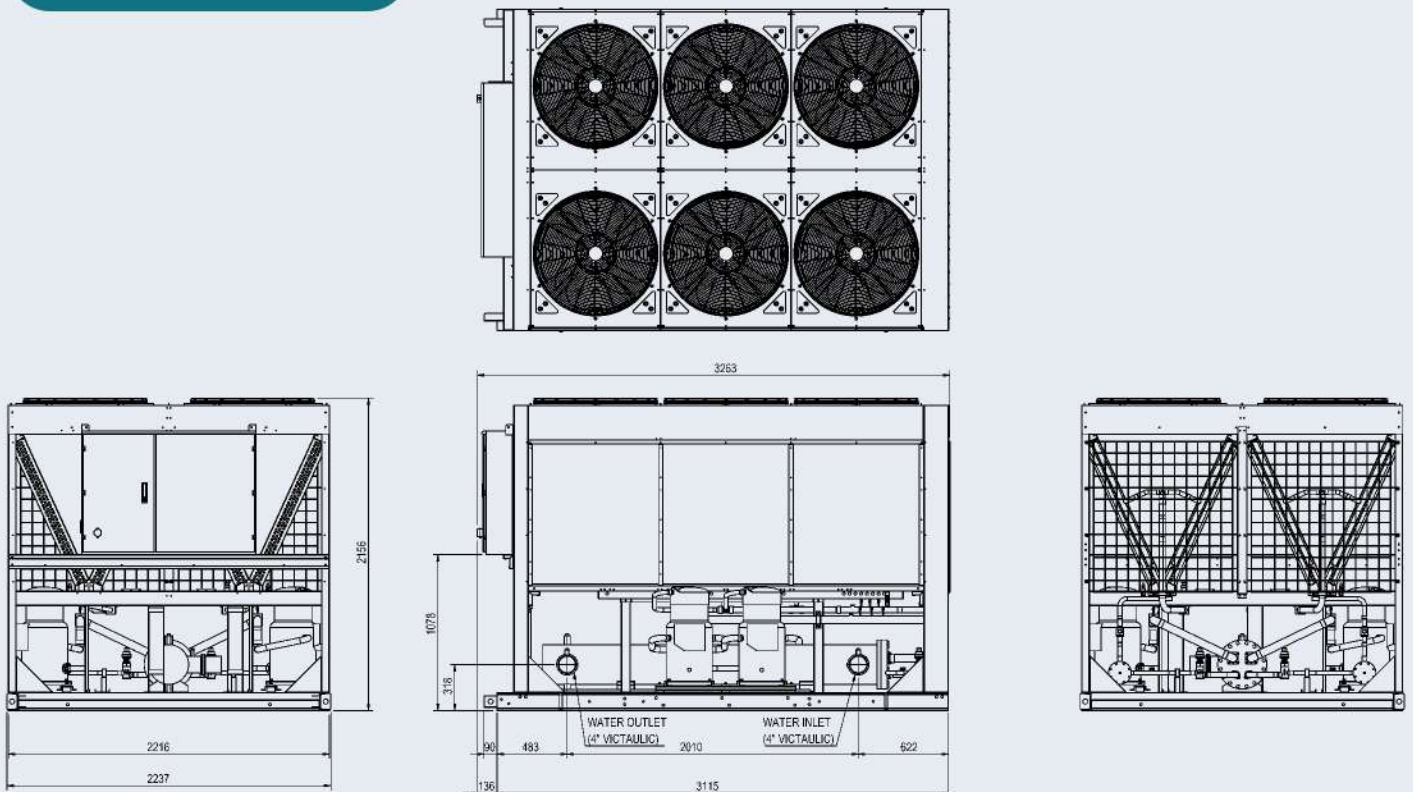
- Nominal cooling capacity is based on the AHRI 551/591 Standard: 12/7°C EWT and LWT, 35°C ambient temperature.
- Operation weight includes the weight of the water in the water-side heat exchanger.
- For detailed technical data please refer to selection sheet.

