



AIR HEATING AND VENTILATION

Fan heaters LEO





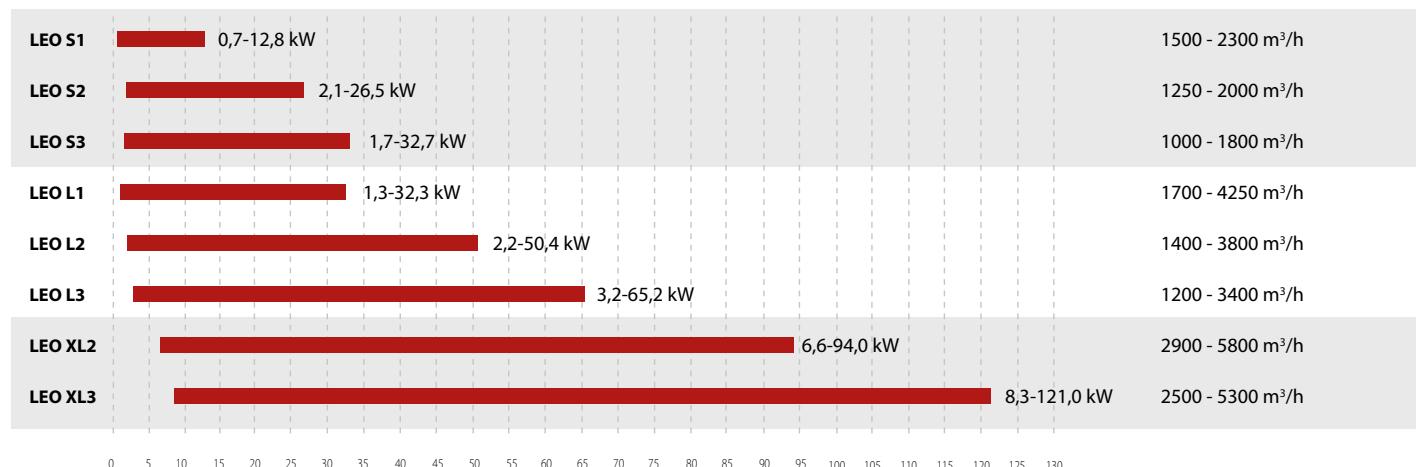
NEW SERIES OF LEO HEATERS

Adapted to your needs

For us a fan heater is not enough! That's why we have created a new series of LEO fan heaters with greater functionality and better parameters confirmed by an international, accredited testing lab.

Choose one of **eight versions** which you can adjust in terms of heating power, temperature, range and noise level

I CHOOSE ONE OF EIGHT



Range of heating power at given parameters:
min. – I step of fan, temperature of heating medium 40/30°C, air temperature at the supply to the device 20°C
max. – III step of fan, temperature of heating medium 120/90°C, air temperature at the supply to the device 0°C

I RANGE OF AIR FLOW

DEVICE AVAILABLE IN AND THREE VERSIONS OF CASING



EPP

Casing made of expanded polypropylene.
Standard.



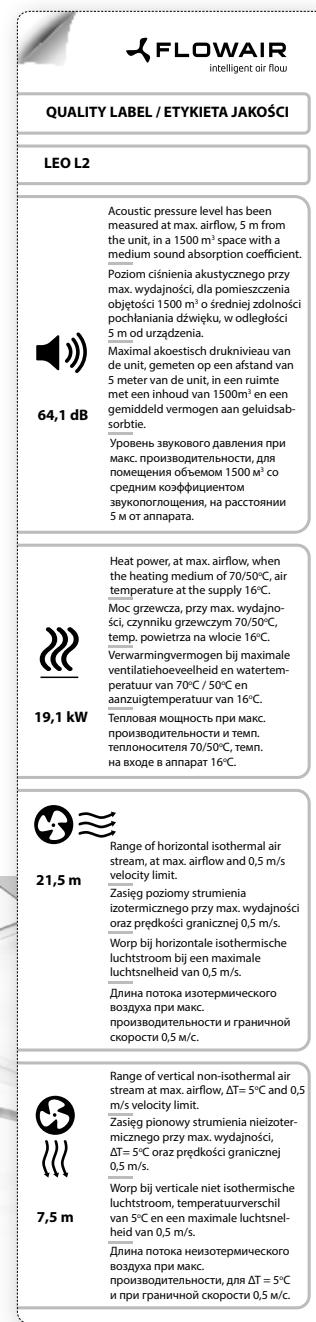
RAL

Powder painted casing.
Special request.



INOX

Stainless steel casing.
Special request.



Parameters of devices
are confirmed by an
accredited testing lab.



We care about quality! That's why we cooperate with an independent, international and accredited testing lab. The results confirm technical parameters of our devices.

The information on the label presents true parameters of the device. It's heating power, range and noise level. These parameters are measured in real life, boundary conditions that are present in most of facilities.

The label on FLOWAIR devices is a guarantee for all parties involved in the investment process. Reliable technical parameters of devices eliminate the risk connected with the investment. The client is sure that the devices were tested and the technical parameters are confirmed.



ACCREDITED TESTING LAB

The testing lab is a renowned company, carrying about high standards. The results are respected by all producers all over the world. The tests were carried out observing international regulations and norms. Based on these lab reports FLOWAIR developed quality labels.



FAN HEATERS LEO

Heating capacity [kW] **0,7-121**

Weight [kg] **9,5-26,2**

Casing
EPP

Air flow [m³/h]
1000-5800

Colour
Grey

(expanded
polypropylene)



AVAILABLE TYPES OF UNITS:

■ LEO BMS

LEO BMS fan heater is equipped with energy efficient 3 speed fans controlled by the DRV module. The DRV module manages the operation of devices according to control signals from T-Box or directly from BMS.

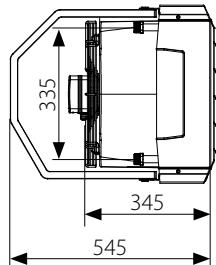
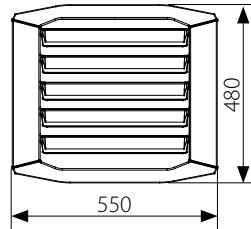
■ LEO

LEO fan heater with AC fan offers possibility to switch between 3 steps of efficiency.

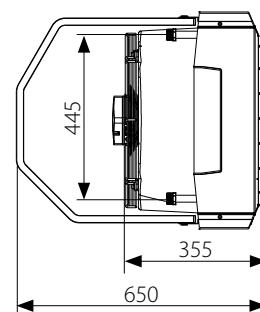
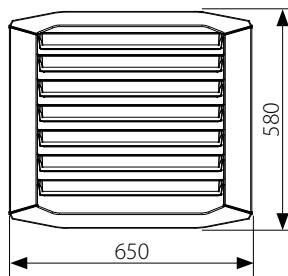
APPLICATION

Big cubature buildings: industrial halls, warehouses, department stores, production halls, sports halls, sacral buildings, etc., as well as smaller rooms, like: workshops, garages, stores, car show rooms, gas stations, etc.

