

Air handling unit model:

VERSO-S-1300-F-E/15-X-F7/X-C5-X

TECHNICAL SPECIFICATION

Typology	NRVU
	UVU
Type of HRS	none

Air handling unit data

Nominal flow rate	[m ³ /h]	1100
	[m ³ /s]	0.31
Nominal external pressure	[Pa]	100
Face velocity at design flow rate	[m/s]	2.39
SFPv	[kW/m ³ /s]	0.47

Calculation data

		Winter	Summer
Design outdoor temperature	[°C]	-4	26
Outdoor relative humidity	[%]	100	50
Indoor temperature	[°C]	20	22
Indoor relative humidity	[%]	55	55
Atmosphere pressure	[Pa]	101325	
Air density	[kg/m ³]	1.2	

Air handling unit location	London, United Kingdom
Dry-bulb temperature (TdryS)	[°C] 27.1
Wet-bulb temperature (TwetS)	[°C] 18.3
Dew-point temperature (Tdw-pS)	[°C] 13.4
Dry-bulb temperature (TdryW)	[°C] 0.9

Electrical data

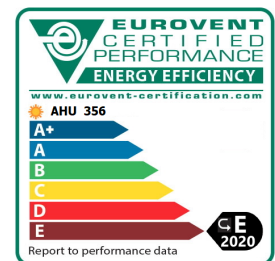
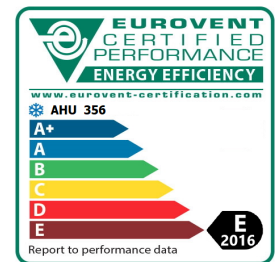
Number of electrical input	1
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AHU

Electrical connection	~400V / 50Hz / 3-phase / 5x2.5mm ² /24.4A
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COMMISSION REGULATION (EU) No 1253 (ecodesign requirements)

	Value	2018
The fan efficiency, η_{vu}	[%] 39.72	30
Internal specific fan power, SFPint_limit	[W/m ³ /s] 206	230



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Date: 7/22/2024

Type of drive - variable speed	Installed	Necessary
Warning - filter is clogged	Exist	Necessary
Unit conformity assessment		Complies
Int. pressure drop of ventilation components (Ps, int) [Pa]	82	
Int. pressure drop of non-ventilation components (Ps, add) [Pa]		
Effective electric power input of the fans (clean filter) [kW]	0.14	

Casing construction STANDART4

Panels from two galvanized steel sheets, filled with thermal and sound insulation fire-resistant min. wool ($\lambda=0,036$ W/mK).

AHU painted C3 class, RAL 7035.

Indoor unit.

When filters gets dirty, unit control panel gives notice to change the filters.

Dirty filters cause increased energy consumption, which decreases performance and energy efficiency of the unit, so it is very important to change the filters regularly.

AHU shall operate with variable speed drive.

Instructions: www.komfovent.com/en/downloads

Thermal insulation class	T2
Thermal bridging class	TB2
Casing strength	D1 (M)
Filter bypass leakage	F9 (M)
Casing air leakage	L1(R)
Casing air leakage (Model Box, EN 1886)	
-400 Pa (L1) [dm ³ /(s·m ²)]	0.02
+700 Pa (L1) [dm ³ /(s·m ²)]	0.21
Maximum external leakage rate at - 400 Pa (R) [%]	< 1
Maximum external leakage rate at + 400 Pa (R) [%]	< 1

AHU configuration

Panels thickness [mm]	50
Unit weight	
Weight (netto) [kg]	46

ACOUSTIC DATA

Sound power level Lw	to the air ducts		to surrounding	
	Supply air flow [dB]		[dB]	
F[Hz]	Inlet	Outlet	Lw	Lp 3m
63	65.3	70.3	52.1	44.0

125	64.4	69.4	51.4	43.3
250	63.7	68.7	53.6	40.3
500	65.3	71.0	52.0	40.0
1000	66.3	72.0	46.8	37.3
2000	63.7	68.6	32.3	20.9
4000	59.4	65.0	28.3	18.1
8000	58.8	63.7	27.4	17.1
dB(A)	70	76	52	41

SUPPLY AIR FLOW

Air filter

Filter correction (F), (EU 1253)		0
Type	Panel air filter	
Energy efficiency class		
Air velocity class (EN13053)	V5	
Filter class	F7	
Filter class (EN ISO 16890)	ePM1 60%	
Dimensions bxhxl	[mm]	558x287x46
Quantity of filters	1	
Pressure drop (clean filter)	[Pa]	75
Recomended max. pressure drop (EN 13779 2007)	[Pa]	200
Velocity in the AHU filter section	[m/s]	2.39

