



New rooftop series

UATYQ-ABAY1 | AFC2Y1 | AFC3Y1

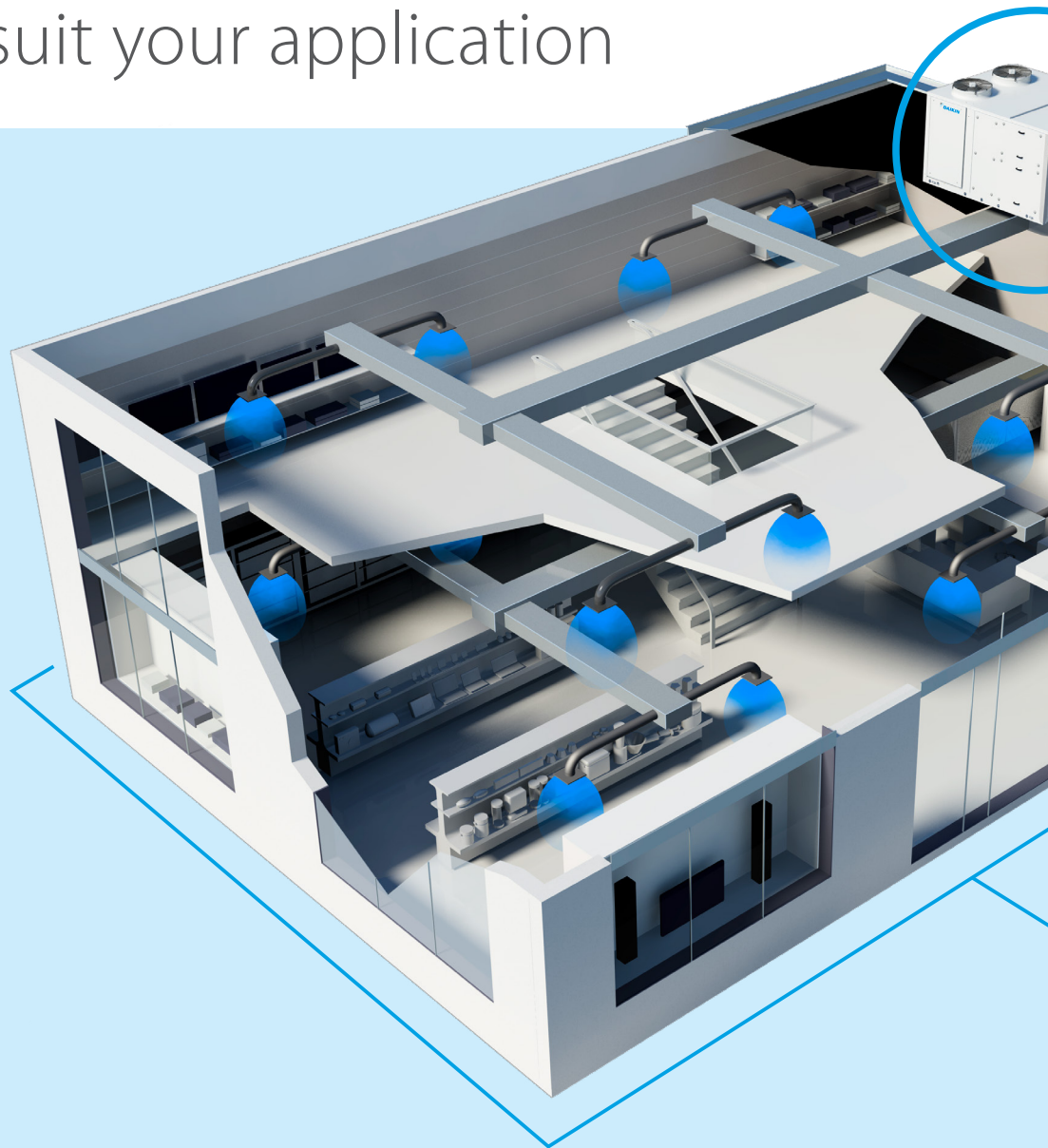


Extensive option package included in all models



Daikin rooftops

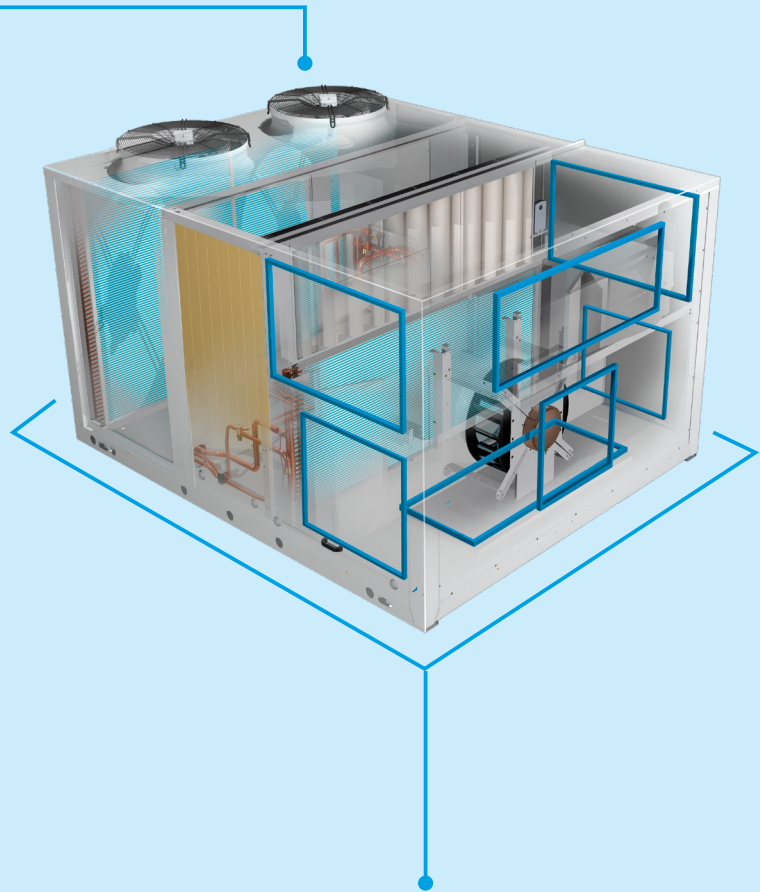
Flexible to suit your application



Rooftop for Retail & Department Stores

Retail & department stores need challenging design because of **limited space and complex building structure, containing different floors and spaces**. Daikin rooftops provide the solution:

- › Ductwork can be connected flexibly (front, left, right, bottom) to optimize installation space.
- › High efficiency EC plug fans are maintenance free, limiting the downtime of the system for maintenance.
- › Extraction damper and fan ensure there is no overpressure in the building and air circulation is optimised.
- › High indoor air quality can be guaranteed thanks to integrated fresh air provision.



Supply and extract ducting ensures even distribution in the building.

Plug & play installation as indoor and outdoor are in one package.

Rooftop for Warehouses & Industry

For building managers and engineers, warehouses or industrial applications can pose serious HVAC **challenges because of their size and unique design**. Daikin rooftops provide the solution:

- › Pre-connected indoor/outdoor units and factory charged refrigerant provide cost-effective installation.
- › High ESP up to 300Pa allows extensive ductwork to evenly distribute the air across a large space.
- › Scroll compressor and free cooling ensure highly efficient 24/7 operation.
- › Clogged filter alarm indicates when filter needs cleaning, ensuring optimum operation and minimized energy consumption.