# CHILLER OUTLINE

## UAM40CFM



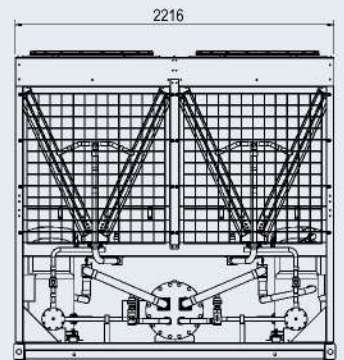
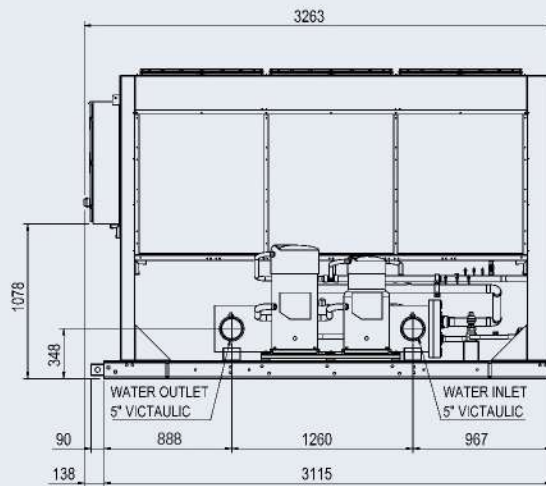
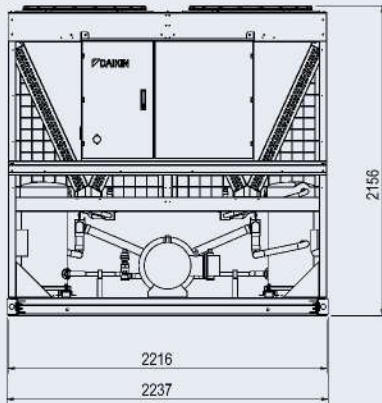
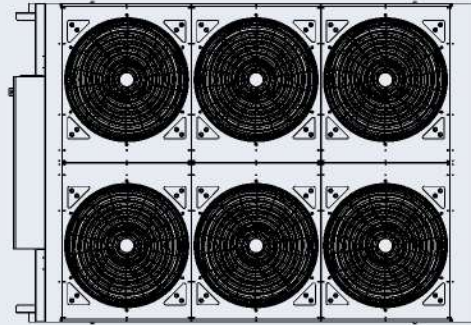
## UAM60CFM



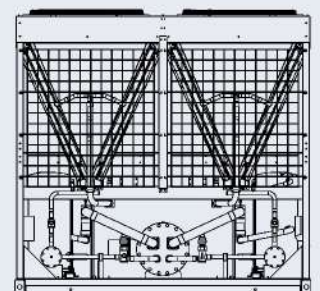
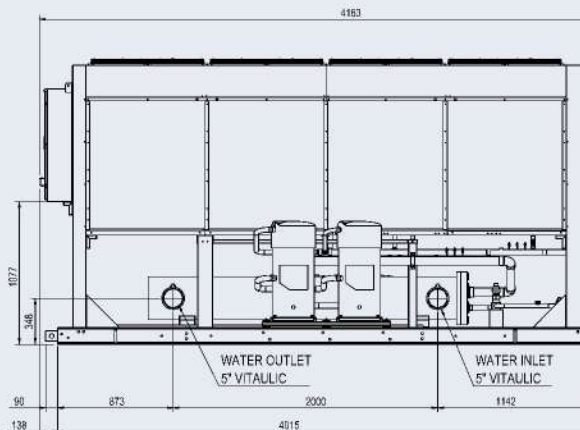
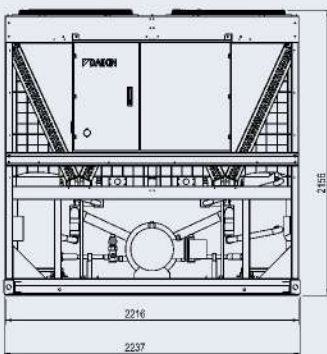
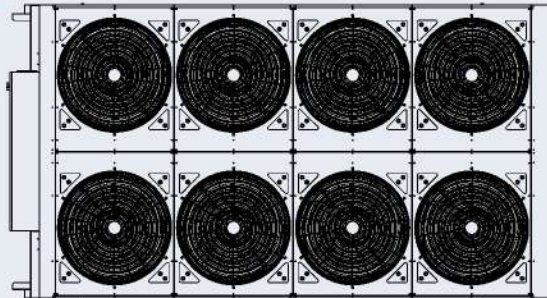


# CHILLER OUTLINE

## UAM80CFM



## UAM100CFM





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