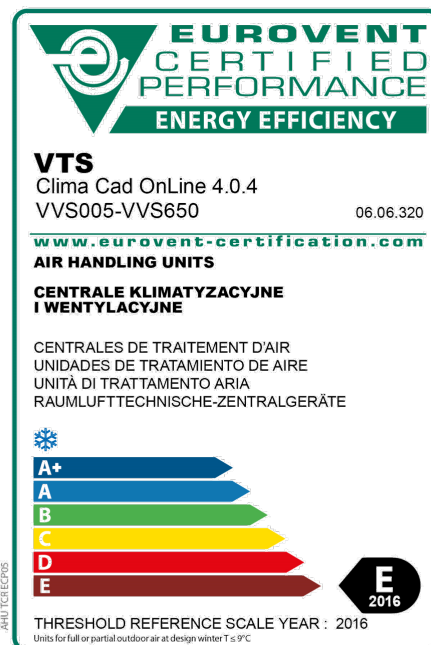


Technical data for item 1

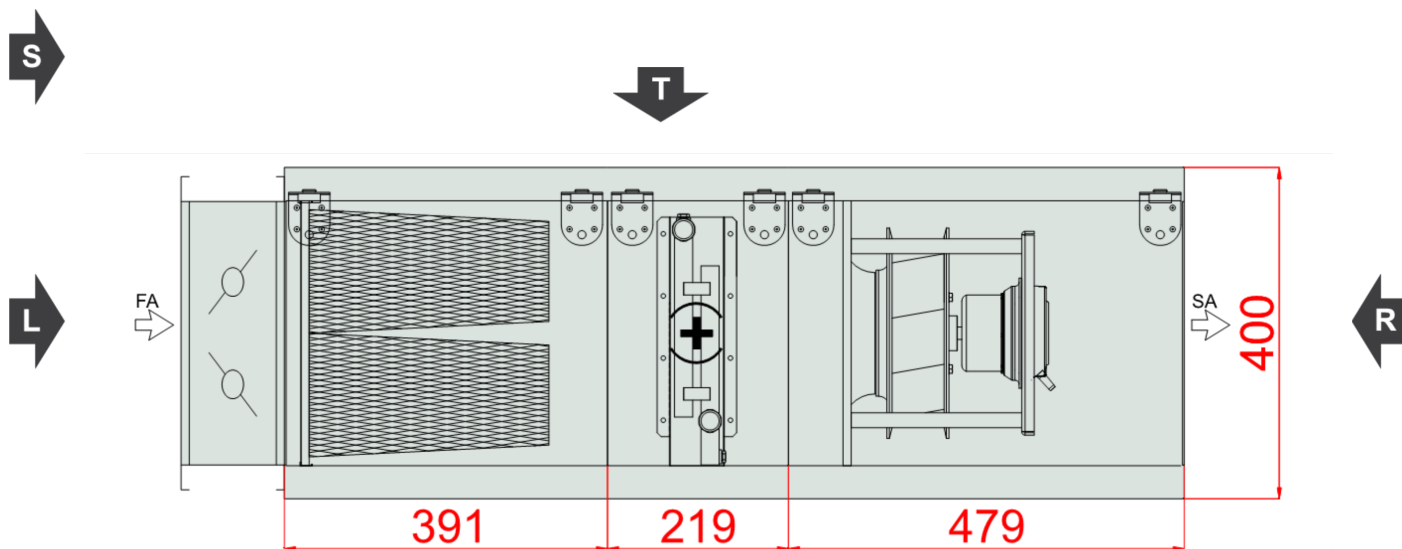
Offer number 297B/LIVE.EUR/EST/2023-23

Project name

Type	SingleSupplySuspended
Unit Type:	Indoor
Project Tag	S1
Size	VVS010s
Set	VVS010s-R-FHV
Insulation thickness	40 mm
Insulation	Mineral Wool
Weight of the set (+/- 10%)*	93 Kg
Supply airflow 2	882.00 m³/h
External pressure	250 Pa
SFP Winter	0.52 kW/m³/s
Ecodesign	Yes (2018 +)
Eurovent Energy efficiency class (Winter 2016 / Summer 2020)	E 2016