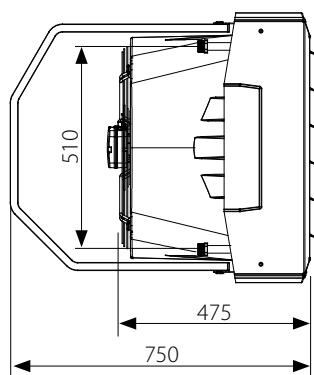
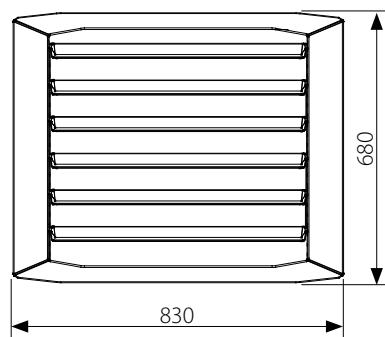
DIMENSIONS



LEO S1 | S2 | S3 / LEO S1 BMS | S2 BMS | S3 BMS



LEO L1 | L2 | L3 / LEO L1 BMS | L2 BMS | L3 BMS



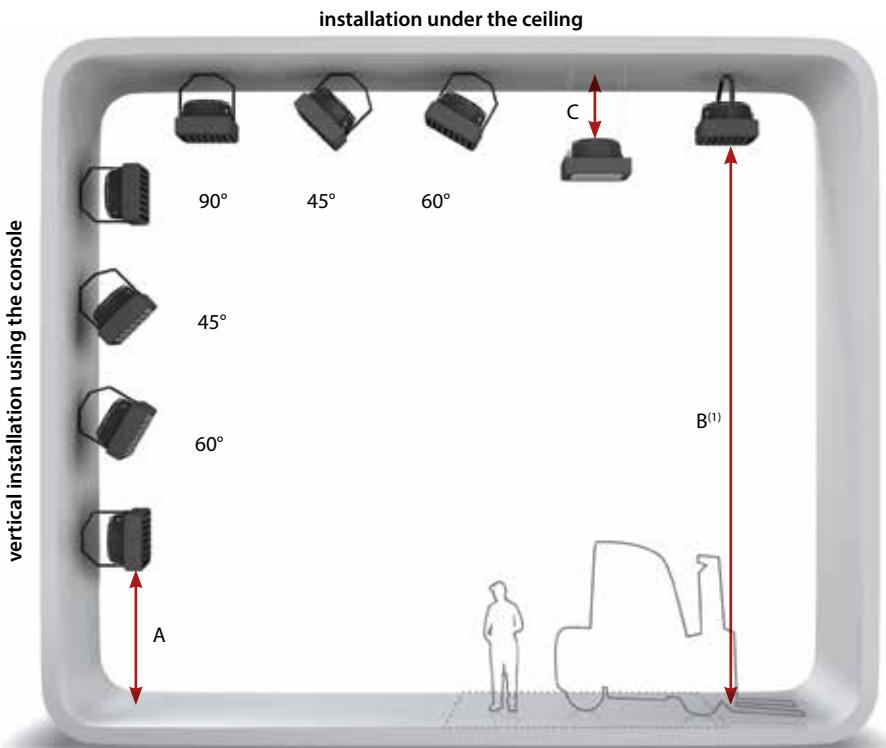
LEO XL2 | XL3 / LEO XL2 BMS | XL3 BMS

For CAD drawings, Revit files and documentation for all available versions of LEO visit www.flowair.com



INSTALLATION AND VARIOUS MOUNTING POSSIBILITIES

Possibility of setting the direction of air stream



⁽¹⁾When device is mounted under the ceiling please note the proper nonisothermal air stream range



Optional corner holders

There are corner brackets available which make installation and levelling of the heater easier.



Rotary console

It enables installation of the heater perpendicularly or horizontally at various angles to the partition.



RECOMMENDED INSTALLATION DISTANCE [M]

	S1	S2	S3	L1	L2	L3	XL2	XL3
A	max. 3,0	max. 3,0	max. 3,0	2,5–8,0	2,5–8,0	2,5–8,0	2,5–10,0	2,5–10,0
B	2,5–7,0	2,5–6,0	2,5–6,0	2,5–9,5	2,5–8,5	2,5–8,0	2,5–9,5	2,5–9,0
C	min. 0,3							

COMPARE LEO SOLUTIONS

I When you need
a simple solution

LEO Basic line



BENEFITS

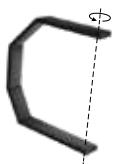
- the cheapest offer on the market (as a kit)
- easy connection
- 3-speed manual efficiency control

SET



Fan heater LEO

- 3 speed fan
- light and durable EPP casing
- wide range of heating power 0,7-121 kW



Rotating console

- 170° rotation of the device
- mounting- wall and ceiling
- possibility of mounting at different angles to the partition

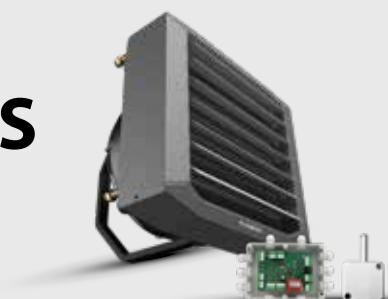


TS - 3-step regulator with termostate

- 3-speed efficiency control
- continuous and thermostatic mode
- heating and ventilating function

I Intelligent solutions compatible
with **FLOWAIR SYSTEM**

LEO BMS



BENEFITS

- intelligent solutions and energy savings
- controls up to 31 devices compatible with the FLOWAIR SYSTEM
- BMS control
- local regulation
- 3-speed automatic efficiency control
- easy connection

SET



Fan heater LEO

- 3 speed fan
- light and durable EPP casing
- wide range of heating power 0,7-121 kW



Rotating console

- 170° rotation of the device
- mounting- wall and ceiling
- possibility of mounting at different angles to the partition



