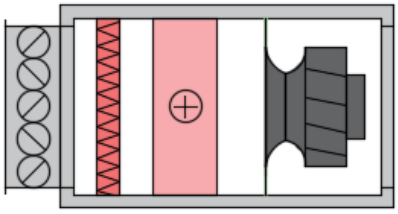
REV 08.11.23
Article 1210
Unit name

LBK-AT4000Bu



		Supply
Air flow	[m^3/h]	4000
Static pressure	[Pa]	200
Temperature SUMMER	[°C]	28
Relative humidity SUMMER	[%]	60
Temperature WINTER	[°C]	-7
Relative humidity, WINTER	[%]	90
Unit SFP	[$W/(m^3/s)$]	1074.3

Heating type		Water
Temperature, Heater outlet	[°C]	20
Required power	[kW]	37.2
Water temperature IN	[°C]	80
Water temperature OUT	[°C]	60
Glycol	[%]	25
Max heating capacity	[kW]	80.9

Heater

Galvanized steel case equipped with air and drain valves.

Copper pipe manifold.

Heat exchange surface made of aluminium plates.

Outlet header is equipped with a spigot for installation of an immersion temperature sensor or freezing protection mechanism.

Temperature, Heater inlet	[°C]	-7	Max heating capacity	[kW]	80.9
Temperature, Heater outlet	[°C]	20	Water pressure	[kPa]	26.9
Relative humidity, Heater inlet	[%]	90	Water flow	[l/s]	0.48
Relative humidity, Heater outlet	[%]	13	Water temperature IN	[°C]	80
Required power	[kW]	37.2	Water temperature OUT	[°C]	60
Air pressure drop	[Pa]	46.1	Glycol	[%]	25
Face air velocity	[m/s]	2.2			

Fans, winter

FAN TYPE 1

Fan, winter		
Number of fans		1
RPM	[1/min]	3010.5
Electric power consumption, Pe	[W]	1193.6
Current, I	[A]	1.9
Total fan pressure , Pf	[Pa]	673.9
Phase/voltage	[50/60Hz/VAC]	~3, 380/480
Static fan pressure , Psf	[Pa]	604.1
Static fan efficiency η es	[%]	56.2
Airflow at operating point	[m^3/h]	4000
Power rated	[W]	1800
Current rated	[A]	2.8
Control voltage	[V]	7.9
Sound pressure level to environment @3m with A filter	[dB(A)]	40.5

SFP, winter		
SFP	[$W/(m^3/s)$]	1074.3

Acoustic data

Parameters		**Octave frequency bands [Hz]**								**Gen.**
Frequency		63	125	250	500	1000	2000	4000	8000	[dB(A)]
Lw, to inlet	[dB]	57	65	73	72	70	71	72	65	78
Lw, to outlet	[dB]	65	69	76	76	79	79	81	77	86
Lw, to environment	[dB]	52	52	69	48	44	41	48	41	61
Lpa (to inlet), 3 m	[dB(A)]									57
Lpa (to outlet), 3 m	[dB(A)]									65
Lpa (to environment), 3 m	[dB(A)]									40