Inspection Panels

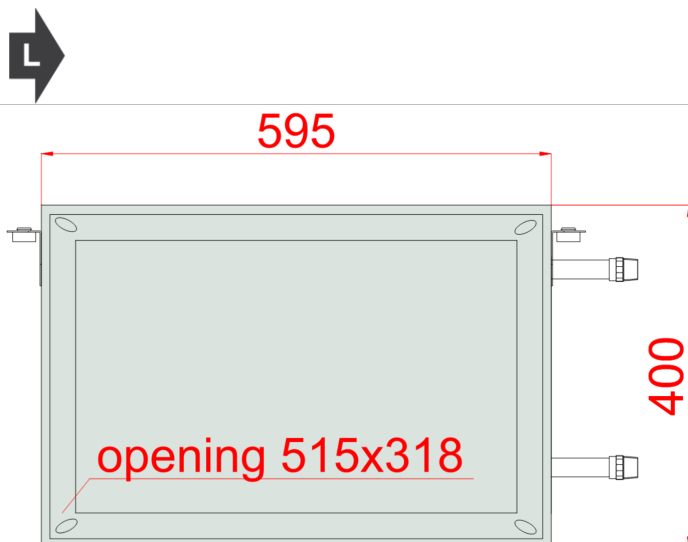


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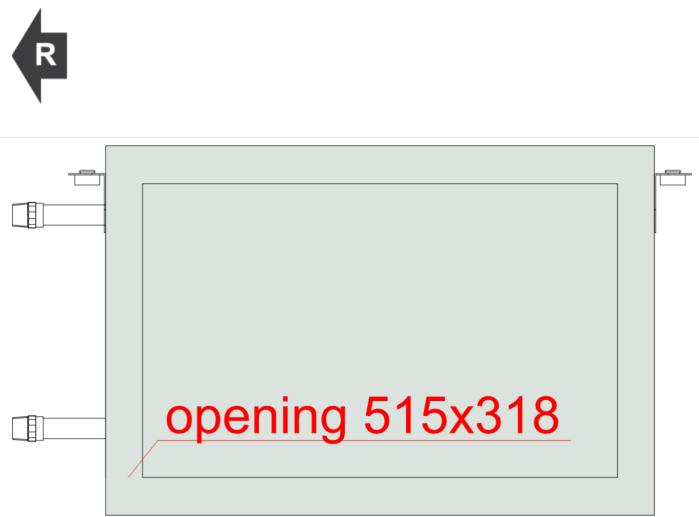
Technical data for item 1

Offer number 297B/LIVE.EUR/EST/2023-23

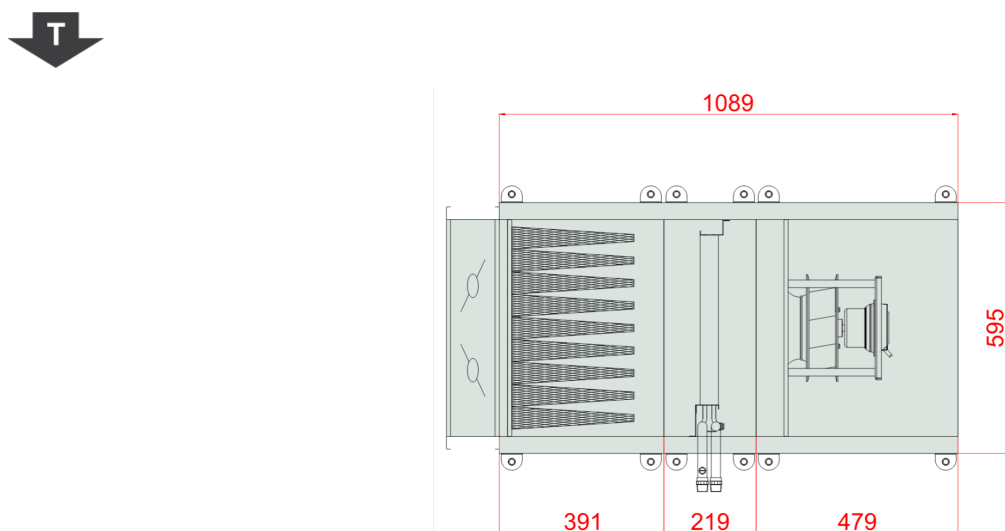
Front View (left)



Front View (right)



Top View



Sizes [mm]

Air intake Supply FF	515x318	Lt 1089	Hid 320	Wi 515
Air outlet Supply FF	515x318	LtA 1214	Hiu 320	W 595
			Hi 320	
			H 400	

Unit design

Walls filled with MW 40mm, double skin made of steel, excluding silencer and electric heater sections

Down base unit inspection

Casing anti-corrosion protection: Aluzinc AZ 150.

