

CATALOGUE CARD LEO S | L | XL / BMS KARTA KATALOGOWA LEO S | L | XL / BMS

GENERAL INFORMATION | INFORMACJE OGÓLNE



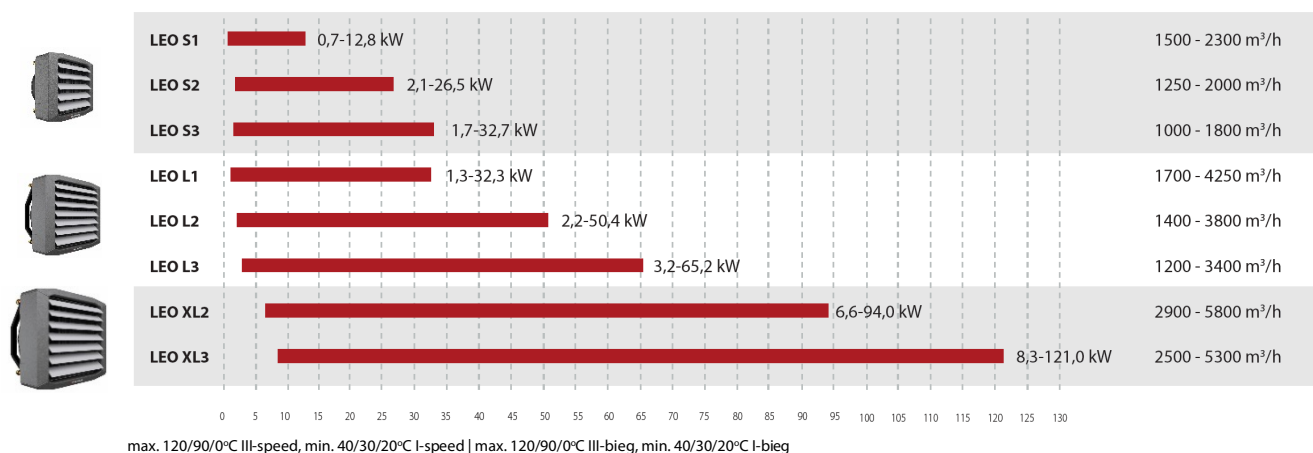
EN

- Fan heaters LEO are used for heating large volume buildings: general, industrial and public buildings etc. The devices are designed for indoor use where maximum air dustiness does not exceed 0,3 g/m³.
- EPP housing, color grey (near to RAL 9007)
- 3-speed, energy saving fan in standard.
- Easy to mount thanks to small size and weight.

PL

- Wodne nagrzewnice powietrza LEO służą do ogrzewania obiektów o dużych kubaturach budownictwa ogólnego i przemysłowego, budynków użyteczności publicznej itp. Przeznaczone są do pracy wewnątrz pomieszczeń o maksymalnym zapyleniu powietrza 0,3g/m³.
- Obudowa wykonana z EPP, kolor szary (zbliżony do RAL 9007)
- W standardzie z energooszczędnym wentylatorem z silnikiem 3 biegowym.
- Łatwy montaż dzięki niewielkim gabarytom oraz masie.

HEATING CAPACITY RANGE | ZAKRES MOCY GRZEWczyCH



CONTROL SYSTEM I STEROWANIE



T-box

LEO S BMS | L BMS | XL BMS

- 3-speed, auto fan regulation
3-stopniowa, automatyczna regulacja wentylatora
- working modes: heating/cooling/ventilation
tryby pracy: grzanie/chłodzenie/wentylacja
- antifreeze
- BMS
- integration with FLOWAIR SYSTEM
integracja urządzeń do SYSTEMU FLOWAIR