Daikin rooftops series

An extensive package included in all models



1 Standard integrated high efficiency EC plug fans

- › Static pressure up to 300Pa
- › Inverter controlled
- › Maintenance free

2 Standard flexible air delivery

- › Up to 4 possible sides can be selected on site (front, left, right, bottom)

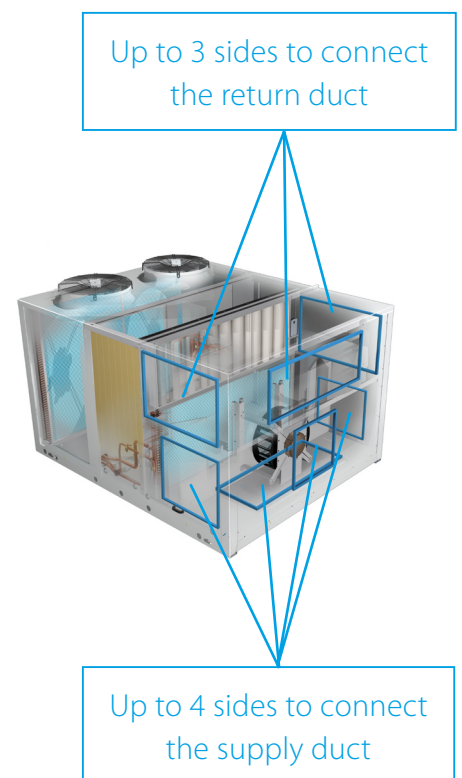
3 Latest pCO⁵ controller

- › Direct integration into Daikin intelligent Touch Manager BMS (via optional BACnet protocol)
- › Easy integration in 3rd party BMS systems
 - › Standard Modbus protocol
 - › Optional BACnet protocol

4 Standard clogged filter alarm

- › Indicates when a filter requires cleaning
- › Improved indoor air quality and efficiency

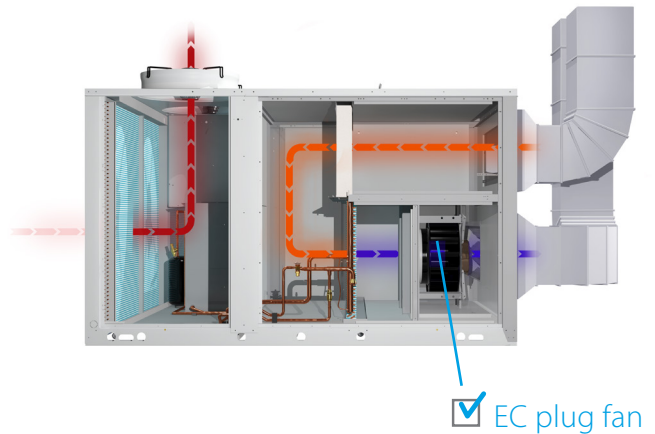
5 Hydrophilic coated aluminium fins on indoor and outdoor side



UATYQ-ABAY1

High installation flexibility and easy servicing

- › Easy to install 'plug and play' concept plus single installation configuration; no additional piping is required since indoor and outdoor sides are pre-connected
- › High efficiency and reliable scroll compressor
- › Factory pre-charged refrigerant ensures clean and efficient operation

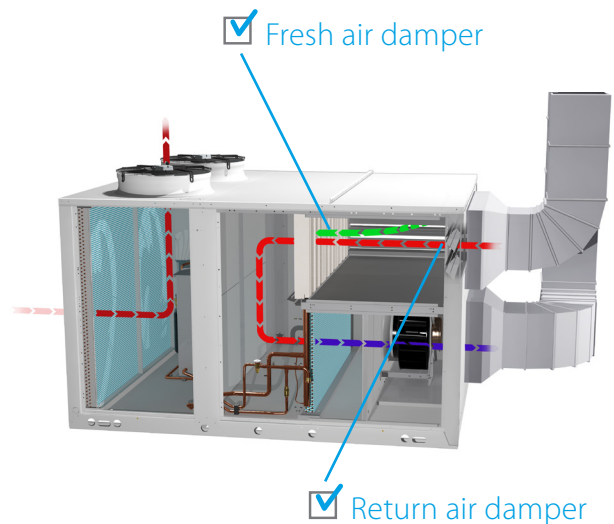


Cooling operation example

UATYQ-AFC2Y1

2 damper version, with integrated fresh air

- › Free cooling with 100% fresh air possible
 - › Improved air quality
 - › Energy saving using fresh outdoor air to cool the building
- › Standard CO₂ sensor connection
 - › Ideal balance between efficiency and indoor air quality
- › Includes all Base model features

