



Cooling Only

# AIR-COOLED SCROLL CHILLER

40 - 100 TR

UAM-B Series  
50&60Hz



# UAM-B

## AIR COOLED SCROLL CHILLER



 Cooling Capacity  
40tr, 60tr, 80tr, 100tr

 Refrigerant  
R410a

 Low  
Noise level

### General

- For cooling function only
- Staged capacity controller
- Double circuits
- Shell and tube evaporator for 60tr,80tr,100tr chiller
- Brazed Plate heat exchangers (BPHE) as evaporator for 40tr chiller
- R410a refrigerant
- Microtech III controller compatible with BMS

### Versions

Version A  
COP up to 2.85, 1.23 kw/ton

Sound Level  
Sound level from - 76-83 db(A)

Weight  
902kg - 2599 kg

### Standard Options

- Gold fins
- Heresite coating aluminium fins
- Spring isolator
- Flow switch
- Modbus
- Bacnet
- Coil guard
- IP55 Fan motor
- Copper Fins
- Stainless steel bolt and nut
- Softstarter

### Options On Request

- Chiller water inlet and outlet direction
- EC Fan
- High Static Fan
- Heresite coating copper fins
- Change of BPHE to shell and tube evaporator
- Chillers sequencing control
- Partial Heat Recovery

# UAM-B

## AIR COOLED SCROLL CHILLER

### UAM (50Hz) Technical Data

MODEL	UAM	40	60	80	100
<b>GENERAL</b>					
NOMINAL COOLING CAPACITY (R410A)	Ton	40.0	60.0	80.0	100.0
	kW	140.7	211.0	281.4	351.7
Power Supply	V/PH/HZ	400 / 3N~ / 50			
Nominal kW Input (Total)	kW	49.3	74.5	99.3	125.2
EER	-	2.85	2.82	2.83	2.81
RLA (Total)	A	111.0	176.0	221.0	263.0
No of Refrigerant Circuit	-	1	2	2	2
Unit Capacity Control	Steps	2	4	4	4
Nominal Refrigerant Charge / Circuit	kg	25	21	25	33
<b>Sound Level</b>					
Sound Level	db(A)	76	79	80	83
Sound Power	-	87	90	91	94
<b>COMPRESSOR</b>					
Type	-	Hermetic-sealed (Scroll)			
Quantity / Unit	-	2	4	4	4
Max. Operating Current (each comp max)	A	44.0/56.0	36.0	44.0/56.0	56.0/69.0
Oil Charge (each comp)	Litre	6.7	6.7	6.7	6.7
<b>EVAPORATOR</b>					
Type	-	Plate Heat Exchanger	Shell and tube		
Construction	-	Channel Plates	Round tube and cylindrical shell		
Max. Water Side Pressure	PSIG (kPa)	152 (1050)			
Max. Ref. Side Pressure	-	650 (4500)	392 (2700)		
Water Connection Size	Type	2.5" Male BSPT	5" Victaulic Joint		
Nominal Water Flow Rate	USgpm (l/s)	106.5 (6.72)	159.5 (10.08)	213.0 (13.44)	266.3 (16.8)
Water Pressure Drop (max)	PSIG (kPa)	7.25 (50)	7.25 (50)	9.43 (65)	9.43 (65)
<b>CONDENSER COIL</b>					
Tube Type	-	Copper Tube			
Tube Size / Thickness	in (mm)	3/8" OD / 0.35mm			
Fin Type / Thickness	-	Aluminium Fin / 0.11mm			
Quantity (Number of Straight Coil)	Qty	2	4	4	4
Number of Rows	-	3	3	3	3
Fins per Inch	-	12	12	12	12
Surface Area	ft <sup>2</sup> (m <sup>2</sup> )	62.0 (5.76)	124.0 (11.52)	124.0 (11.52)	165.33 (15.36)
<b>CONDENSER FAN</b>					
Type / Drive	-	Axial / Direct			
Size	in (mm)	31.5 (800)			
Quantity / Unit	-	3	6	6	8
Motor kW / Each Design Motor Size	kW (HP)	1.5 (2)			
Total Airflow Nominal Air Flow / Fan	CFM / (m <sup>3</sup> /h)	10000 / (16990)	10000 / (16990)	10000 / (16990)	10000 / (16990)
Nominal Motor FLA / Each	-	3.0			
Motor LRA / Each	A	12.57			
<b>UNIT DIMENSION</b>					
Width	-	44.1 (1120)	87.4 (2220)	87.4 (2220)	87.4 (2220)
Depth	in (mm)	124.8 (3170)	124.8 (3170)	124.8 (3170)	160.2 (4070)
Height	-	84.6 (2150)	84.6 (2150)	84.6 (2150)	84.6 (2150)
Shipping Weight	-	902	1707	1915	2345
Operating Weight	kg	930	1825	2033	2509

