



FLEXIHEAT UK LTD
www.flexiheatuk.com
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LEO



LEO fan heaters



Air flow

up to 5800 m³/h



Heating capacity

up to 121 kW



Mass

10.4 – 26.2 kg



Casing

EPP expanded polypropylene

What is LEO?

For us, the heater alone is not enough! That's why we created the LEO series of water heaters with greater functionality and better performance confirmed by an internationally accredited testing laboratory.

Available types of units

- 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 – fan heater with AC fan offers possibility to switch between 3 steps of efficiency.
- HP ready – LEO heaters work together with low-temperature heat sources.



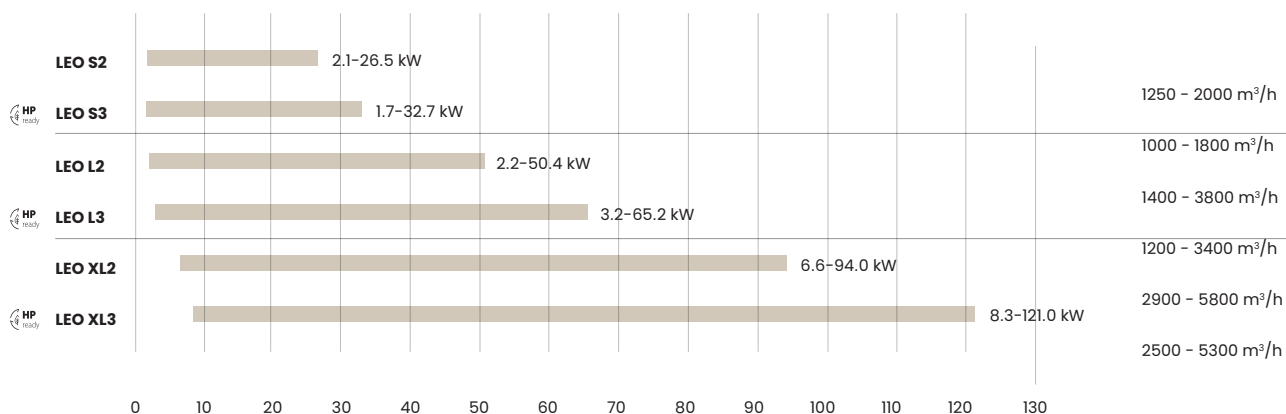
Application

- big cubature buildings: industrial halls, warehouses, department stores, production halls, sports halls, sacral buildings
- smaller rooms, like: workshops, garages, stores, car show rooms, gas stations

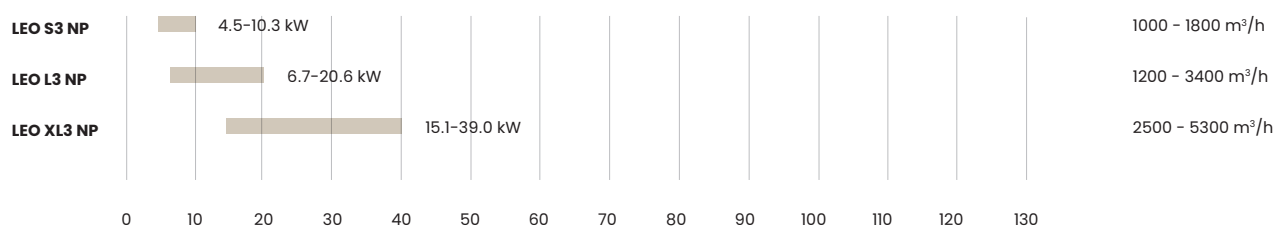
LEO heaters range



A full range of LEO heaters means, above all, that it is possible to choose the perfect solution for the needs of a facility. FLOWAIR's offer includes heater models with a wide range of heating power, whose parameters have been confirmed by an independent testing laboratory.



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



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 15°C
 max. – III step of fan, temperature of heating medium 120/90°C, air temperature at the supply to the device 15°C

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

EPP — Casing made of expanded polypropylene. Standard.

RAL — Powder painted casing. Special request.

INOX — Stainless steel casing. Special request.



Compare LEO solutions

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

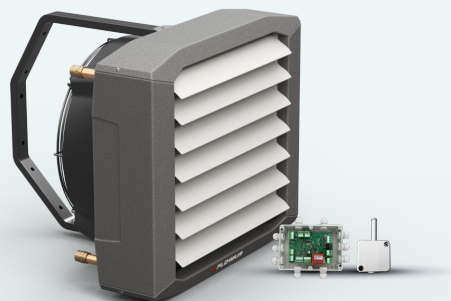
Set:

- fan heater LEO
- rotating console
- TS - 3-step regulator with thermostate

Intelligent control

The LEO water heater has a number of control options. Using T-box intelligent controller with a touch screen display and innovative algorithms, it is possible to integrate it into the SYSTEM FLOWAIR. This ensures full cooperation of LEO devices with other FLOWAIR products.

Intelligent solutions compatible with SYSTEM FLOWAIR



LEO — BMS line

Benefits:

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

Set:

- LEO fan heaters
- rotating console
- DRV V - control module
- PT-1000 IP65 - wall mounted temperature sensor



Technical data, accessories and installation

	LEO S2 / S2 BMS	LEO S3 / S3 BMS	LEO L2 / L2 BMS	LEO L3 / L3 BMS	LEO XL2 / XL2 BMS	LEO XL3 / XL3 BMS
Max. air flow stream [m ³ /h]	2000	1800	3800	3400	5800	5300
Heating capacity [kW]	2.1 – 26.5	1.7 – 32.7	2.2 – 50.4	3.2 – 65.2	6.6 – 94.0	8.3 – 121.0
Nominal heat power (70/50/16°C, III step) [kW]	10.2	12.3	19.1	25.6	36.5	48.1
Power supply [V/Hz] I	230/50	230/50	230/50	230/50	230/50	230/50
Max. current consumption [A]	0.6	0.6	1.5	1.5	2.3	2.4
Max. power consumption [W]	130	130	340	340	520	550
IP / Insulation class	54/F	54/F	54/F	54/F	54/F	54/F
Max. acoustic pressure level [dB(A)] ⁽¹⁾	56.3	56.3	64.1	64.1	67.5	67.5
Max. acoustic power level [dB(A)] ⁽²⁾	71.4	71.4	79.2	79.2	82.6	82.6
Horizontal air throw range [m] ⁽³⁾	14.0	12.5	21.5	19.0	26.0	23.5
Vertical air throw range [m] ⁽⁴⁾	5.3	4.9	7.5	6.8	8.5	7.7
Max. heating water temperature [°C]	120	120	120	120	120	120
Max. operating pressure [MPa]	1.6	1.6	1.6	1.6	1.6	1.6
Connection	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"
Max. operating temperature [°C]	60	60	60	60	60	60
Mass of unit [kg]	10.4	10.8	16.2	17.8	23.2	26.2
Mass of unit filled with water [kg]	11.6	12.2	18.2	20.5	25.9	30.3
Interoperability with heat pumps	HP ready		HP ready		HP ready	

