

# L-TYPE

## Gas-fired vertical air heater

Vertical or horizontal air heater with burner.  
Output from 30 to 600 kW.



For more information, downloads  
and videos, visit the L-TYPE page  
on our website



### A wide variety of uses

The Mark L-TYPE is a vertical or horizontal gas-fired air heater with a capacity of 30 to 600 kW. In combination with a 2-stage Low-Nox gas burner (< 70 mg/kWh), ERP 2021 Step 2 is fulfilled.

The device can be blown into the room with an optional exhaust hood or can be connected to a duct system (increased external pressure optional).

The Mark L-TYPE can be used in the following rooms: sports halls, churches, warehouses, offices and shops.

### Accessories/options:

- 2-stage duct thermostat
- Room thermostat PinTherm Connect
- Outside installation
- Air filter with filter monitoring
- Servo or manually-operated slatted valves
- Flexible connection
- Downflow hood
- Increased external pressure 300 Pa
- Siphon for condensate connection

#### Fan:

- A dual blast centrifugal ventilator with bent blades
- V-belt drive

#### Housing:

- Pre-painted steel plating
- Frame: aluminium profiles

#### Standard equipment:

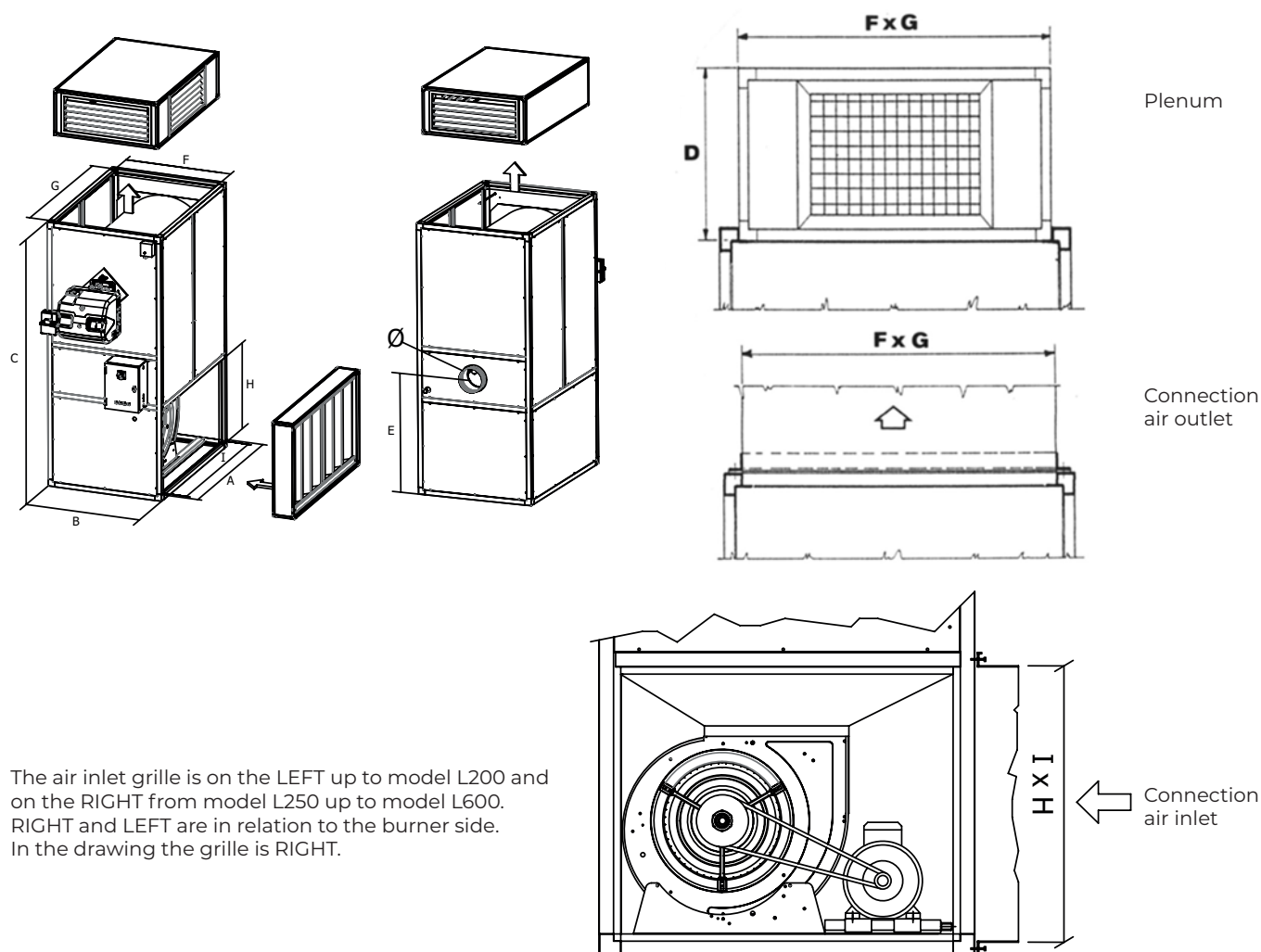
- AISI 430 (1.4016) blast chamber
- AISI 409 (1.4512) heat exchanger
- Electrical switch box
- Three-way thermostat
- Motor cut-out
- Condensate connection