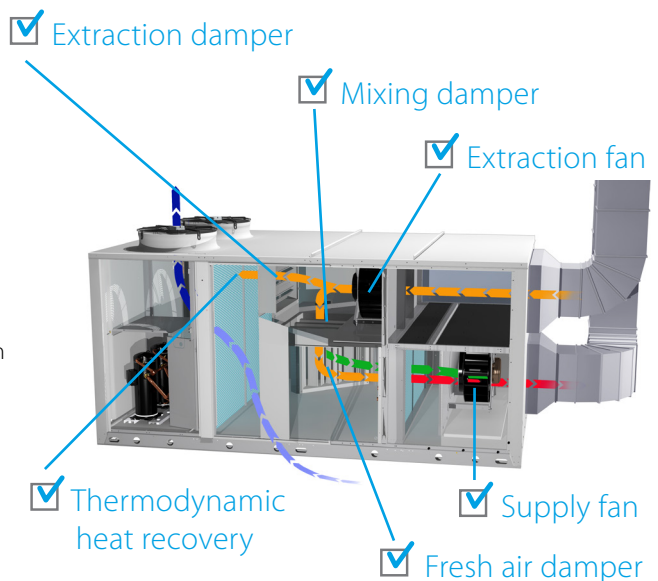


Cooling operation example

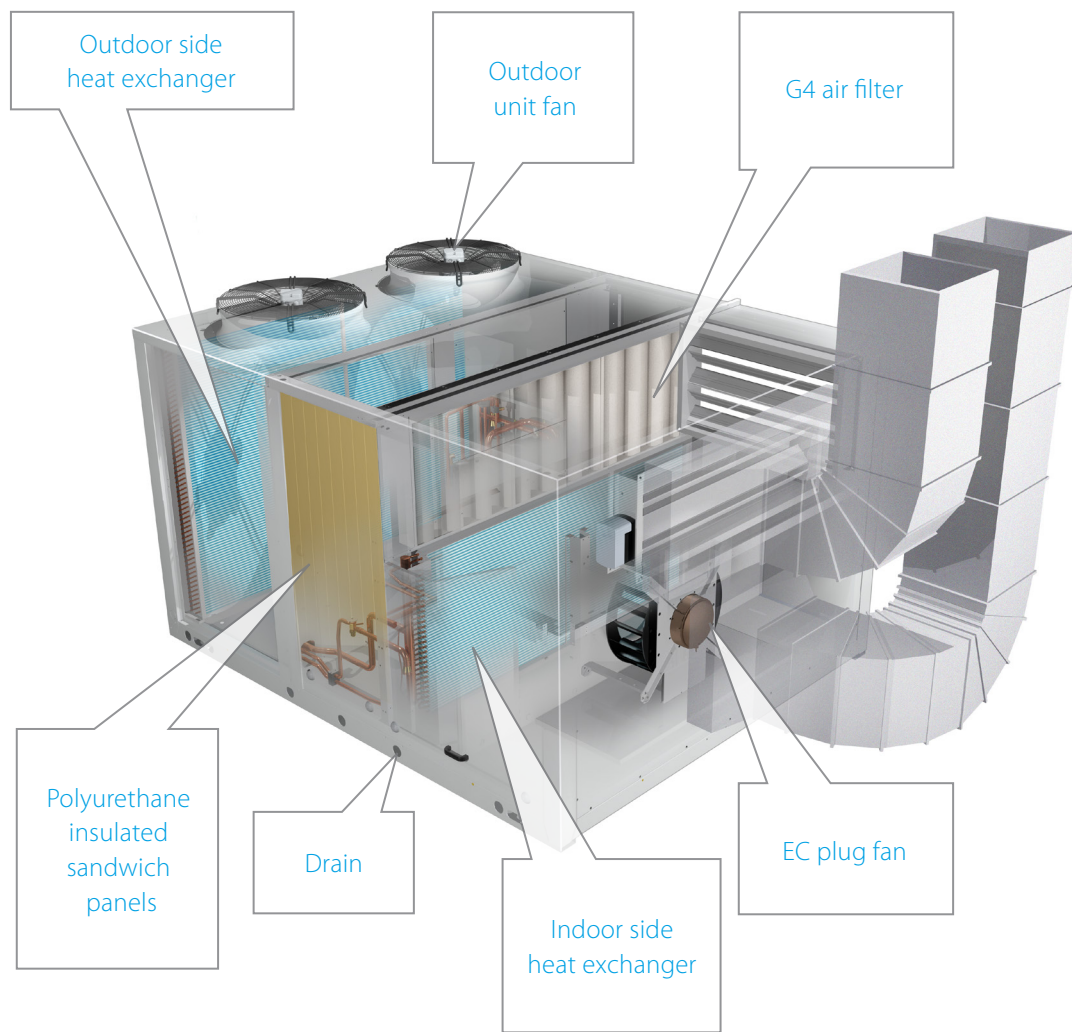
UATYQ-AFC3Y1

3 damper version, with integrated fresh air and extraction

- › Extraction damper integrated
 - › Eliminates excessive overpressure in the building
 - › UATYQ45-115AFC3Y1 models include high efficient extraction fan for optimum air circulation in larger buildings
- › Thermo dynamic heat recovery
 - › Saves energy by recovering waste heat through the outdoor heat exchanger
 - › Available on UATYQ20-55AFC3Y1



Heating operation example



UATYQ20ABAY1
UATYQ20AFC2Y1
UATYQ20AFC3Y1

UATYQ25-30ABAY1
UATYQ25-30AFC2Y1
UATYQ25-30AFC3Y1

UATYQ45-55ABAY1
UATYQ25-30AFC2Y1
UATYQ25-30AFC3Y1

UATYQ65-75ABAY1
UATYQ65-75AFC2Y1
UATYQ65-75AFC3Y1

UATYQ90-115ABAY1
UATYQ90-115AFC2Y1
UATYQ90-115AFC3Y1

Products overview rooftops

		Capacity class (kW)														
System	Type	Model	Product name	Refrigerant	20	25	30	45	50	55	65	75	90	100	115	
For EU region	Air cooled Heat pump	Rooftop unit With extensive base package for high installation flexibility and easy servicing - 'Plug and play' for easy installation - High efficiency - Field convertible return and supply air - Direct integration with Daikin or third party BMS - Factory pre-charged refrigerant	UATYQ-ABAY1		●	●	●	●	●	●	●	●	●	●	●	
		Rooftop unit 2 damper version with integrated fresh air - 'Plug and play' for easy installation - Free cooling with up to 100% fresh air intake - High efficiency - Field convertible return and supply air - Direct integration with Daikin or third party BMS	UATYQ-AFC2Y1	R-410A	●	●	●	●	●	●	●	●	●	●	●	●
		Rooftop unit 3 damper version with integrated fresh air and extraction - 'Plug and play' for easy installation - Integrated extraction damper eliminates over-pressure - Thermo dynamic heat recovery, recovering waste heat - Free cooling with up to 100% fresh air intake - Field convertible return and supply air	UATYQ-AFC3Y1		●	●	●	●	●	●	●	●	●	●	●	●