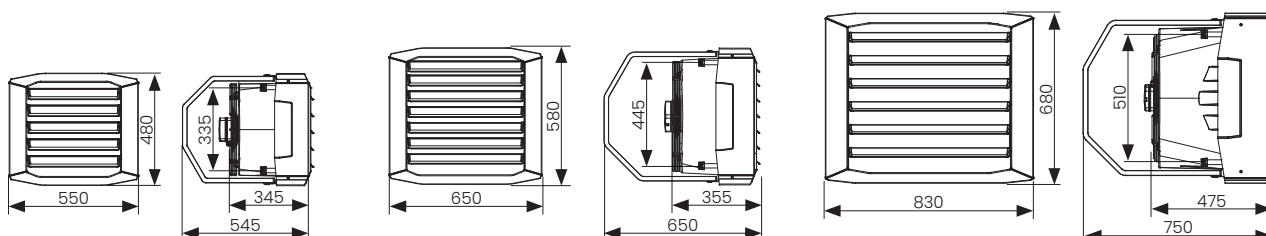
⁽¹⁾ Acoustic pressure level at the distance of 5 m from the unit, in the room of medium capability of sound absorption and 1500 m³ of cubature

⁽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

Dimensions



LEO S2 | S3 / LEO S2 BMS | S3 BMS

LEO L2 | L3 / LEO L2 BMS | L3 BMS

LEO XL2 | XL3 / LEO XL2 BMS | XL3 BMS

LEO NP	 LEO S3 NP / LEO S3 NP BMS	 LEO L3 NP / LEO L3 NP BMS	 LEO XL3 NP / LEO XL3 NP BMS
Max. air flow stream [m ³ /h]	1800	3400	5300
Heating capacity [kW]	3.0 – 16.3	4.5 – 32.6	10.0 – 61.8
Nominal heat power (60/30/18°C, III step) [kW]	7.1	14.7	28.2
Power supply [V/Hz] I	230/50	230/50	230/50
Max. current consumption [A]	0.6	1.5	2.4
Max. power consumption [W]	130	340	550
IP / Insulation class	54/F	54/F	54/F
Max. acoustic pressure level [dB(A)] ⁽¹⁾	56.3	64.1	67.5
Max. acoustic power level [dB(A)] ⁽²⁾	71.4	79.2	82.6
Horizontal range [m] ⁽³⁾	12.5	19	23.5
Vertical range [m] ⁽⁴⁾	4.9	6.8	7.7
Max. heating water temperature [°C]	70	70	70
Max. operating pressure [MPa]	1.6	1.6	1.6
Connection	1/2"	3/4"	3/4"
Max. operating temperature [°C]	60	60	60
Weight of unit [kg]	10.5	16.3	25.8
Weight of unit filled with water [kg]	11.5	18.6	29.6

⁽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

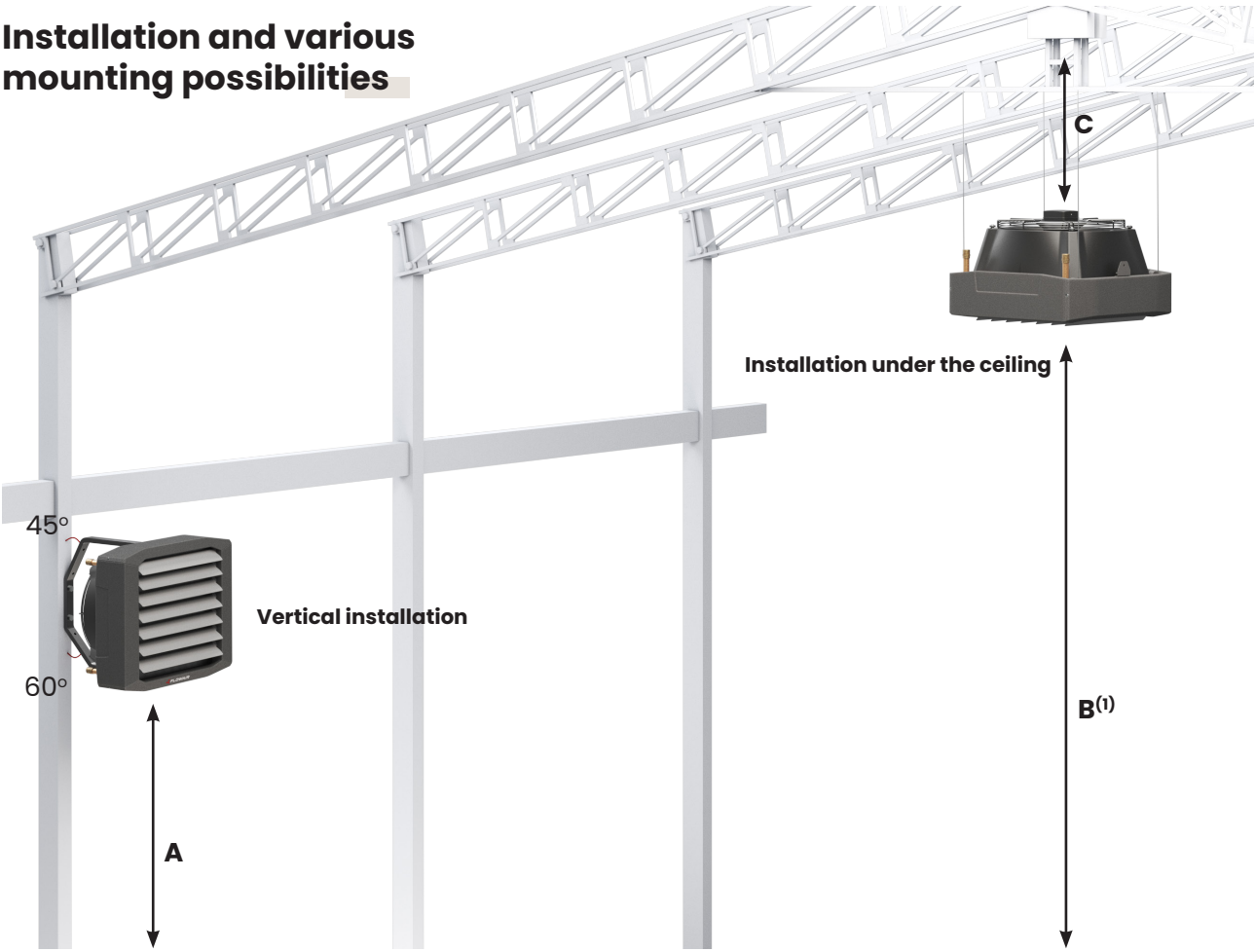
⁽²⁾ In accordance with PN-EN ISO3744

⁽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

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

Installation and various mounting possibilities



Installation equipment

Rotary console

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

Optional corner holders

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



Recommended installation distance [m]

