

Air Conditioning
Technical Data
**UATYQ-
AFC3Y1**



- > UATYQ20AFC3Y1
- > UATYQ25AFC3Y1
- > UATYQ30AFC3Y1
- > UATYQ45AFC3Y1
- > UATYQ50AFC3Y1
- > UATYQ55AFC3Y1
- > UATYQ65AFC3Y1
- > UATYQ75AFC3Y1
- > UATYQ90AFC3Y1
- > UATYQ100AFC3Y1
- > UATYQ115AFC3Y1

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UATYQ-AFC3Y1

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1 Features

3 damper version with integrated fresh air solution and extraction

- Easy to install 'plug and play' concept; no additional piping is required since this is a packaged unit
- Integrated extraction damper ensures an optimal pressure balance inside the building
- Thermo dynamic heat recovery, recovers waste heat through the outdoor heat exchanger (available on sizes 20-55)
- Free cooling with up to 100% fresh air intake, saving on energy consumption and improving indoor air quality
- Demand controlled fresh air management possible, thanks to the CO2 sensor connection
- Highly efficient ERP compliant models, meeting the latest eco-design requirements
- Standard integrated high efficiency inverter controlled EC plug fans, providing up to 300Pa static pressure
- Up to 4 possible sides can be selected on site for both return and supply air connection (front, left, right, bottom)
- Latest pCO5 controller allows direct integration with Daikin BMS, or third party BMS via BACnet or Modbus
- Clogged filter alarm indicates when filter requires cleaning, improving air quality and efficiency
- Factory pre-charged refrigerant ensures a very quick installation and reliable & efficient system operation
- Minimized delivery lead time thanks to stock availability



Scroll
compressor

2 Specifications

2-1 Technical Specifications				UATYQ20AFC3 Y1	UATYQ25AFC3 Y1	UATYQ30AFC3 Y1	UATYQ45AFC3 Y1	UATYQ50AFC3 Y1	UATYQ55AFC3 Y1
Cooling capacity	Nom.		kW	19.5 (1)	28.0 (1)	30.4 (1)	44.1 (1)	49.2 (1)	51.6 (1)
Heating capacity	Nom.		kW	17.9 (2)	27.0 (2)	31.3 (2)	46.1 (2)	51.9 (2)	56.3 (2)
Power input	Cooling	Nom.	kW	6.6 (1)	10.0 (1)	12.0 (1)	17.0 (1)	19.7 (1)	22.5 (1)
	Heating	Nom.	kW	5.8 (2)	8.00 (2)	9.6 (2)	14.6 (2)	16.3 (2)	18.1 (2)
EER				2.94 (3) / 3.25	2.79 (3) / 3.08	2.54 (3) / 2.82	2.60 (3) / 2.82	2.50 (3) / 2.70	2.29 (3) / 2.51
COP				3.07 (3) / 3.46	3.38 (3) / 3.84	3.26 (3) / 3.66	3.15 (3) / 3.44	3.19 (3) / 3.51	3.11 (3) / 3.42
Dimensions	Unit	Height	mm	1,600	2,150		1,800		
		Width	mm	1,790		3,530			
		Depth	mm	1,730		2,245			
Weight	Unit		kg	686	796		1,382		
Evaporator	Control	Operation		Staged					
Condenser	Compressor	Quantity		2					
		Motor	Type	Scroll					
	Refrigerant	Type		R-410A					
		GWP		2,087.5					
		Charge	TCO ₂ eq	15.7	27.1		35.5		
			kg	7.5	13.0		17.0		
		Circuits	Quantity	1					
	Refrigerant oil	Charged volume	l	2	3	4	6		

2-2 Technical Specifications				UATYQ65AFC3Y1	UATYQ75AFC3Y1	UATYQ90AFC3Y1	UATYQ100AFC3Y1	UATYQ115AFC3Y1
Cooling capacity	Nom.		kW	63.5 (1)	73.9 (1)	90.3 (1)	101.6 (1)	106.8 (1)
Heating capacity	Nom.		kW	63.8 (2)	76.6 (2)	93.3 (2)	104.5 (2)	114.2 (2)
Power input	Cooling	Nom.	kW	23.6 (1)	29.7 (1)	33.8 (1)	39.0 (1)	44.3 (1)
	Heating	Nom.	kW	20.0 (2)	25.1 (2)	29.9 (2)	33.2 (2)	37.3 (2)
EER				2.69 (3) / 2.82	2.49 (3) / 2.58	2.67 (3) / 2.79	2.60 (3) / 2.70	2.41 (3) / 2.51
COP				3.20 (3) / 3.58	3.05 (3) / 3.26	3.12 (3) / 3.33	3.15 (3) / 3.38	3.06 (3) / 3.30
Dimensions	Unit	Height	mm	1,800		2,180		
		Width	mm	5,650				
		Depth	mm	2,240				
Weight	Unit		kg	2,142		2,338	2,346	2,398
Evaporator	Control	Operation		Staged				
Condenser	Compressor	Quantity		4				
		Motor	Type	Scroll				
	Refrigerant	Type		R-410A				
		GWP		2,087.5				
		Charge	TCO ₂ eq	31.3		41.8	43.8	48.0
			kg	15.0		20.0	21.0	23.0
		Circuits	Quantity		2			
	Refrigerant oil	Charged volume	l	3	4	5		6

2-3 Electrical Specifications				UATYQ20AFC3 Y1	UATYQ25AFC3 Y1	UATYQ30AFC3 Y1	UATYQ45AFC3 Y1	UATYQ50AFC3 Y1	UATYQ55AFC3 Y1
Power supply	Phase			3N~					
	Frequency		Hz	50					
	Voltage		V	400					
Current	Nominal running current (RLA)	Cooling	A	16.00	22.00	27	39	50	

2-4 Electrical Specifications				UATYQ65AFC3Y1	UATYQ75AFC3Y1	UATYQ90AFC3Y1	UATYQ100AFC3Y1	UATYQ115AFC3Y1
Power supply	Phase			3N~				
	Frequency		Hz	50				
	Voltage		V	400				
Current	Nominal running current (RLA)	Cooling	A	63	72	82	85.4	80.8

2 Specifications

Notes

(1) Conditions for calculation: Ambient air 27°C DB, 19°C WB; External air 35°C DB, 24°C WB. 100% recirculating air; calculated according to EN 14511/2018

(2) Conditions for calculation: Ambient air 20°C DB, 15°C WB; External air 7°C DB, 6°C WB. 100% recirculating air; calculated according to EN 14511/2018

(3) Calculated according to EN 14511/2018

Sound power level in free field calculated according to standard ISO 3744. Values refer only to the base unit version

Average Sound Pressure Level at 1 meter in free field on a reflecting surface

3 Capacity tables

3 - 1 Cooling/Heating Capacity Tables

UATYQ-AFC3Y1

1. PERFORMANCE CALCULATION EXAMPLES (TC, SHC, PI)

The example is referred to the units:

UATYQ50AFC3Y1 (with thermodynamic heat recovery)

Consider the case where performances have to be calculated according to the following conditions:

$$T_{outdoor} : 35^{\circ}\text{C}$$

$$T_{indoor} : 27^{\circ}\text{C}$$

x = Percentage of fresh air = (30% V_{supply}) for UATYQ50AFC3Y1 (as factory default)

$$V_{intake} = V_{supply} : 12100 \text{ mc/h}$$

$$V_{axial} : 19000 \text{ mc/h}$$

SOLUTION:

1st step: DETERMINATION OF AIR CONDITION ON SUPPLY COIL ($T_{in,sup.coil}$)

$$T_{in,sup.coil} = T_{indoor} * \left(1 - \frac{x}{100}\right) + T_{outdoor} * \frac{x}{100} = 27 * \left(1 - \frac{30}{100}\right) + 35 * \frac{30}{100} = 29,4^{\circ}\text{C}$$

$T_{in,sup.coil}$: 29,4°C is located between 28 and 30°C of air condition on supply coil
(thus, interpolation need to be applied).

2nd step: DETERMINATION OF AIR CONDITION ON SUPPLY COIL ($T_{in,ext.coil}$)

$$x_{exhaust} = \frac{V_{exhaust}}{V_{axial}} = \frac{(x * V_{intake})}{V_{axial}} = \frac{(30 * 12100)}{19000} = 19,1 \%$$

$$T_{in,ext.coil} = T_{indoor} * \frac{x_{exhaust}}{100} + T_{outdoor} * \left(1 - \frac{x_{exhaust}}{100}\right) = 27 * \frac{19,1}{100} + 35 * \left(1 - \frac{19,1}{100}\right) = 33,5^{\circ}\text{C}$$

$T_{in,ext.coil}$: 33,5 °C, is located between 30 and 35°C of air condition on external coil
(thus, interpolation need to be applied).

