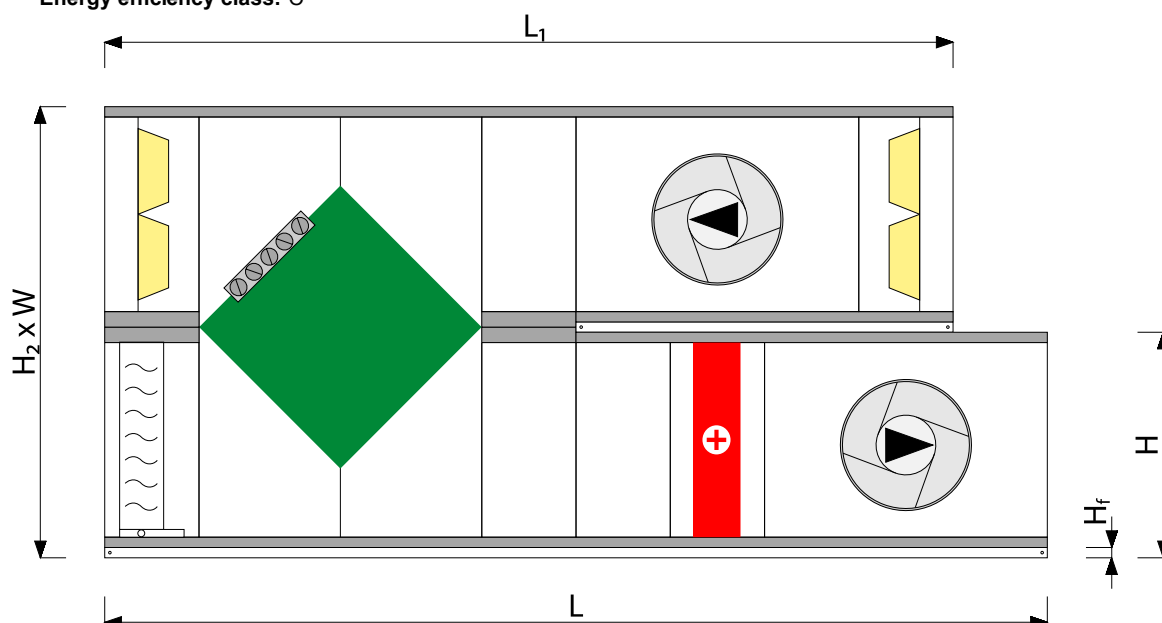


OFFER NUMBER: 713/LV/2012

1. PN-1; Virtuve
TYPE: Sup-Exh
SET: VS-21-R-PH
SIZE: 21
SUPPLY: 1350 m³/h
EXHAUST: 1350 m³/h
INSULATION THICKNESS: 40 mm
EXTERNAL PRESSURE: 350 Pa
EXTERNAL PRESSURE: 350 Pa
WEIGHT OF UNIT (+/- 10%) *: 329 kg
SFP: 2,18 kW/m³/s (EN 13779)
Energy efficiency class: C



OPTIONAL SETS ARE INTEGRAL PART OF BASE UNIT.

(*) Net weight of AHU including optional equipment without controls.

Unit dimensions

Dimension name	W	H	H2	Hf	L	L1	K	hwx
Dimension	961	528	976	80	2953	2587	366	313x821
Supply	1490,1490							
Exhaust	1124							

Pamatnes rāmja ārējie izmēri ir iekļauti OMM

Supply part



Filter

Name	VS 21 B.FLT F5	Final pressure drop	250 Pa
Air pressure drop	137 Pa	Air velocity	1,53 m/s
Initial pressure drop	23 Pa	Type	EU5



Plate exchanger

Type	VS 21 PCR	Latent efficiency (winter)	0 %
Pressure drop (supply)	72 Pa	Supply air intake (in summer)	25,2 °C
Pressure drop (supply - winter)	72 Pa	Supply air outlet (in summer)	25,2 °C
Pressure drop (exhaust)	81 Pa	Exhaust air intake (in summer)	24 °C
Pressure drop (exhaust - winter)	81 Pa	Exhaust air outlet (in summer)	24 °C
Supply air intake (in winter)	-23 °C	Sensible efficiency (summer)	0 %
Supply air outlet (in winter)	0 °C	Latent efficiency (summer)	0 %
Exhaust air intake (in winter)	22 °C	Total recovery capacity (summer)	0 kW



OFFER NUMBER: 713/LV/2012

Exhaust air outlet (in winter)	1,2 °C	100 %	Total recovery capacity (winter)	10,4 kW
Sensible efficiency (winter)		51 %	Sensible recovery capacity	0 kW
Sensible efficiency (winter)		51 %	(summer)	
balanced flow			Sensible recovery capacity (winter)	10,4 kW