DRV V - control module

- power 230 V
- IP54 protection
- wall mounted



PT-1000 IP65 - wall mounted

temperature sensor

- IP65 protection
- wall mounted

Add T-box



T-box

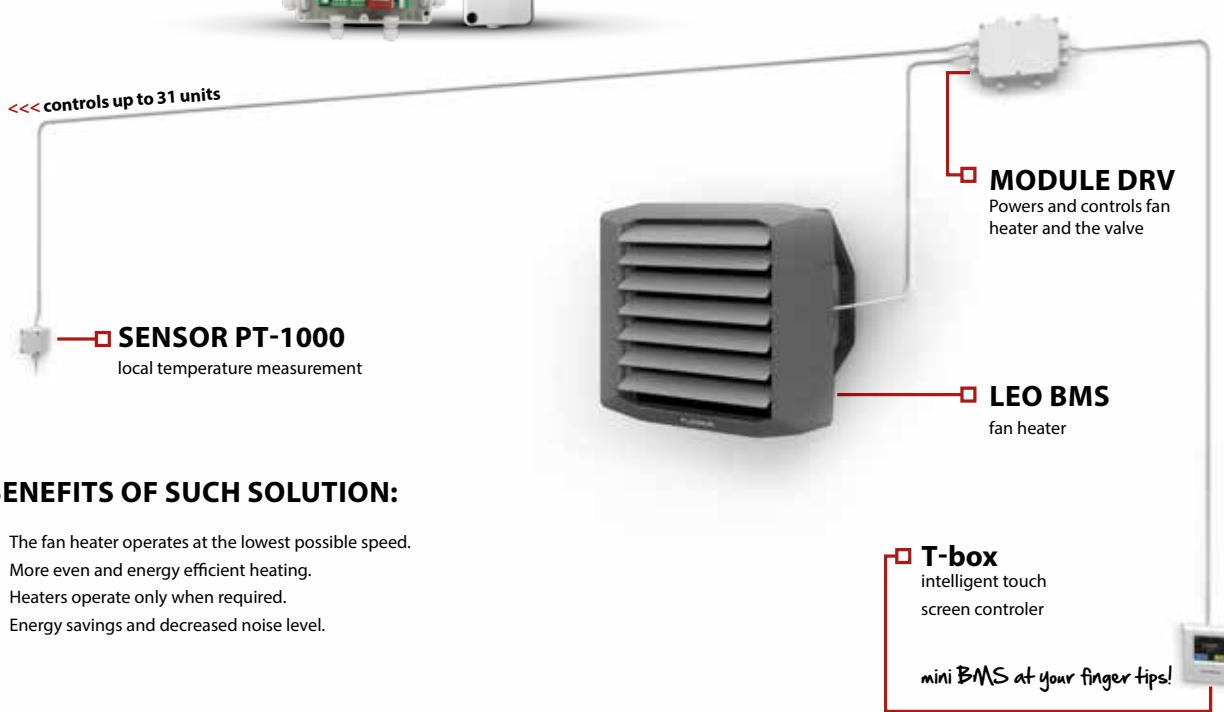
Intelligent touch screen controller
controls up to 31 units



LEO BMS SET

Intelligent solution

LEO BMS fan heater is equipped with energy efficient 3 speed fans controlled by the DRV module. The DRV module manages the operation of devices according to control signals from T-Box or directly from BMS.



BENEFITS OF SUCH SOLUTION:

- The fan heater operates at the lowest possible speed.
- More even and energy efficient heating.
- Heaters operate only when required.
- Energy savings and decreased noise level.

Fan heater LEO

Max. air flow stream [m³/h]

Heating capacity [kW]

Nominal heat power (70/50/16°C, III step) [kW]

Power supply [V/Hz] |

Max. current consumption [A]

Max. power consumption [W]

IP / Insulation class

Max. acoustic pressure level [dB(A)]⁽¹⁾

Max. acoustic power level [dB(A)]⁽²⁾

Horizontal range [m]⁽³⁾

Vertical range [m]⁽⁴⁾

Max. heating water temperature [°C]

Max. operating pressure [MPa]

Connection

Max. operating temperature [°C]

Weight of unit [kg]

Weight of unit filled with water [kg]

LEO S1 / S1 BMS	LEO S2 / S2 BMS	LEO S3 / S3 BMS	LEO L1 / L1 BMS	LEO L2 / L2 BMS	LEO L3 / L3 BMS	LEO XL2 / XL2 BMS	LEO XL3 / XL3 BMS
2300	2000	1800	4250	3800	3400	5800	5300
0,7 – 12,8	2,1 – 26,5	1,7 – 32,7	1,3 – 32,3	2,2 – 50,4	3,2 – 65,2	6,6 – 94,0	8,3 – 121,0
4,5	10,2	12,3	11,7	19,1	25,6	36,5	48,1
	230/50			230/50			230/50
0,5	0,6	0,6	1,4	1,5	1,5	2,3	2,4
120	130	130	330	340	340	520	550
	54/F			54/F			54/F
	56,3			64,1			67,5
	71,4			79,2			82,6
16,0	14,0	12,5	24,0	21,5	19,0	26,0	23,5
6,0	5,3	4,9	8,3	7,5	6,8	8,5	7,7
	120			120			120
	1,6			1,6			1,6
	½"			¾"			¾"
	60			60			60
9,5	10,4	10,8	14,9	16,2	17,8	23,2	26,2
10,2	11,6	12,2	15,9	18,2	20,5	25,9	30,3

⁽¹⁾ Acoustic pressure level at the distance of 5 m from the unit, in the room of medium capability of sound absorption and 1500 m³ of cubature
⁽²⁾ In accordance with PN-EN ISO3744

⁽³⁾ Range of horizontal isothermal air stream, at 0,5 m/s velocity limit

⁽⁴⁾ Range of vertical nonisothermal air stream at ΔT = 5°C, at 0,5 m/s velocity limit

CONTROL SYSTEMS

for LEO heaters LEO / LEO BMS



CONTROLLER TS basic version

the simplest regulation of 3-step fans.
Fan heater operation is controlled by 3-step fan speed controller with thermostat.



CONTROLLER HMI basic version

the advanced regulation of 3-step fans via HMI programmable controller.



CONTROLLER T-box BMS version

the intelligent regulation system of 3-step fans.
Speed regulation of energy-efficient fan via T-box controller.

FAN HEATER LEO



Controller TS



Controller HMI



Controller T-BOX

Types of regulation/control

Manual 3-step air flow regulation
Automatic 3-step air flow regulation

Modes

Heating / Ventilation
Operation in continuous or thermostatic mode
Weekly programmer
BMS
Antifreeze
Integration with FLOWAIR SYSTEM

Max. number of connected units

Via controller
Via additional splitters

	Controller TS	Controller HMI	Controller T-BOX
Manual 3-step air flow regulation	✓	✓	✓
Automatic 3-step air flow regulation		✓	✓
Heating / Ventilation	✓	✓	✓
Operation in continuous or thermostatic mode	✓	✓	✓
Weekly programmer		✓	✓
BMS		✓	✓
Antifreeze		✓	✓
Integration with FLOWAIR SYSTEM			✓
Max. number of connected units			
Via controller	7	5	31
Via additional splitters	36	36	n/d

CONTROL ELEMENTS

I RX SPLITTER



Splitter of control signal for connection of several LEO units with 3-step fans to one controller. It is possible to combine max. 3 splitters RX, so that the single controller can control up to 36 units simultaneously.

Max. number of controlled units via single controller

S1	S2	S3	L1	L2	L3	XL2	XL3
1 pcs. RX		12		6		3	
2 pcs. RX		24		12		6	
3 pcs. RX		36		18		9	

I WALL-MOUNTED TEMPERATURE SENSOR



Wall mounted temperature sensor makes it possible to measure the temperature in a different zone than the controller.

Possibility of temperature measurement

CONTROLLER	Temperature sensor	The connection of wall mounted temperature sensor
TS	integrated	n/d
HMI	NTC or integrated	to HMI controller
T-box	PT-1000 or integrated	to DRV control module

I SRQ VALVES



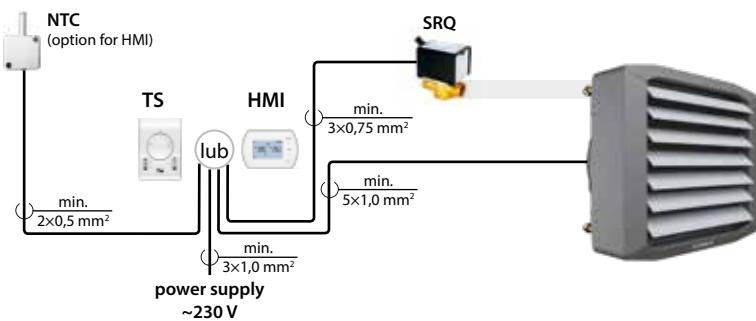
For control the heating medium flow, the two- or three-way valves with electric actuator can be applied.