3 Capacity tables

3 - 1 Cooling/Heating Capacity Tables

UATYQ-AFC3Y1

3rd step: INPUT IN THE COOLING CAPACITY TABLE

UATYQ50AFC3Y1:

The desired conditions are:

$$T_{in,sup.coil} : 29,4^{\circ}\text{C}$$

$$T_{in,ext.coil} : 33,5^{\circ}\text{C}$$

Cooling Capacity and Power Input Table (EN 14511)																	
Air Flow	Air Condition on Supply Coil		Air conditions on External Coil														
	T DB	TWB	20			25			30			35			40		
[m3/h]	[°C]	[°C]	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
12100	24	17	53,8	39,9	14,88	52,0	39,1	16,54	50,2	38,3	18,21	48,4	37,5	19,88	46,5	36,7	21,54
	25	18	54,9	40,6	14,96	52,8	39,7	16,61	50,7	38,8	18,26	48,6	37,9	19,90	46,6	37,0	21,55
	26	18	55,9	41,3	15,05	53,6	40,4	16,68	51,3	39,4	18,30	48,9	38,4	19,93	46,6	37,4	21,56
	27	19	57,0	42,1	15,14	54,4	41,0	16,74	51,8	39,9	18,35	49,2	38,8	19,96	46,6	37,8	21,56
	28	20	58,6	41,9	15,28	55,9	40,8	16,94	53,1	39,7	18,59	50,4	38,6	20,24	47,7	37,5	21,90
	30	22	62,0	41,5	15,58	58,9	40,4	17,32	55,9	39,2	19,07	52,8	38,1	20,82	49,8	37,0	22,56

Interpolate in the following way among the 4 highlighted conditions to obtain the desired conditions:

- 1) interpolate between the *air conditions on the external coil* of 30 and 35 °C with 28° C of *air conditions on the supply coil*:

$$TC_1 = TC_{30^{\circ}\text{C}} - \frac{(TC_{30^{\circ}\text{C}} - TC_{35^{\circ}\text{C}})}{(30-35)} * (T_{in,ext.coil} - 35) = 53,1 - \frac{(53,1 - 50,4)}{(30-35)} * (33,5 - 35) = 52,3 \text{ kW}$$

- 2) interpolate between the *air conditions on the external coil* of 30 and 35 °C with 30° C of *air conditions on the supply coil*:

$$TC_2 = TC_{30^{\circ}\text{C}} - \frac{(TC_{30^{\circ}\text{C}} - TC_{35^{\circ}\text{C}})}{(30-35)} * (T_{in,ext.coil} - 35) = 55,9 - \frac{(55,9 - 52,8)}{(30-35)} * (33,5 - 35) = 54,97 \text{ kW}$$

- 3) make the final interpolation with the above results in order to obtain the final value at 29,4°C of *air conditions on the supply coil*:

$$TC = TC_1 - \frac{(TC_1 - TC_2)}{(28-30)} * (T_{in,ext.coil} - 30) = 52,3 - \frac{(52,3 - 54,97)}{(28-30)} * (29,4 - 30) = 53,1 \text{ kW}$$

The same interpolations should be done for the sensible cooling capacity and the power input. Moreover, the same method is to be used to calculate the **heating capacities and power input** at desired conditions.

!! For the units that don't have thermodynamic heat recovery on the external coil,

$$\text{the } T_{in,ext.coil} = T_{outdoor}$$

3 Capacity tables

3 - 1 Cooling/Heating Capacity Tables

UATYQ-AFC3Y1

2. REMARKS FOR THE USE OF COOLING / HEATING CAPACITY TABLES

Use as input for the tables, the air condition on supply coil and external coil, determined according to the following formulas. If air conditions on the supply coil and external coil are not present in the table, interpolation is required.

Determination of air temperature on supply coil (use as input in the table)

$$T_{in,sup.coil} = T_{indoor} * \left(1 - \frac{X}{100}\right) + T_{outdoor} * \frac{X}{100}$$

Where:

$T_{in,sup.coil}$ is the temperature that has to be used as input for the table on the *air temperature supply coil data set*

T_{indoor} is the temperature of the indoor ambient

$T_{outdoor}$ is the temperature of the outdoor ambient

X is the amount (in %) of the fresh air. As factory default this is set to 30%, therefore the above calculation is:

(e.g. with $T_{indoor} = 27^{\circ}\text{C}$ and $T_{outdoor} = 35^{\circ}\text{C}$)

$$T_{in,sup.coil} = T_{indoor} * 0.7 + T_{outdoor} * 0.3 = 27 * 0.7 + 35 * 0.3 = 29.4$$

Determination of air temperature on the external coil (use as input in the table)

For units UATYQ65AFC3Y1, UATYQ90AFC3Y1, UATYQ100AFC3Y, UATYQ115AFC3Y1, the thermodynamic heat recovery on the external coil is not present. For this reason, use:

$$T_{in,ext.coil} = T_{outdoor}$$

For units UATYQ20AFC3Y1, UATYQ25AFC3Y1, UATYQ30FC3Y, UATYQ45AFC3Y1, UATYQ50AFC3Y1, UATYQ50AFC3Y1, the thermodynamic heat recovery on the external coil is present. For this reason, use:

$$T_{in,ext.coil} = T_{indoor} * \frac{X_{exhaust}}{100} + T_{outdoor} * \left(1 - \frac{X_{exhaust}}{100}\right)$$

Where:

$T_{in,ext.coil}$ is the temperature that has to be used as input for the table on the *air temperature on outdoor coil data set*

T_{indoor} is the temperature of the indoor ambient

$T_{outdoor}$ is the temperature of the outdoor ambient

$X_{exhaust}$ is the ratio between the exhaust air flow, $V_{exhaust}$, and in total air flow on the external coil, V_{axial} :

$$X_{exhaust} = \frac{V_{exhaust}}{V_{axial}} = X * \frac{V_{intake}}{V_{axial}}$$

Where:

X is the amount (in %) of the fresh air. As factory default this is set to 30%

V_{intake} is the return air flow. As factory default, the return air flow is equal to the supply air flow.

(e.g. with $T_{indoor} = 27^{\circ}\text{C}$ and $T_{outdoor} = 35^{\circ}\text{C}$, $X = 30\%$, $V_{intake} = 4950 \text{ mc/h}$, $V_{axial} = 11500 \text{ mc/h}$)

$$\begin{aligned} T_{in,ext.coil} &= T_{indoor} * X_{exhaust} + T_{outdoor} * \left(1 - \frac{X_{exhaust}}{100}\right) = T_{indoor} * \frac{X * V_{intake}}{V_{axial}} + T_{outdoor} * \left(1 - \frac{X * V_{intake}}{V_{axial}}\right) \\ &= T_{indoor} * \frac{30 * 4950}{11500} + T_{outdoor} * \left(1 - \frac{30 * 4950}{11500}\right) = 27 * 0,129 + 35 * (1 - 0,129) = 33.96^{\circ}\text{C} \end{aligned}$$

3 Capacity tables

3 - 1 Cooling/Heating Capacity Tables

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UATYQ20AFC3Y1

Cooling Capacity and Power Input Table (EN 14511)																	
Air Flow	Air Condition on Supply Coil		Air conditions on External Coil														
	T DB	TWB	20			25			30			35			40		
[m3/h]	[°C]	[°C]	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
4950	24	17	21,1	16,1	4,90	20,1	15,6	5,46	19,2	15,2	6,02	18,3	14,8	6,58	17,4	14,3	7,14
	25	18	21,5	16,4	4,91	20,6	16,0	5,47	19,6	15,6	6,03	18,7	15,1	6,59	17,7	14,7	7,15
	26	18	22,0	16,7	4,91	21,0	16,3	5,47	20,0	15,9	6,03	19,1	15,5	6,59	18,1	15,1	7,15
	27	19	22,4	17,1	4,92	21,5	16,7	5,48	20,5	16,3	6,04	19,5	15,9	6,60	18,5	15,5	7,16
	28	20	23,1	17,0	4,93	22,1	16,6	5,49	21,1	16,2	6,06	20,1	15,8	6,62	19,1	15,4	7,18
	30	22	24,6	16,9	4,96	23,5	16,5	5,53	22,4	16,1	6,09	21,3	15,7	6,66	20,2	15,3	7,23

Heating Capacity and Power Input Table (EN 14511)													
Air Flow	Air conditions on External Coil		Air Condition on Supply Coil										
	T DB	TWB	16		18		20		22		24		
[m3/h]	[°C]	[°C]	PC	PI	PC	PI	PC	PI	PC	PI	PC	PI	
4950	-10	-10,1	10,9	4,9	10,9	5,1	10,9	5,3	10,8	5,6	10,8	5,8	
	-7	-8	12,1	5,0	12,0	5,2	11,9	5,4	11,8	5,6	11,8	5,9	
	-3	-4	13,5	5,1	13,4	5,3	13,3	5,5	13,3	5,8	13,2	6,0	
	0	-1	14,7	5,1	14,5	5,4	14,4	5,6	14,4	5,8	14,3	6,1	
	2	1	15,4	5,2	15,3	5,4	15,2	5,7	15,1	5,9	15,0	6,1	
	7	6	18,4	5,4	18,2	5,6	17,9	5,84	17,8	6,1	17,7	6,4	
	12	11	20,9	5,6	20,7	5,9	20,5	6,1	20,3	6,4	20,1	6,6	

Data calculated in accordance with EN 14511

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UATYQ25AFC3Y1

Cooling Capacity and Power Input Table (EN 14511)																	
Air Flow	Air Condition on Supply Coil		Air conditions on External Coil														
	T DB	TWB	20			25			30			35			40		
[m3/h]	[°C]	[°C]	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
7260	24	17	30,6	23,5	7,11	29,6	23,1	8,08	28,5	22,6	9,06	27,5	22,2	10,03	26,5	21,7	11,00
	25	18	31,7	24,2	7,18	30,4	23,6	8,13	29,0	23,1	9,08	27,7	22,5	10,03	26,3	21,9	10,98
	26	18	32,8	24,9	7,24	31,1	24,2	8,17	29,5	23,5	9,10	27,8	22,8	10,03	26,2	22,1	10,96
	27	19	33,9	25,6	7,31	31,9	24,8	8,22	30,0	23,9	9,12	28,0	23,1	10,03	26,0	22,3	10,94
	28	20	34,4	25,3	7,34	32,5	24,5	8,26	30,7	23,8	9,19	28,8	23,0	10,11	26,9	22,2	11,04
	30	22	35,4	24,7	7,39	33,7	24,0	8,35	32,1	23,4	9,31	30,4	22,8	10,27	28,7	22,2	11,23