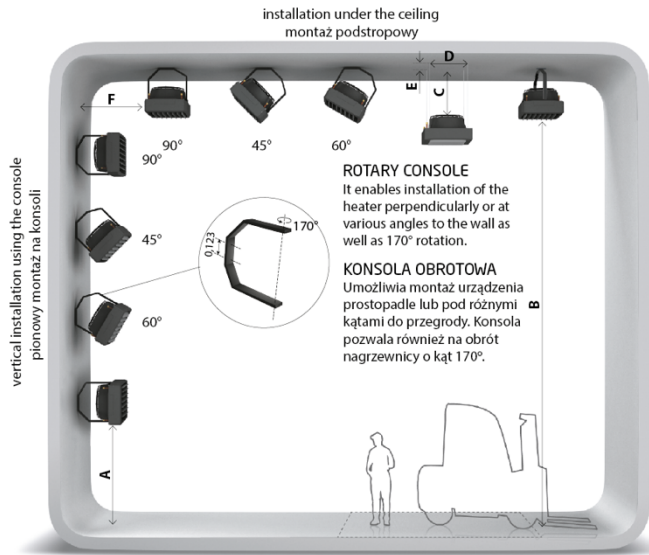


TS

LEO S | L | XL

- 3-speed, manual fan regulation
3-stopniowa, manualna regulacja wentylatora
- working modes: heating/cooling/ventilation
tryby pracy: grzanie/chłodzenie/wentylacja

INSTALATION I MOŻLIWOŚĆ MONTAŻU



| | A | B | C | D | E | F |
|-----|---------|---------|------|-------|-------|------|
| S1 | <3,0 | 2,5-7,0 | >0,3 | 0,415 | 0,415 | >0,5 |
| S2 | <3,0 | 2,5-6,0 | >0,3 | 0,415 | 0,415 | >0,5 |
| S3 | <3,0 | 2,5-6,0 | >0,3 | 0,415 | 0,415 | >0,5 |
| L1 | 2,5-8,0 | 2,5-9,5 | >0,3 | 0,515 | 0,515 | >0,5 |
| L2 | 2,5-8,0 | 2,5-8,5 | >0,3 | 0,515 | 0,515 | >0,5 |
| L3 | 2,5-8,0 | 2,5-8,0 | >0,3 | 0,515 | 0,515 | >0,5 |
| XL2 | 2,5-8,0 | 2,5-9,5 | >0,3 | 0,66 | 0,58 | >0,5 |
| XL3 | 2,5-8,0 | 2,5-9,0 | >0,3 | 0,66 | 0,58 | >0,5 |

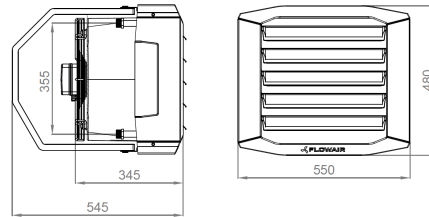


Corner holders, ensure easy installation and leveling of the heater.

Dostępne są ceowniki, które ułatwiają montaż podstropowy i wypoziomowanie urządzenia.

TECHNICAL DATA I DANE TECHNICZNE

LEO S1 | S2 | S3



| Gear Bieg | LEO S1 | | | LEO S2 | | | LEO S3 | | |
|--|---|------|------|------------|------|------|------------|------|------|
| | III | II | I | III | II | I | III | II | I |
| Max airflow [m³/h] Max. strumień przepływu powietrza [m³/h] | 2300 | 1900 | 1500 | 2000 | 1600 | 1250 | 1800 | 1400 | 1000 |
| Heating power range Zakres mocy grzewczej [kW]* | 12,8 – 0,7 | | | 26,5 – 2,1 | | | 32,7 – 1,7 | | |
| Nominal heating power (70/50/16°C, III-speed) Nominalna moc grzewcza (70/50/16°C, III-bieg) | 4,5 | | | 10,2 | | | 12,3 | | |
| Power supply [V/Hz] Zasilanie [V/Hz] | 230/50 | | | | | | | | |
| Max current consumption [A] Max. pobór prądu [A] | 0,5 | 0,4 | 0,3 | 0,6 | 0,4 | 0,3 | 0,6 | 0,4 | 0,3 |
| Max power consumption [W] Mak. pobór mocy [W] | 120 | 90 | 70 | 130 | 90 | 70 | 130 | 90 | 70 |
| IP/Insulation class IP/Klasa izolacji | 54 / F | | | | | | | | |
| Acoustic pressure level [dB(A)]** Poziom ciśnienia akustycznego [dB(A)]** | 56,3 | 50,7 | 43,9 | 56,3 | 50,7 | 43,9 | 56,3 | 50,7 | 43,9 |
| Acoustic power level [dB(A)]*** Poziom mocy akustycznej [dB(A)]*** | 71,4 | 65,8 | 59,0 | 71,4 | 65,8 | 59,0 | 71,4 | 65,8 | 59,0 |
| Horizontal range [m] Zasięg poziomy [m] **** | 16,0 | 13,0 | 10,0 | 14,0 | 11,0 | 8,5 | 12,5 | 9,5 | 7,0 |
| Vertical range [m] Zasięg pionowy [m] ***** | 6,0 | 5,1 | 4,1 | 5,3 | 4,4 | 3,5 | 4,9 | 3,9 | 2,9 |
| Max heating water temperature [°C] Max. temp. wody grzewczej [°C] | 120 | | | | | | | | |
| Max operating pressure [MPa] Max. ciśnienie robocze [MPa] | 1,6 | | | | | | | | |
| Connection Przyłącze | ½" | | | | | | | | |
| Type of casing Rodzaj obudowy | EPP | | | | | | | | |
| Color Kolor | grey (similar to RAL 9007) szary (zblizony do RAL 9007) | | | | | | | | |
| Usage Zastosowanie | indoors wewnątrz pomieszczeń | | | | | | | | |
| Max working temperature [°C] Max. temp. pracy [°C] | 60 | | | | | | | | |
| Device mass [kg] Masa urządzenia [kg] | 9,5 | | | 10,4 | | | 10,8 | | |
| Mass of device filled with water [kg] Masa urządzenia napełnionego wodą [kg] | 10,2 | | | 11,6 | | | 12,2 | | |

