

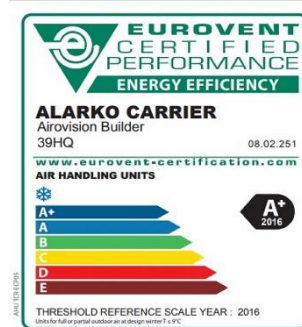
Technical Specification

Project name :	Airovision Builder version: E1.13 (12-4-2022)(R086)/A
Quotation no. : 6.1 AHU Technical Guide / 010	Eurovent identification number: 08.02.251
Eurovent identification number: 08.02.251	

GENERAL DATA

Customer reference	6.1.1 7500 08.06
Number off	1
Location	External (flat roof)
Delivery	In sections
AHU finish	Outside in standard colour (RAL 7035)
Product	Air handling unit
AHU configuration	Inline
Pallet option	Excluded
Lifting Beam	Included
Total weight (each)	kg 670
(Radiated casework SWL)	dB(A) 62
ErP identification code	NRVU / UVU

Eurovent energy classification



Calculations conform to the Regulation for unidirectional ventilation unit (UVU) for delivery after 01.01.2018

Ecodesign 1253/2014 2018 UVU after 01.01.2018

Intermediate calculations

SFP int_limit (W/(m³/s))	230.0
SFP int (W/(m³/s))	103.5
n fan_limit (%)	47.4

Supply air unit data

Airflow (m³/s)	2.08
Static pressure (Pa)	751
p fan (kW)	2.40
n fan (%)	65.2
Fine Filter	Yes
dp Fine filter (Pa)	67

Check

Fan is selected with VSD	Passed
n fan_limit	Passed
SFP int	Passed
Filters equipped with pressure gauge	Passed
Total check	Passed

ACCESS DATA

Handle type	L-Handle	Pressure guard at positive pressure doors	Included
-------------	----------	---	----------

Technical Specification

Project name :	Airovision Builder version: E1.13 (12-4-2022)(R086)/A
Quotation no. : 6.1 AHU Technical Guide / 010	Eurovent identification number: 08.02.251
Eurovent identification number: 08.02.251	

SUPPLY DATA

Glasswool 23 kg/m ³ Type	39HQ 08.06	Air volume	m ³ /s	2.08
Casing construction	GP080 60 mm	Internal sheet		Galvanised 0.80mm
Design outdoor temperature	°C 9.0	External sheet		PUR-PA painted galvanized steel 0.80mm
Design outdoor temperature (summer)	°C 37.5	Insulation		Glasswool 23 kg/m ³
Design outdoor dew point (summer)	°C 16.8	Profile		Steel
Unit velocity	m/s 1.83			
SFPe	kJ/m ³ 1.15	SFPv	kJ/m ³	1.02

Mechanical performance according EN1886

Model box	D1	L1 (-400Pa)	L1 (+400Pa)	L1 (+700Pa)	F9	T2	TB2
Real Unit		L2 (-400Pa)	L2 (+400Pa)	L2 (+700Pa)			

(Sound data supply SWL)	Hz	125	250	500	1k	2k	4k	8k	dB(A)
	dB	54	60	60	60	58	49	39	64
	dB	59	62	62	61	58	50	40	65
	dB	60	66	73	78	78	77	68	83

In direction of airflow, the unit comprises:

DELIVERY SECTION(S)

Section	Width (mm)	Height (mm)	Length (mm)	Baseframe (mm)	Weight (kg)	Weight (Lifting Beam) (kg)
1	1378	1058	2818	62	474	19
2	1378	1058	98	62	28	
3	1378	1058	898	62	166	

EXHAUST COMPONENTS

SUPPLY COMPONENTS

Technical Specification

Project name :	Airovision Builder version: E1.13 (12-4-2022)(R086)/A
Quotation no. : 6.1 AHU Technical Guide / 010	Eurovent identification number: 08.02.251
Eurovent identification number: 08.02.251	