Compatibility of valves with LEO fan heaters

Valve	S1	S2	S3	L1	L2	L3	XL2	XL3
SRQ2d ½"	✓	✓	✓					
SRQ2d ¾"				✓	✓	✓	✓	✓
SRQ3d ½"	✓	✓	✓					
SRQ3d ¾"				✓	✓	✓	✓	✓

CONNECTION DIAGRAMS

I CONTROLLER TS / HMI



to 1 TS controller:

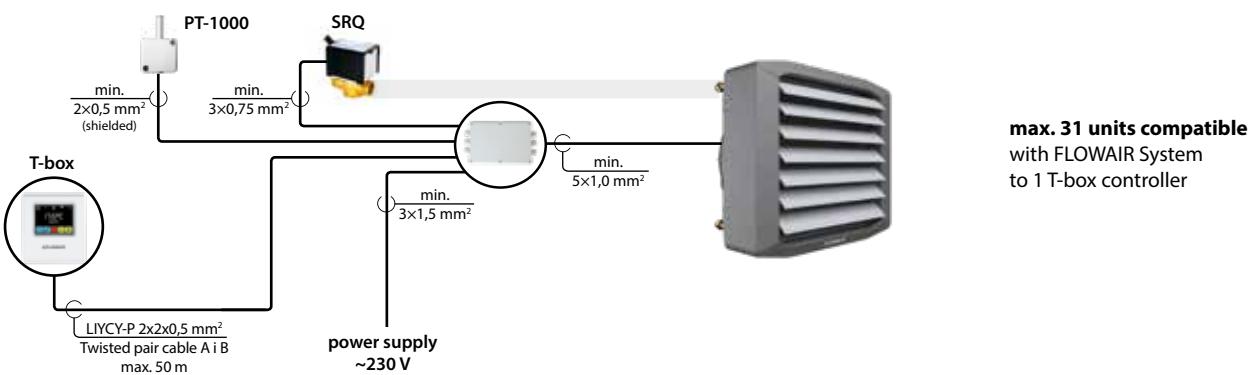
- max. 7 units
LEO S
- max. 3 units
LEO L
- max. 2 units
LEO XL

to 1 HMI controller:

- max. 5 units
LEO S
- max. 2 units
LEO L
- max. 1 units
LEO XL

It is possible to apply RX splitters to increase the maximum number of controlled units

I CONTROLLER T-box



LEO ACCESSORIES

available for LEO L i XL

I CONFUSOR LEO

Material: powder-painted steel, RAL 9007

Weight:

Confusor LEO L: 3,8 kg

Confusor LEO XL: 6,2 kg

Confusor increases air flow speed. It results in faster air distribution to the lower zones of the room.



I 4-SIDE OUTLET GRILLE LEO

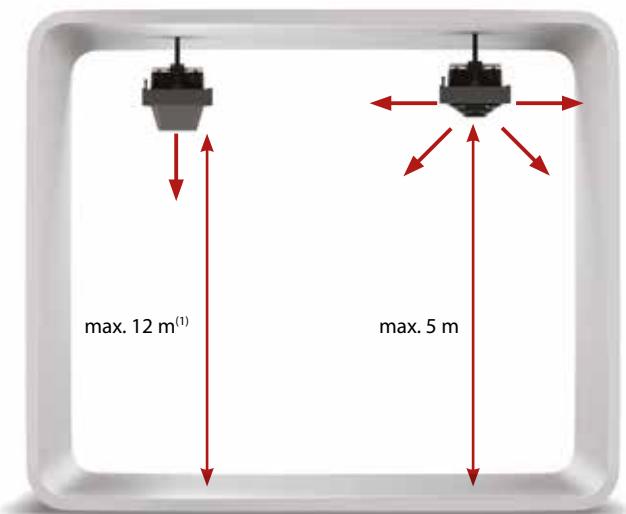
Material: powder-painted steel, RAL 9007

Weight:

Outlet grille LEO L: 2,8 kg

Outlet grille LEO XL: 4,8 kg

Outlet grille improves air distribution. It is perfect solution for low level ceiling rooms, where heaters are installed under the ceiling.



⁽¹⁾ When device is mounted under the ceiling please note the proper nonisothermal air stream range.

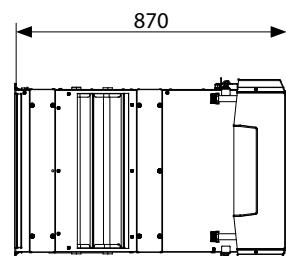
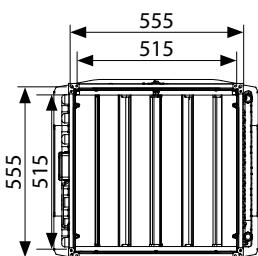
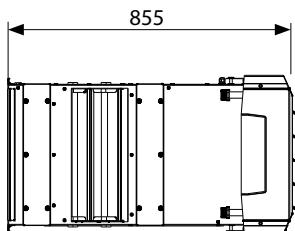
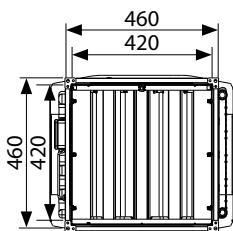
I MIXING CHAMBER

available to all models LEO

LEO + KM

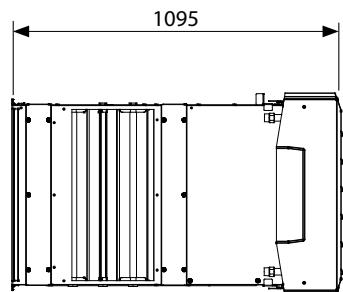
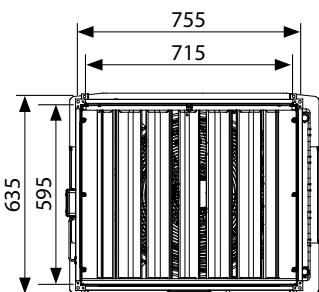


I DIMENSIONS



LEO S1 | S2 | S3 + KM S / LEO S1 BMS | S2 BMS | S3 BMS + KM S

LEO L1 | L2 | L3 + KM L / LEO L1 BMS | L2 BMS | L3 BMS + KM L



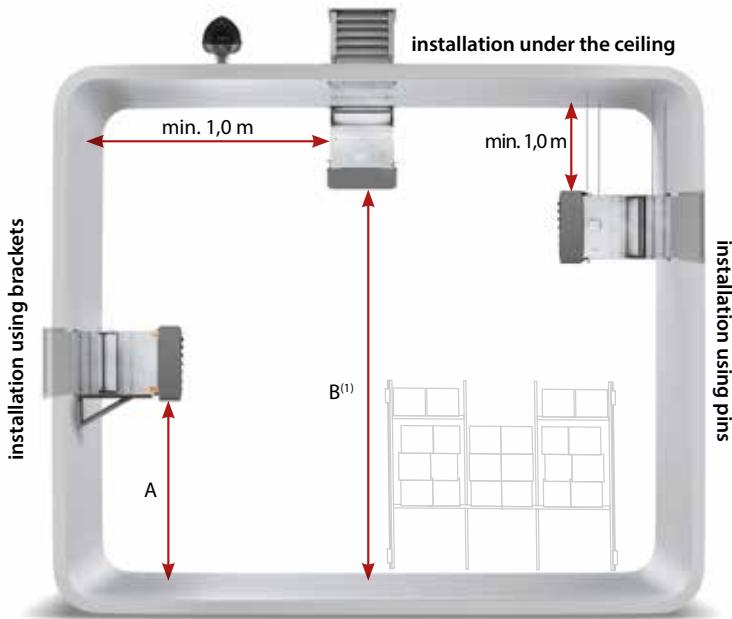
LEO XL2 | XL3 + KM XL / LEO XL2 BMS | XL3 BMS + KM XL

For CAD drawings, Revit files and documentation for all available versions of LEO visit www.flowair.com



INSTALLATION

MIXING CHAMBER



LEO + KM + UVÖ

The easiest mechanical ventilation system.



installation using pins



Installation brackets
Enable easy and aesthetic installation on the walls.