# UAM-B

## AIR COOLED SCROLL CHILLER

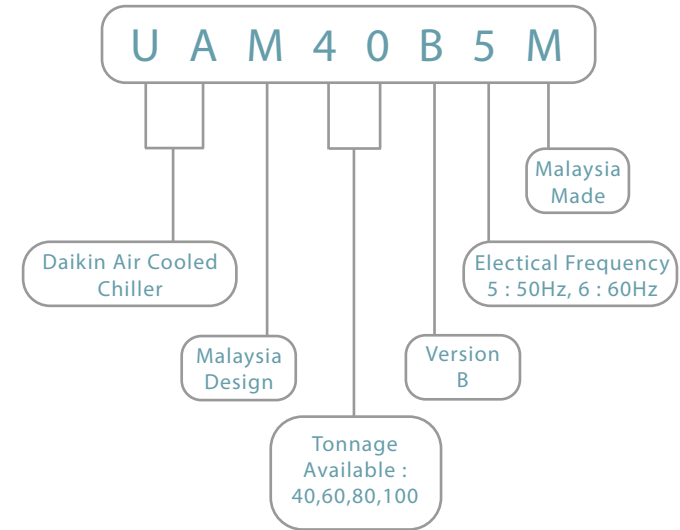
# UAM-B

## AIR COOLED SCROLL CHILLER

### UAM (60Hz) Technical Data

MODEL	UAM	40	60	80	100
<b>GENERAL</b>					
NOMINAL COOLING CAPACITY (R410A)	Ton	40.0	60.0	80.0	100.0
	kW	140.7	211.0	281.4	351.7
Power Supply	V/PH/Hz	380 / 3N~ / 60			
Nominal kW Input (Total)	kW	49.5	78.3	98.9	120.7
COP	-	2.84	2.70	2.84	2.81
RLA (Total)	A	94.0	149.0	188.0	230.0
No of Refrigerant Circuit	-	1	2	2	2
Unit Capacity Control	Steps	3	4	6	4
Nominal Refrigerant Charge / Circuit	kg	25	22	25	35
<b>SOUND LEVEL</b>					
Sound Level	db(A)	75	78	79	80
Sound Power		86	89	90	91
<b>COMPRESSOR</b>					
Type	-	Hermetic-sealed (Scroll)			
Quantity / Unit	-	3	4	6	4
Max. Operating Current (each comp max)	A	32.7	32.7/43.6	32.7	43.6/43.9
Oil Charge (each comp)	Litre	3.6	6.7	6.7	6.7
<b>EVAPORATOR</b>					
Type	-	Plate Heat Exchanger	Shell and tube		
Construction	-	Channel Plates	Round tube and cylindrical shell		
Max. Water Side Pressure	PSIG (kPa)	152 (1050)		392 (2700)	
Max. Ref. Side Pressure		650 (4500)	392 (2700)		
Water Connection Size	Type	2.5" BSPT Male	5" Victaulic Joint		
Nominal Water Flow Rate	USgpm (l/s)	106.5 (6.72)	159.5 (10.08)	213.0 (13.44)	266.3 (16.8)
Water Pressure Drop (max)	PSIG (kPa)	7.25 (50)	7.25 (50)	9.43 (65)	9.43 (65)
<b>CONDENSER COIL</b>					
Tube Type	-	Copper Tube			
Tube Size / Thickness		3/8" OD / 0.35mm			
Fin Type / Thickness	in (mm)	Aluminium Fin / 0.11mm			
Quantity (Number of Straight Coil)	Qty	2	4	4	4
Number of Rows	-	3	3	3	3
Fins per Inch	-	12	12	12	12
Surface Area	ft <sup>2</sup> (m <sup>2</sup> )	62.0 (5.76)	124.0 (11.52)	124.0 (11.52)	165.33 (15.36)
<b>CONDENSER FAN</b>					
Type / Drive	-	Axial / Direct			
Size	in (mm)	31.5 (800)			
Quantity / Unit	-	3	6	6	8
Motor kW / Each Design Motor Size	kW (HP)	1.05(1.4)			
Total Airflow Nominal Air Flow / Fan	CFM / (m <sup>3</sup> /h)	9200 / (15630)	9200 / (15630)	9200 / (15630)	9200 / (15630)
Nominal Motor FLA / Each	A	3.5			
Motor LRA / Each		17.0			
<b>UNIT DIMENSION</b>					
Width		44.1 (1120)	87.4 (2220)	87.4 (2220)	87.4 (2220)
Depth	in (mm)	124.8 (3170)	124.8 (3170)	124.8 (3170)	160.2 (4070)
Height		84.6 (2150)	84.6 (2150)	84.6 (2150)	84.6 (2150)
Shipping Weight		902	1707	1915	2345
Operating Weight	kg	930	1825	2033	2509

