

# LYNGSON



## AIR COOLING AND HEATING

Fan cooler / heater LEO COOL



# HOW LEO COOL WORKS?

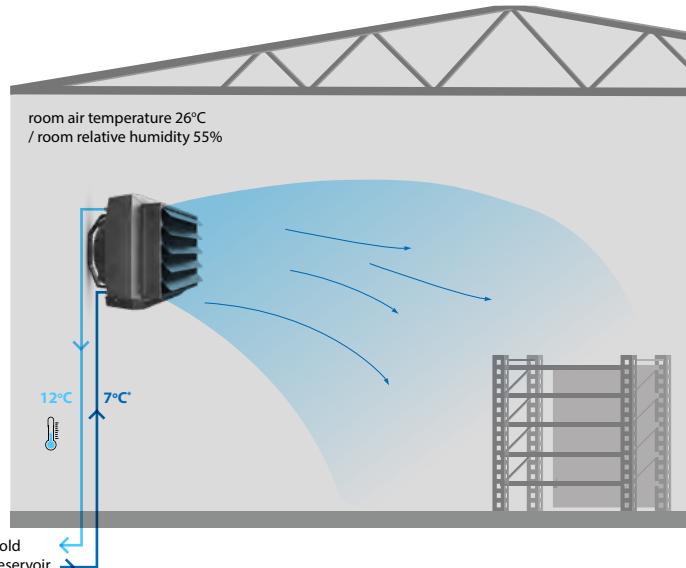
The LEO COOL air cooler-heater creates a decentralised cooling / heating system. It is an universal device which effectively cooperates with thermal sources such as condensing gas boilers, chillers or reversible heat pumps.