Specifications



UATYQ-ABAY1

UATYQ-ABAY1				20	25	30	45	50	55	65	75	90	100	115		
Cooling capacity	Nom.		kW	19.5	28.0	30.4	44.1	49.2	51.6	63.5	73.9	90.3	101.6	106.8		
	with 30% fresh air		kW	20.9	30.0	32.5	47.8	52.3	55.1	68.1	78.9	96.7	108.2	114.2		
Heating capacity	Nom.		kW	17.9	27.0	31.3	46.1	51.9	56.3	63.8	76.6	93.3	104.5	114.2		
	with 30% fresh air		kW	18.3	27.5	31.8	48.8	52.6	57.2	65.5	77.8	94.9	106.0	116.6		
Space cooling	Capacity	Pdesign	kW	19.5	28.0	30.4	44.1	49.2	51.6	63.5	73.9	90.3	101.6	106.8		
	η _{s,c}		%	135.0	143.5	127.5	119.5	134.1	129.0	130.4	124.6	118.2	137.9	127.0		
Space heating (Average climate)	Capacity	Pdesign	kW	17.9	27.0	31.3	46.1	51.9	56.3	63.8	76.6	93.3	104.5	114.2		
	η _{s,h}		%	115.4	129.0	119.5	115.4	125.2	124.8	121.0	118.2	116.0	125.3	124.3		
Power input	Cooling	Nom.	kW	6.6	10.0	12.0	17.0	19.7	22.5	23.6	29.7	33.8	39.0	44.3		
	Heating	Nom.	kW	5.8	8.0	9.6	14.6	16.3	18.1	20.0	25.1	29.9	33.2	37.3		
EER				2.94	2.79	2.54	2.60	2.50	2.29	2.69	2.49	2.67	2.60	2.41		
COP				3.07	3.38	3.26	3.15	3.19	3.11	3.20	3.05	3.12	3.15	3.06		
Evaporator	Supply side	Fan	Air flow rate	m ³ /h												
			Nom. external static pressure	Pa												
				300												
			Air discharge direction	Frontal, Left			Frontal, Left, Right, Bottom			Left, Right, Bottom						
	Return side		Air intake direction	Rear			Rear, Right, Left			Rear			44,000			
Condensor	Air flow rate	Cooling	m ³ /h	11,500	12,000			19,000			33,200			44,000		
Condensor	Refrigerant	Type / GWP		R410-A / 2,087.5												
Condensor	Charge	TCO ₂ Eq / kg		15.7 / 7.5	27.1 / 13.0			35.5 / 17.0			31.3 / 15.0			41.8 / 20.0	43.8 / 21.0	48.0 / 23.0
Dimensions	Unit	Height x Width x Depth	mm	1,600 x 1,790 x 1,730	2,150 x 1,790 x 1,730			1,800 x 2,715 x 2,245			1,800 x 3,750 x 2,240			2,180 x 4,050 x 2,240		
Weight	Unit		kg	672	780			1,068			1,553			1,738	1,742	1,794
Casing	Colour			RAL 7035												
Sound pressure level	Cooling		dB(A)	60			61	63			64			65		
	Heating		dB(A)	77	78			79	81			83			85	
Operation range	Cooling	Min. ~ Max.	°CDB	0 ~ 47												
	Heating	Min. ~ Max.	°CWB	-12.1 ~ 19.5												
Power supply	Voltage / Phase / Frequency		V / Hz	400/3+N/50 ±5%												
Current	Recommended fuses		A	25	32	40	50	63	80	100	400/3/50 ±5%			125		