	S2	S3	L2	L3	XL2	XL3
A	max. 3.0	max. 3.0	2.5–8.0	2.5–8.0	2.5–8.0	2.5–8.0
B	2.5–6.0	2.5–6.0	2.5–8.5	2.5–8.0	2.5–9.5	2.5–9.0
C	min. 0.3	min. 0.3	min. 0.3	min. 0.3	min. 0.3	min. 0.3

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

Control systems

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.



	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 SYSTEM FLOWAIR			✓
Weekly programmer for each zone			✓ ⁽¹⁾
Individual settings for each zone			✓ ⁽¹⁾
Individual description of the controlled zone			✓ ⁽¹⁾
Antifreeze for each zone			✓ ⁽¹⁾
Max. number of connected units			
Via controller	7	5	31
Via additional splitters	36	36	n/d

⁽¹⁾ T-box Zone

Control elements

Wall-mounted temperature sensor

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

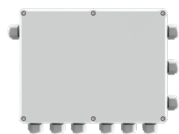


Possibility of temperature measurement

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

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

Splitter	S2 / S3	L2 / L3	XL2 / XL3
1 szt. RX	12	6	3
2 szt. RX	24	12	6
3 szt. RX	36	18	9

SRQ valves

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

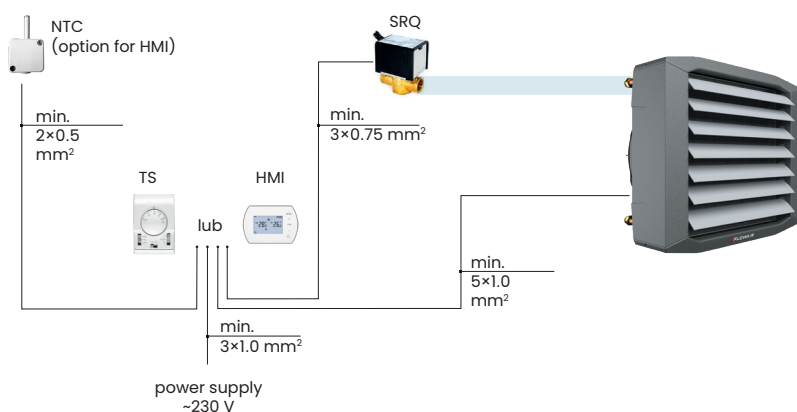


Compatibility of valves with LEO fan heaters

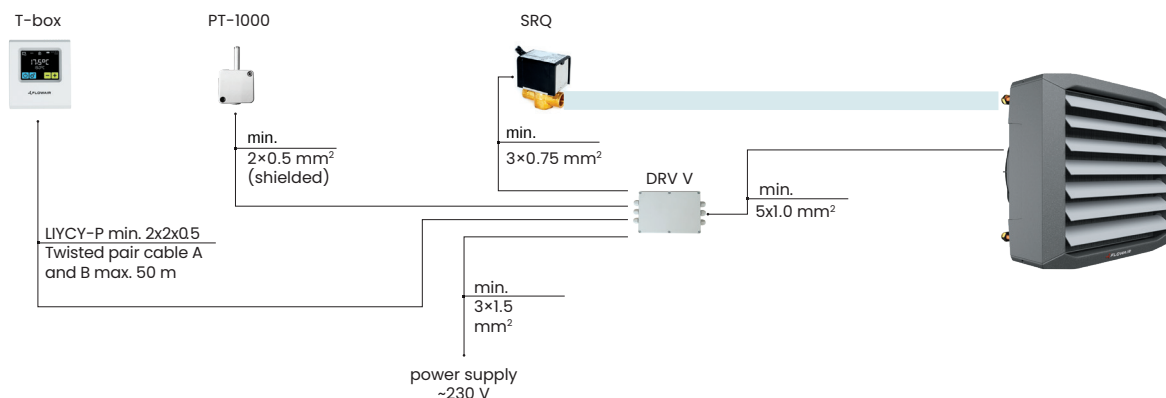
Valve	S2	S3	L2	L3	XL2	XL3
SRQ2d ½"	✓	✓				
SRQ2d ¾"			✓	✓	✓	✓
SRQ3d ½"	✓	✓				
SRQ3d ¾"			✓	✓	✓	✓

Connection diagrams

Controller TS / HMI



Controller T-box



LEO accessories

Confusor LEO

Confusor increases air flow speed. It results in faster air distribution to the lower zones of the room. Material: powder-painted steel, RAL 9007. The maximum installation height is 12 m⁽¹⁾.

- Weight: confusor LEO L: 3.8 kg, confusor LEO XL: 6.2 kg

4-Side outlet grille LEO

Outlet grille improves air distribution. It is perfect solution for low level ceiling rooms, where heaters are installed under the ceiling. Material: powder-painted steel, RAL 9007. The maximum installation height is 5 m⁽¹⁾.

- Weight: outlet grille LEO L: 2.8 kg, outlet grille LEO XL: 4.8 kg

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

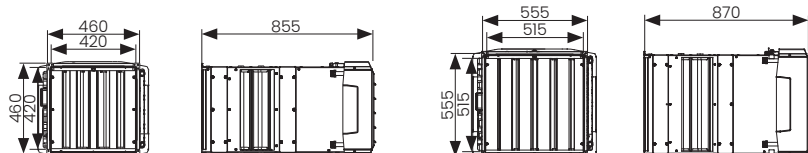


Mixing chamber

LEO fan heaters with LEO KM mixing chamber form heating and ventilation unit. It is the easiest way to create the efficient mechanical ventilation without additional systems. The set of chamber and heater is easy to install thanks to the suitable supports.