 REVERSIBLE HEAT PUMP

 REVERSIBLE HEAT PUMP

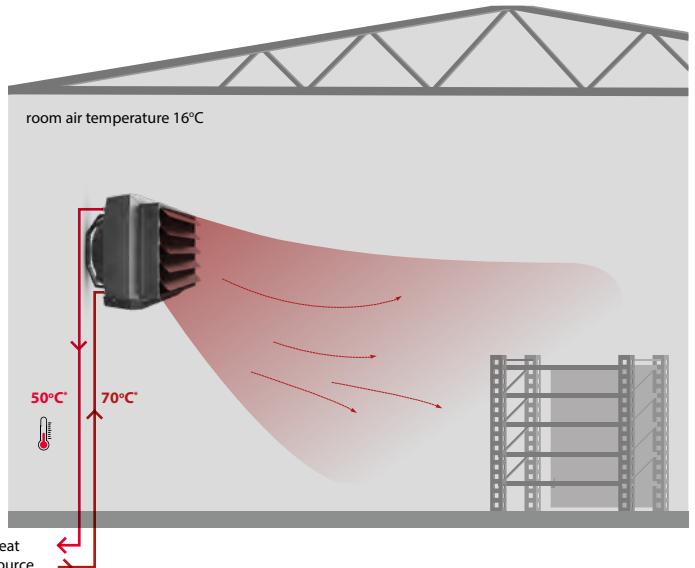
 CHILLER

## SUMMER



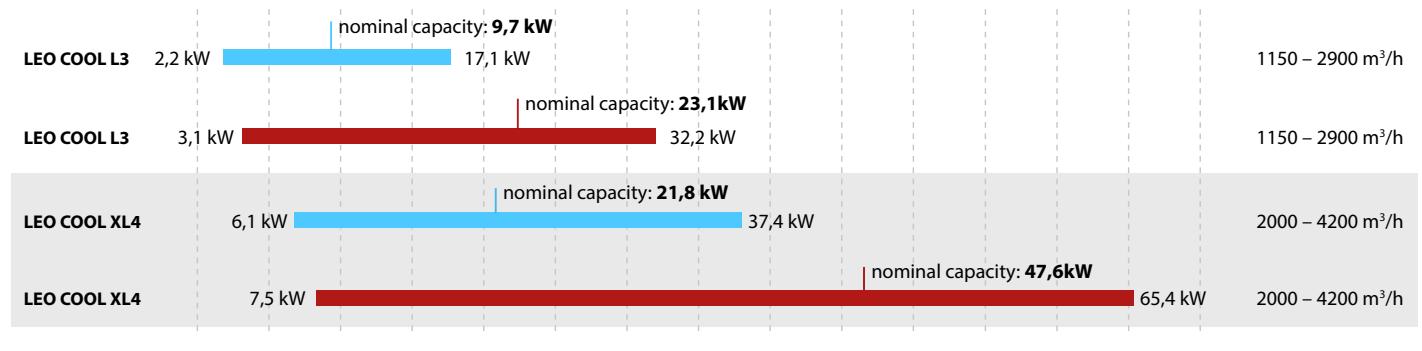
\*cooling medium temperature and its flow direction

## WINTER



\*heating medium temperature and its flow direction

## 2 MODELS



## AIRFLOW RANGE

**COOLING / HEATING CAPACITY  
IS A VARIABLE VALUE**

# LEO COOL - MAIN FEATURES

## CONDENSATE DRAIN SYSTEM

Droplet eliminator equipped with outlet blades prevents condensate droplets from escaping with supply air stream. The water from the condensate drain pan is being removed by gravity. The drain pipe shall be connected to the drain pan.



## HEAT EXCHANGER

A big heating and cooling capacity is provided thanks to a special hydrophilic layers, thin lamellas spacing and 4-row of heat exchanger in case of LEO COOL XL4 or 3-rows water heat exchaner in case of LEO COOL L3.



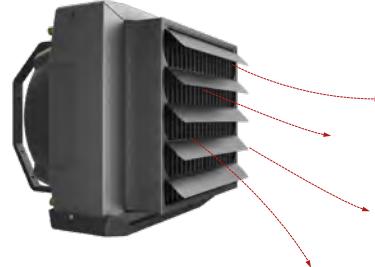
## 3-SPEED FAN

LEO COOL fan coolers-heaters are equipped with 3 speed fans. It's the simplest and the most effective way to control the fan cooler-heater's operation.



## AIR BLADES

Adjustable outlet blades enable to set the direction of the supply air stream according to the needs.



## EASY INSTALLATION

The rotary console ensures easy mounting to the wall. The device's casing is made of EPP which increases its mechanical strength, resistance to dirt and decreases its weight.



## FLOWAIR SYSTEM / BMS

The devices can be optionally connected via the DRV control module. The DRV module manages the operation of devices according to control signals from T-box or directly from BMS.



# FAN COOLER / HEATER LEO COOL

 Cooling capacity<sup>(1)</sup> [kW] **2,2-37,4**

 Heating capacity<sup>(2)</sup> [kW] **3,1-65,4**

 Weight [kg] **23,1-36,0**

 Casing  
**EPP**  
(expanded polypropylene)

 Airflow<sup>(3)</sup> [m³/h] **1150-4200**

 Colour<sup>(4)</sup>  
**Grey,  
black**



<sup>(1)</sup> min. - 10/15/24°C, I step, relative humidity 55%; max - 3/8/32°C, III step, relative humidity 40%

<sup>(2)</sup> min. - 40/30/20°C, I step; max. - 70/50/0°C, III step

<sup>(3)</sup> min. for LEO COOL L3, I step; max. for LEO COOL XL4, III step

<sup>(4)</sup> similar to RAL 9007

## AVAILABLE TYPES OF UNITS:

- **LEO COOL L3**  
- with 3-row water heat exchanger
- **LEO COOL XL4**  
- with 4-row water heat exchanger

## APPLICATION

Fan cooler-heaters are used for heating industrial halls, mid-size and large facilities for instance logistic centers, production halls, warehouses, shops, sports halls etc.  
The devices are designed for indoor use where maximum air dustiness does not exceed 0,3 g/m<sup>3</sup>.