* max. 120/90/0°C III-speed, min. 40/30/20°C I-speed | max. 120/90/0°C III-bieg, min. 40/30/20°C I-bieg

** Acoustic pressure level has been measured 5m from the unit in a 1500m³ space with a medium sound absorption coefficient |

Poziom ciśnienia akustycznego dla pomieszczenia o średniej zdolności pochłaniania dźwięku, objętości 1500m³, w odległości 5 m od urządzenia

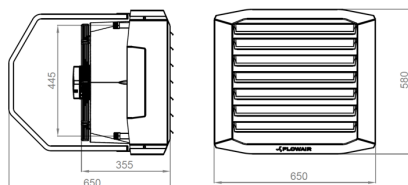
*** Acoustic power level according to EN ISO 3744:2011 | Poziom mocy akustycznej zgodnie z PN-EN ISO 3744:2011

**** Horizontal isothermal range for 0,5 m/s border air stream speed | zasięg poziomy strumienia izotermicznego, przy prędkości granicznej 0,5 m/s

***** Vertical nonisothermal range for ΔT = 5°C and for 0,5 m/s border air stream speed | zasięg pionowy strumienia nieizotermicznego przy ΔT = 5°C, przy prędkości granicznej 0,5 m/s

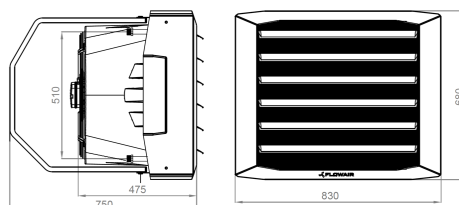
TECHNICAL DATA I DANE TECHNICZNE

LEO L1 | L2 | L3



| Gear Bieg | LEO L1 | | | LEO L2 | | | LEO L3 | | |
|---|---|------|------|------------|------|------|------------|------|------|
| | III | II | I | III | II | I | III | II | I |
| Max airflow [m ³ /h] Max. strumień przepływu powietrza [m ³ /h] | 4250 | 2800 | 1700 | 3800 | 2400 | 1400 | 3400 | 2100 | 1200 |
| Heating power range Zakres mocy grzewczej [kW]* | 32,3 – 1,3 | | | 50,4 – 2,2 | | | 65,2 – 3,2 | | |
| Nominal heating power (70/50/16°C, III-speed) Nominalna moc grzewcza (70/50/16°C, III-bieg) | 11,7 | | | 19,1 | | | 25,6 | | |
| Power supply [V/Hz] Zasilanie [V/Hz] | 230/50 | | | | | | | | |
| Max current consumption [A] Max. pobór prądu [A] | 1,4 | 1,2 | 0,6 | 1,5 | 1,2 | 0,6 | 1,5 | 1,2 | 0,6 |
| Max power consumption [W] Mak. pobór mocy [W] | 330 | 240 | 120 | 340 | 240 | 120 | 340 | 240 | 120 |
| IP/Insulation class IP/Klasa izolacji | 54 / F | | | | | | | | |
| Acoustic pressure level [dB(A)] Poziom ciśnienia akustycznego [dB(A)]** | 64,1 | 54,5 | 42,1 | 64,1 | 54,5 | 42,1 | 64,1 | 54,5 | 42,1 |
| Acoustic power level [dB(A)] Poziom mocy akustycznej [dB(A)]*** | 79,2 | 69,6 | 57,2 | 79,2 | 69,6 | 57,2 | 79,2 | 69,6 | 57,2 |
| Horizontal range [m] Zasięg poziomy [m]**** | 24,0 | 15,0 | 9,5 | 21,5 | 13,0 | 8,0 | 19,0 | 11,5 | 6,5 |
| Vertical range [m] Zasięg pionowy [m]***** | 8,3 | 5,6 | 3,7 | 7,5 | 4,9 | 3,1 | 6,8 | 4,4 | 2,8 |
| Max heating water temperature [°C] Max. temp. wody grzewczej [°C] | 120 | | | | | | | | |