Heating Capacity and Power Input Table (EN 14511)													
Air Flow	Air conditions on External Coil		Air Condition on Supply Coil										
	T DB	TWB	16		18		20		22		24		
[m3/h]	[°C]	[°C]	PC	PI	PC	PI	PC	PI	PC	PI	PC	PI	
7260	-10	-10,1	15,9	5,7	15,9	5,9	15,9	6,2	15,8	6,5	15,7	6,8	
	-7	-8	17,4	6,0	17,3	6,1	17,2	6,2	17,2	6,7	17,1	7,2	
	-3	-4	19,4	6,4	19,3	6,7	19,2	6,9	19,1	7,3	19,0	7,7	
	0	-1	20,9	6,8	20,8	7,1	20,6	7,4	20,5	7,7	20,4	8,1	
	2	1	21,9	7,0	21,7	7,3	21,6	7,7	21,5	8,0	21,3	8,4	
	7	6	27,8	7,4	27,4	7,7	27,0	8,00	27,0	8,4	26,9	8,8	
	12	11	31,7	7,7	31,4	8,1	31,1	8,5	30,8	8,8	30,5	9,2	

Data calculated in accordance with EN 14511

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3 Capacity tables

3 - 1 Cooling/Heating Capacity Tables

UATYQ30AFC3Y1

Cooling Capacity and Power Input Table (EN 14511)																	
Air Flow	Air Condition on Supply Coil		Air conditions on External Coil														
	T DB	TWB	20			25			30			35			40		
[m3/h]	[°C]	[°C]	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
8250	24	17	33,5	25,8	8,91	31,9	25,1	9,89	30,3	24,4	10,87	28,6	23,7	11,85	27,0	23,0	12,83
	25	18	34,2	26,4	8,96	32,5	25,7	9,94	30,9	25,0	10,91	29,2	24,2	11,89	27,5	23,5	12,87
	26	18	34,9	26,9	9,00	33,2	26,2	9,98	31,5	25,5	10,96	29,8	24,8	11,93	28,1	24,1	12,91
	27	19	35,6	27,4	9,05	33,8	26,7	10,02	32,1	26,0	11,00	30,4	25,3	11,97	28,7	24,6	12,94
	28	20	36,6	27,3	9,13	34,8	26,6	10,11	33,0	25,9	11,10	31,2	25,2	12,08	29,5	24,5	13,06
	30	22	38,6	27,0	9,29	36,7	26,3	10,29	34,8	25,6	11,29	33,0	24,9	12,29	31,1	24,2	13,29

Heating Capacity and Power Input Table (EN 14511)												
Air Flow	Air conditions on External Coil		Air Condition on Supply Coil									
	T DB	TWB	16		18		20		22		24	
[m3/h]	[°C]	[°C]	PC	PI	PC	PI	PC	PI	PC	PI	PC	PI
8250	-10	-10,1	19,0	7,8	18,8	8,1	18,6	8,4	18,4	8,5	18,3	8,7
	-7	-8	20,6	8,0	20,3	8,2	19,9	8,5	19,9	8,7	19,9	9,0
	-3	-4	22,9	8,2	22,6	8,5	22,3	8,8	22,2	9,1	22,1	9,4
	0	-1	24,5	8,4	24,3	8,7	24,0	9,0	23,9	9,3	23,7	9,7
	2	1	25,6	8,5	25,4	8,8	25,2	9,2	25,0	9,5	24,8	9,9
	7	6	32,1	8,9	31,7	9,3	31,3	9,59	31,2	10,0	31,0	10,4
	12	11	36,2	9,4	35,8	9,8	35,5	10,1	35,2	10,5	34,9	10,9

Data calculated in accordance with EN 14511

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UATYQ45AFC3Y1

Cooling Capacity and Power Input Table (EN 14511)																	
Air Flow	Air Condition on Supply Coil		Air conditions on External Coil														
	T DB	TWB	20			25			30			35			40		
[m3/h]	[°C]	[°C]	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
11000	24	17	48,9	36,2	12,69	46,4	35,1	14,09	43,9	34,0	15,49	41,5	32,9	16,89	39,0	31,9	18,29
	25	18	49,6	36,8	12,89	47,2	35,8	14,25	44,8	34,7	15,61	42,3	33,7	16,97	39,9	32,6	18,33
	26	18	50,3	37,4	13,09	48,0	36,4	14,41	45,6	35,4	15,73	43,2	34,4	17,05	40,9	33,4	18,37
	27	19	51,1	38,0	13,29	48,8	37,1	14,57	46,4	36,1	15,85	44,1	35,2	17,13	41,8	34,2	18,41
	28	20	52,9	38,0	13,26	50,4	37,0	14,59	47,9	36,0	15,92	45,5	35,0	17,25	43,0	34,0	18,58
	30	22	56,5	37,8	13,21	53,7	36,8	14,63	50,9	35,7	16,06	48,1	34,7	17,49	45,3	33,7	18,91

Heating Capacity and Power Input Table (EN 14511)												
Air Flow	Air conditions on External Coil		Air Condition on Supply Coil									
	T DB	TWB	16		18		20		22		24	
[m3/h]	[°C]	[°C]	PC	PI	PC	PI	PC	PI	PC	PI	PC	PI
11000	-10	-10,1	28,2	12,2	28,0	12,6	27,8	13,0	27,7	13,5	27,5	13,9
	-7	-8	30,6	12,5	30,1	12,8	29,6	13,0	29,8	13,6	29,9	14,3
	-3	-4	34,0	12,9	33,6	13,2	33,2	13,6	33,1	14,1	33,1	14,7
	0	-1	36,4	13,2	36,1	13,6	35,8	14,0	35,6	14,5	35,4	15,0
	2	1	38,1	13,4	37,8	13,8	37,6	14,3	37,3	14,8	37,0	15,2
	7	6	47,5	14,0	46,8	14,4	46,1	14,85	46,0	15,4	46,0	16,0
	12	11	53,3	14,7	52,8	15,2	52,4	15,7	51,9	16,2	51,5	16,7

Data calculated in accordance with EN 14511

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3 Capacity tables

3 - 1 Cooling/Heating Capacity Tables

3

UATYQ50AFC3Y1

Cooling Capacity and Power Input Table (EN 14511)																	
Air Flow	Air Condition on Supply Coil		Air conditions on External Coil														
	T DB	TWB	20			25			30			35			40		
[m3/h]	[°C]	[°C]	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
12100	24	17	53,8	39,9	14,88	52,0	39,1	16,54	50,2	38,3	18,21	48,4	37,5	19,88	46,5	36,7	21,54
	25	18	54,9	40,6	14,96	52,8	39,7	16,61	50,7	38,8	18,26	48,6	37,9	19,90	46,6	37,0	21,55
	26	18	55,9	41,3	15,05	53,6	40,4	16,68	51,3	39,4	18,30	48,9	38,4	19,93	46,6	37,4	21,56
	27	19	57,0	42,1	15,14	54,4	41,0	16,74	51,8	39,9	18,35	49,2	38,8	19,96	46,6	37,8	21,56
	28	20	58,6	41,9	15,28	55,9	40,8	16,94	53,1	39,7	18,59	50,4	38,6	20,24	47,7	37,5	21,90
	30	22	62,0	41,5	15,58	58,9	40,4	17,32	55,9	39,2	19,07	52,8	38,1	20,82	49,8	37,0	22,56

Heating Capacity and Power Input Table (EN 14511)												
Air Flow	Air conditions on External Coil		Air Condition on Supply Coil									
	T DB	TWB	16		18		20		22		24	
[m3/h]	[°C]	[°C]	PC	PI	PC	PI	PC	PI	PC	PI	PC	PI
12100	-10	-10,1	31,4	13,1	31,2	13,6	31,0	14,1	30,8	14,7	30,6	15,2
	-7	-8	34,1	13,5	33,5	13,9	32,9	14,4	32,9	15,0	32,8	15,5
	-3	-4	37,7	14,0	37,3	14,5	36,9	15,0	36,8	15,6	36,6	16,1
	0	-1	40,5	14,3	40,2	14,9	39,9	15,4	39,7	16,0	39,5	16,6
	2	1	42,3	14,5	42,1	15,1	41,8	15,7	41,6	16,3	41,4	16,9
	7	6	52,5	15,3	52,2	15,9	51,9	16,51	51,5	17,1	51,0	17,7
	12	11	58,6	16,1	58,1	16,7	57,6	17,4	57,1	18,0	56,6	18,6

Data calculated in accordance with EN 14511

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UATYQ55AFC3Y1

Cooling Capacity and Power Input Table (EN 14511)																	
Air Flow	Air Condition on Supply Coil		Air conditions on External Coil														
	T DB	TWB	20			25			30			35			40		
[m3/h]	[°C]	[°C]	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
13200	24	17	57,3	42,5	16,70	54,5	41,2	18,59	51,6	40,0	20,48	48,7	38,7	22,36	45,9	37,4	24,25
	25	18	58,5	43,3	16,81	55,5	42,0	18,71	52,6	40,8	20,60	49,7	39,5	22,50	46,8	38,2	24,39
	26	18	59,6	44,1	16,92	56,6	42,8	18,82	53,6	41,6	20,73	50,6	40,3	22,63	47,7	39,1	24,53
	27	19	60,7	44,9	17,02	57,6	43,6	18,94	54,6	42,4	20,85	51,6	41,2	22,76	48,6	39,9	24,68
	28	20	62,4	44,6	17,18	59,3	43,4	19,11	56,2	42,2	21,03	53,1	40,9	22,96	49,9	39,7	24,89
	30	22	65,9	44,2	17,48	62,6	43,0	19,44	59,3	41,7	21,40	56,0	40,5	23,36	52,6	39,3	25,32

