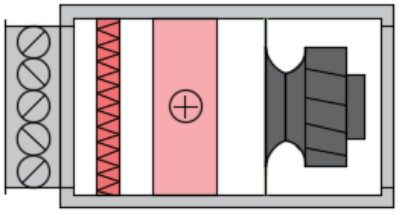
REV 08.11.23
Article 1217
Unit name

LBK-AT3000Bi



		Supply
Air flow	[m^3/h]	3000
Static pressure	[Pa]	200
Temperature SUMMER	[°C]	28
Relative humidity SUMMER	[%]	60
Temperature WINTER	[°C]	-7
Relative humidity, WINTER	[%]	90
Unit SFP	[$W/(m^3/s)$]	869.4

Heating type		Water
Temperature, Heater outlet	[°C]	20
Required power	[kW]	27.9
Water temperature IN	[°C]	80
Water temperature OUT	[°C]	60
Glycol	[%]	25
Max heating capacity	[kW]	68.9

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]	68.9
Temperature, Heater outlet	[°C]	20	Water pressure	[kPa]	15.1
Relative humidity, Heater inlet	[%]	90	Water flow	[l/s]	0.36
Relative humidity, Heater outlet	[%]	13	Water temperature IN	[°C]	80
Required power	[kW]	27.9	Water temperature OUT	[°C]	60
Air pressure drop	[Pa]	27	Glycol	[%]	25
Face air velocity	[m/s]	1.7			

Fans, winter

FAN TYPE 1

Fan, winter		
Number of fans		1
RPM	[1/min]	2457.9
Electric power consumption, Pe	[W]	724.5
Current, I	[A]	1.2
Total fan pressure , Pf	[Pa]	522.3
Phase/voltage	[50/60Hz/VAC]	~3, 380/480
Static fan pressure , Psf	[Pa]	483
Static fan efficiency η es	[%]	55.6
Airflow at operating point	[m^3/h]	3000
Power rated	[W]	1800
Current rated	[A]	2.8
Control voltage	[V]	6.4
Sound pressure level to environment @3m with A filter	[dB(A)]	34.5

SFP, winter		
SFP	[$W/(m^3/s)$]	869.4

Acoustic data

Parameters		**Octave frequency bands [Hz]**								**Gen.**
Frequency		63	125	250	500	1000	2000	4000	8000	[dB(A)]
Lw, to inlet	[dB]	56	64	68	67	65	67	65	54	73
Lw, to outlet	[dB]	63	67	70	71	76	75	75	67	81
Lw, to environment	[dB]	50	50	63	43	41	37	42	31	55
Lpa (to inlet), 3 m	[dB(A)]									52
Lpa (to outlet), 3 m	[dB(A)]									60
Lpa (to environment), 3 m	[dB(A)]									34

Filter

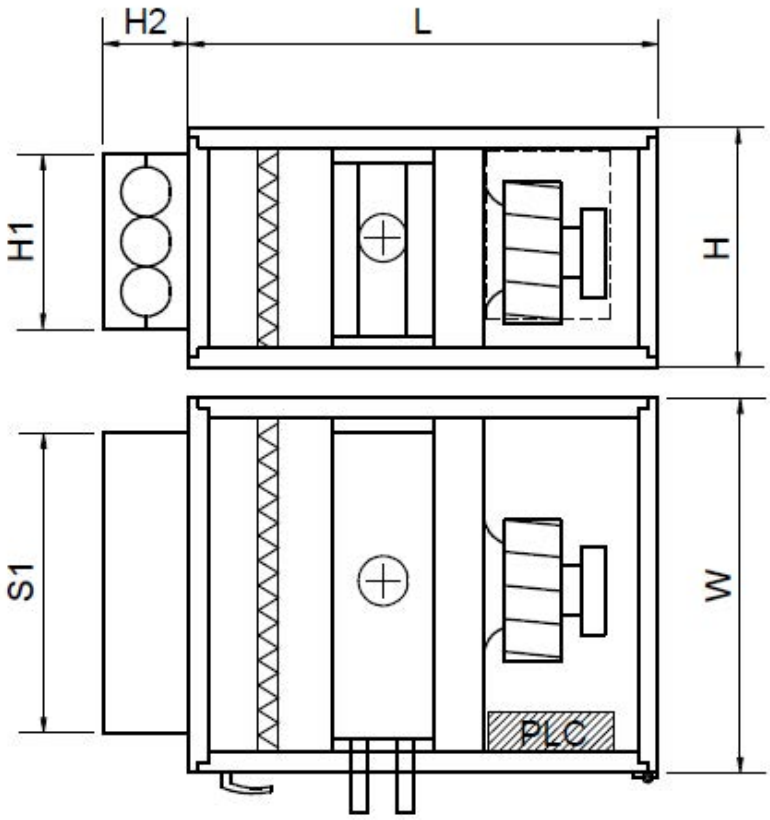
Parameters		
Type		panel
Make		TECHNOGAJA
Filter class		ePM1 70%/F7/MERV13
Energy Efficiency Class		E
Filter Size (WxHxD)	[mm]	2x253x603x48