Remote connection possible with the PinTherm Connect!

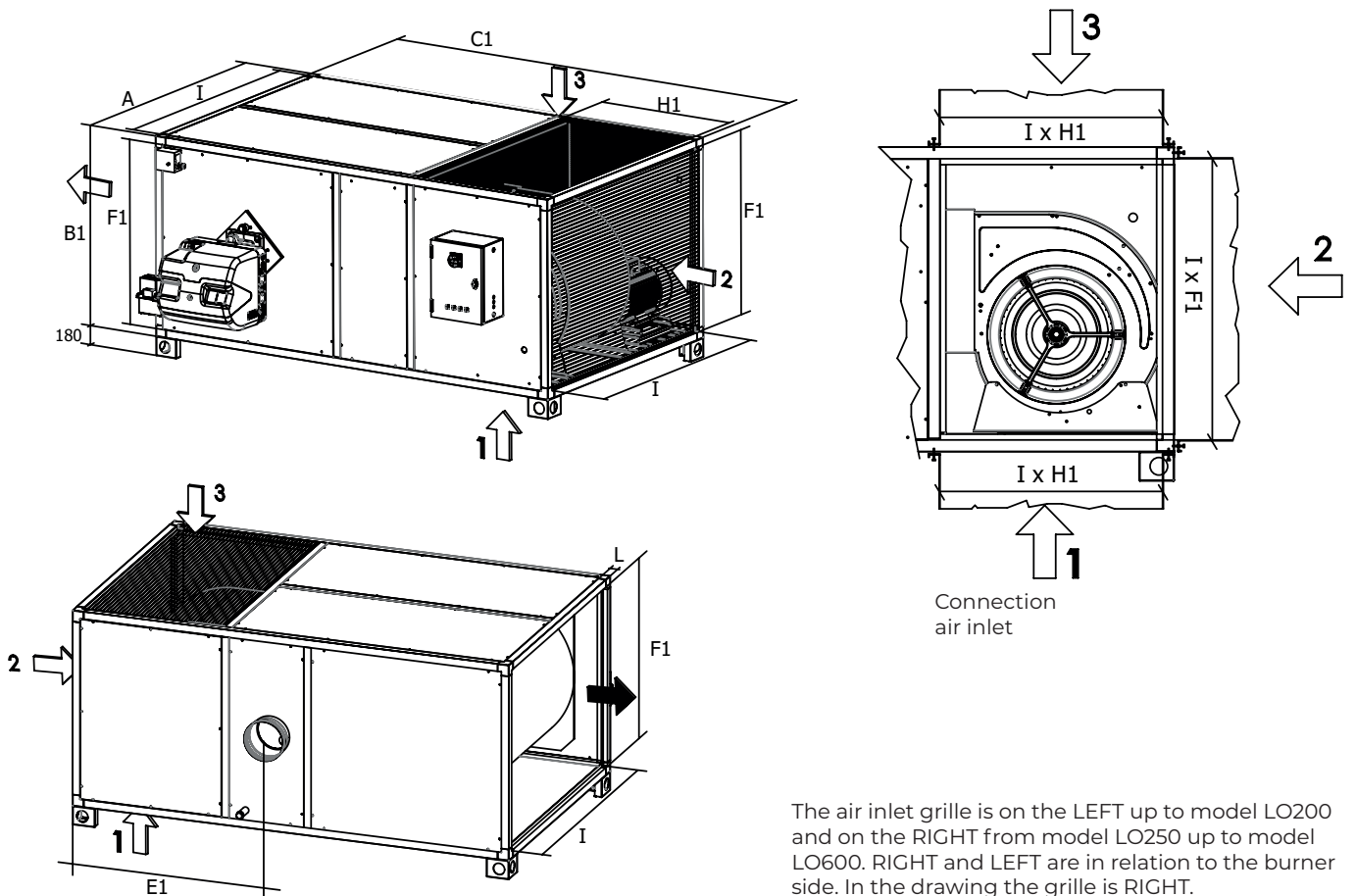
## Dimensions

| Type | L-TYPE |       |        | Head height<br>D | Flue height<br>E | Air Outlet connection |      | Air Inlet connection |      | Frame profile<br>L | Flue system<br>Ø | Weight |        | Net head weight<br>kg |
|------|--------|-------|--------|------------------|------------------|-----------------------|------|----------------------|------|--------------------|------------------|--------|--------|-----------------------|
|      | Length | Width | Height |                  |                  | F                     | G    | H                    | I    |                    |                  | Net    | Packed |                       |
|      | A      | B     | C      |                  |                  |                       |      |                      |      |                    |                  | kg     | kg     |                       |
| L30  | 660    | 530   | 1430   | 305              | 705              | 490                   | 620  | 480                  | 620  | 20                 | 150              | 110    | 115    | 10                    |
| L60  | 870    | 636   | 1750   | 305              | 860              | 596                   | 830  | 630                  | 830  | 20                 | 150              | 176    | 183    | 12                    |
| L80  | 1020   | 750   | 1950   | 405              | 935              | 670                   | 940  | 690                  | 940  | 40                 | 130              | 236    | 245    | 37                    |
| L100 | 1020   | 750   | 1950   | 405              | 935              | 670                   | 940  | 690                  | 940  | 40                 | 130              | 250    | 260    | 37                    |