⁽¹⁾ When device is mounted under the ceiling please note the proper nonisothermal air stream range.

RECOMMENDED INSTALLATION DISTANCE

	LEO S1 + KM S	LEO S2 + KM S	LEO S3 + KM S	LEO L1 + KM L	LEO L2 + KM L	LEO L3 + KM L	LEO XL2 + KM XL	LEO XL3 + KM XL
A	max. 3,0	max. 3,0	max. 3,0	2,5 – 5,0	2,5 – 5,0	2,5 – 5,0	2,5 – 5,0	2,5 – 5,0
B	2,5 – 4,5	2,5 – 4,0	2,5 – 4,0	2,5 – 6,5	2,5 – 6,0	2,5 – 5,5	2,5 – 7,0	2,5 – 6,0

Fan heaters with LEO KM mixing chamber

	LEO S1 + KM S	LEO S2 + KM S	LEO S3 + KM S	LEO L1 + KM L	LEO L2 + KM L	LEO L3 + KM L	LEO XL2 + KM XL	LEO XL3 + KM XL
Max. air flow stream [m³/h]⁽¹⁾	1200	1100	1000	2600	2400	2250	3700	3100
Nominal heat power (70/50/16°C, III step) [kW]	3,1	7,2	8,3	9,1	14,4	19,5	27,4	33,0
Power supply [V/Hz]	230/50			230/50			230/50	
Max. current consumption [A]	0,5	0,6	0,6	1,4	1,5	1,5	2,3	2,4
Max. power consumption [W]	110	130	130	320	340	340	520	550
IP / Insulation class	54/F			54/F			54/F	
Max. acoustic pressure level [dB(A)]⁽²⁾	56,3			64,1			67,5	
Max. acoustic power level [dB(A)]⁽³⁾	71,4			79,2			82,6	
Horizontal range [m]⁽⁴⁾	8,0	7,5	7,0	14,5	13,5	12,5	16,5	14,0
Vertical range [m]⁽⁵⁾	3,4	3,2	2,9	5,3	5,0	4,7	5,8	4,9
Max. heating water temperature [°C]	120			120			120	
Max. operating temperature [MPa]	1,6			1,6			1,6	
Connection	1/2"			3/4"			3/4"	
Weight of unit [kg]	25,9	26,8	27,9	34,3	35,5	37,8	53,6	57,9
Weight of unit filled with water [kg]	26,6	28,0	29,3	35,3	37,5	40,5	56,3	62,0

⁽¹⁾ Efficiency with air intake/inlet and 100% fresh air

⁽²⁾ Acoustic pressure level at the distance of 5 m from the unit, in the room of medium capability of sound absorption and 1500 m³ of cubature

⁽³⁾ In accordance with PN-EN ISO3744

⁽⁴⁾ Range of horizontal isothermal air stream, at 0,5 m/s velocity limit

⁽⁵⁾ Range of vertical nonisothermal air stream at T = 5°C, at 0,5 m/s velocity limit

DESTRATIFICATORS LEO D

 Weight [kg]
8,9–19,5

 Air flow [m³/h]
2500–7200

 Colour
Grey

 Casing
EPP
(expanded polypropylene)



AVAILABLE TYPES OF UNITS:

- **LEO D BMS**
version with a DRV-D module with a temperature sensor, integration with FLOWAIR SYSTEM.
- **LEO D**
without additional regulation.
- **LEO DT**
with mounted thermostat.

APPLICATION

Destratifiers are dedicated to be used inside buildings. They work together with other devices in the heating system. They increase the efficiency of heating of large and high spaces for example production facilities, warehouses, supermarkets and trade fair centers.

Destratifier LEO D

LEO D S

LEO D L

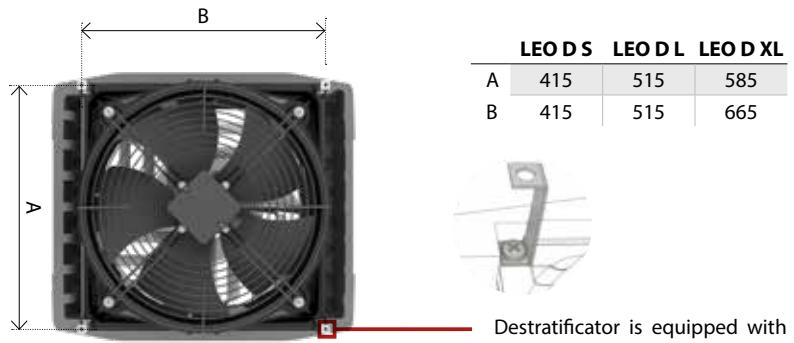
LEO D XL

Fan	3 speed fan, Axial, single-phase, AC	3 speed fan, Axial, single-phase, AC	3 speed fan, Axial, single-phase, AC
Max. range of air stream [m³/h]	2500	5200	7200
Power supply [V/Hz]	230/50	230/50	230/50
Max. current consumption [A]	0,5	1,3	2,0
Max. power consumption [W]	110	280	450
IP / Insulation class	54/F	54/F	54/F
Max. acoustic pressure level [dB(A)] ⁽¹⁾	56,9	65,7	72,8
Max. acoustic power level [dB(A)] ⁽²⁾	72,0	80,0	87,9
Maks. operating temperature [°C]	60	60	60
Position of operation	horizontal	horizontal	horizontal
Weight of unit [kg]	8,9	13,9	19,5

⁽¹⁾ Acoustic pressure level at the distance of 5 m from the unit, in the room of medium capability of sound absorption and 1500 m³ of cubature

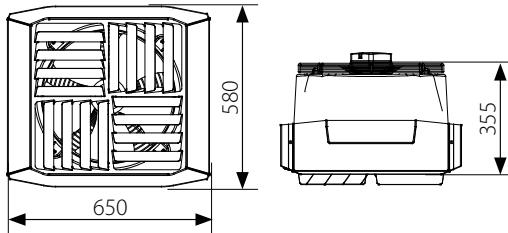
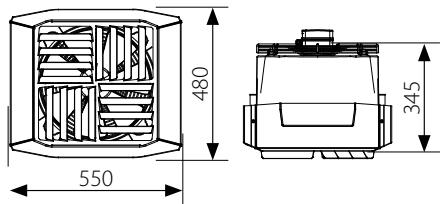
⁽²⁾ In accordance with PN-EN ISO3744

INSTALLATION



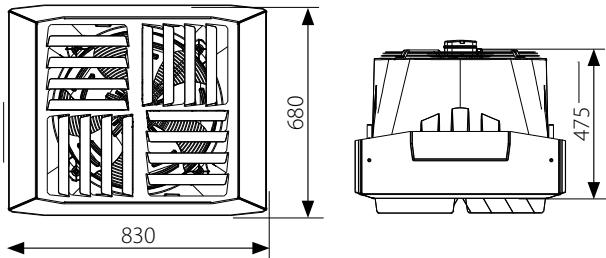
Destratifier is equipped with corner holders, which make the installation and leveling of the unit under the ceiling much easier. In case of installation under the ceiling which transmit vibrations it is recommended to use vibro-isolators.