| Max operating pressure [MPa] Max. ciśnienie robocze [MPa] | 1,6 | | | | | | | | |
| Connection Przyłącze | ¾" | | | | | | | | |
| Type of casing Rodzaj obudowy | EPP | | | | | | | | |
| Color Kolor | grey (similar to RAL 9007) szary (zblizony do RAL 9007) | | | | | | | | |
| Usage Zastosowanie | indoors wewnątrz pomieszczeń | | | | | | | | |
| Max working temperature [°C] Max. temp. pracy [°C] | 60 | | | | | | | | |
| Device mass [kg] Masa urządzenia [kg] | 14,9 | | | 16,2 | | | 17,8 | | |
| Mass of device filled with water Masa urządzenia napełnionego wodą [kg] | 15,9 | | | 18,2 | | | 20,5 | | |

LEO XL2 | XL3



| Gear Bieg | LEO XL2 | | | LEO XL3 | | |
|---|---|------|------|-------------|------|------|
| | III | II | I | III | II | I |
| Max airflow [m ³ /h] Max. strumień przepływu powietrza [m ³ /h] | 5800 | 4600 | 2900 | 5300 | 4100 | 2500 |
| Heating power range Zakres mocy grzewczej [kW]* | 94,0 – 6,6 | | | 121,0 – 8,3 | | |
| Nominal heating power (70/50/16°C, III-speed) Nominalna moc grzewcza (70/50/16°C, III-bieg) | 36,5 | | | 48,1 | | |
| Power supply [V/Hz] Zasilanie [V/Hz] | 230/50 | | | | | |
| Max current consumption [A] Max. pobór prądu [A] | 2,3 | 1,8 | 1,4 | 2,4 | 1,8 | 1,4 |
| Max power consumption [W] Mak. pobór mocy [W] | 520 | 370 | 270 | 550 | 370 | 270 |
| IP/Insulation class IP/Klasa izolacji | 54 / F | | | 54 / F | | |
| Acoustic pressure level [dB(A)] Poziom ciśnienia akustycznego [dB(A)]** | 67,5 | 61,1 | 52,3 | 67,5 | 61,1 | 52,3 |
| Acoustic power level [dB(A)] Poziom mocy akustycznej [dB(A)]*** | 82,6 | 76,2 | 67,8 | 82,6 | 76,2 | 67,8 |
| Horizontal range [m] Zasięg poziomy [m]**** | 26,0 | 20,5 | 13,0 | 23,5 | 18,0 | 11,0 |
| Vertical range [m] Zasięg pionowy [m]***** | 8,5 | 7,0 | 4,7 | 7,7 | 6,2 | 4,1 |
| Max heating water temperature [°C] Max. temp. wody grzewczej [°C] | 120 | | | | | |
| Max operating pressure [MPa] Max. ciśnienie robocze [MPa] | 1,6 | | | | | |
| Connection Przyłącze | ¾" | | | | | |
| Type of casing Rodzaj obudowy | EPP | | | | | |
| Color Kolor | grey (similar to RAL 9007) szary (zblizony do RAL 9007) | | | | | |
| Usage Zastosowanie | indoors wewnątrz pomieszczeń | | | | | |
| Max working temperature [°C] Maks. Temperature pracy [°C] | 60 | | | | | |
| Device mass [kg] Masa urządzenia [kg] | 23,2 | | | 26,2 | | |
| Mass of device filled with water [kg] Masa urządzenia napełnionego wodą [kg] | 25,9 | | | 30,3 | | |