### UAM Model Naming Logic



### UAM Container Arrangement

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

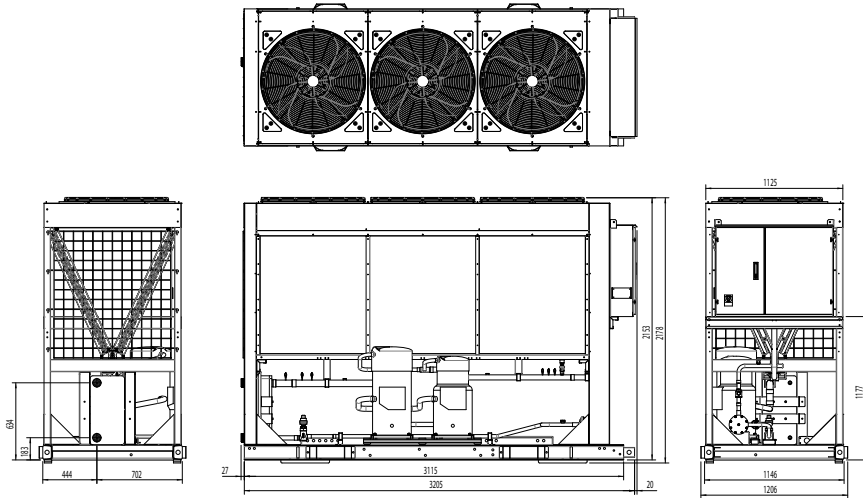
UAM is designed light and easy to transfer. UAM40 is able to move by forklift and the weight is 902kg