SINGLE MIXING BOX				
Opening Position		Top	Provided with:	
Number of Recirc openings		1	Opening product	None
Recirc opening, w x h	mm	1280 x 320	Damper	External, Opposed blades, Aluminium
Pressure drop	Pa	41	Number of Dampers	1
Actuator type		External	Damper Code	DMP1178x0218-200-162-1-D1Y1-0
Actuator Side		Left		
Access side		None	Number of Drive shafts (Total) x Torque for one shaft	Nm 1 x 2
Opening Position		Full face	Provided with:	
Number of openings		1	Opening product	None
Fresh air opening, w x h	mm	1280 x 960	Damper	External, Opposed blades, Aluminium
Pressure drop	Pa	3	Number of Dampers	1
Actuator type		External	Damper Code	DMP1178x0858-200-162-5-D1Y1-0
Actuator Side		Left		
Access side		None	Number of Drive shafts (Total) x Torque for one shaft	Nm 1 x 5
Mixing ratio, winter (recirculation air/supply air) in %	%	0		

EXTRAS

1 x Coupling rod for dampers

COMBINED FILTER				
Primary filter type		Panel (Synthetic)	Secondary filter type	Bag (Synthetic)
Test method		EN 779 / ISO 16890	Test method	EN 779 / ISO 16890
EN 779 Class		G4	EN 779 Class	F7
Eurovent Efficiency Class		NA	Eurovent Efficiency Class	E
ISO 16890 Class		ISO Coarse 60	ISO 16890 Class	ISO ePM1 50
Design pressure drop		Mean pd	Design pressure drop	Mean pd
Initial pressure drop	Pa	54	Initial pressure drop	Pa 69
Mean pressure drop	Pa	79	Mean pressure drop	Pa 119
Final pressure drop	Pa	104	Final pressure drop	Pa 169
Filter casing material		Galvanised	Filter casing material	Galvanised
Filter frame material		Galvanised	Withdrawal method	Side
Filter length	mm	48	Filter length	mm 500
Filters			Filters	
592x592	Qty	2	592x592	Qty 2
592x287	Qty	2	592x287	Qty 2

ACCESS

Access type	Door	Access side	Right
-------------	------	-------------	-------

EXTRAS

2 x Pressure gauge wall mounted, Magnehelic 2000

Technical Specification

Project name :	Airovision Builder version: E1.13 (12-4-2022)(R086)/A
Quotation no. : 6.1 AHU Technical Guide / 010	Eurovent identification number: 08.02.251
Eurovent identification number: 08.02.251	

CHILLED WATER COIL			Number of coils		1
Coil Code	P25-10AR-5R-34T-1083A-2.0PA-22NC-Cu		0.36/Al 0.10-1 1/2"		
Air volume	m³/s	2.08	Fluid	100%	Water
Duty	kW	47.08	Fluid flow rate	l/s	2.24
Air on db	°C	27.0	Fluid on	°C	7.0
Air on wb/RH	°C/%	19.0/47	Fluid off	°C	12.0
Air off db	°C	13.0	Fluid content	l	16.22
Air off wb/RH	°C/%	12.4/94	Fluid pressure drop	kPa	34
Sensible duty	kW	35.00			
Air pressure drop coil (Dry)	Pa	86	Air pressure drop elim.	Pa	12
Tubes/fins/connections	Cu / Al / Fe		Connection type	Threaded (Right)	
Coil frame	Galvanised		Connection size	1 1/2"	
Tube thickness	mm	0.36	Fin spacing	mm	2.0
Tube Diameter	mm	9.2388	Fin thickness	mm	0.10
Face velocity	m/s	2.2			
Eliminator	Plastic – side withdrawal		Eliminator frame	Galvanised	
Drainpan type	Recessed (sloped)		Drainpan material	Stainless steel 304	
Drain pipes on drainpan	1		Intermediate drainpan	No	
Condensed Water	l/min	0.3	Syphon Type	Negative	
Coil Weight	kg	51.66	Xin/Yin/Xout/Yout	mm/mm/ mm/mm	164/57/76/76