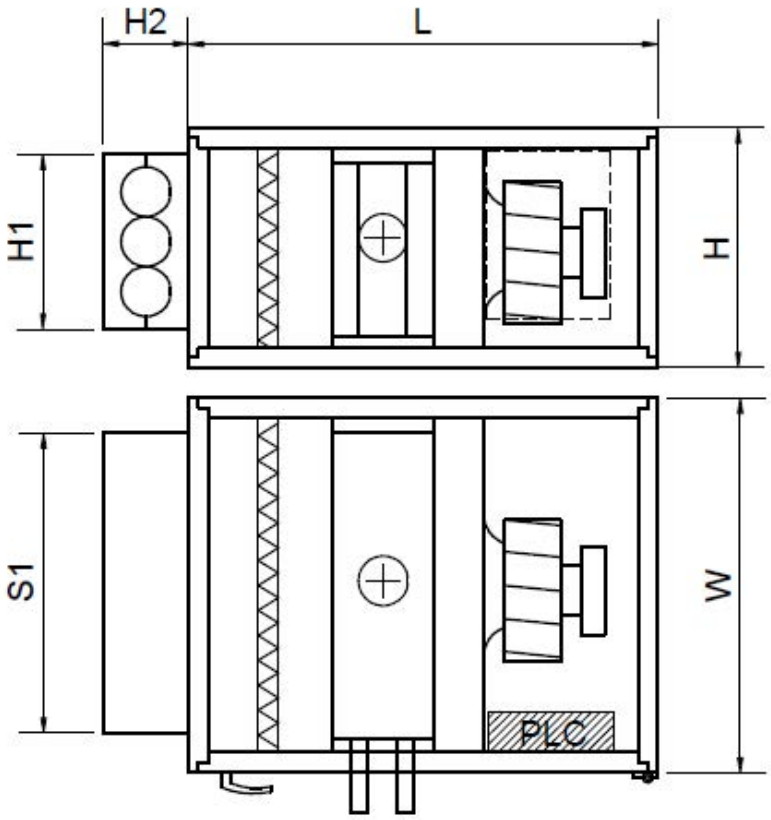
Filter

Parameters			**Parameters**		
Type		panel	Face velocity	[m/s]	2.22
Make		TECHNOGAJA	Initial Pressure Drop	[Pa]	308
Filter class		ePM1 70%/F7/MERV13	Final Pressure Drop	[Pa]	408
Energy Efficiency Class		E	Design Pressure Drop	[Pa]	358
Filter Size (WxHxD)	[mm]	2x253x603x48	Filter Media		Synthetic fiber PES

Casing

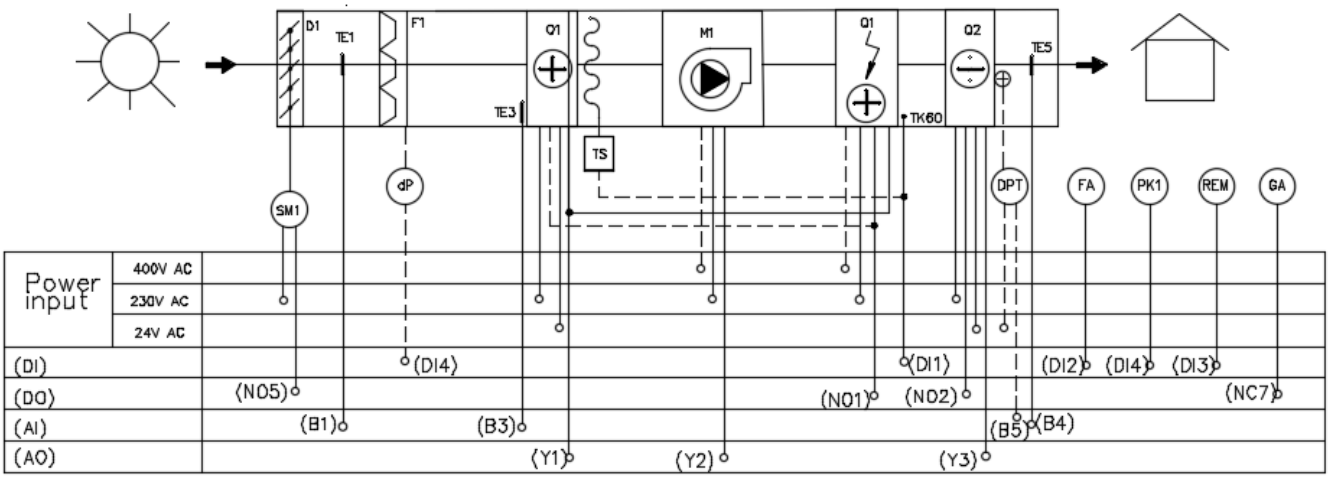
Double skin frameless casing with 40 mm mineral wool 90 kg/m3; non-flammable; outer skin: zinc-aluminum; inner skin: zinc-aluminum; EN1886 class: D1, T3, TB4.
Insulation class B