Technical data for item 1

Offer number 297B/LIVE.EUR/EST/2023-23

Base unit with pre-configured EC motors drives
Energy recovery efficiency meet EC 1253/2014 requirements

Temperature Conditions

Reference atmospheric pressure 101325 Pa

Winter outdoor reference temperature -24.0 °C

	External air			Return air		
	DBT	RH	DA	DBT	RH	DA
Winter	-24.0 °C	90 %	1.2000 kg/m³	22.0 °C	20 %	1.2000 kg/m³

Supply

Short Bag Filter

Type F7/300.Bag.Int.Sld

ePM2,5 65% (ISO16890) - EFF CLASS Bag[8.0]/300
E

Energy Performance	E	InitAirPressDrop_Name	48 Pa
50% Dirty Air Pressure Drop	124 Pa	AirVelocity_Name	1.53 m/s
FinalAirPressDrop_Name	200 Pa		

Sizes

B.FLT F7 513x320x300 (1-2-0302-0060) 1,000 x Sizes_Pcs

Hot water Coil

Type WCL VVS010s 2R DT SH.St.St.Std Number of rows 2 Connection Supply/Return: 3/4"/22

Standard Circuits	0,94 [dm³]		
Medium	Water	Maximum working pressure	16 bar
Intake air DBT / RH	-24.0 °C / 90 %	Discharge air DBT / RH	24.0 °C / 2 %
Velocity Air Name	1.75 m/s	Press Drop Air Name Wet	24 Pa
Air Pressure	101325 Pa	Air Density	1.2000 kg/m³
Entering Air Vol Flow	882.00 m³/h		
Total Capacity	14.2 kW	Medium Temp	60.0 °C/40.0 °C
Medium Flow Rate	0.61 m³/h	Medium Press Drop	6.56 kPa

V_p

Fan Section PLUG_DD_225_0,38_1.64

EC_IE4_F_IMB14_71_1.64p_T 771.3.550-3 225|0.38kW|1.64x1

Qty in section x 1

DesignedForWetOperatingConditions
TheFanSystemEffectsTakenIntoAccountInTheFanPerformances

Fan PLUG_VS_225_AF_Px 1

Technical data for item 1

Offer number 297B/LIVE.EUR/EST/2023-23

FanStaticPressure Name	398 Pa
Dynamic pressure	18 Pa
FanExternalPressure Name	250 Pa
FanTotalPressure Name	416 Pa
Entering Air Vol Flow	882.00 m³/h

Impeller efficiency: Static / Total	71 %/74 %
Shaft power	0.14 kW x 1
FanOperatingRevolutions Name	2619 1/min

Motor EC_IE4_F_71_IMB14_1.64p_0.38_50x 1

771.3.550-3		EC	50Hz
FLA Name	2.1 A	MCA Name	2.7 A
MCB Name	6.0 A		
		Motor RatedRevolutions Name	3650 1/min
Operational Voltage	230 V/1 ph	Motor RatedPower Name	0.38 kW x 1
Motor NominalRatedVoltage Name	230 V/1 ph/50 Hz		

EC Motor Controller

	_EC		_EC
Motor Drive FLA (Full-Load Amperes)	2.1 A	Motor Drive MCA (Min. Circuit Ampacity)	2.7 A
Motor Drive MCB (Max. Circuit Breaker)	6.0 A		
EC Controller Settings	36 Hz		

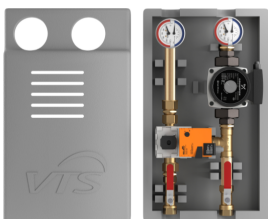
Vfd PowerSemiDirtyFilter Name	0.16 kW	Vfd PowerCleanFilter Name	0.13 kW
Vfd SfpCleanFilter Name	0.52 kW/m³/s		