Heating Capacity and Power Input Table (EN 14511)												
Air Flow	Air conditions on External Coil		Air Condition on Supply Coil									
	T DB	TWB	16		18		20		22		24	
[m3/h]	[°C]	[°C]	PC	PI	PC	PI	PC	PI	PC	PI	PC	PI
13200	-10	-10,1	34,4	14,6	34,2	15,2	34,0	15,8	33,6	16,4	33,3	17,0
	-7	-8	37,3	15,0	36,6	15,5	35,9	16,0	35,6	16,7	35,4	17,3
	-3	-4	41,3	15,5	40,8	16,1	40,2	16,7	39,9	17,3	39,6	18,0
	0	-1	44,3	15,9	43,9	16,6	43,4	17,2	43,1	17,9	42,8	18,5
	2	1	46,3	16,2	45,9	16,9	45,6	17,5	45,2	18,2	44,9	18,9
	7	6	57,6	17,1	56,9	17,8	56,3	18,39	56,0	19,2	55,8	20,0
	12	11	64,5	18,1	63,9	18,8	63,4	19,6	62,9	20,3	62,4	21,1

Data calculated in accordance with EN 14511

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3 Capacity tables

3 - 1 Cooling/Heating Capacity Tables

UATYQ65AFC3Y1

Cooling Capacity and Power Input Table (EN 14511)																	
Air Flow	Air Condition on Supply Coil		Air conditions on External Coil														
	T DB	TWB	20			25			30			35			40		
[m3/h]	[°C]	[°C]	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
15400	24	17	69,2	52,0	17,99	66,6	50,8	19,58	63,9	49,6	21,16	61,3	48,3	22,75	58,6	47,1	24,34
	25	18	70,8	53,0	18,07	67,9	51,7	19,76	64,9	50,4	21,44	62,0	49,1	23,12	59,1	47,8	24,81
	26	18	72,3	54,0	18,15	69,1	52,7	19,93	65,9	51,3	21,72	62,8	49,9	23,50	59,6	48,6	25,28
	27	19	73,9	55,0	18,23	70,4	53,6	20,11	67,0	52,2	21,99	63,5	50,7	23,87	60,1	49,3	25,75
	28	20	75,8	54,7	18,36	72,3	53,3	20,25	68,8	52,0	22,13	65,4	50,6	24,02	61,9	49,2	25,90
	30	22	79,6	54,3	18,63	76,1	52,9	20,52	72,6	51,5	22,42	69,1	50,2	24,31	65,5	48,8	26,20

Heating Capacity and Power Input Table (EN 14511)												
Air Flow	Air conditions on External Coil		Air Condition on Supply Coil									
	T DB	TWB	16		18		20		22		24	
[m3/h]	[°C]	[°C]	PC	PI	PC	PI	PC	PI	PC	PI	PC	PI
15400	-10	-10,1	38,2	16,5	38,0	17,1	37,8	17,7	37,7	18,3	37,6	19,0
	-7	-8	41,7	16,8	41,1	17,4	40,5	18,0	40,4	18,7	40,2	19,3
	-3	-4	46,3	17,3	45,8	18,0	45,3	18,6	45,0	19,3	44,7	20,0
	0	-1	49,7	17,7	49,3	18,4	48,8	19,1	48,5	19,8	48,1	20,5
	2	1	52,0	18,0	51,6	18,7	51,2	19,4	50,8	20,1	50,4	20,8
	7	6	65,2	18,9	64,5	19,6	63,8	20,29	63,4	21,1	63,0	21,9
	12	11	73,4	19,9	72,7	20,7	72,1	21,4	71,5	22,2	70,9	23,0

Data calculated in accordance with EN 14511

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UATYQ75AFC3Y1

Cooling Capacity and Power Input Table (EN 14511)																	
Air Flow	Air Condition on Supply Coil		Air conditions on External Coil														
	T DB	TWB	20			25			30			35			40		
[m3/h]	[°C]	[°C]	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
17600	24	17	80,7	59,3	22,83	77,0	57,6	25,10	73,3	56,0	27,37	69,6	54,3	29,63	65,9	52,6	31,90
	25	18	82,3	60,3	22,94	78,6	58,7	25,22	74,8	57,0	27,50	71,1	55,4	29,78	67,3	53,8	32,06
	26	18	84,0	61,4	23,05	80,1	59,8	25,34	76,3	58,1	27,63	72,5	56,5	29,93	68,7	54,9	32,22
	27	19	85,6	62,4	23,15	81,7	60,8	25,46	77,8	59,2	27,77	73,9	57,6	30,07	70,0	56,0	32,38
	28	20	88,0	62,2	23,31	84,0	60,6	25,64	80,0	59,0	27,96	76,0	57,4	30,29	72,0	55,8	32,61
	30	22	93,0	61,7	23,63	88,7	60,1	25,99	84,4	58,5	28,35	80,2	56,9	30,71	75,9	55,3	33,07

Heating Capacity and Power Input Table (EN 14511)												
Air Flow	Air conditions on External Coil		Air Condition on Supply Coil									
	T DB	TWB	16		18		20		22		24	
[m3/h]	[°C]	[°C]	PC	PI	PC	PI	PC	PI	PC	PI	PC	PI
17600	-10	-10,1	46,6	20,5	46,4	21,2	46,3	21,9	46,1	22,8	45,9	23,6
	-7	-8	50,7	21,0	49,8	21,7	49,0	22,3	48,7	23,1	48,4	23,9
	-3	-4	56,1	21,7	55,4	22,5	54,8	23,2	54,4	24,0	54,1	24,8
	0	-1	60,1	22,3	59,6	23,1	59,1	23,9	58,7	24,7	58,3	25,5
	2	1	62,8	22,7	62,4	23,5	62,0	24,3	61,6	25,1	61,2	26,0
	7	6	78,4	23,9	77,6	24,7	76,7	25,49	76,4	26,5	76,0	27,4
	12	11	88,1	25,2	87,3	26,1	86,5	27,0	85,8	27,9	85,0	28,9

Data calculated in accordance with EN 14511

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3 Capacity tables

3 - 1 Cooling/Heating Capacity Tables

3

UATYQ90AFC3Y1

Cooling Capacity and Power Input Table (EN 14511)																	
Air Flow	Air Condition on Supply Coil		Air conditions on External Coil														
	T DB	TWB	20			25			30			35			40		
[m ³ /h]	[°C]	[°C]	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
20900	24	17	97,9	71,8	26,41	93,5	69,8	28,87	89,2	67,8	31,32	84,9	65,8	33,77	80,6	63,9	36,23
	25	18	100,0	73,2	26,55	95,5	71,2	29,00	91,1	69,2	31,45	86,7	67,3	33,91	82,3	65,3	36,36
	26	18	102,0	74,6	26,68	97,5	72,6	29,13	93,0	70,7	31,59	88,5	68,7	34,04	84,0	66,7	36,49
	27	19	104,1	76,0	26,81	99,5	74,1	29,27	94,9	72,1	31,72	90,3	70,1	34,17	85,6	68,1	36,63
	28	20	106,9	75,5	27,13	102,2	73,6	29,56	97,6	71,7	31,98	93,0	69,9	34,40	88,4	68,0	36,82
	30	22	112,3	74,5	27,77	107,7	72,8	30,13	103,0	71,1	32,49	98,4	69,4	34,85	93,8	67,6	37,21

Heating Capacity and Power Input Table (EN 14511)												
Air Flow	Air conditions on External Coil		Air Condition on Supply Coil									
	T DB	TWB	16		18		20		22		24	
[m ³ /h]	[°C]	[°C]	PC	PI	PC	PI	PC	PI	PC	PI	PC	PI
20900	-10	-10,1	55,9	23,8	55,5	24,4	55,0	25,1	54,8	26,1	54,6	27,0
	-7	-8	60,9	24,5	59,9	25,5	59,0	26,6	58,9	27,1	58,8	27,6
	-3	-4	67,5	25,5	66,8	26,5	66,0	27,5	65,7	28,2	65,4	28,9
	0	-1	72,5	26,3	71,9	27,3	71,2	28,2	70,8	29,1	70,3	29,9
	2	1	75,9	26,8	75,3	27,8	74,7	28,7	74,2	29,7	73,6	30,6
	7	6	95,0	28,2	94,0	29,1	93,0	29,96	92,3	31,1	91,6	32,1
	12	11	107,0	29,6	105,9	30,6	104,8	31,6	103,8	32,7	102,7	33,7

Data calculated in accordance with EN 14511

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UATYQ100AFC3Y1

Cooling Capacity and Power Input Table (EN 14511)																	
Air Flow	Air Condition on Supply Coil		Air conditions on External Coil														
	T DB	TWB	20			25			30			35			40		
[m ³ /h]	[°C]	[°C]	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
23650	24	17	110,3	81,0	29,76	105,4	78,8	32,81	100,5	76,6	35,87	95,7	74,4	38,92	90,8	72,2	41,97
	25	18	112,4	82,5	29,93	107,5	80,3	32,99	102,5	78,1	36,05	97,6	75,9	39,11	92,7	73,7	42,16
	26	18	114,5	84,0	30,11	109,5	81,8	33,17	104,6	79,6	36,23	99,6	77,5	39,29	94,7	75,3	42,36
	27	19	116,5	85,5	30,28	111,6	83,3	33,35	106,6	81,2	36,41	101,6	79,0	39,48	96,6	76,9	42,55
	28	20	120,0	85,1	30,53	115,1	83,0	33,46	110,1	80,9	36,39	105,2	78,9	39,32	100,3	76,8	42,25
	30	22	126,9	84,2	31,04	122,1	82,3	33,69	117,3	80,5	36,35	112,5	78,6	39,00	107,7	76,8	41,65