L	L2	L3	W	H	H1	S1	H2
1290	1750	2150	1280	710	500	1000	170



Controls

Control system features functions activated based on the devices installed on the air handling unit:
Coils management: electric heater, water cooler, direct expansion, cooler/heater coil;
Fans management: 3 speed setup, air pressure control, airflow control;
Temperature and/or humidity control;
Automatic summer/winter (cooling/heating) changeover;
Operation in comfort, precomfort or economy mode;
Selection of up to four daily time bands, with settings for each operating mode;
Holiday and special day function, with reduced set point;
Air quality control with optional CO2/IAQ probe;
Priority to temperature or humidity control, by room/supply/extract sensors
Protection: antifreeze, overheating, dirty filters, fire, etc.
Parameter settings divided by level, user, installer or manufacturer, with password-protected access;
Manual functioning mode;
Supervisor protocol: Modbus slave build-in, Bacnet build-in;
Freecooling and freeheating;
Pumps management, overload alarms and anti-blocking for each pump;
WEB-interface via integrated Ethernet port



ERP		
Trade mark		AT
Model		LBK-AT4000Bu
Declared typology		NRVU UVU
Type of drive installed		Integrated MSD
Type of heat recovery system		None
Thermal efficiency of heat recovery	[%]	0
Supply flow rate	[m^3/s]	1.11
Effective electric power input	[W]	1193.6
SFPint	[$W/(m^3/s)$]	1273.3
Face velocity at design flow rate	[m/s]	2.2
External pressure	[Pa]	200
Internal pressure drop of ventilation components	[Pa]	358
Static efficiency of fans	[%]	56.2
Maximum leakage rates	[%]	2.7
Maximum leakage rates	[%]	2.7
Performance of filters		B
Visual filter warning		Visual filter warning
Sound power level	[db]	61
Internet address		www.air-transfer.nl

Accessories

SKU	Title	Quantity
A29	A29 control panel (controller A31)	1

Extended Control panel provides access to engineering menu, alarm logs. service settings, unit configuration. Access to engineering manu protected by password.Used only with A31 controller.

AV07 roof	Roof for outdoor installation	1

Belimo R3025-10-B2+LR24A-SR	Three-way motorized ball valve	1

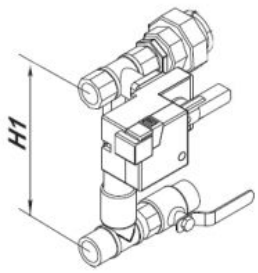
Three-way valves are designed to regulate water flows in the piping circuits of heating / cooling heat exchangers.

Dimensions [mm]

Belimo	H1
R3025+LR24A-SR	240

Technical data

Connection/diameter	Tread/DN20
Max capacity [m3/h]	6.3
Temperature range [°C]	-10...+100
Pipe diameter	1"

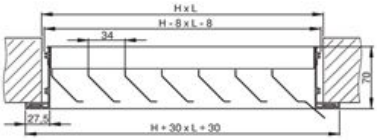


DTV 500	Filter pressure switch	1

The pressure differential switch is used to determine air rarefaction or air (non-aggressive gases) pressure drop. It is used in ventilation systems to determine air filter clogging degree or belt breaking in centrifugal fans, etc.

RN 1000x500	External grill	1

Outdoor grill made of extruded aluminum profile, internal louvers and protective grid IP20 made of galvanized steel. Grill is powdercoated in white.
Dimensions, LXH [mm] 1000x500



VVG 1000x500	Flexible duct connection	1

Flexible connectors are flanges interconnected by antvibration material. The inserts are made of galvanized steel and polyethylene tape reinforced with polyamide textile cloth.

Dimentions [mm]

Size	L	H
VVG 1000x500	1000	500