* max. 120/90/0°C III-speed, min. 40/30/20°C I-speed | max. 120/90/0°C III-bieg, min. 40/30/20°C I-bieg

** Acoustic pressure level has been measured 5m from the unit in a 1500m³ space with a medium sound absorption coefficient |

*** Poziom ciśnienia akustycznego dla pomieszczenia o średniej zdolności pochłaniania dźwięku, objętości 1500m³, w odległości 5 m od urządzenia

**** Acoustic power level according to EN ISO 3744:2011 | Poziom mocy akustycznej zgodnie z PN-EN ISO 3744:2011

***** Horizontal isothermal range for 0,5 m/s border air stream speed | zasięg poziomy strumienia izotermicznego, przy prędkości granicznej 0,5 m/s

***** Vertical nonisothermal range for ΔT = 5°C and for 0,5 m/s border air stream speed | zasięg pionowy strumienia nieizotermicznego przy ΔT = 5°C, przy prędkości granicznej 0,5 m/s

HEATING CAPACITY I TABELE MOCY GRZEWCZYCH

| LEO S1 | | | | | | | | | | | | | | | | | | | | |
|-----------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|------|
| Tp1 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 |
| [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] |
| 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 | | | | |
| III : V = 2300 [m³/h] | | | | | | | | | | | | | | | | | | | | |
| 0,0 | 12,8 | 381 | 1,8 | 16,5 | 9,8 | 430 | 2,4 | 12,5 | 6,7 | 292 | 1,3 | 8,5 | 5,0 | 219 | 0,8 | 6,5 | 3,8 | 325 | 1,7 | 5,0 |
| 5,0 | 12,2 | 362 | 1,6 | 20,5 | 9,1 | 401 | 2,1 | 16,5 | 6,0 | 262 | 1,0 | 12,5 | 4,3 | 188 | 0,6 | 10,5 | 3,0 | 263 | 1,2 | 9,0 |
| 10,0 | 11,5 | 343 | 1,5 | 24,5 | 8,4 | 372 | 1,8 | 21,0 | 5,3 | 232 | 0,8 | 17,0 | 3,6 | 155 | 0,4 | 14,5 | 2,3 | 197 | 0,7 | 13,0 |
| 15,0 | 10,9 | 324 | 1,3 | 29,0 | 7,8 | 343 | 1,6 | 25,0 | 4,6 | 202 | 0,7 | 21,0 | 2,7 | 117 | 0,3 | 18,5 | 1,2 | 104 | 0,2 | 16,5 |
| 20,0 | 10,2 | 305 | 1,2 | 33,0 | 7,1 | 314 | 1,3 | 29,0 | 3,9 | 170 | 0,5 | 25,0 | 1,7 | 74 | 0,1 | 22,0 | 0,8 | 72 | 0,1 | 21,0 |

| LEO S2 | | | | | | | | | | | | | | | | | | | | |
|-----------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|------|
| Tp1 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 |
| [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] |
| 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 | | | | |
| III : V = 2000 [m³/h] | | | | | | | | | | | | | | | | | | | | |
| 0 | 26,5 | 788 | 10,7 | 39,0 | 20,1 | 889 | 14,2 | 30,0 | 14,4 | 631 | 8,2 | 21,5 | 11,5 | 502 | 5,6 | 17,0 | 8,3 | 719 | 11,4 | 12,5 |
| 5 | 25,2 | 750 | 9,8 | 42,0 | 18,9 | 832 | 12,6 | 33,0 | 13,1 | 574 | 6,9 | 24,5 | 10,2 | 445 | 4,5 | 20,0 | 7,0 | 604 | 8,4 | 15,5 |
| 10 | 24,0 | 713 | 8,9 | 45,0 | 17,6 | 776 | 11,1 | 36,0 | 11,8 | 517 | 5,7 | 27,5 | 8,9 | 386 | 3,6 | 23,0 | 5,6 | 488 | 5,8 | 18,5 |
| 15 | 22,7 | 676 | 8,1 | 48,0 | 16,3 | 719 | 9,7 | 39,0 | 10,5 | 459 | 4,6 | 30,5 | 7,5 | 328 | 2,7 | 26,0 | 4,3 | 370 | 3,5 | 21,0 |
| 20 | 21,5 | 639 | 7,3 | 51,0 | 15,0 | 663 | 8,4 | 42,0 | 9,2 | 401 | 3,6 | 33,5 | 6,1 | 267 | 1,9 | 29,0 | 2,8 | 246 | 1,7 | 24,0 |