Heating Capacity and Power Input Table (EN 14511)												
Air Flow	Air conditions on External Coil		Air Condition on Supply Coil									
	T DB	TWB	16		18		20		22		24	
[m ³ /h]	[°C]	[°C]	PC	PI	PC	PI	PC	PI	PC	PI	PC	PI
23650	-10	-10,1	63,7	26,1	63,3	27,6	62,9	29,0	62,5	30,1	62,1	31,2
	-7	-8	69,1	27,0	67,7	28,5	66,3	30,0	66,2	30,9	66,0	31,8
	-3	-4	76,3	28,3	75,3	29,6	74,3	31,0	74,0	32,0	73,7	33,0
	0	-1	81,7	29,2	81,0	30,4	80,3	31,7	79,8	32,8	79,4	33,9
	2	1	85,4	29,8	84,8	31,0	84,3	32,1	83,8	33,3	83,2	34,4
	7	6	106,7	31,5	105,6	32,6	104,5	33,64	104,1	35,0	103,6	36,4
	12	11	119,8	33,2	118,9	34,4	117,9	35,7	117,0	37,0	116,1	38,3

Data calculated in accordance with EN 14511

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3 Capacity tables

3 - 1 Cooling/Heating Capacity Tables

UATYQ115AFC3Y1

Cooling Capacity and Power Input Table (EN 14511)																	
Air Flow	Air Condition on Supply Coil		Air conditions on External Coil														
	T DB	TWB	20			25			30			35			40		
[m ³ /h]	[°C]	[°C]	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
25300	24	17	117,7	85,7	33,25	112,0	83,1	36,87	106,4	80,5	40,48	100,7	77,9	44,09	95,0	75,4	47,71
	25	18	120,1	87,3	33,44	114,3	84,7	37,07	108,5	82,1	40,70	102,7	79,5	44,33	97,0	77,0	47,97
	26	18	122,4	88,8	33,63	116,5	86,2	37,28	110,6	83,7	40,93	104,8	81,1	44,57	98,9	78,6	48,22
	27	19	124,7	90,3	33,81	118,8	87,8	37,48	112,8	85,3	41,15	106,8	82,8	44,81	100,8	80,2	48,48
	28	20	128,3	89,9	34,11	122,3	87,4	37,81	116,2	85,0	41,50	110,2	82,5	45,20	104,2	80,0	48,90
	30	22	135,5	89,0	34,69	129,3	86,7	38,45	123,1	84,4	42,21	117,0	82,0	45,97	110,8	79,7	49,73

Heating Capacity and Power Input Table (EN 14511)													
Air Flow	Air conditions on External Coil		Air Condition on Supply Coil										
	T DB	TWB	16		18		20		22		24		
[m ³ /h]	[°C]	[°C]	PC	PI	PC	PI	PC	PI	PC	PI	PC	PI	
25300	-10	-10,1	69,4	30,0	68,8	31,2	68,1	32,3	67,5	33,5	66,8	34,7	
	-7	-8	75,5	30,9	74,0	31,9	72,6	33,0	72,1	34,2	71,6	35,5	
	-3	-4	83,6	32,0	82,4	33,1	81,3	34,3	80,7	35,6	80,1	36,9	
	0	-1	89,7	32,8	88,8	34,1	87,9	35,4	87,2	36,7	86,5	38,0	
	2	1	93,7	33,4	93,0	34,7	92,2	36,0	91,5	37,4	90,8	38,7	
	7	6	117,0	35,3	115,6	36,6	114,2	37,80	113,5	39,4	112,9	40,9	
	12	11	131,3	37,3	130,1	38,7	128,8	40,2	127,5	41,7	126,3	43,2	

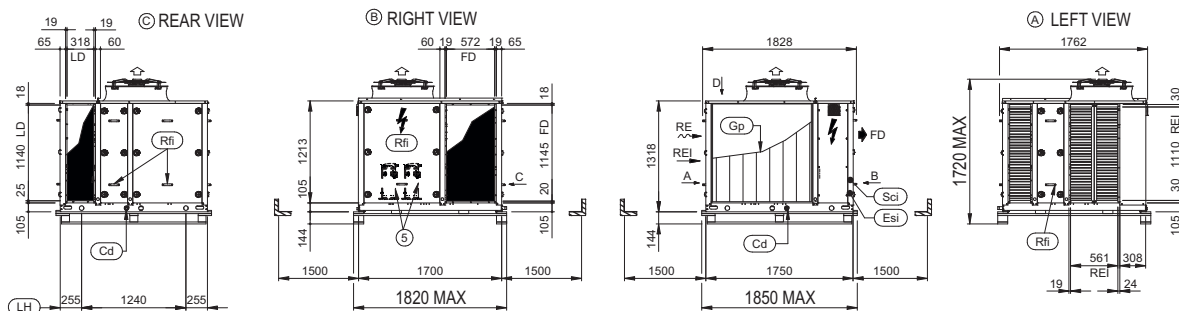
Data calculated in accordance with EN 14511

4 Dimensional drawings

4 - 1 Dimensional Drawings

4

UATYQ20AFC3Y1



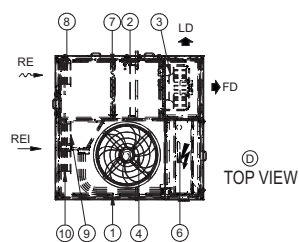
DENOMINATION

- | | | |
|---------------------|------------------------|--------------------------|
| 1) Condensing coil | 5) Compressor | 9) Mixing damper |
| 2) Evaporating coil | 6) Electrical panel | 10) Expulsion air damper |
| 3) Discharge fan | 7) EU4 air filter | |
| 4) Condensing fan | 8) External air damper | |

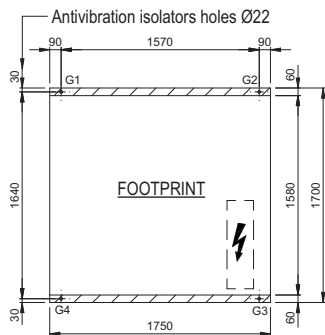
Discharge air direction
FD= Frontal discharge
LD= Left discharge

External air direction
RE=Rear external air

Intake air direction
REI=Rear intake



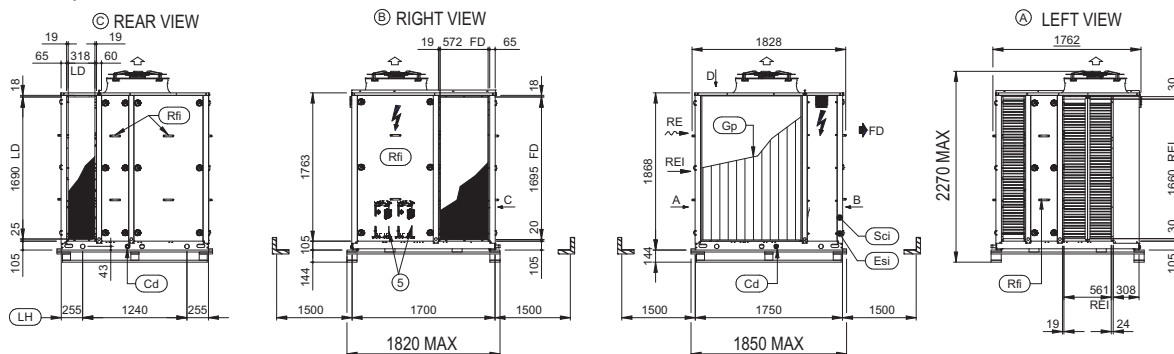
Gp	GRID PROTECTIONS
Cd	CONDENSATE DRAIN
Rfi	REMOVE FOR INSPECTION
Esi	ELECTRICAL SUPPLY INLET
Sci	SIGNAL CABLES INLET
Lh	LIFTING HOLES Ø55



[Kg]					ANTIVIBRATION ISOLATOR CODE
OPERATING WEIGHT	G1	G2	G3	G4	
686	128	212	237	109	UATYQAVM1

DDIM000233A

UATYQ25-30AFC3Y1



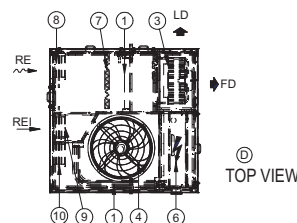
DENOMINATION

- | | | |
|---------------------|------------------------|--------------------------|
| 1) Condensing coil | 5) Compressor | 9) Mixing damper |
| 2) Evaporating coil | 6) Electrical panel | 10) Expulsion air damper |
| 3) Discharge fan | 7) EU4 air filter | |
| 4) Condensing fan | 8) External air damper | |

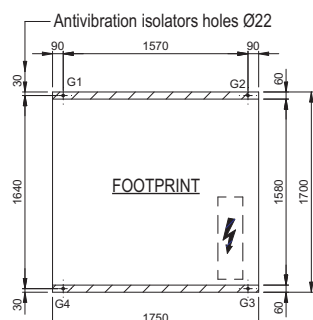
Discharge air direction
FD= Frontal discharge
LD= Left discharge

Intake air direction
REI=Rear intake

External air direction
RE=Rear external air



Gp	GRID PROTECTIONS
Cd	CONDENSATE DRAIN
Rfi	REMOVE FOR INSPECTION
Esi	ELECTRICAL SUPPLY INLET
Sci	SIGNAL CABLES INLET
Lh	LIFTING HOLES Ø55



[Kg]					ANTIVIBRATION ISOLATOR CODE
OPERATING WEIGHT	G1	G2	G3	G4	
796	147	252	271	126	UATYQAVM1

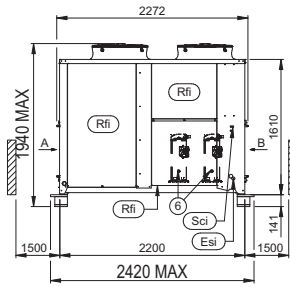
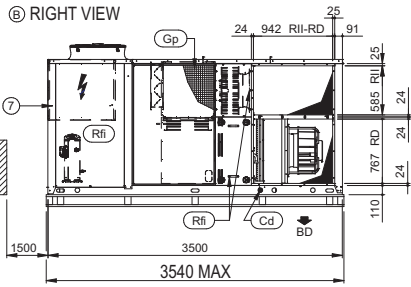
DDIM000245A