UATYQ-AFC2Y1

UATYQ-AFC2Y1				20	25	30	45	50	55	65	75	90	100	115		
Cooling capacity	Nom.		kW	19.5	28.0	30.4	44.1	49.2	51.6	63.5	73.9	90.3	101.6	106.8		
	with 30% fresh air		kW	20.9	30.0	32.5	47.8	52.3	55.1	68.1	78.9	96.7	108.2	114.2		
Heating capacity	Nom.		kW	17.9	27.0	31.3	46.1	51.9	56.3	63.8	76.6	93.3	104.5	114.2		
	with 30% fresh air		kW	18.3	27.5	31.8	48.8	52.6	57.2	65.5	77.8	94.9	106.0	116.6		
Space cooling	Capacity	Pdesign	kW	19.5	28.0	30.4	44.1	49.2	51.6	63.5	73.9	90.3	101.6	106.8		
	η _{s,c}		%	135.0	143.5	127.5	119.5	134.1	129.0	130.4	124.6	118.2	137.9	127.0		
Space heating (Average climate)	Capacity	Pdesign	kW	17.7	27.0	31.3	46.1	51.9	56.3	63.8	76.6	93.3	104.5	114.2		
	η _{s,h}		%	115.4	129.0	119.5	115.4	125.2	124.8	121.0	118.2	116.0	125.3	124.3		
Power input	Cooling	Nom.	kW	6.6	10.0	12.0	17.0	19.7	22.5	23.6	29.7	33.8	39.0	44.3		
	Heating	Nom.	kW	5.8	8.0	9.6	14.6	16.3	18.1	20.0	25.1	29.9	33.2	37.3		
EER	with 30% fresh air			3.14	2.95	2.67	2.82	2.60	2.41	2.85	2.61	2.82	2.73	2.53		
COP	with 30% fresh air			3.37	3.75	3.56	3.44	3.48	3.40	3.64	3.31	3.38	3.43	3.35		
Evaporator	Supply side	Fan	Air flow rate	m ³ /h												
			Nom. external static pressure	Pa												
				300												
			Air discharge direction	Frontal, Left			Frontal, Left, Right, Bottom			Left, Right, Bottom						
	Return side		Air intake direction	Rear			Rear, Right, Left			Rear			44,000			
	Fresh air		Standard	yes												
			Ratio	30												
			In free cooling	100												
Condensor	Air flow rate	Cooling	m ³ /h	11,500	12,000			19,000			33,200			44,000		
Condensor	Refrigerant	Type / GWP		R410-A / 2,087.5												
Condensor	Charge	TCO ₂ Eq / kg		15.7 / 7.5	27.1 / 13.0			35.5 / 17.0			31.3 / 15.0			41.8 / 20.0	43.8 / 21.0	48.0 / 23.0
Dimensions	Unit	Height x Width x Depth	mm	1,600 x 1,790 x 1,730	2,150 x 1,790 x 1,730			1,800 x 2,715 x 2,245			1,800 x 4,650 x 2,240			2,180 x 4,850 x 2,240		
Weight	Unit		kg	679	788			1,098			1,698			1,906	1,914	1,966
Casing	Colour			RAL 7035												
Sound pressure level	Cooling		dB(A)	60			61	63			64			65		
	Heating		dB(A)	77	78			79	81			83			85	
Operation range	Cooling	Min. ~ Max.	°CDB	0 ~ 47												
	Heating	Min. ~ Max.	°CWB	-12.1 ~ 19.5												
Power supply	Voltage / Phase / Frequency		V / Hz	400/3+N/50 ±5%												
Current	Recommended fuses		A	25	32	40	50	63	80	100	400/3/50 ±5%			125		