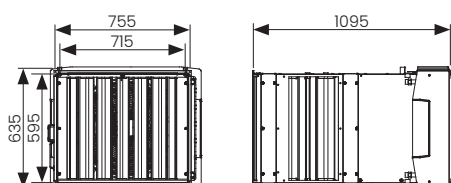


Dimensions



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

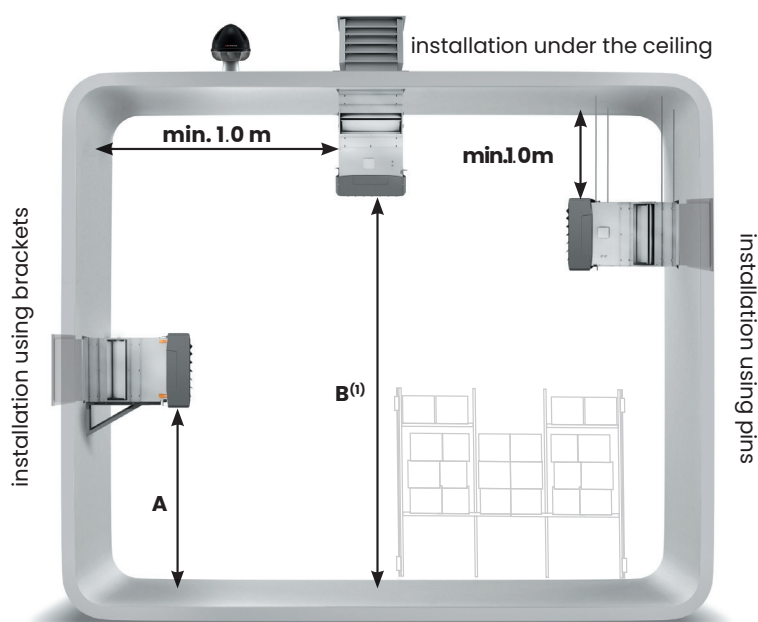
LEO L2 | L3 + KM L / LEO L2 BMS |
L3 BMS + KM L



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.flexiheatuk.com

Mixing chamber installation



The use of LEO + KM + UVO is the simplest way to provide forced ventilation in a room without the need for additional systems.



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 S2 + KM S	LEO S3 + KM S	LEO L2 + KM L	LEO L3 + KM L	LEO XL2 + KM XL	LEO XL3 + KM XL
A	max. 3.0	max. 3.0	2.5 – 5.0	2.5 – 5.0	2.5 – 5.0	2.5 – 5.0
B	2.5 – 4.0	2.5 – 4.0	2.5 – 6.0	2.5 – 5.5	2.5 – 7.0	2.5 – 6.0

Technical data

	LEO S2 + KM S	LEO S3 + KM S	LEO L2 + KM L	LEO L3 + KM L	LEO XL2 + KM XL	LEO XL3 + KM XL
Max. air flow stream [m ³ /h] ⁽¹⁾	1100	1000	2400	2250	3700	3100
Nominal heat power (70/50/16°C, III step) [kW]	7.2	8.3	14.4	19.5	27.4	33.0
Power supply [V/Hz]	230/50	230/50	230/50	230/50	230/50	230/50
Max. current consumption [A]	0.6	0.6	1.5	1.5	2.3	2.4
Max. power consumption [W]	130	130	340	340	520	550
IP / Insulation class	54/F	54/F	54/F	54/F	54/F	54/F
Max. acoustic pressure level [dB(A)] ⁽²⁾	56.3	56.3	64.1	64.1	67.5	67.5
Max. acoustic power level [dB(A)] ⁽³⁾	71.4	71.4	79.2	79.2	82.6	82.6
Horizontal range [m] ⁽⁴⁾	7.5	7.0	13.5	12.5	16.5	14.0
Vertical range [m] ⁽⁵⁾	3.2	2.9	5.0	4.7	5.8	4.9
Max. heating water temperature [°C]	120	120	120	120	120	120
Max. operating pressure [MPa]	1.6	1.6	1.6	1.6	1.6	1.6
Connection	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"
Mass of unit [kg]	26.8	27.9	35.5	37.8	53.6	57.9
Mass of unit filled with water [kg]	28.0	29.3	37.5	40.5	56.3	62.0

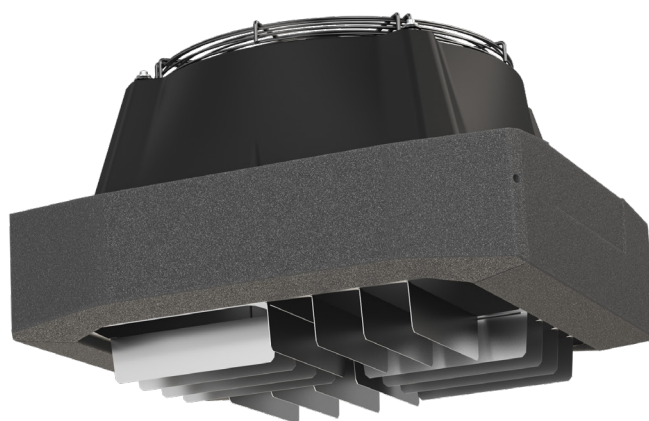
⁽¹⁾ Efficiency with air intake/inlet and 100% fresh air

⁽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



LEO D destratificators



Air flow

up to 7200 m³/h



Colour

Grey



Mass

up to 19.5 kg



Casing

EPP expanded polypropylene

What is LEO D?

Destratificator 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 a reduction of heat loss through the ceiling and leads to faster and energy-efficient heating of the building.

LEO D destratificator assists the proper operation of heating system counteracting the accumulation of warm air in the upper zones of the room. 3 sizes of destratificators make it possible to choose the perfect fit for the different heights of the building. A wide range of air flow efficiency 1900–7200m³/h ensures high user comfort with high efficiency in lower rooms from 6 m to very high rooms up to 15 m.

Available types of units:

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



Application

Destatificators 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.

LEO D can be used in:

- tall industrial buildings
- public utility buildings
- production facilities, warehouses,
- supermarkets and trade fair centers.