4 Dimensional drawings

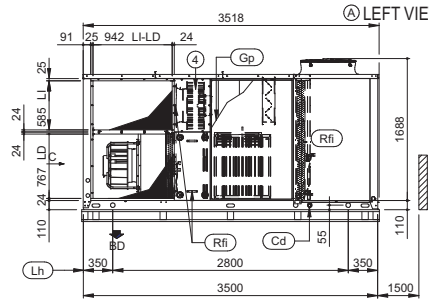
4 - 1 Dimensional Drawings

UATYQ45AFC3Y1

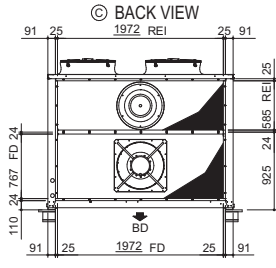
Ⓑ RIGHT VIEW



Ⓐ LEFT VIEW



Ⓒ BACK VIEW



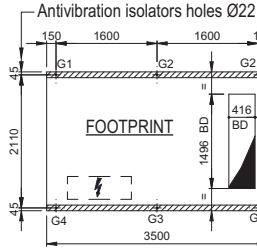
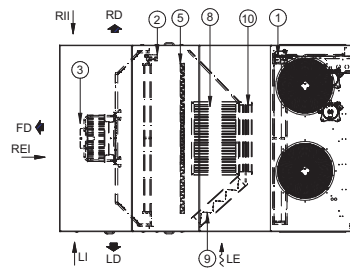
Discharge air direction
FD= Frontal discharge
LD= Left discharge
RD=Right discharge
BD=Bottom discharge

Intake air direction
REI=Rear intake
Rli=Right intake
Li=Left intake

External air direction
LE=Left external air

DENOMINATION

- 1) Condensing coil
- 2) Evaporating coil
- 3) Discharge fan
- 4) Intake fan
- 5) EU4 filter
- 6) Compressor
- 7) Electrical panel
- 8) Mixing air damper
- 9) External air damper
- 10) Expulsion air damper



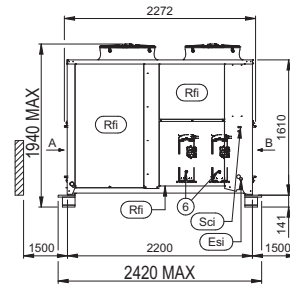
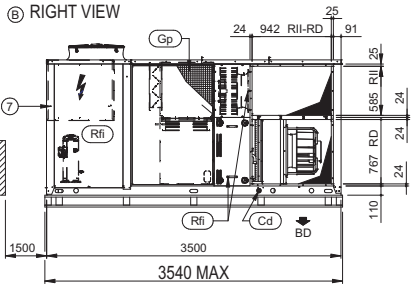
Gp	GRID PROTECTIONS	Esi	ELECTRICAL SUPPLY INLET
Cd	CONDENSATE DRAIN	Sci	SIGNAL CABLES INLET
Rfi	REMOVE FOR INSPECTION	Lh	LIFTING HOLES Ø55

[Kg]					ANTIVIBRATION ISOLATOR CODE
OPERATING WEIGHT	G1	G2	G3	G4	
1382	250	194	226	292	

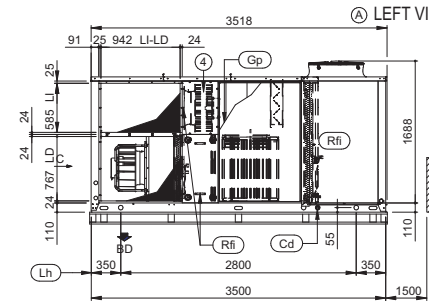
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UATYQ50-55AFC3Y1

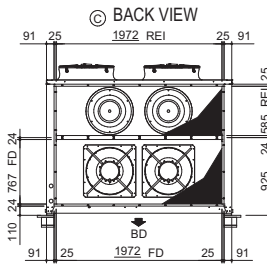
Ⓑ RIGHT VIEW



Ⓐ LEFT VIEW



Ⓒ BACK VIEW



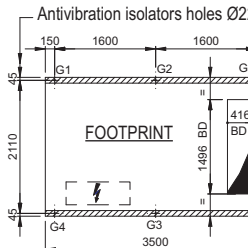
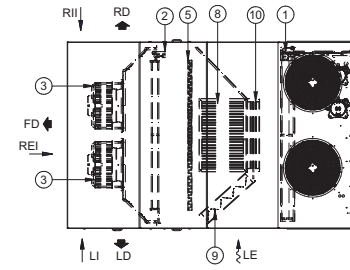
DENOMINATION

- 1) Condensing coil
- 2) Evaporating coil
- 3) Discharge fan
- 4) Intake fan
- 5) EU4 filter
- 6) Compressor
- 7) Electrical panel
- 8) Mixing air damper
- 9) External air damper
- 10) Expulsion air damper

Discharge air direction
FD= Frontal discharge
LD= Left discharge
RD=Right discharge
BD=Bottom discharge

Intake air direction
REI=Rear intake
Rli=Right intake
Li=Left intake

External air direction
LE=Left external air



Gp	GRID PROTECTIONS	Esi	ELECTRICAL SUPPLY INLET
Cd	CONDENSATE DRAIN	Sci	SIGNAL CABLES INLET
Rfi	REMOVE FOR INSPECTION	Lh	LIFTING HOLES Ø55

[Kg]					ANTIVIBRATION ISOLATOR CODE
OPERATING WEIGHT	G1	G2	G3	G4	
UATYQ50AFC3Y1	1535	309	207	243	
UATYQ55AFC3Y1	1561	316	209	246	UATYQAVM1