DIMENSIONS



LEO D S BMS | LEO DT S | LEO D S

LEO D L BMS | LEO DTL | LEO D L



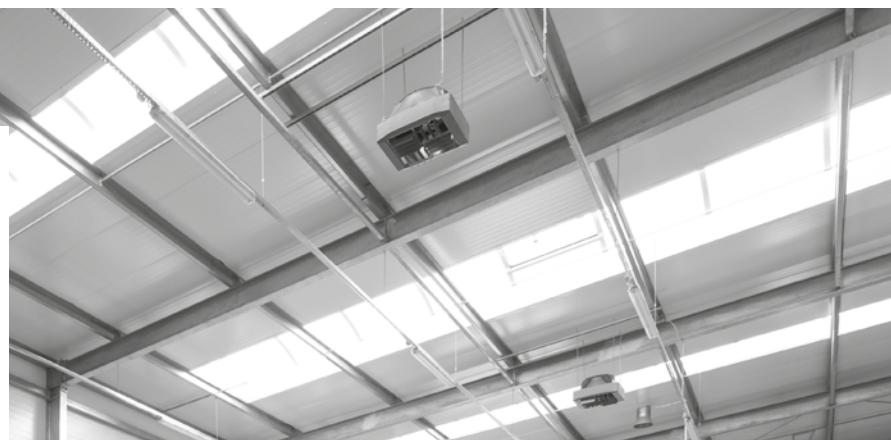
LEO D XL BMS | LEO DT XL | LEO D XL

For CAD drawings, Revit files and documentation for all available versions of LEO visit www.flowair.com



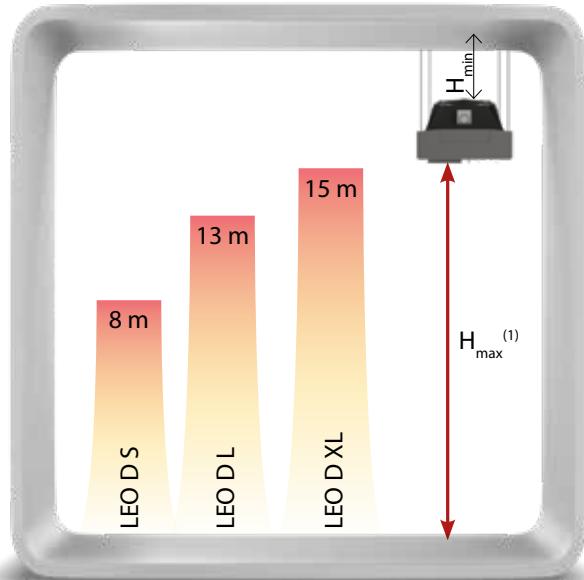
FUNCTION OF DESTRATIFICATOR

Destratifier prevents accumulation of the warm air in the upper zones of the room. The fan redirects the warm air back into the zone occupied by the people. It limits heat losses, heat transfers to the roof. This results in faster heating of a building.



CHOOSE AN OPTIMAL DESTRATIFICATOR

LEO D destratifier assists the proper operation of heating system counteracting the accumulation of warm air in the upper zones of the room. 3 sizes of destratifiers make it possible to choose the perfect fit for the different heights of the building. A wide range of air flow efficiency 1900-7200m/h ensures high user comfort in rooms with a low and high level of ceiling.



⁽¹⁾ When device is mounted under the ceiling please note the proper nonisothermal air stream range

AUTOMATIC DESTRATIFICATION SYSTEM

AUTOMATIC DESTRATIFICATION:

It offers energy savings thanks to the redirection of warm air from the upper zone to the lower zone of the room. The destratifiers switch on when the temperature drops in the room and there is an excess of warm air under the ceiling. If this heat is not sufficient the LEO heaters switch on.

- **Step 1** – activation of destratifiers to push down the warm air from the area under the ceiling.
- **Step 2** – activation of fan heaters in order to reach the temp level set by the user.



FIND OUT MORE!

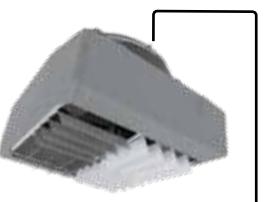
Get to know FLOWAIR SYSTEM and see how automatic destratification works.

CONNECTION DIAGRAMS

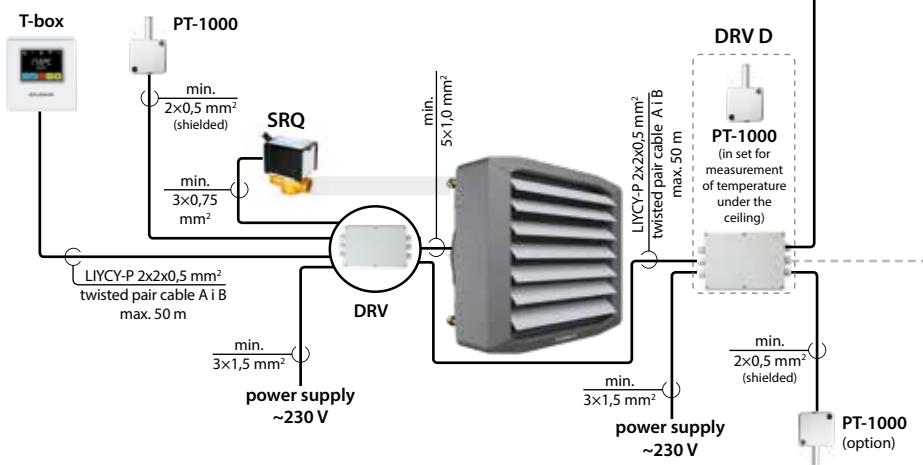
I SYNERGY OF DEVICES WHEN CONNECTED TO FLOWAIR SYSTEM

MAX. 31 UNITS

compatible with FLOWAIR System
to 1 T-box controller



min.
 $5 \times 1,0 \text{ mm}^2$



ELEMENTS:

T-box

intelligent controller
with touch screen

PT-1000

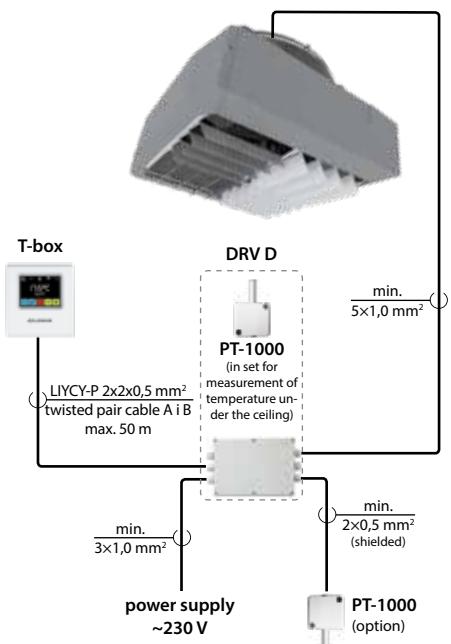
wall-mounted
temperature sensor

SRQ

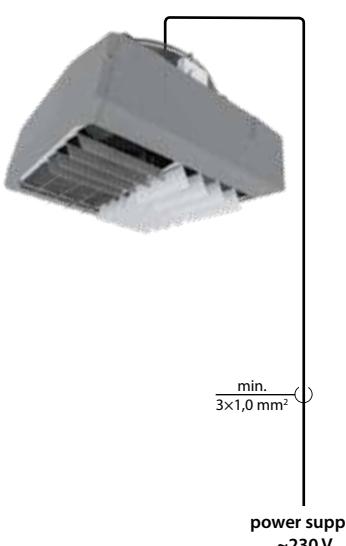
valve with actuator



I LEO D BMS REGULATION WITH CONTROLLER T-box



I LEO DT ON/OFF MODE



SYSTEM FLOWAIR

mini BMS at your finger tips



| INTEGRATION OF DEVICES

SYSTEM FLOWAIR is an intelligent solution which makes it possible to integrate the devices into a system with only one controller. T-Box offers many necessary functions for effective management of a heating-ventilating system. These function were previously reserved for an extensive Building Management System (BMS).



Control of devices with
one T-BOX



Local regulation
of devices



Advanced control of
ventilating and heating
devices



Control the devices
according to your time
schedule and individual
needs



Antifreeze protects the
devices against
low temperatures



| SYNERGY OF DEVICES

The system offers higher heat comfort and energy savings. Thanks to destratifiers and fan heaters working together it is possible to take advantage and effectively use the hot air that is present under the ceiling, thus saving heat energy to be supplied by the fan heaters.



HEATING CAPACITIES

Tw1/Tw2 = 120/90°C					Tw1/Tw2 = 90/70°C					Tw1/Tw2 = 70/50°C					Tw1/Tw2 = 60/40°C					Tw1/Tw2 = 40/30°C				
Tp1	PT	Qw	Δpw	Tp2	Tp1	PT	Qw	Δpw	Tp2	Tp1	PT	Qw	Δpw	Tp2	Tp1	PT	Qw	Δpw	Tp2	Tp1	PT	Qw	Δpw	Tp2
°C	kW	l/h	kPa	°C	°C	kW	l/h	kPa	°C	°C	kW	l/h	kPa	°C	°C	kW	l/h	kPa	°C	°C	kW	l/h	kPa	°C
LEO S1 / LEO S1 BMS																								
$V = 2300 \text{ m}^3/\text{h}$																								
0,0	12,8	381	1,8	16,5	0,0	9,8	430	2,4	12,5	0,0	6,7	292	1,3	8,5	0,0	5,0	219	0,8	6,5	0,0	3,8	325	1,7	5,0
5,0	12,2	362	1,6	20,5	5,0	9,1	401	2,1	16,5	5,0	6,0	262	1,0	12,5	5,0	4,3	188	0,6	10,5	5,0	3,0	263	1,2	9,0
10,0	11,5	343	1,5	24,5	10,0	8,4	372	1,8	21,0	10,0	5,3	232	0,8	17,0	10,0	3,6	155	0,4	14,5	10,0	2,3	197	0,7	13,0
15,0	10,9	324	1,3	29,0	15,0	7,8	343	1,6	25,0	15,0	4,6	202	0,7	21,0	15,0	2,7	117	0,3	18,5	15,0	1,2	104	0,2	16,5
20,0	10,2	305	1,2	33,0	20,0	7,1	314	1,3	29,0	20,0	3,9	170	0,5	25,0	20,0	1,7	74	0,1	22,0	20,0	0,8	72	0,1	21,0
LEO S2 / LEO S2 BMS																								
$V = 2000 \text{ m}^3/\text{h}$																								
0,0	26,5	788	10,7	39,0	0,0	20,1	889	14,2	30,0	0,0	14,4	631	8,2	21,5	0,0	11,5	502	5,6	17,0	0,0	8,3	719	11,4	12,5
5,0	25,2	750	9,8	42,0	5,0	18,9	832	12,6	33,0	5,0	13,1	574	6,9	24,5	5,0	10,2	445	4,5	20,0	5,0	7,0	604	8,4	15,5
10,0	24,0	713	8,9	45,0	10,0	17,6	776	11,1	36,0	10,0	11,8	517	5,7	27,5	10,0	8,9	386	3,6	23,0	10,0	5,6	488	5,8	18,5
15,0	22,7	676	8,1	48,0	15,0	16,3	719	9,7	39,0	15,0	10,5	459	4,6	30,5	15,0	7,5	328	2,7	26,0	15,0	4,3	370	3,5	21,0
20,0	21,5	639	7,3	51,0	20,0	15,0	663	8,4	42,0	20,0	9,2	401	3,6	33,5	20,0	6,1	267	1,9	29,0	20,0	2,8	246	1,7	24,0
LEO S3 / LEO S3 BMS																								
$V = 1800 \text{ m}^3/\text{h}$																								
0,0	32,7	973	8,4	54,0	0,0	24,9	1098	11,1	41,0	0,0	17,6	769	6,2	29,0	0,0	13,8	603	4,2	23,0	0,0	10,1	872	8,6	16,5
5,0	31,1	925	7,6	56,0	5,0	23,3	1026	9,8	43,0	5,0	15,9	697	5,2	31,0	5,0	12,2	530	3,3	25,0	5,0	8,4	726	6,2	18,5
10,0	29,5	878	6,9	58,0	10,0	21,6	954	8,6	45,5	10,0	14,3	624	4,3	33,5	10,0	10,5	457	2,5	27,0	10,0	6,7	579	4,1	21,0
15,0	27,9	831	6,3	60,5	15,0	20,0	883	7,5	47,5	15,0	12,6	551	3,4	35,5	15,0	8,8	382	1,8	29,0	15,0	4,9	428	2,4	23,0
20,0	26,3	784	5,6	62,5	20,0	18,4	811	6,4	49,5	20,0	10,9	478	2,6	37,5	20,0	7,0	304	1,2	31,5	20,0	3,1	264	1,0	25,0
LEO L1 / LEO L1 BMS																								
$V = 4250 \text{ m}^3/\text{h}$																								
0,0	32,3	961	7,0	22,5	0,0	24,6	1086	9,4	17,0	0,0	17,1	749	5,1	12,0	0,0	13,3	578	3,3	9,0	0,0	9,8	845	7,0	7,0
5,0	30,7	913	6,4	26,5	5,0	23,0	1014	8,3	21,0	5,0	15,4	676	4,2	15,5	5,0	11,6	504	2,6	13,0	5,0	8,0	697	4,9	10,5
10,0	29,1	865	5,8	30,0	10,0	21,3	941	7,2	25,0	10,0	13,8	602	3,4	19,5	10,0	9,8	429	1,9	17,0	10,0	6,3	547	3,2	14,5
15,0	27,5	818	5,2	34,0	15,0	19,7	869	6,3	28,5	15,0	12,1	528	2,7	23,5	15,0	8,1	352	1,4	20,5	15,0	4,5	391	1,8	18,0
20,0	25,9	770	4,7	37,5	20,0	18,0	796	5,3	32,5	20,0	10,4	453	2,1	27,0	20,0	6,2	272	0,9	24,5	20,0	1,6	139	0,3	21,0