| LEO S3 | | | | | | | | | | | | | | | | | | | | |
|-----------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|------|
| Tp1 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 |
| [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] |
| 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 | | | | |
| III : V = 1800 [m³/h] | | | | | | | | | | | | | | | | | | | | |
| 0,0 | 32,7 | 973 | 8,4 | 54,0 | 24,9 | 1098 | 11,1 | 41,0 | 17,6 | 769 | 6,2 | 29,0 | 13,8 | 603 | 4,2 | 23,0 | 10,1 | 872 | 8,6 | 16,5 |
| 5,0 | 31,1 | 925 | 7,6 | 56,0 | 23,3 | 1026 | 9,8 | 43,0 | 15,9 | 697 | 5,2 | 31,0 | 12,2 | 530 | 3,3 | 25,0 | 8,4 | 726 | 6,2 | 18,5 |
| 10,0 | 29,5 | 878 | 6,9 | 58,0 | 21,6 | 954 | 8,6 | 45,5 | 14,3 | 624 | 4,3 | 33,5 | 10,5 | 457 | 2,5 | 27,0 | 6,7 | 579 | 4,1 | 21,0 |
| 15,0 | 27,9 | 831 | 6,3 | 60,5 | 20,0 | 883 | 7,5 | 47,5 | 12,6 | 551 | 3,4 | 35,5 | 8,8 | 382 | 1,8 | 29,0 | 4,9 | 428 | 2,4 | 23,0 |
| 20,0 | 26,3 | 784 | 5,6 | 62,5 | 18,4 | 811 | 6,4 | 49,5 | 10,9 | 478 | 2,6 | 37,5 | 7,0 | 304 | 1,2 | 31,5 | 3,1 | 264 | 1,0 | 25,0 |

| LEO L1 | | | | | | | | | | | | | | | | | | | | |
|------------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|------|
| Tp1 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 |
| [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] |
| 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 | | | | |
| III : V = 4250 [m³/h], | | | | | | | | | | | | | | | | | | | | |
| 0,0 | 32,3 | 961 | 7,0 | 22,5 | 24,6 | 1086 | 9,4 | 17,0 | 17,1 | 749 | 5,1 | 12,0 | 13,3 | 578 | 3,3 | 9,0 | 9,8 | 845 | 7,0 | 7,0 |
| 5,0 | 30,7 | 913 | 6,4 | 26,5 | 23,0 | 1014 | 8,3 | 21,0 | 15,4 | 676 | 4,2 | 15,5 | 11,6 | 504 | 2,6 | 13,0 | 8,0 | 697 | 4,9 | 10,5 |
| 10,0 | 29,1 | 865 | 5,8 | 30,0 | 21,3 | 941 | 7,2 | 25,0 | 13,8 | 602 | 3,4 | 19,5 | 9,8 | 429 | 1,9 | 17,0 | 6,3 | 547 | 3,2 | 14,5 |
| 15,0 | 27,5 | 818 | 5,2 | 34,0 | 19,7 | 869 | 6,3 | 28,5 | 12,1 | 528 | 2,7 | 23,5 | 8,1 | 352 | 1,4 | 20,5 | 4,5 | 391 | 1,8 | 18,0 |
| 20,0 | 25,9 | 770 | 4,7 | 37,5 | 18,0 | 796 | 5,3 | 32,5 | 10,4 | 453 | 2,1 | 27,0 | 6,2 | 272 | 0,9 | 24,5 | 1,6 | 139 | 0,3 | 21,0 |