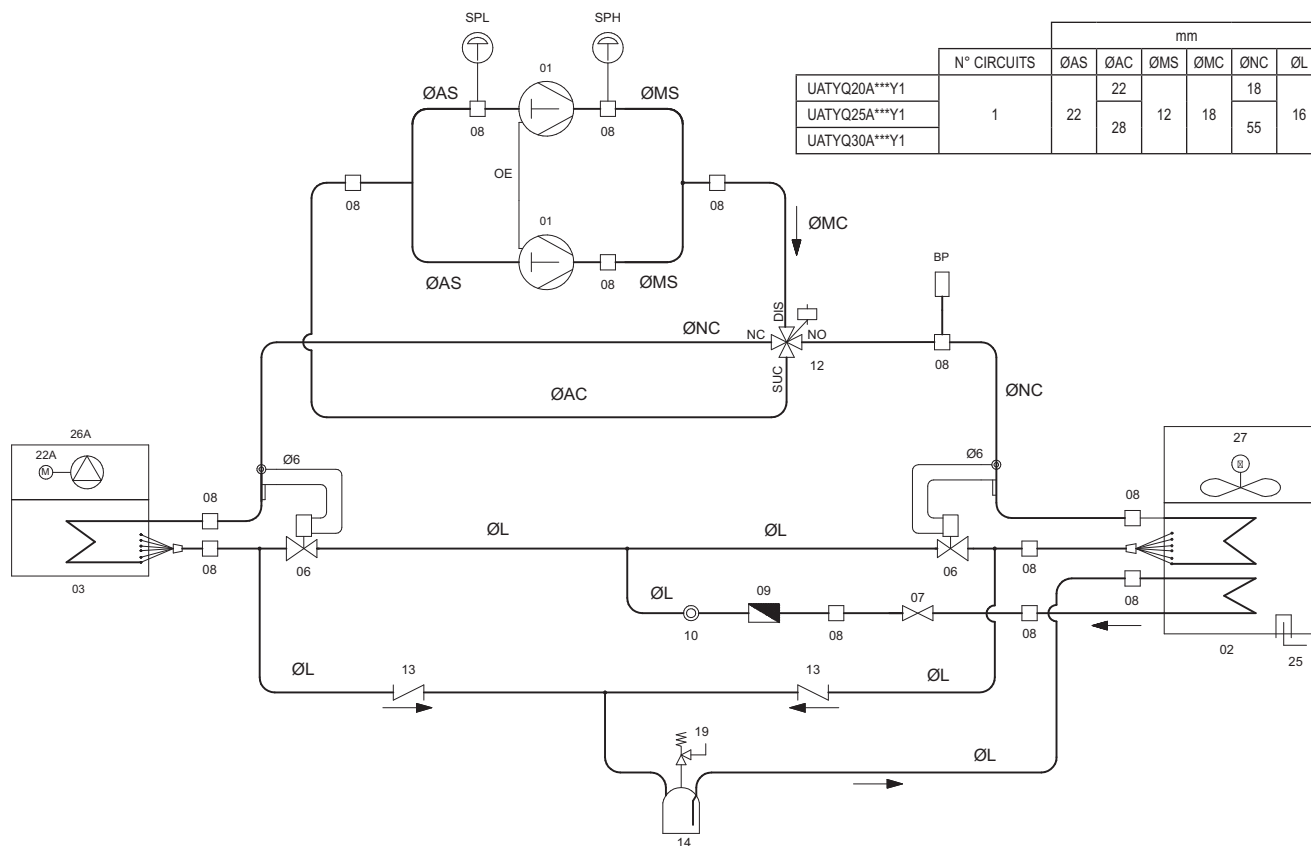
DDIM000294A

5 Piping diagrams

5 - 1 Piping Diagrams

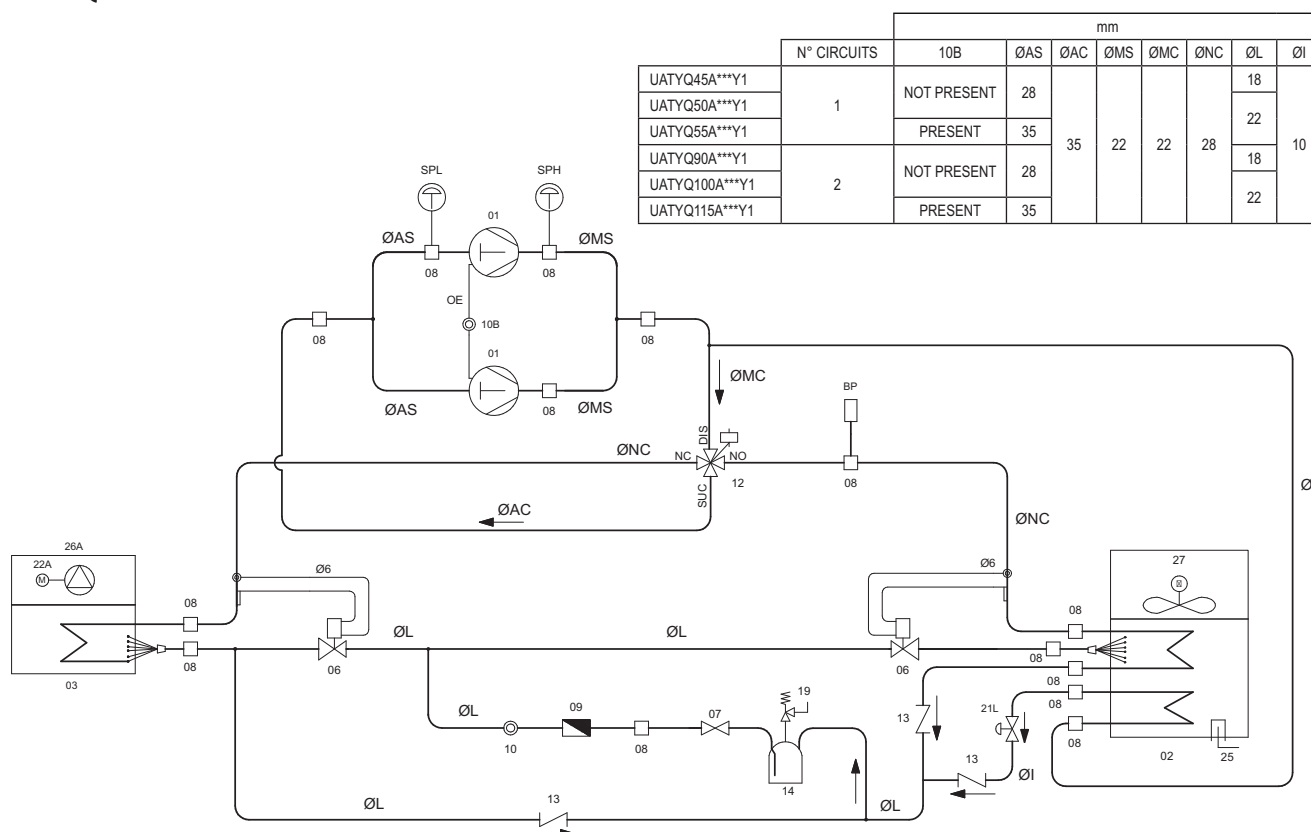
5

UATYQ20-25-30ABAY1 / UATYQ20-25-30AFC2Y1 / UATYQ20-25-30AFC3Y1



DFRI000056C

UATYQ45-50-55-90-100-115ABAY1 / UATYQ45-50-55-90-100-115AFC2Y1 / UATYQ45-50-55-90-100-115AFC3Y1



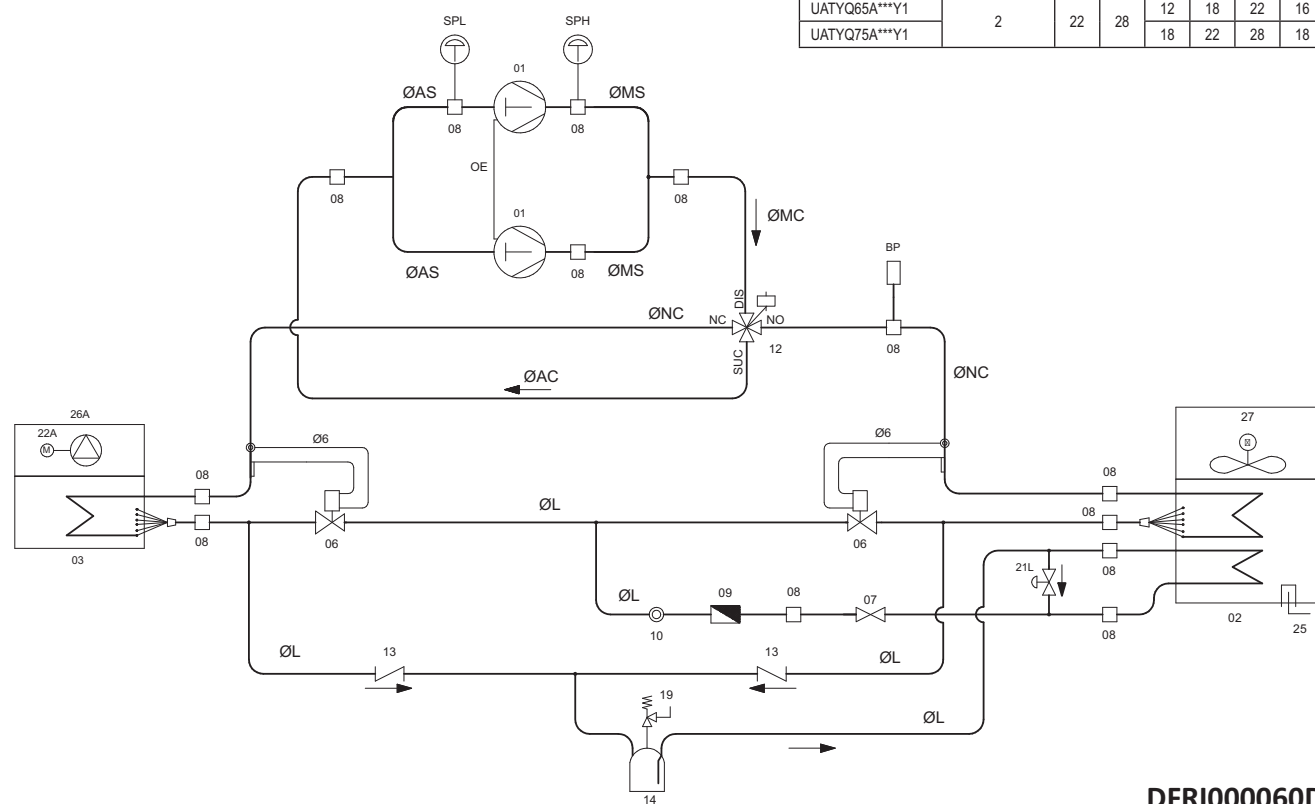
DFRI000056C

5 Piping diagrams

5 - 1 Piping Diagrams

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

		mm					
	N° CIRCUITS	ØAS	ØAC	ØMS	ØMC	ØNC	ØL
UATYQ65A***Y1	2	22	28	12	18	22	16
UATYQ75A***Y1				18	22	28	18



DFRI000060D

6 Wiring diagrams

6 - 1 Wiring Diagrams - Single Phase

UATYQ-ABAY1 / UATYQ-AFC2Y1 / UATYQ-AFC3Y1

All wiring diagrams can be downloaded from the Daikin Europe Portal (my.daikin.eu) or your local country portal.

7 Sound data

7 - 1 Sound Level Data

UATYQ20,25,30ABAY1 / UATYQ20,25,30AFC2Y1 / UATYQ20,25,30AFC3Y1

MODEL	Octave bands [dB]																Total [dB(A)]	
	63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz		8000 Hz			
	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp
UATYQ20A*	71	54	74	57	76	59	72	55	72	55	71	54	65	48	59	42	77	60
UATYQ25A*	72	54	75	57	77	59	73	55	73	55	72	54	66	48	60	42	78	60
UATYQ30A*	72	54	75	57	77	59	73	55	73	55	72	54	66	48	60	42	78	60

Lw: sound power levels on free field calculated based upon ISO 3744. Values refer to basic unit only.

Lp: average sound pressure level at 1 meter on free field on a reflecting surface.

THEORETICAL NOISE ATTENUATION VALUES BASED ON DISTANCE IN FREE FIELD

Distance	(m)	1	2	3	4	5	6	7	8	9	10
Attenuation	(dB)	0	6	9,5	12	14	15,5	17	18	19	20

UATYQ45-50-55ABAY1 / UATYQ45-50-55AFC2Y1 / UATYQ45-50-55AFC3Y1

MODEL	Octave bands [dB]																Total [dB(A)]	
	63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz		8000 Hz			
	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp
UATYQ45A*	89	71	86	68	83	65	75	57	72	54	65	47	61	43	52	34	79	61
UATYQ50A*	91	73	88	70	85	67	77	59	75	57	67	49	62	44	53	35	81	63
UATYQ55A*	91	73	88	70	85	67	77	59	75	57	67	49	62	44	53	35	81	63

Lw: sound power levels on free field calculated based upon ISO 3744. Values refer to basic unit only.

Lp: average sound pressure level at 1 meter on free field on a reflecting surface.

THEORETICAL NOISE ATTENUATION VALUES BASED ON DISTANCE IN FREE FIELD

Distance	(m)	1	2	3	4	5	6	7	8	9	10
Attenuation	(dB)	0	6	9,5	12	14	15,5	17	18	19	20

7 Sound data

7 - 1 Sound Level Data

UATYQ65,75,90,100,115ABAY1 / UATYQ65,75,90,100,115AFC2Y1 / UATYQ65,75,90,100,115AFC3Y1

MODEL	Octave band [dB]																Total [dB(A)]	
	63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz		8000 Hz			
	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp
65	94	75	90	71	77	58	80	61	76	57	69	50	65	46	53	34	83	64
75	94	75	90	71	77	58	80	61	76	57	69	50	65	46	53	34	83	64
90	93	73	89	69	89	69	81	61	77	57	72	52	79	59	63	43	85	65
100	93	73	89	69	89	69	81	61	77	57	72	52	79	59	63	43	85	65
115	93	73	89	69	89	69	81	61	77	57	72	52	79	59	63	43	85	65

Lw: sound power levels on free field calculated based on ISO 3744. Values refer to basic unit only.