UATYQ-AFC3Y1

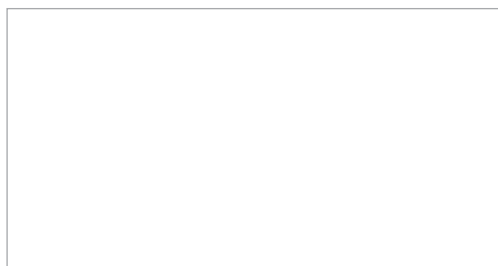
		UATYQ-AFC3Y1		20	25	30	45	50	55	65	75	90	100	115	
Cooling capacity	Nom.		kW	19.5	28.0	30.4	44.1	49.2	51.6	63.5	73.9	90.3	101.6	106.8	
	with 30% fresh air		kW	21.1	30.4	33.2	47.8	53.4	56.3	68.1	78.9	96.7	108.2	114.2	
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	ηs,c		%	135.0	143.5	127.5	119.5	134.1	129.0	130.4	124.6	118.2	137.9	127.0	
Space heating (Average climate)	Capacity	Pdesign	kW	17.9	27.0	31.3	46.1	51.9	56.3	63.8	76.6	93.3	104.5	114.2	
	ηs,h		%	115.4	129.0	119.5	115.4	125.2	124.8	121.0	118.2	116.0	125.3	124.3	
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	Heating	Nom.	kW	5.8	8.0	9.6	14.6	16.3	18.1	20.0	25.1	29.9	33.2	37.3	
EER	with 30% fresh air			3.25	3.08	2.82	2.82	2.70	2.53	2.82	2.58	2.79	2.70	2.51	
	with 30% fresh air			3.46	3.84	3.66	3.44	3.51	3.42	3.58	3.26	3.33	3.38	3.30	
Evaporator	Supply side	Fan	Air flow rate	m³/h	4,950	7,260	8,250	11,000	12,100	13,200	15,400	17,600	20,900	23,650	25,300
			Nom. external static pressure	Pa	300										
Return side	Fan	Air discharge direction		Frontal, Left			Frontal, Left, Right, Bottom			Left, Right, Bottom					
		Air flow rate	m³/min	N/A			11,000	12,100	13,200	15,400	17,600	20,900	23,650	25,300	
Fresh air	Standard	Ratio	Standard	In free cooling	%				yes			no			
									30			100			
Condensator	Air flow rate	Cooling	Refrigerant	Type / GWP	Charge	TCO2Eq / kg	R410-A / 2,087.5								
							15.7 / 7.5		27.1 / 13.0		35.5 / 17.0		31.3 / 15.0		41.8 / 20.0
Dimensions	Unit	Height x Width x Depth	1,600 x 1,790 x 1,730		2,150 x 1,790 x 1,730		1,800 x 3,530 x 2,245		1,800 x 5,650 x 2,240		2,180 x 5,650 x 2,240				
			mm		686		796		1,382		2,142		2,338		2,346
Weight	Unit	Colour	RAL 7035												
			Sound pressure level		Cooling		60		61		63		64		65
Sound power level	Cooling	77		78		79		81		83		85			
		Operation range		Cooling		Min. ~ Max.		°CDB		0 ~ 47		°CWB		-12.1 ~ -19.5	
Power supply	Voltage / Phase / Frequency	400/3+N/50 ±5%													
		Current		25		32		40		63		80		100	
Recommended fuses		A													

Options

	Image	Base series - UATYQ-ABAY1			2 damper series - UATYQ-AFC2Y1					3 damper series - UATYQ-AFC3Y1				
		20-55	65-75	90-115	20	25-30	45-55	65-75	90-115	20	25-30	45-55	65-75	90-115
UATYQWRC Remote controller (standard 1 delivered with the unit)		•	•	•	•	•	•	•	•	•	•	•	•	•
UATYQBACNET BMS interface: BACnet (IP); Modbus (TCP/IP)		•	•	•	•	•	•	•	•	•	•	•	•	•
UATYQAVM1 Anti-vibration mounts		2x	3x	4x	2x	2x	2x	4x	4x	2x	2x	3x	4x	4x
Rainproof hood & protection grill					UATYQRAPH1	UATYQRAPH2	UATYQRAPH3	UATYQRAPH4	UATYQRAPH5	UATYQRAPH1	UATYQRAPH2		UATYQRAPH4 x2 (1)	UATYQRAPH5 x2 (1)

(1) Requires 2 kits for both fresh air and exhaust air

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