Technical data and installation

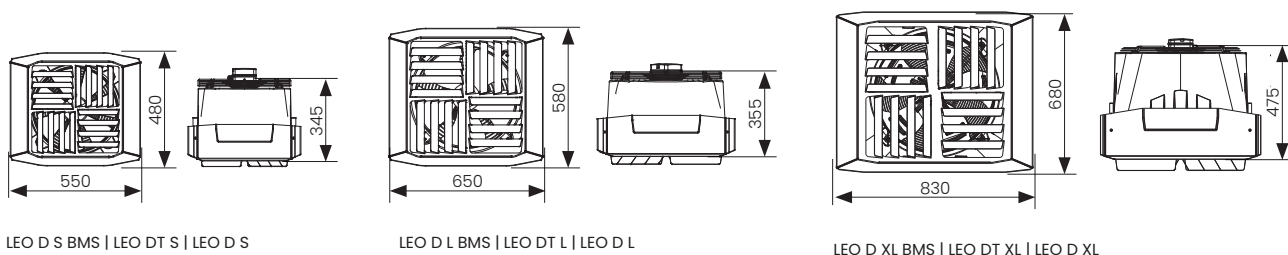
	LEO D S	LEO D L	LEO D XL
Fan	3 speed fan, Axial, single-phase, AC	3 speed fan, Axial, single-phase, AC	3 speed fan, Axial, single-phase, AC
Max. range of air stream [m ³ /h]	2500	5200	7200
Power supply [V/Hz]	230/50	230/50	230/50
Max. current consumption [A]	0.5	1.3	2.0
Max. power consumption [W]	110	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
Mass 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

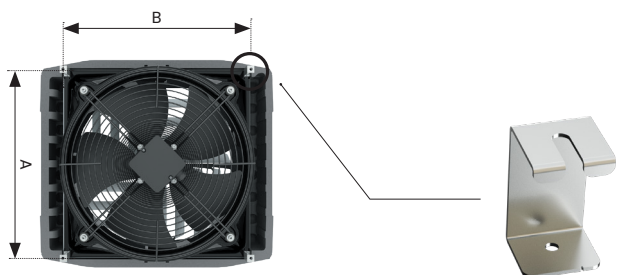
Dimensions

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Installation

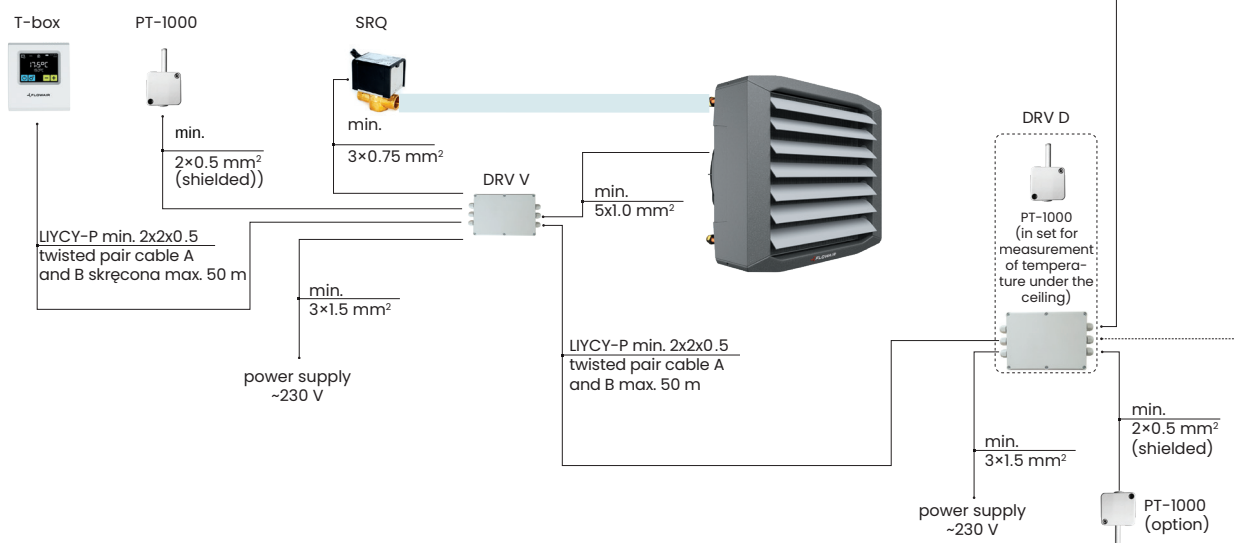
Destratificator is equipped with corner holders, which make the installation and leveling of the unit under the ceiling much easier. In case of installation under the ceiling which transmit vibrations it is recommended to use vibro-isolators.



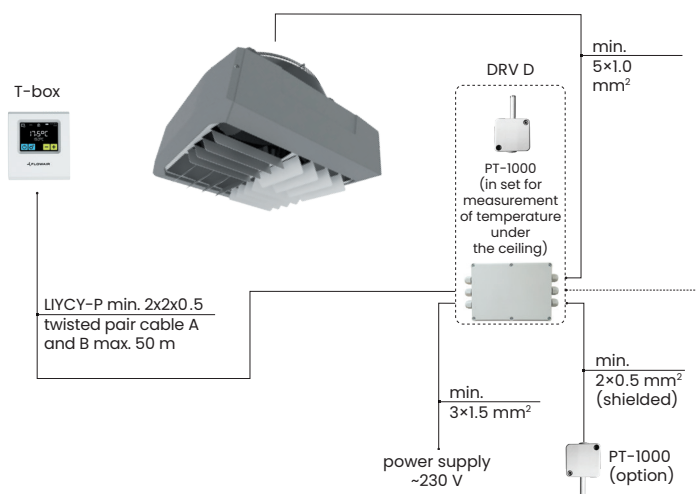
	LEO D S	LEO D L	LEO D XL
A	415	515	585
B	415	515	665

Connection diagrams LEO

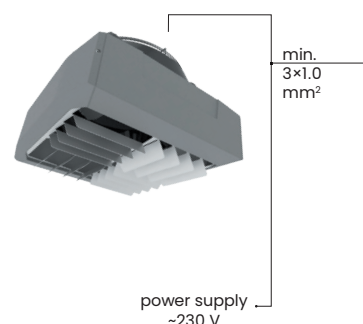
Synergy of devices when Connected to SYSTEM FLOWAIR