Lp: average sound pressure level at 1 meter on free field on a reflecting surface.

THEORETICAL NOISE ATTENUATION VALUES BASED ON DISTANCE IN FREE FIELD

Distance	(m)	1	2	3	4	5	6	7	8	9	10
Attenuation	(dB)	0	6	9,5	12	14	15,5	17	18	19	20

8 Fan characteristics

8 - 1 Fan Characteristics

UATYQ-ABAY1 / AFC2Y1 / AFC3Y1

	UATYQ 20			UATYQ 25			UATYQ 30			UATYQ 45			UATYQ 50			UATYQ 55			UATYQ 65			UATYQ 75			UATYQ 90			UATYQ 100			UATYQ 115		
	MIN	NOM	MAX*	MIN	NOM	MAX*	MIN	NOM	MAX*	MIN	NOM	MAX*	MIN	NOM	MAX*	MIN	NOM	MAX*	MIN	NOM	MAX*	MIN	NOM	MAX*	MIN	NOM	MAX*	MIN	NOM	MAX*	MIN	NOM	MAX*
DECLARED AIR FLOW (m³/h)	3960	4950	5445	5808	7260	7986	6600	8250	9075	8800	11000	12100	9680	12100	13310	10560	13200	14520	12320	15400	16940	14080	17600	19360	16720	20900	22990	18920	23650	26015	20240	25300	27830

SUPPLY FAN (for version UATYQ***ABAY1 / UATYQ***AFC2Y1 / UATYQ***AFC3Y1)

Available external static pressure																																		
50	Pa	3960	4950	5445	5808	7260	7986	6600	8250	9075	8800	11000	12001	9680	12100	13310	10560	13200	14520	12320	15400	16940	14080	17600	19360	16720	20900	22990	18920	23650	26015	20240	25300	27830
100	Pa	3960	4950	5445	5808	7260	7986	6600	8250	9075	8800	11000	11826	9680	12100	13310	10560	13200	14520	12320	15400	16940	14080	17600	19360	16720	20900	22990	18920	23650	26015	20240	25300	27830
150	Pa	3960	4950	5445	5808	7260	7986	6600	8250	9075	8800	11000	11594	9680	12100	13310	10560	13200	14520	12320	15400	16940	14080	17600	19360	16720	20900	22990	18920	23650	26015	20240	25300	27830
200	Pa	3960	4950	5445	5808	7260	7986	6600	8250	9075	8800	11000	11300	9680	12100	13310	10560	13200	14520	12320	15400	16940	14080	17600	19360	16720	20900	22839	18920	23650	26015	20240	25300	27830
250	Pa	3960	4950	5107	5808	7260	7986	6600	8250	9075	8800	11000	11000	9680	12100	13310	10560	13200	14520	12320	15400	16940	14080	17600	19258	16720	20900	22187	18920	23650	26015	20240	25300	26721
300	Pa	3960	4950	4950	5808	7260	7986	6600	8250	9075	8800	11000	11000	9680	12100	13310	10560	13200	14520	12320	15400	16940	14080	17600	18498	16720	20900	21465	18920	23650	25775	20240	25300	25300

RETURN FAN (only for version UATYQ***AFC3Y1)

Available external static pressure																																				
50	Pa	/	/	/	/	/	/	/	/	/	/	/	8800	11000	11706	9680	12100	13310	10560	13200	14520	12320	15400	16940	14080	17600	19360	16720	20900	22990	18920	23650	24880	20240	25300	27830
100	Pa	/	/	/	/	/	/	/	/	/	/	/	8800	11000	11425	9680	12100	13310	10560	13200	14520	12320	15400	16940	14080	17600	19360	16720	20900	22990	18920	23650	24422	20240	25300	27830
150	Pa	/	/	/	/	/	/	/	/	/	/	/	8800	11000	11162	9680	12100	13310	10560	13200	14520	12320	15400	16940	14080	17600	19360	16720	20900	22990	18920	23650	24117	20240	25300	27830
200	Pa	/	/	/	/	/	/	/	/	/	/	/	8800	11000	11000	9680	12100	13310	10560	13200	14520	12320	15400	16940	14080	17600	19360	16720	20900	22990	18920	23650	23800	20240	25300	27830
250	Pa	/	/	/	/	/	/	/	/	/	/	/	8800	11000	11000	9680	12100	13310	10560	13200	14520	12320	15400	16940	14080	17600	19360	16720	20900	22990	18920	23650	23650	20240	25300	27830
300	Pa	/	/	/	/	/	/	/	/	/	/	/	8800	11000	11000	9680	12100	13310	10560	13200	14520	12320	15400	16940	14080	17600	19360	16720	20900	22842	18920	23650	23650	20240	25300	27830

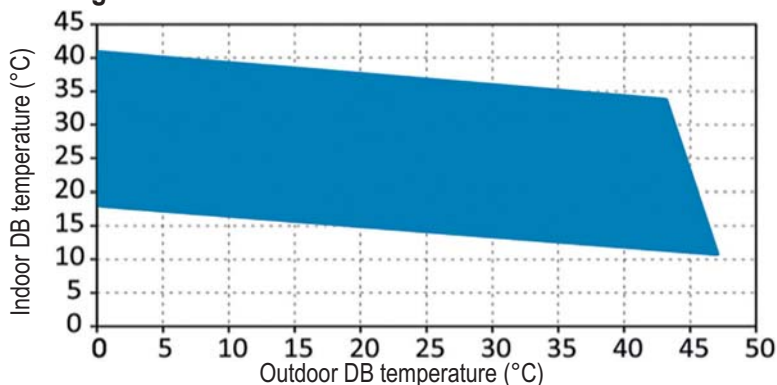
* The maximum airflow is related to the available pressure required. Check the table below to get the maximum airflow for the different available pressures.

9 Operation range

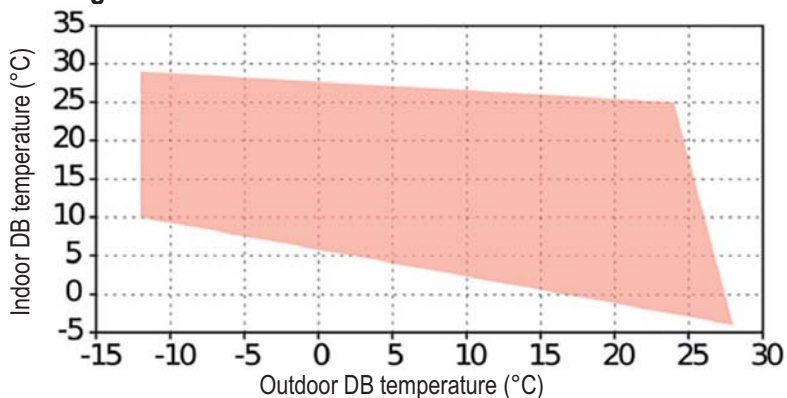
9 - 1 Operation Range

UATYQ20-25-30ABAY1 / UATYQ20-25-30AFC2Y1 / UATYQ20-25-30AFC3Y1

Cooling

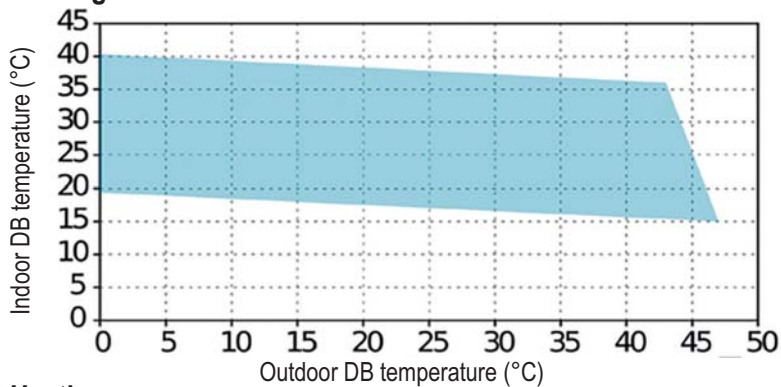


Heating

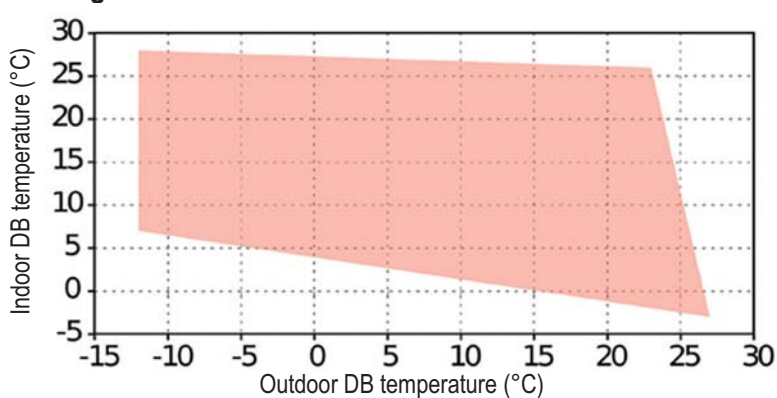


UATYQ45-50-55-65-75-90-100-115ABAY1 / UATYQ45-50-55-65-75-90-100-115AFC2Y1 / UATYQ45-50-55-65-75-90-100-115AFC3Y1

Cooling



Heating





Daikin Europe N.V. Naamloze Vennootschap - Zandvoordestraat 300, B-8400 Oostende - Belgium - www.daikin.eu - BE 0412 120 336 - RPR Oostende



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