# UAM-B

AIR COOLED SCROLL CHILLER

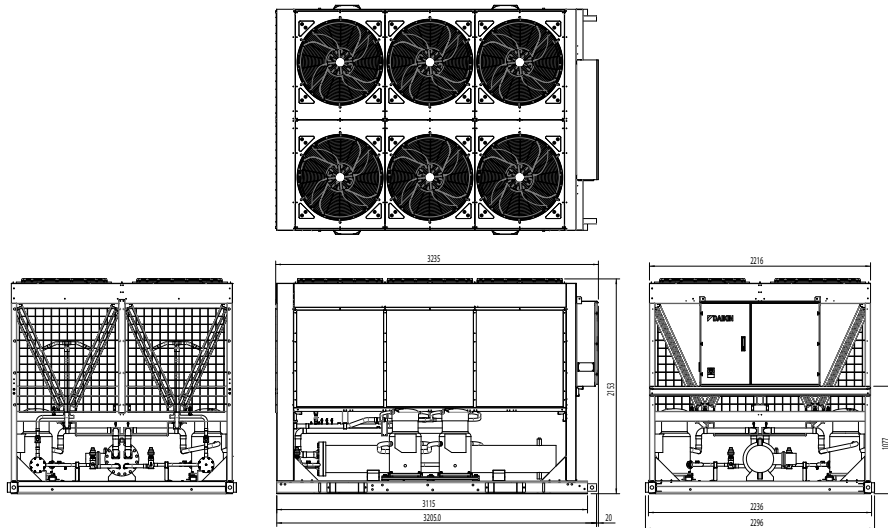
## UAM40B5M

DRAWING OUTLINE



## UAM60B5M

DRAWING OUTLINE



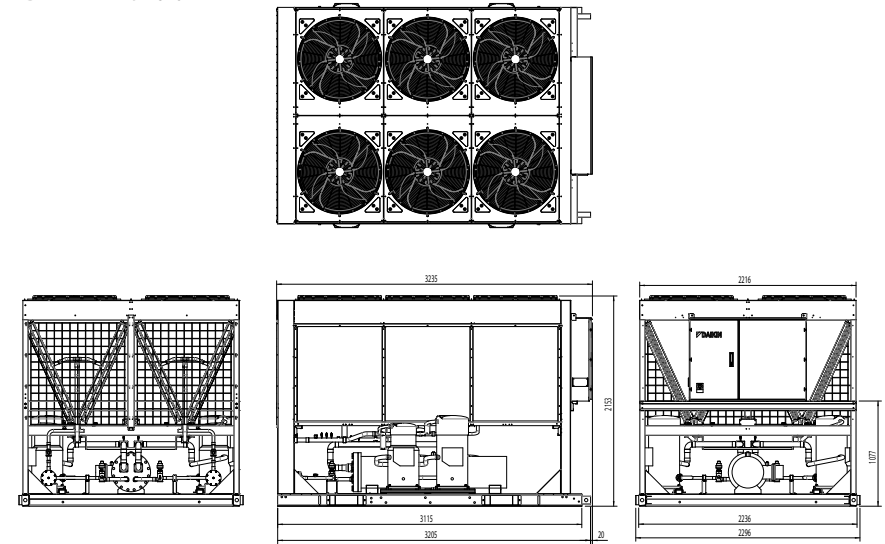
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AIR COOLED SCROLL CHILLER

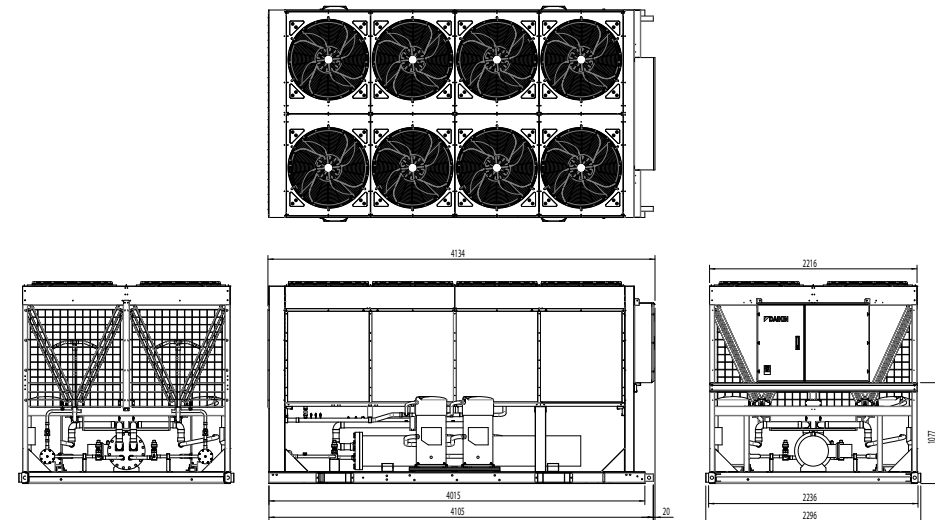
## UAM80B5M

DRAWING OUTLINE



## UAM100B5M

DRAWING OUTLINE



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**DEALER**

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