V - airflow / przepływ powietrza

PT - heat capacity / moc grzewcza

Tp1 - inlet air temp. / temperatura powietrza na wlocie do aparatu

Tp2 - outlet air temp. / temperatura powietrza na wylocie z aparatu

Tw1 - inlet water temp. / temperatura wody na zasilaniu wymiennika

Tw2 - outlet water temp. / temperatura wody na powrocie z wymiennika

Qw - water flow rate / strumień przepływu wody grzewczej

Δpw - pressure drop of water / spadek ciśnienia wody w wymienniku

HEATING CAPACITY I TABELE MOCY GRZEWCZYCH

| LEO L2 | | | | | | | | | | | | | | | | | | | | |
|-----------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|------|
| Tp1 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 |
| [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] |
| 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 | | | | |
| III : V = 3800 [m³/h] | | | | | | | | | | | | | | | | | | | | |
| 0,0 | 50,4 | 1 500 | 7,9 | 43,5 | 38,4 | 1693 | 10,5 | 33,0 | 27,2 | 1190 | 5,9 | 23,5 | 21,5 | 937 | 4,0 | 18,5 | 15,6 | 1 351 | 8,2 | 13,5 |
| 5,0 | 48,0 | 1 428 | 7,2 | 46,5 | 35,9 | 1584 | 9,3 | 36,0 | 24,7 | 1079 | 4,9 | 26,5 | 18,9 | 825 | 3,2 | 21,5 | 13,0 | 1 128 | 5,9 | 16,0 |
| 10,0 | 45,5 | 1 355 | 6,5 | 49,0 | 33,4 | 1474 | 8,1 | 38,5 | 22,1 | 968 | 4,1 | 29,0 | 16,3 | 712 | 2,4 | 24,0 | 10,4 | 902 | 4,0 | 19,0 |
| 15,0 | 43,1 | 1 283 | 5,9 | 52,0 | 30,9 | 1364 | 7,1 | 41,5 | 19,6 | 856 | 3,3 | 31,5 | 13,7 | 598 | 1,8 | 26,5 | 7,7 | 671 | 2,4 | 21,5 |
| 20,0 | 40,7 | 1 211 | 5,3 | 54,5 | 28,4 | 1254 | 6,1 | 44,0 | 17,0 | 743 | 2,5 | 34,5 | 11,0 | 480 | 1,2 | 29,5 | 4,9 | 425 | 1,1 | 24,0 |

| LEO L3 | | | | | | | | | | | | | | | | | | | | |
|-----------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|------|
| Tp1 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 |
| [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] |
| 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 | | | | |
| III : V = 3400 [m³/h] | | | | | | | | | | | | | | | | | | | | |
| 0,0 | 65,2 | 1 942 | 11,9 | 63,0 | 49,4 | 2182 | 15,7 | 48,0 | 35,7 | 1564 | 9,1 | 34,5 | 28,8 | 1254 | 6,4 | 28,0 | 20,5 | 1 775 | 12,6 | 20,0 |
| 5,0 | 62,2 | 1 852 | 10,9 | 65,0 | 46,4 | 2046 | 13,9 | 49,5 | 32,6 | 1426 | 7,7 | 36,5 | 25,6 | 1115 | 5,2 | 29,5 | 17,3 | 1 499 | 9,3 | 21,5 |
| 10,0 | 59,2 | 1 762 | 10,0 | 67,0 | 43,3 | 1910 | 12,3 | 51,5 | 29,5 | 1289 | 6,4 | 38,5 | 22,4 | 975 | 4,1 | 31,5 | 14,1 | 1 220 | 6,5 | 23,5 |
| 15,0 | 56,2 | 1 672 | 9,1 | 68,5 | 40,2 | 1775 | 10,8 | 53,5 | 26,3 | 1150 | 5,3 | 40,0 | 19,1 | 832 | 3,1 | 33,5 | 10,8 | 935 | 4,0 | 25,5 |
| 20,0 | 53,2 | 1 584 | 8,2 | 70,5 | 37,1 | 1639 | 9,3 | 55,0 | 23,1 | 1010 | 4,2 | 42,0 | 15,8 | 686 | 2,2 | 35,0 | 7,3 | 637 | 2,1 | 27,0 |