Electric air heater

Capacity	[kW]	8.9
Air volume	[m³/h]	1100
Inlet temperature	[°C]	-4.0
Inlet rel. humidity	[%]	100
Outlet temperature	[°C]	20
Full load I	[A]	21.7

Max. Power	[kW]	15
Power supply ~400V / 50Hz / 3 phase		

Fan EC

Wheel diameter	[mm]	250
Air volume	[m³/h]	1100
Built-in loss	[Pa]	7
Static pressure	[Pa]	182
Speed	[1/min]	2486
Max. speed	[1/min]	3370

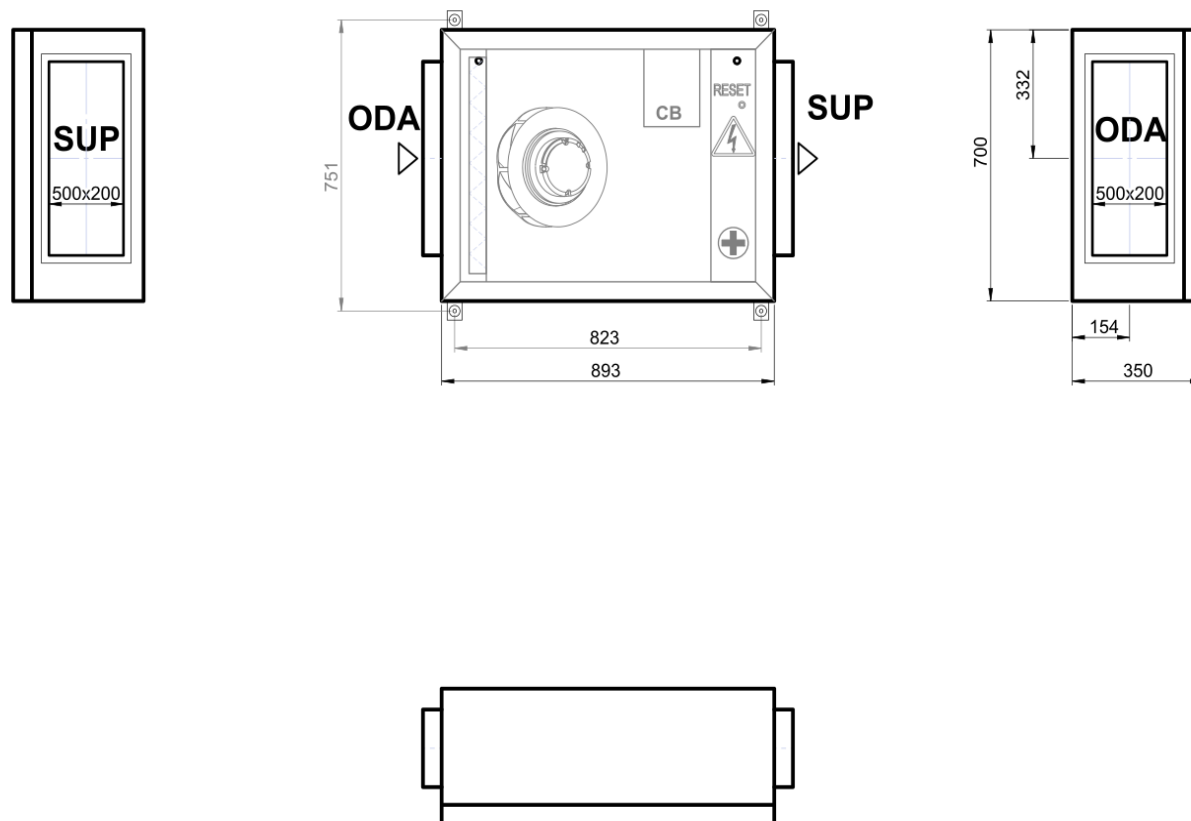
Motor efficiency class	IE4 (Super Premium)	
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Motor power	[kW]	0.38
Input current	[A]	0.9
Electric power to motor (clean filters)	[kW]	0.14
SFPv	[kW/m ³ /s]	0.47
Total fan efficiency	[%]	48.24
Static fan efficiency	[%]	39.72

We reserve the rights to change technical data of the products in the process of their improvement without advance notice. Validity period of presented data - 1 month



ODA - Outdoor air;
 SUP - Supply air;
 CB - Control box;