Acoustic data

Acoustic power level [dB(A)]	Frequency	125 [Hz]	250 [Hz]	500 [Hz]	1000 [Hz]	2000 [Hz]	4000 [Hz]	8000 [Hz]	Lw [dB(A)]
Inlet	[dB(A)]	40.9	54.2	60.2	59.6	57.9	50.7	45.1	64.8
Outlet	[dB(A)]	44.5	57.8	63.8	64.1	62.4	57.9	52.3	69.1
Environment	[dB(A)]	31.5	42.8	48.8	45.1	45.4	25.9	18.3	52.1

Acoustic pressure level at 1 meter distance [dB(A)]	Frequency	125 [Hz]	250 [Hz]	500 [Hz]	1000 [Hz]	2000 [Hz]	4000 [Hz]	8000 [Hz]	Lp [dB(A)]
	[dB(A)]	24.5	35.8	41.8	38.1	38.4	18.9	11.3	45.1

Water Pump group (WPG) - water heater regulation system



Water pump group (WPG) provides smooth regulation of water heater capacity. WPG consists of: a EPP casing, thermo-manometers, a mesh filter, water pump, 3-way valve with actuator, cutting valves on the source side.

Name:	Resp_Controls_HydronicCoilsControls_Water_Pump_GroupWPG-25-060-2.5		
Heater No:	1		
Type	WPG-25-060-2.5	WPG Quantity	1
Main Supply	230/1/50	WPG Kvs	2.50
Rated Current	0.5 A		



Technical data for item 1

Offer number 297B/LIVE.EUR/EST/2023-23

AHU Discharge and Intake Opening Sizes & Unit Accessories

Supply

Controls Selection Mode: Functional set

AHU Discharge and Intake Opening Sizes	Supply
Air Inlet	Front 515x318
Air Outlet	Front 515x318
AirDamper	Supply
Air Inlet	Provided 485x288

Control application

Functional Code	AS 1 0 0 0 0 0 0 6 0 0 0 0 0 0 1
APP Code	uPC3 (AS-1)
Main Temp. Sensor	Duct Supply

Human Machine Interface

Options

Differential Pressure Transducer CAV

HMI Advanced (Settings)	YES
Control Box	YES

Air damper actuators

Name	Code	Set
Air Damper Actuator ON-OFF S 10Nm	ADMP.ACT.SET ON-OFF S 10Nm	1

Temperature sensor

Name	Code	Set
Strap-on temperature sensor NTC 10k	Temp. Sensor NTC10k (Strap-on)	1
Outdoor temperature sensor NTC 10k	Temp. Sensor NTC10k (Outdoor)	1
Duct temperature sensor NTC 10k	Temp. Sensor NTC10k (Duct)	1

Transducers and Switches

Name	Code	Set
Frost Switch	FRST.SWCH	1
Air Pressure Switch	PRESS.SWCH	1
Differential Pressure Transducer CAV	PRSS.TRDC_CAV	1

DECLARATION OF PERFORMANCE - Product information - (EU) 1253/2014 annex V as referred to in art. 4(2)

No.	Parameter	Unit	Value
1	Manufacturer's name		VTS sp. z o.o.
2	Manufacturer's product code		VVS010s-F-H-V
3	Declared type		NRVU, UVU
4	Type of drive installed		VFD(AC) or Controller(EC)
5	Type of energy recovery		None
6	Thermal efficiency of heat recovery		Not applicable
7	Nominal NRVU flow rate	m³/s	0.25
8	Effective electric power input	kW	0.16
9	Internal Specific Fan Power (SFPint)	w/m³/s	78.16
10	Face velocity	m/s	1.53
11	Nominal external pressure	Pa	250.00
12	Internal Pressure Drop of ventilation components Δps,int	Pa	48.11



Technical data for item 1

Offer number 297B/LIVE.EUR/EST/2023-23

13	Internal pressure drop of non-ventilation components $\Delta p_{s,add}$	Pa	99.86
14	Maximum Leakage Rate	%	0.01
15	Energy performance of filters (declared information about the calculated annual anergy consumption)		Bag / F7 / -
16	Description of visual filter warning for NRVUs		Supported by control application
17	Casing sound power level LWA	dBA	52
18	Internet address for disassembly instructions		http://www.vtsgroup.com
19	Ecodesign Compliance		Yes (2018 +)

Section splits

Transport Sections	Mass [Kg]	LENGTH [mm]	WIDTH [mm]	HEIGHT [mm]
1	26	391	595	400
2	18	219	595	400
3	36	479	595	400

Transport Sections Dims