| L150 | 1440   | 1020  | 2340   | 405              | 1070             | 940                   | 1360 | 760                  | 1360 | 40                 | 150              | 390    | 400    | 40                    |
| L175 | 1440   | 1020  | 2340   | 405              | 1070             | 940                   | 1360 | 760                  | 1360 | 40                 | 150              | 400    | 410    | 40                    |
| L200 | 1440   | 1020  | 2340   | 405              | 1070             | 940                   | 1360 | 760                  | 1360 | 40                 | 150              | 415    | 425    | 40                    |
| L250 | 1790   | 1020  | 2340   | 405              | 1130             | 940                   | 1710 | 760                  | 1710 | 40                 | 200              | 520    | 535    | 46                    |
| L300 | 1790   | 1020  | 2340   | 405              | 1130             | 940                   | 1710 | 760                  | 1710 | 40                 | 200              | 550    | 565    | 46                    |
| L425 | 2300   | 1340  | 2660   | 405              | 1220             | 1260                  | 2220 | 930                  | 2220 | 40                 | 250              | 790    | 810    | 67                    |
| L500 | 2300   | 1340  | 2660   | 405              | 1220             | 1260                  | 2220 | 930                  | 2220 | 40                 | 250              | 815    | 830    | 67                    |
| L600 | 2300   | 1500  | 2840   | 445              | 1400             | 1420                  | 2220 | 1070                 | 2220 | 40                 | 250              | 965    | 985    | 70                    |