EXTRAS

1 x Syphone

HOT WATER COIL			Number of coils		1
Coil Code	P25-10AR-2R-34T-1083A-2.0PA-18NC-Cu		0.36/Al 0.10-1 1/2"		
Air volume	m³/s	2.08	Fluid	100%	Water
Duty	kW	42.50	Fluid flow rate	l/s	2.05
Air on db	°C	8.0	Fluid on	°C	45.0
Air off db	°C	25.0	Fluid off	°C	40.0
Air pressure drop	Pa	28	Fluid content	l	8.27
			Fluid pressure drop	kPa	15
Tubes/fins/connections	Cu / Al / Fe		Connection type	Threaded (Right)	
Coil frame	Galvanised		Connection size	1 1/2"	
Tube thickness	mm	0.36	Fin spacing	mm	2.0
Tube Diameter	mm	9.2388	Fin thickness	mm	0.10
Face velocity	m/s	2.2	Xin/Yin/Xout/Yout	mm/mm/ mm/mm	143/57/75/75
Coil Weight	kg	28.82			

EXTRAS

1 x Syphone

Technical Specification

Project name :	Airovision Builder version: E1.13 (12-4-2022)(R086)/A
Quotation no. : 6.1 AHU Technical Guide / 010	Eurovent identification number: 08.02.251
Eurovent identification number: 08.02.251	

STEAM HUMIDIFIER					
Air volume	m³/s	2.08	Humidifier supplier		Condair
Moisture addition	kg/h	35	Number of steam lances		1
Air on db	°C	25.0	Steam lance length	mm	1000
Air on moisture content	g/kg	2.8			
Air on rh	%	32			
Air off db	°C	25.7			
Air off moisture content	g/kg	6.6			
Air off rh	%	32			
Steam boiler type 1		EL35	Power each	kW	26.3
Max steam capacity, each	kg/h	35	Current each	A	37.9
Number off		1	Voltage	V	3x400V, 50/60Hz
Boiler weight, each	kg	40			
Section length	mm	960	Drainpan material		Stainless steel 304
Drainpan		Included			

Note: Electric boilers will be delivered separately (not mounted on the unit). Boiler weights not included in unit weights.

ACCESS			
Access type	Door	Access side	Right

EXTRAS
1 x Syphone

ANY COMPONENT		
Pressure drop	Pa	0

INLET PLENUM		
Air pressure drop	Pa	0

ACCESS			
Access type	Door	Access side	Right

FAN									
Fan type		K3G500PA2375							
Fan arrangement		Fan Wall - 1x1							
Air volume	m³/s	2.08	Installed motor power	kW	3.45	Motor		Run	
External static pressure	Pa	392	Motor efficiency class		IE4	Motor nominal speed	rpm	1910	
Internal static pressure	Pa	351	Voltage	V	380-480	Current	A	5.3	
Static pressure ISP+ESP	Pa	743	Abs. motor power incl. F.I.	kW	2.40	Control Signal (0-10V)	V	7.52	
System effect	Pa	8	Fan bulkhead material		Galvanised				
Extra static pressure	Pa	0							
Total static pressure	Pa	751							
Dynamic pressure	Pa	36							
Total pressure	Pa	786							
Fan speed	rpm	1660							
Max fan speed	rpm	1910							
Efficiency (total)	%	67							
Fan shaft power	kW	2.40							
(Fan sound data SWL)	Hz	63	125	250	500	1k	2k	4k	8k
Total	Inlet dB	39	59	65	66	72	73	74	64
	Outlet dB	42	60	66	73	78	78	77	68

FAN EXTRAS
Inlet cone measuring points

Technical Specification

Project name :	Airovision Builder version: E1.13 (12-4-2022)(R086)/A
Quotation no. : 6.1 AHU Technical Guide / 010	Eurovent identification number: 08.02.251
Eurovent identification number: 08.02.251	

ACCESS
Access type Door Access side Right

EXTRAS
2 x Measuring nipple, 6mm 1 x Fanwall terminal box

OUTLET

Opening Position	Full face	Provided with:	
Number of openings	1	Opening product	Duct spigot
Opening, width x height	mm 1280 x 960		
Pressure drop	Pa 2		