Parameters		
Face velocity	[m/s]	1.67
Initial Pressure Drop	[Pa]	206
Final Pressure Drop	[Pa]	306
Design Pressure Drop	[Pa]	256
Filter Media		Synthetic fiber PES

Casing

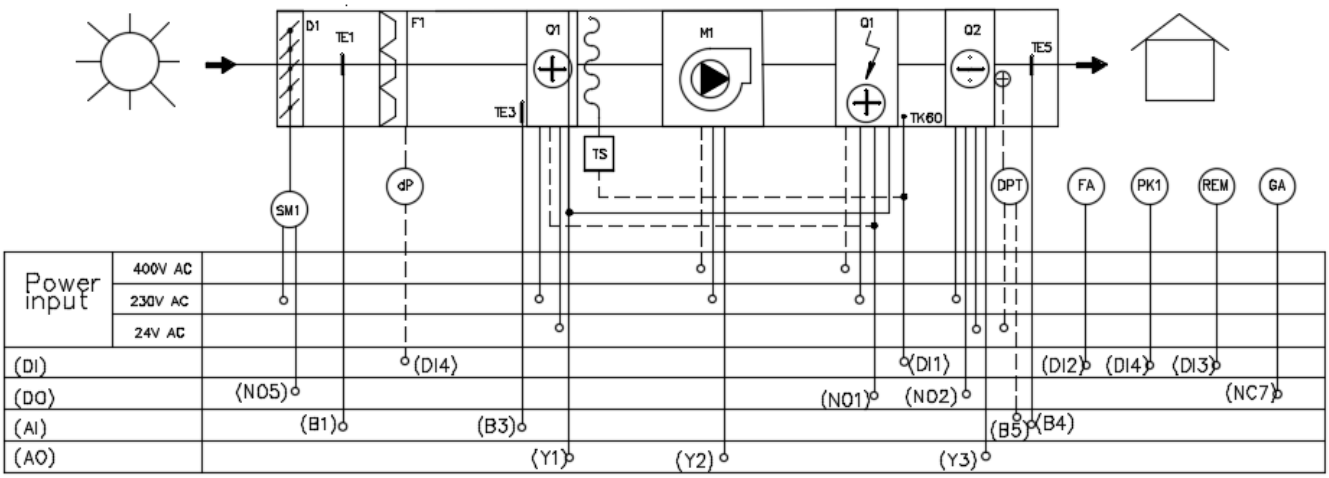
Double skin frameless casing with 40 mm mineral wool 90 kg/m3; non-flammable; outer skin: zinc-aluminum; inner skin: zinc-aluminum; EN1886 class: D1, T3, TB4.
Insulation class B

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-AT30000Bi
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]	0.83
Effective electric power input	[W]	724.5
SFPint	[$W/(m^3/s)$]	921.7
Face velocity at design flow rate	[m/s]	1.7
External pressure	[Pa]	200
Internal pressure drop of ventilation components	[Pa]	256
Static efficiency of fans	[%]	55.6
Maximum leakage rates	[%]	2.7
Maximum leakage rates	[%]	2.7
Performance of filters		B
Visual filter warning		Visual filter warning
Sound power level	[db]	55
Internet address		www.air-transfer.nl

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.

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

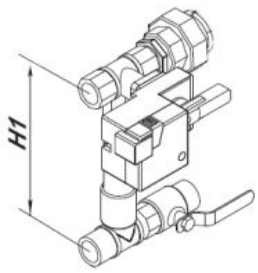
Three-way valves are designed to regulate water flows in the piping circuits of heating / cooling heat exchangers.

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.

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