## Fan cooler / heater LEO COOL

<b>Max. airflow [m³/h]</b>	2900	4200
<b>Nominal cooling capacity<sup>(1)</sup> (7/12/26°C, 55%, III fan step) [kW]</b>	9,7	21,8
<b>Nominal heating capacity (70/50/16°C, III fan step) [kW]</b>	23,1	47,6
<b>Power supply [V/Hz]</b>	230/50	230/50
<b>Max. current consumption [A]</b>	1,5	2,4
<b>Max. power consumption [W]</b>	340	550
<b>IP / Insulation class</b>	54/F	54/F
<b>Max. acoustic pressure level<sup>(2)</sup> [dB(A)]</b>	64,1	67,5
<b>Max. acoustic power level<sup>(3)</sup> [dB(A)]</b>	79,2	82,6
<b>Isothermal horizontal airflow range<sup>(4)</sup> [m]</b>	18,0	20,5
<b>Max. heating medium temeperature [°C]</b>	70 water or 30% glycol solution	70 water or 30% glycol solution
<b>Max. operating pressure [MPa]</b>	1,6	1,6
<b>Connection</b>	¾"	¾"
<b>Max. working temperature [°C]</b>	55	55
<b>Weight of device [kg]</b>	23,1	36,0
<b>Weight of device filled with water [kg]</b>	25,8	41,4

### LEO COOL L3

### LEO COOL XL4

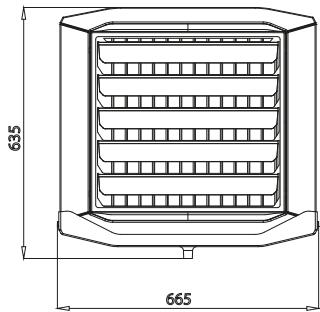
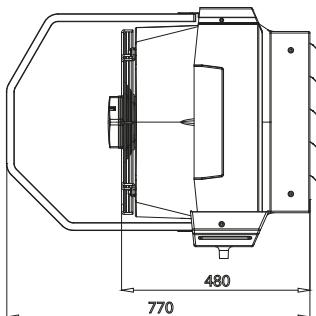
(1) relative humidity of the inlet air: 55%

(2) acoustic pressure level has been measured 5 m from the unit in a 1500 m<sup>3</sup> space with a medium sound absorption coefficient

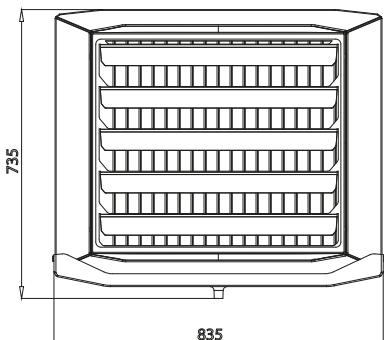
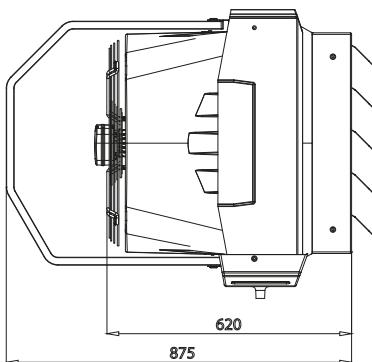
(3) acoustic power level according to PN-EN ISO 3744:2011