LEO D BMS regulation with controller T-box



LEO DT ON/OFF mode



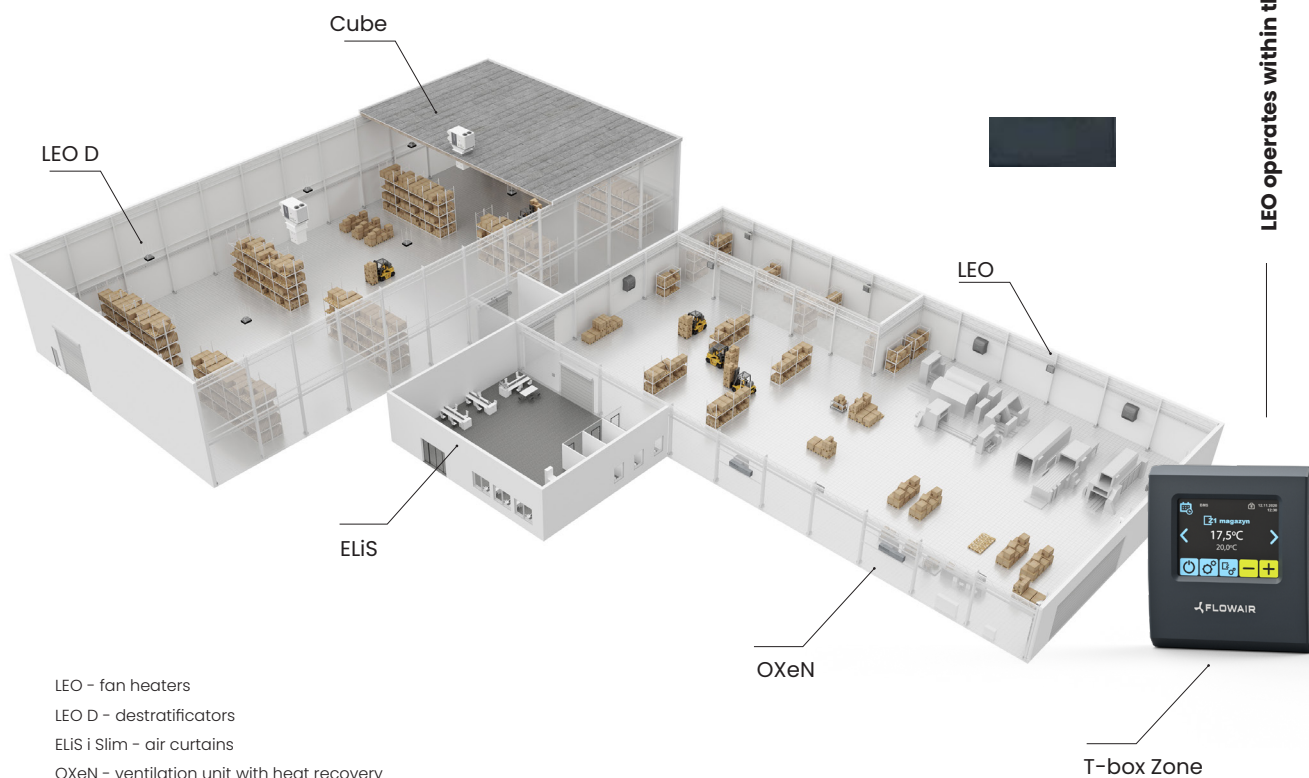
Automatic destratification system

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. This solution allows to reuse previously generated heat saving operating costs and energy.

- 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.

SYSTEM FLOWAIR

The SYSTEM FLOWAIR is a complete range of heating and ventilation devices integrated by a single controller. The T-box Zone controller allows up to 31 devices from the range to work together in 31 independent zones.



LEO - fan heaters
LEO D - destratificators
ELIS i Slim - air curtains
OXeN - ventilation unit with heat recovery
Cube - rooftop devices



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

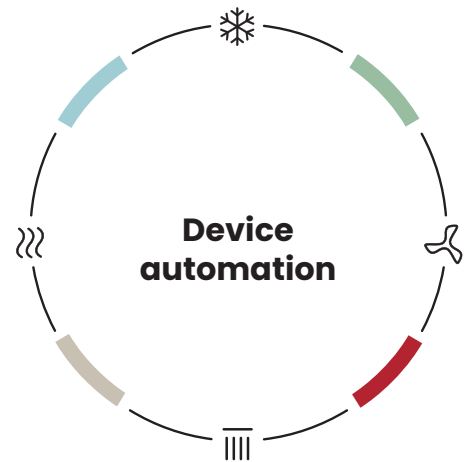


Antifreeze protects the devices against low temperatures

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 functions were previously reserved for an extensive Building Management System (BMS).

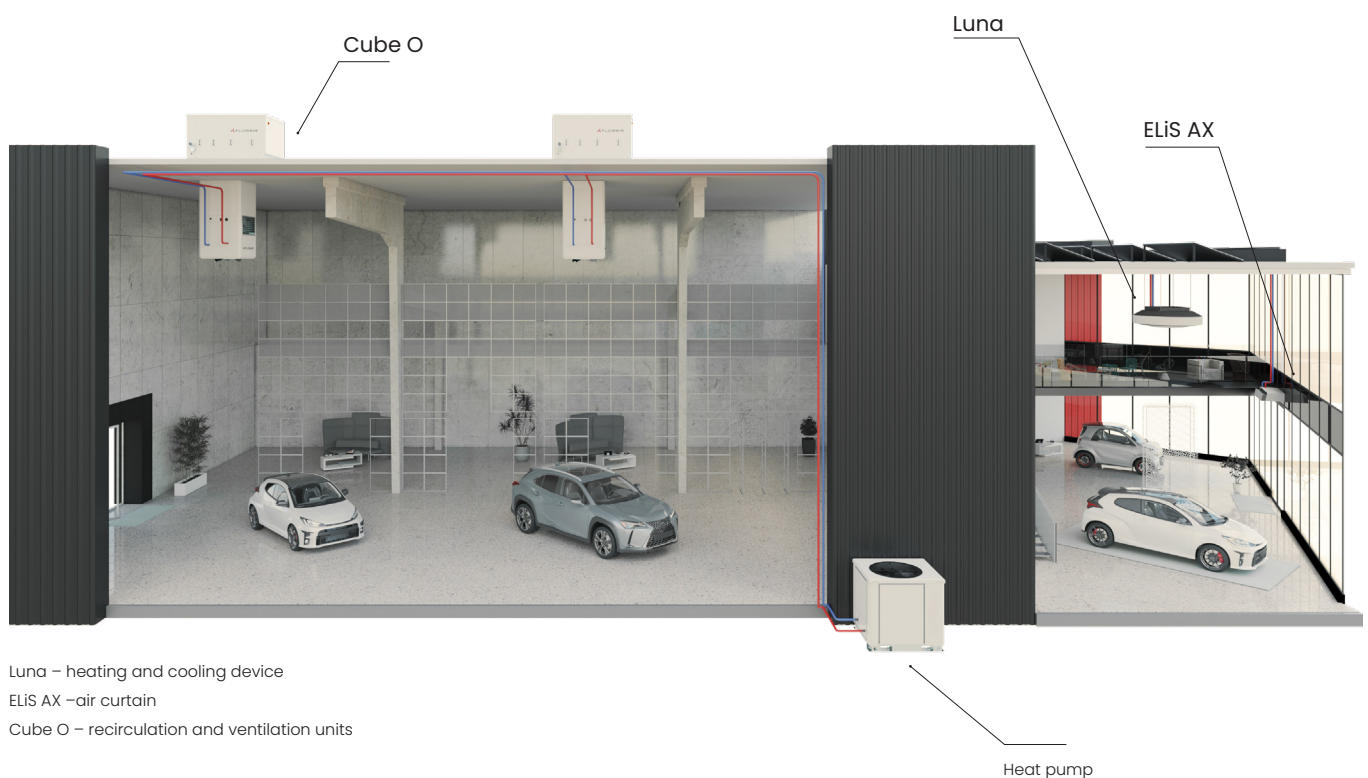
The SYSTEM offers higher heat comfort and energy savings. Thanks to destratifiers and fan heaters working together it is possible to take advantage and effectively use the hot air that is present under the ceiling, thus saving heat energy to be supplied by the fan heaters.