**Water heater**

Name	VS 21 WCL 2	Glycol content	0 %
Air pressure drop	23 Pa	Medium pressure drop	1,52 kPa
Air velocity	1,61 m/s	Inlet temp. of medium	80 °C
Air intake (in winter)	-5 °C	Outlet temp. of medium	60 °C
Air outlet (in winter)	20 °C	Medium flow rate	0,49 m³/h
Air intake (in summer)	25,2 °C	Total heater capacity	11,35 kW
Air outlet (in summer)	25,2 °C	Header type	R 1"
Type of glycol	Ethylene		

**Fan section**

Fan		Frequency	49,4 Hz
Name	VS 21 DRCT.DR.FAN 1 v.2	Rated voltage	3x230 V
Static pressure	582 Pa	Rated current	3 A
Static pressure (winter)	581,6 Pa	Rated power	0,75 kW
Dynamic pressure	27 Pa	Electric power consumption	0,433 kW
External pressure	350 Pa	Electric power consumption (winter)	0,433 kW
Static efficiency	71 %	Rated revolutions	2855 1/min
Total efficiency	75 %	Fan section	VS 21 1
Rated revolutions	2819 1/min		DRCT.DR.PLUG.FAN.SET
Shaft power	0,307 kW		25/0,75/2
Motor	M 0,75/2P v.2	Frequency converter	VS 21-150 FC 0,75 v 1
IEC size	80		2
		Frequency converter's power supply	1x230 V
		SFPs	1,16 kW/m³/s

Sound-level table

Frequency		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Lw dB(A)
Intake	dB	64	69,5	69,1	62,9	58,7	48,9	44	69,2
Outlet	dB	72	78,5	79,1	75,9	72,7	67,9	64	80,9
Environment	dB	62	65,1	59,4	54,1	53,1	38,9	32	61,6
Sound press. **	dB(A)	38,9	49,5	49,2	47,1	47,3	32,9	23,9	54,6

(**) Approximate data of sound pressure.

Exhaust section**Filter**

Name	VS 21 P.FLT G4	Final pressure drop	150 Pa
Air pressure drop	82 Pa	Air velocity	1,19 m/s
Initial pressure drop	14 Pa	Type	DEU4

**Fan section**

Fan		Frequency	47,4 Hz
Name	VS 21 DRCT.DR.FAN 1 v.2	Rated voltage	3x230 V
Static pressure	518 Pa	Rated current	3 A
Static pressure (winter)	517,9 Pa	Rated power	0,75 kW
Dynamic pressure	27 Pa	Electric power consumption	0,385 kW
External pressure	350 Pa	Electric power consumption (winter)	0,385 kW
Static efficiency	71 %	Rated revolutions	2855 1/min
Total efficiency	75 %	Fan section	VS 21 1
Rated revolutions	2706 1/min		DRCT.DR.PLUG.FAN.SET
Shaft power	0,273 kW		25/0,75/2
Motor	M 0,75/2P v.2	Frequency converter	VS 21-150 FC 0,75 v 1
IEC size	80		2



OFFER NUMBER: 713/LV/2012

Frequency converter's power 1x230 V
supply
SFPe 1,03 kW/m³/s

Moisture eliminator

Name VS 21 DRP.ELTR Air pressure drop 5 Pa

Sound-level table

Frequency		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Lw dB(A)
Intake	dB	68	74,5	75,1	71,9	68,7	62,9	59	76,8
Outlet	dB	67	72,5	72,1	67,9	62,7	50,9	45	72,8
Environment	dB	61	64,1	58,4	53,1	52,1	37,9	31	60,6
Sound press. **	dB(A)	37,9	48,5	48,2	46,1	46,3	31,9	22,9	53,6

(**) Approximate data of sound pressure.

Options

Flexible connection	VS 21/30 FLX.CNC 1	Flexible connection	VS 21/30 FLX.CNC 1
	821x313		821x313
Flexible connection	VS 21/30 FLX.CNC 1	Damper	VS 21 A.DAMP 1
	821x313		821x313
Flexible connection	VS 21/30 FLX.CNC 1	Damper	VS 21 A.DAMP 1
	821x313		821x313

Controls AP-33E

Fuse element	VS 21-150 FUSE gG 1	Throttle valve actuator	VS 00 AD.ACTR 1
	10A type10x38		0-10 10Nm
Fuse element	VS 21-150 FUSE gG 1	Valve set	VS 00 3W.VLV 4 1
	10A type10x38	Pressure control	VS 10-150 1
HMI Interface Basic	HMI BASIC UPC 1		DFF.PRSS.GG 400
HMI Interface Advanced	HMI ADVANCED 1		Pa
	UPC	Pressure control	VS 10-150 1
Duct temperature sensor	NTC.TEMP.SNR 4		DFF.PRSS.GG 400
	DUCT		Pa
Throttle valve actuator	VS 00 AD.ACTR 1	Antifreeze thermostat	VS 10-40 1
	ON-OFF/S 10Nm		FROST.THMST 2m
Throttle valve actuator	VS 00 AD.ACTR 1	Capillary grip	VS 1
	ON-OFF 10Nm		CPLRY.GRIP.SET
			3#

Control box VS 10-75 CG UPC