The air inlet grille is on the LEFT up to model L200 and on the RIGHT from model L250 up to model L600. RIGHT and LEFT are in relation to the burner side. In the drawing the grille is RIGHT.

| Type  | L-TYPE |       |        | Head height | Flue height | Air Outlet and Inlet connection |      | Air Inlet connection |      | Frame profile | Flue system | Weight | Net head weight |
|-------|--------|-------|--------|-------------|-------------|---------------------------------|------|----------------------|------|---------------|-------------|--------|-----------------|
|       | Length | Width | Height |             |             | F1                              | I    | H1                   | I    |               |             |        |                 |
| LO30  | 660    | 530   | 1430   | 305         | 705         | 490                             | 620  | 480                  | 620  | 20            | 150         | 114    | 10              |
| LO60  | 870    | 636   | 1750   | 305         | 860         | 596                             | 830  | 630                  | 830  | 20            | 150         | 180    | 12              |
| LO80  | 1020   | 850   | 2200   | 405         | 1185        | 770                             | 940  | 880                  | 940  | 40            | 130         | 300    | 37              |
| LO100 | 1020   | 850   | 2200   | 405         | 1185        | 770                             | 940  | 880                  | 940  | 40            | 130         | 314    | 37              |
| LO150 | 1440   | 1020  | 2340   | 405         | 1070        | 940                             | 1360 | 760                  | 1360 | 40            | 150         | 395    | 40              |
| LO175 | 1440   | 1020  | 2340   | 405         | 1070        | 940                             | 1360 | 760                  | 1360 | 40            | 150         | 405    | 40              |
| LO200 | 1440   | 1020  | 2340   | 405         | 1070        | 940                             | 1360 | 760                  | 1360 | 40            | 150         | 420    | 40              |
| LO250 | 1790   | 1020  | 2660   | 405         | 1450        | 940                             | 1710 | 1100                 | 1710 | 40            | 200         | 615    | 46              |
| LO300 | 1790   | 1020  | 2660   | 405         | 1450        | 940                             | 1710 | 1100                 | 1710 | 40            | 200         | 645    | 46              |
| LO425 | 2300   | 1340  | 2960   | 405         | 1750        | 1260                            | 2220 | 1190                 | 2220 | 40            | 250         | 910    | 67              |
| LO500 | 2300   | 1340  | 2960   | 405         | 1750        | 1260                            | 2220 | 1190                 | 2220 | 40            | 250         | 935    | 67              |
| LO600 | 2300   | 1500  | 3290   | 445         | 2080        | 1420                            | 2220 | 1520                 | 2220 | 40            | 250         | 1100   | 70              |