Interoperability with heat pump

LEO HP ready devices are energy-efficient solutions that align with ecological trends and zero-emission policies. LEO heater can be supplied with low-temperature heating medium (60–40°C).

Advanced control ensures service-free interoperability with heat pumps. An additional advantage of the solution is the use of water as a heating medium, which guarantees greater safety and lower environmental impact compared to air conditioning systems which use CFCs.



Luna – heating and cooling device

ELiS AX – air curtain

Cube O – recirculation and ventilation units

Heat pump

LEO heating capacities

Tw1/Tw2 = 90/70°C					Tw1/Tw2 = 70/50°C					Tw1/Tw2 = 60/40°C					Tw1/Tw2 = 45/35°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 S2 / LEO S2 BMS																								
V = 2000 m³/h																								
0	20.1	889	14.2	30	0	14.4	631	8.2	21.5	0	11.5	502	5.6	17.0	0	9.7	845	14.9	14.5	0	8.3	719	11.4	12.5
5	18.9	832	12.6	33	5	13.1	574	6.9	24.5	5	10.2	445	4.5	20	5	8.4	730	11.5	17.5	5	7	604	8.4	15.5
10	17.6	776	11.1	36	10	11.8	517	5.7	27.5	10	8.9	386	3.6	23	10	7.1	615	8.5	20.5	10	5.6	488	5.8	18.5
15	16.3	719	9.7	39	15	10.5	459	4.6	30.5	15	7.5	328	2.7	26	15	5.7	499	5.8	23.5	15	4.3	370	3.5	21
20	15	663	8.4	42	20	9.2	401	3.6	33.5	20	6.1	267	1.9	29	20	4.4	380	3.6	26.5	20	2.8	246	1.7	24
LEO S3 / LEO S3 BMS																								
V = 1800 m³/h																								
0	24.9	1098	11.1	41	0	17.6	769	6.2	29	0	13.8	603	4.2	23	0	11.9	1032	11.4	19.5	0	10.1	872	8.6	16.5
5	23.3	1026	9.8	43	5	15.9	697	5.2	31	5	12.2	530	3.3	25	5	10.2	887	8.7	22	5	8.4	726	6.2	18.5
10	21.6	954	8.6	45.5	10	14.3	624	4.3	33.5	10	10.5	457	2.5	27	10	8.5	741	6.3	24	10	6.7	579	4.1	21
15	20	883	7.5	47.5	15	12.6	551	3.4	35.5	15	8.8	382	1.8	29	15	6.8	594	4.2	26	15	4.9	428	2.4	23
20	18.4	811	6.4	49.5	20	10.9	478	2.6	37.5	20.0	7.0	304	1.2	31.5	20	5.1	443	2.5	28.5	20	3.1	264	1	25
LEO L2 / LEO L2 BMS																								
V = 3800 m³/h																								
0	38.4	1693	10.5	33	0	27.2	1190	5.9	23.5	0	21.5	937	4	18.5	0	18.4	1596	10.8	16	0	15.6	1351	8.2	13.5
5	35.9	1584	9.3	36.0	5	24.7	1079	4.9	26.5	5	18.9	825	3.2	21.5	5	15.8	1374	8.2	19	5	13	1128	5.9	16
10	33.4	1474	8.1	38.5	10	22.1	968	4.1	29	10	16.3	712	2.4	24	10	13.3	1150	6	21.5	10	10.4	902	4	19
15	30.9	1364	7.1	41.5	15	19.6	856	3.3	31.5	15	13.7	598	1.8	26.5	15	10.6	924	4.1	24	15	7.7	671	2.4	21.5
20	28.4	1254	6.1	44	20	17	743	2.5	34.5	20	11	480	1.2	29.5	20	8	694	2.4	27	20	4.9	425	1.1	24
LEO L3 / LEO L3 BMS																								
V = 3400 m³/h																								
0	49.4	2182	15.7	48	0	35.7	1564	9.1	34.5	0	28.8	1254	6.4	28	0	23.9	2074	16.4	23	0	20.5	1775	12.6	20
5	46.4	2046	13.9	49.5	5	32.6	1426	7.7	36.5	5	25.6	1115	5.2	29.5	5	20.7	1800	12.7	25	5	17.3	1499	9.3	21.5
10	43.3	1910	12.3	51.5	10	29.5	1289	6.4	38.5	10	22.4	975	4.1	31.5	10	17.5	1523	9.4	27	10	14.1	1220	6.5	23.5
15	40.2	1775	10.8	53.5	15	26.3	1150	5.3	40	15	19.1	832	3.1	33.5	15	14.3	1244	6.6	29	15	10.8	935	4	25.5
20	37.1	1639	9.3	55	20	23.1	1010	4.2	42	20	15.8	686	2.2	35	20	11	959	4.1	30.5	20	7.3	637	2.1	27
LEO XL2 / LEO XL2 BMS																								
V = 5800 m³/h																								
0	71.6	3159	30.7	40	0	51.4	2248	17.5	28.5	0	41.2	1794	12.1	23	0	34.6	3008	31.9	19.5	0	29.6	2568	24.4	16.5
5	67	2958	27.2	42	5	46.8	2046	14.7	31	5	36.5	1591	9.7	25.5	5	30	2603	24.5	22	5	24.9	2161	17.9	19
10	62.5	2757	23.9	44.5	10	42.1	1843	12.2	33.5	10	31.8	1386	7.6	27.5	10	25.3	2195	18	24	10	20.2	1751	12.3	21
15	57.9	2556	20.8	47	15	37.5	1639	9.9	35.5	15	27.1	1179	5.7	30	15	20.5	1784	12.4	26.5	15	15.4	1336	7.6	23.5
20	53.4	2355	17.9	49	20	32.8	1433	7.8	38	20	22.2	969	4	32	20	15.7	1367	7.7	28.5	20	10.5	910	3.8	25.5