V – air flow
 PT – heating capacity
 Tp1 – inlet air temperature

Tp2 – outlet air temperature
 Tw1 – inlet water temperature
 Tw2 – outlet water temperature

Qw – water flow in the heat exchanger
 Δpw – water pressure drop in the heat exchanger

HEATING CAPACITIES

T_{w1/Tw2 = 120/90°C} **T_{w1/Tw2 = 90/70°C}** **T_{w1/Tw2 = 70/50°C}** **T_{w1/Tw2 = 60/40°C}** **T_{w1/Tw2 = 40/30°C}**

T _{p1}	PT	Q _w	Δp _w	T _{p2}	T _{p1}	PT	Q _w	Δp _w	T _{p2}	T _{p1}	PT	Q _w	Δp _w	T _{p2}	T _{p1}	PT	Q _w	Δp _w	T _{p2}	T _{p1}	PT	Q _w	Δp _w	T _{p2}
°C	kW	l/h	kPa	°C	°C	kW	l/h	kPa	°C	°C	kW	l/h	kPa	°C	°C	kW	l/h	kPa	°C	°C	kW	l/h	kPa	°C

LEO L2 / LEO L2 BMS

V = 3800 m³/h

0,0	50,4	1 500	7,9	43,5	0,0	38,4	1693	10,5	33,0	0,0	27,2	1190	5,9	23,5	0,0	21,5	937	4,0	18,5	0,0	15,6	1 351	8,2	13,5
5,0	48,0	1 428	7,2	46,5	5,0	35,9	1584	9,3	36,0	5,0	24,7	1079	4,9	26,5	5,0	18,9	825	3,2	21,5	5,0	13,0	1 128	5,9	16,0
10,0	45,5	1 355	6,5	49,0	10,0	33,4	1474	8,1	38,5	10,0	22,1	968	4,1	29,0	10,0	16,3	712	2,4	24,0	10,0	10,4	902	4,0	19,0
15,0	43,1	1 283	5,9	52,0	15,0	30,9	1364	7,1	41,5	15,0	19,6	856	3,3	31,5	15,0	13,7	598	1,8	26,5	15,0	7,7	671	2,4	21,5
20,0	40,7	1 211	5,3	54,5	20,0	28,4	1254	6,1	44,0	20,0	17,0	743	2,5	34,5	20,0	11,0	480	1,2	29,5	20,0	4,9	425	1,1	24,0

LEO L3 / LEO L3 BMS

V = 3400 m³/h

0,0	65,2	1 942	11,9	63,0	0,0	49,4	2182	15,7	48,0	0,0	35,7	1564	9,1	34,5	0,0	28,8	1254	6,4	28,0	0,0	20,5	1 775	12,6	20,0
5,0	62,2	1 852	10,9	65,0	5,0	46,4	2046	13,9	49,5	5,0	32,6	1426	7,7	36,5	5,0	25,6	1115	5,2	29,5	5,0	17,3	1 499	9,3	21,5
10,0	59,2	1 762	10,0	67,0	10,0	43,3	1910	12,3	51,5	10,0	29,5	1289	6,4	38,5	10,0	22,4	975	4,1	31,5	10,0	14,1	1 220	6,5	23,5
15,0	56,2	1 672	9,1	68,5	15,0	40,2	1775	10,8	53,5	15,0	26,3	1150	5,3	40,0	15,0	19,1	832	3,1	33,5	15,0	10,8	935	4,0	25,5
20,0	53,2	1 584	8,2	70,5	20,0	37,1	1639	9,3	55,0	20,0	23,1	1010	4,2	42,0	20,0	15,8	686	2,2	35,0	20,0	7,3	637	2,1	27,0

LEO XL2 / LEO XL2 BMS

V = 5800 m³/h

0,0	94,0	2 799	23,1	52,5	0,0	71,6	3159	30,7	40,0	0,0	51,4	2248	17,5	28,5	0,0	41,2	1794	12,1	23,0	0,0	29,6	2 568	24,4	16,5
5,0	89,5	2 666	21,1	54,5	5,0	67,0	2958	27,2	42,0	5,0	46,8	2046	14,7	31,0	5,0	36,5	1591	9,7	25,5	5,0	24,9	2 161	17,9	19,0
10,0	85,1	2 533	19,2	57,0	10,0	62,5	2757	23,9	44,5	10,0	42,1	1843	12,2	33,5	10,0	31,8	1386	7,6	27,5	10,0	20,2	1 751	12,3	21,0
15,0	80,6	2 400	17,4	59,5	15,0	57,9	2556	20,8	47,0	15,0	37,5	1639	9,9	35,5	15,0	27,1	1179	5,7	30,0	15,0	15,4	1 336	7,6	23,5
20,0	76,2	2 269	15,7	61,5	20,0	53,4	2355	17,9	49,0	20,0	32,8	1433	7,8	38,0	20,0	22,2	969	4,0	32,0	20,0	10,5	910	3,8	25,5

LEO XL3 / LEO XL3 BMS

V = 5300 m³/h

0,0	121,0	3 602	18,7	74,0	0,0	91,6	4043	24,6	56,0	0,0	66,6	2916	14,4	41,0	0,0	54,0	2352	10,2	33,0	0,0	38,2	3 313	20,0	23,5
5,0	115,4	3 436	17,2	75,5	5,0	86,0	3794	21,9	57,5	5,0	60,9	2664	12,3	42,0	5,0	48,1	2097	8,3	34,5	5,0	32,4	2 807	14,9	25,0
10,0	109,9	3 270	15,7	76,5	10,0	80,3	3545	19,4	59,0	10,0	55,1	2411	10,2	43,5	10,0	42,2	1840	6,5	35,5	10,0	26,5	2 297	10,4	26,0
15,0	104,3	3 106	14,3	78,0	15,0	74,7	3296	17,0	60,0	15,0	49,3	2157	8,4	45,0	15,0	36,2	1580	5,0	37,0	15,0	20,5	1 777	6,6	27,5
20,0	98,9	2 944	12,9	79,5	20,0	69,1	3048	14,7	61,5	20,0	43,4	1900	6,7	46,0	20,0	30,1	1314	3,6	38,0	20,0	14,3	1 238	3,5	28,5

V – air flow

PT – heating capacity

T_{p1} – inlet air temperature

T_{p2} – outlet air temperature

T_{w1} – inlet water temperature

T_{w2} – outlet water temperature

Q_w – water stream flow in the heat exchanger

Δp_w – water pressure drop in the heat exchanger



HEAT OUTPUT CALCULATOR

In order to select the device with other parameters scan QR code.



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