| LEO XL2 | | | | | | | | | | | | | | | | | | | | |
|-----------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|------|
| Tp1 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 |
| [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] |
| 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 | | | | |
| III : V = 5800 [m³/h] | | | | | | | | | | | | | | | | | | | | |
| 0,0 | 94,0 | 2 799 | 23,1 | 52,5 | 71,6 | 3159 | 30,7 | 40,0 | 51,4 | 2248 | 17,5 | 28,5 | 41,2 | 1794 | 12,1 | 23,0 | 29,6 | 2 568 | 24,4 | 16,5 |
| 5,0 | 89,5 | 2 666 | 21,1 | 54,5 | 67,0 | 2958 | 27,2 | 42,0 | 46,8 | 2046 | 14,7 | 31,0 | 36,5 | 1591 | 9,7 | 25,5 | 24,9 | 2 161 | 17,9 | 19,0 |
| 10,0 | 85,1 | 2 533 | 19,2 | 57,0 | 62,5 | 2757 | 23,9 | 44,5 | 42,1 | 1843 | 12,2 | 33,5 | 31,8 | 1386 | 7,6 | 27,5 | 20,2 | 1 751 | 12,3 | 21,0 |
| 15,0 | 80,6 | 2 400 | 17,4 | 59,5 | 57,9 | 2556 | 20,8 | 47,0 | 37,5 | 1639 | 9,9 | 35,5 | 27,1 | 1179 | 5,7 | 30,0 | 15,4 | 1 336 | 7,6 | 23,5 |
| 20,0 | 76,2 | 2 269 | 15,7 | 61,5 | 53,4 | 2355 | 17,9 | 49,0 | 32,8 | 1433 | 7,8 | 38,0 | 22,2 | 969 | 4,0 | 32,0 | 10,5 | 910 | 3,8 | 25,5 |

| LEO XL3 | | | | | | | | | | | | | | | | | | | | |
|-----------------------|-------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|---------------------|------|-------|-------|------|
| Tp1 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 | PT | Qw | Δpw | Tp2 |
| [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] | [kW] | [l/h] | [kPa] | [°C] |
| 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 | | | | |
| III : V = 5300 [m³/h] | | | | | | | | | | | | | | | | | | | | |
| 0,0 | 121,0 | 3 602 | 18,7 | 74,0 | 91,6 | 4043 | 24,6 | 56,0 | 66,6 | 2916 | 14,4 | 41,0 | 54,0 | 2352 | 10,2 | 33,0 | 38,2 | 3 313 | 20,0 | 23,5 |
| 5,0 | 115,4 | 3 436 | 17,2 | 75,5 | 86,0 | 3794 | 21,9 | 57,5 | 60,9 | 2664 | 12,3 | 42,0 | 48,1 | 2097 | 8,3 | 34,5 | 32,4 | 2 807 | 14,9 | 25,0 |
| 10,0 | 109,9 | 3 270 | 15,7 | 76,5 | 80,3 | 3545 | 19,4 | 59,0 | 55,1 | 2411 | 10,2 | 43,5 | 42,2 | 1840 | 6,5 | 35,5 | 26,5 | 2 297 | 10,4 | 26,0 |
| 15,0 | 104,3 | 3 106 | 14,3 | 78,0 | 74,7 | 3296 | 17,0 | 60,0 | 49,3 | 2157 | 8,4 | 45,0 | 36,2 | 1580 | 5,0 | 37,0 | 20,5 | 1 777 | 6,6 | 27,5 |
| 20,0 | 98,9 | 2 944 | 12,9 | 79,5 | 69,1 | 3048 | 14,7 | 61,5 | 43,4 | 1900 | 6,7 | 46,0 | 30,1 | 1314 | 3,6 | 38,0 | 14,3 | 1 238 | 3,5 | 28,5 |

V - airflow / przepływ powietrza

PT - heat capacity / moc grzewcza

Tp1 - inlet air temp. / temperatura powietrza na wlocie do aparatu

Tp2 - outlet air temp. / temperatura powietrza na wylocie z aparatu

Tw1 - inlet water temp. / temperatura wody na zasilaniu wymiennika

Tw2 - outlet water temp. / temperatura wody na powrocie z wymiennika

Qw - water flow rate / strumień przepływu wody grzewczej

Δpw - pressure drop of water / spadek ciśnienia wody w wymienniku

For different parameters of the device please use our calculator, scan QR code.
Dobierz urządzenie dla innych parametrów za pomocą naszego kalkulatora, zeskanuj kod QR