Tw1/Tw2 = 90/70°C					Tw1/Tw2 = 70/50°C					Tw1/Tw2 = 60/40°C					Tw1/Tw2 = 45/35°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 XL3 / LEO XL3 BMS																								
V = 5300 m³/h																								
0	91.6	4043	24.6	56	0	66.6	2916	14.4	41	0	54	2352	10.2	33	0	44.5	3866	25.9	27.5	0	38.2	3 313	20	23.5
5	86	3794	21.9	57.5	5	60.9	2664	12.3	42	5	48.1	2097	8.3	34.5	5	38.7	3362	20.1	28.5	5	32.4	2 807	14.9	25
10	80.3	3545	19.4	59	10	55.1	2411	10.2	43.5	10	42.2	1840	6.5	35.5	10	32.9	2855	15	30	10	26.5	2 297	10.4	26
15	74.7	3296	17	60	15	49.3	2157	8.4	45	15	36.2	1580	5	37	15	27	2342	10.5	31.5	15	20.5	1 777	6.6	27.5
20	69.1	3048	14.7	61.5	20	43.4	1900	6.7	46	20	30.1	1314	3.6	38	20	21	1821	6.7	32.5	20	14.3	1 238	3.5	28.5

- V – air flow
- PT – heating capacity
- Tp1 – inlet air temperature
- Tp2 – outlet air temperature
- Tw1 – inlet water temperature
- Tw2 – outlet water temperature
- Qw – water stream flow in the heat exchanger
- Δpw – water pressure drop in the heat exchanger

LEO NP

heating capacities

T _{w1} /T _{w2} = 70/30°C					T _{w1} /T _{w2} = 70/40°C					T _{w1} /T _{w2} = 60/30°C				
T _{p1}	P _T	Q _w	Δp _w	T _{p2}	T _{p1}	P _T	Q _w	Δp _w	T _{p2}	T _{p1}	P _T	Q _w	Δp _w	T _{p2}
°C	kW	l/h	kPa	°C	°C	kW	l/h	kPa	°C	°C	kW	l/h	kPa	°C
LEO S3 NP														
V = 1800 m³/h														
10	10.1	220	4.6	26.5	10	13	378	12	31	10	9.2	268	6.7	25
12	9.3	203	4	27	12	12.3	358	10.9	32	12	8.5	248	5.8	26
15	8.2	178	3.1	28.5	15	11.3	328	9.3	33.5	15	7.4	216	4.5	27
18	6.9	151	2.3	29.5	18	10.2	297	7.8	34.5	18	6.3	182	3.3	28
20	6.1	132	1.9	30	20	9.5	276	6.8	35.5	20	5.5	159	2.6	29
LEO L3 NP														
V = 3400 m³/h														
10	20.8	454	5.9	28	10	26.1	761	15	32.5	10	18.9	530	8.6	26.5
12	19.4	422	5.2	28.5	12	24.8	722	13.6	33.5	12	17.6	510	7.5	27
15	17.1	373	4.2	29.5	15	22.8	663	11.7	34.5	15	15.4	447	5.9	28.5
18	14.7	321	3.2	30.5	18	20.7	604	9.8	36	18	13.2	382	4.4	29.5
20	13.1	285	2.6	31	20	19.3	53	8.7	36.5	20	11.6	337	3.5	30
LEO XL3 NP														
V = 5300 m³/h														
10	39.9	869	8.4	32	10	49.5	1443	20.9	37.5	10	36.2	1050	12.1	30
12	37.1	810	7.4	32.5	12	47	1370	19	38	12	33.5	974	12.1	30.5
15	32.9	718	5.9	33	15	43.2	1260	16.3	39	15	29.5	857	12.1	31.5
18	28.5	622	4.6	33.5	18	39.4	1148	13.8	39.5	18	25.4	736	12.1	32
20	25.4	554	3.7	34	20	36.8	1073	12.2	40.5	20	22.4	651	12.1	32.5

Tw1/Tw2 = 60/40°C					Tw1/Tw2 = 50/30°C					Tw1/Tw2 = 40/30°C				
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
LEO S3 NP														
V = 1800 m³/h														
10	12	522	21.9	29.5	10	8.4	365	11.9	23.5	10	7.5	650	34.5	22
12	11.3	492	19.7	30.5	12	7.7	335	10.2	24.5	12	6.8	593	29.2	23
15	10.3	449	16.6	31.5	15	6.7	290	7.9	26	15	5.8	507	22	24.5
18	9.3	404	13.8	33	18	5.6	243	5.7	27	18	4.8	419	15.6	26
20	8.6	374	12	34	20	4.9	211	4.4	28	20	4.2	360	11.9	26.6
LEO L3 NP														
V = 3400 m³/h														
10	23.9	1043	27.1	30.5	10	17	739	15	24.5	10	14.9	1296	42.5	23
12	22.6	986	24.5	31.5	12	15.7	681	12.9	25.5	12	13.7	1185	36.1	24
15	20.6	900	20.7	32.5	15	13.6	593	10	26.5	15	11.7	1018	27.4	25
18	18.6	813	17.2	34	18	11.5	501	7.4	28	18	9.8	847	19.6	26.5
20	17.3	755	15	35	20	10.1	429	5.8	28.5	20	8.4	731	15	27.5
LEO XL3 NP														
V = 5300 m³/h														
10	45.1	1966	37.5	35	10	32.3	1403	20.9	28	10	28.1	2440	58.6	25.5
12	42.6	1860	33.9	35.5	12	29.8	1295	18.1	28.5	12	25.7	2233	49.9	26
15	39	1699	28.7	36.5	15	26	1129	14.1	29.5	15	22.1	1920	37.8	27.9
18	35.5	1539	23.9	37.5	18	22.1	959	10.4	30	18	18.5	1602	27.1	28
20	32.8	1429	20.9	38	20	19.4	842	8.2	30.5	20	16	1387	20.8	29

V – air flow
 PT – heating capacity
 Tp1 – inlet air temperature
 Tp2 – outlet air temperature
 Tw1 – inlet water temperature
 Tw2 – outlet water temperature
 Qw – water stream flow in the heat exchanger
 Δpw – water pressure drop in the heat exchanger