(4) horizontal isothermal range for 0,5 m/s boundry air stream speed 0,5 m/s

## DIMENSIONS



LEO COOL L3

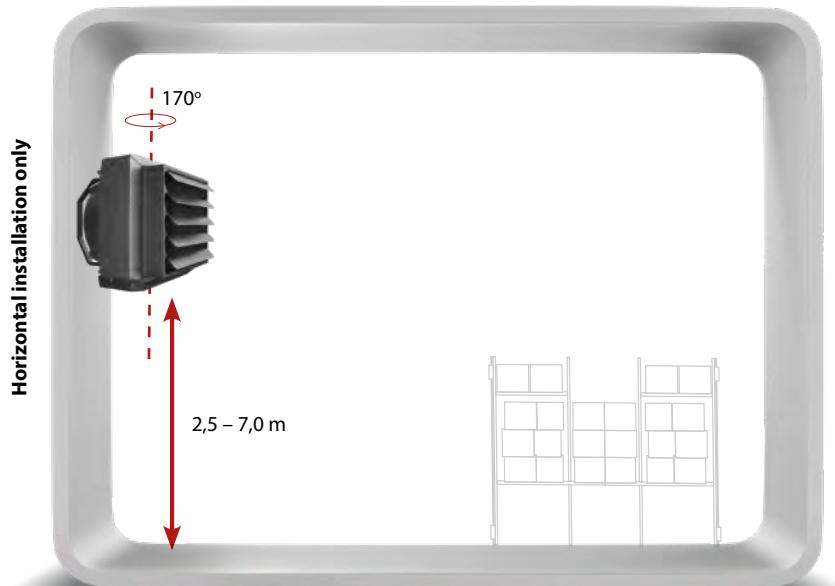


LEO COOL XL4

For **CAD** drawings and documentation of all available versions of LEO visit [www.flowair.com](http://www.flowair.com)



## INSTALLATION



Horizontal installation only



**Rotary console enables**  
installation on the wall  
and 170° rotation  
of the device.

# CONTROL SYSTEMS



## CONTROLLER TS basic version

3-step regulator with room thermostat.



## CONTROLLER T-box BMS version

an intelligent control system tailored to your needs with T-box controller with touch screen.

## FAN COOLER / HEATER LEO COOL

### Types of regulation/control

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

### Modes

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

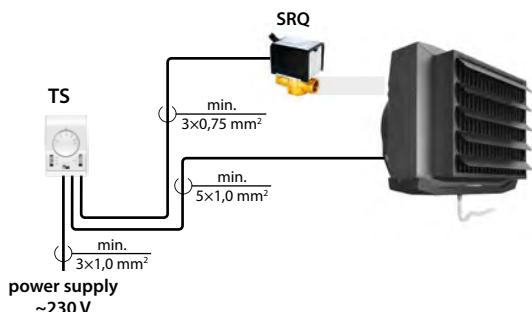
Controller TS

Controller T-box

✓	✓
	✓
✓	✓
✓	✓
	✓
✓	✓
✓	✓
	✓
✓	✓
	✓

# CONNECTION DIAGRAMS

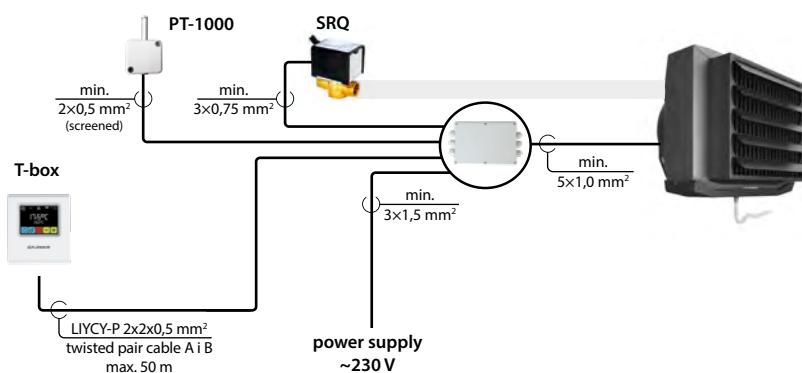
## CONTROLLER TS



### to 1 TS controller:

- max. 3 units  
LEO COOL L3
- max. 2 units  
LEO COOL XL4

## CONTROLLER T-box



### max. 31 units compatible

with FLOWAIR System  
to 1 T-box controller



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