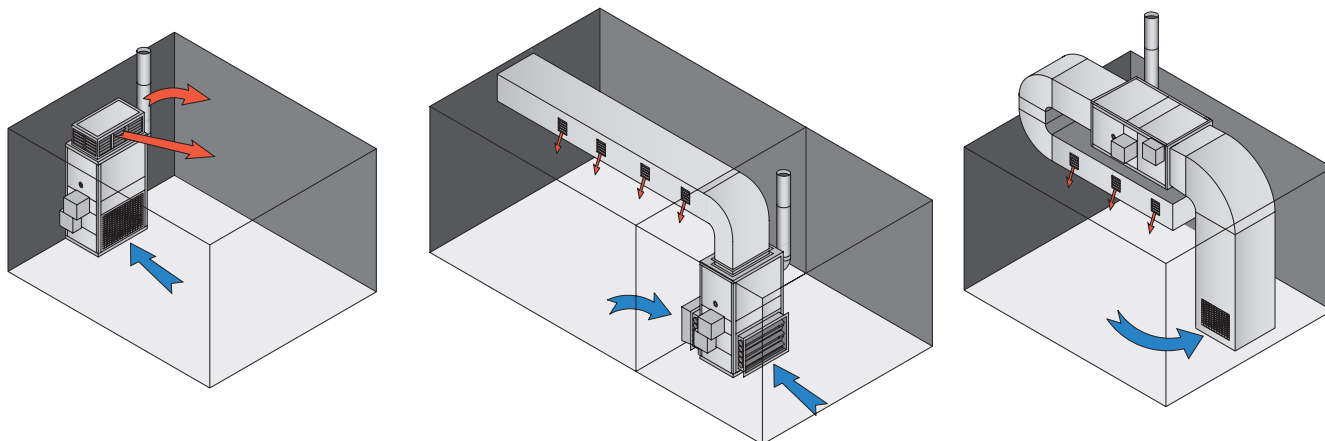


The air inlet grille is on the LEFT up to model LO200 and on the RIGHT from model LO250 up to model LO600. RIGHT and LEFT are in relation to the burner side. In the drawing the grille is RIGHT.

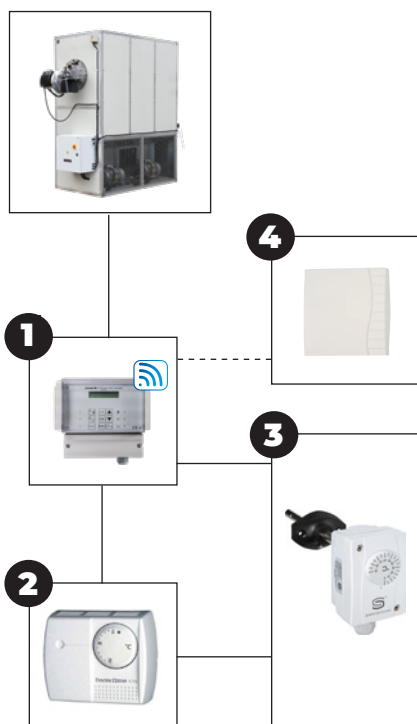
## Technical information

| Type  |                   | 30        | 60        | 80    | 100   | 150    | 175    | 200    | 250         | 300      | 425      | 500      | 600      |
|---|-------------------|-----------|-----------|-------|-------|--------|--------|--------|-------------|----------|----------|----------|----------|
| Rated heat input (Hi)                             | kW                | 32,6      | 58        | 98,5  | 115,8 | 179    | 203    | 238    | 270         | 313      | 425      | 500      | 600      |
| Rated heat input                                  | kW                | 30,6      | 56        | 94,7  | 110,2 | 172,4  | 198,3  | 229,2  | 260,8       | 300,8    | 420,7    | 487,5    | 585      |
| Thermal efficiency at rated heat input            | %                 | 94        | 96,5      | 96,1  | 95,2  | 96,3   | 97,7   | 96,3   | 96,6        | 96,1     | 98,6     | 97,5     | 97,5     |
| Thermal efficiency at 50% of the rated heat input | %                 | 99,8      | 103,8     | 99,3  | 97,9  | 100,4  | 101,8  | 100,3  | 101,6       | 100,5    | 101,4    | 102,1    | 102,1    |
| Back pressure in the combustion chamber with G20  | mbar              | 0,5       | 0,2       | 2,3   | 3,5   | 2,5    | 3,4    | 4      | 2,6         | 3,3      | 3        | 3,6      | 5,2      |
| G20: NOx (ERP 20 step ≤ 70Mg/kWh)                 | mg/kWh            | 63        | 69,1      | 62    | 57,6  | 67,4   | 67,8   | 67,1   | 59,5        | 67,4     | 63       | 59,5     | 58,4     |
| Air flow rate at 18 °C                            | m <sup>3</sup> /h | 2.750     | 5.100     | 7.560 | 9.200 | 13.000 | 15.800 | 18.000 | 20.800      | 24.000   | 32.500   | 38.300   | 41.000   |
| Useful static pressure                            | Pa                | 50        | 90        | 150   | 150   | 200    | 200    | 200    | 200         | 200      | 200      | 200      | 160      |
| Delta T air at max. power                         | °C                | 30        | 30,5      | 37,2  | 37,2  | 40,4   | 37,6   | 38,3   | 37,1        | 37       | 37,2     | 36,7     | 41       |
| Methane G20 (20 mbar)                             | m <sup>3</sup> /h | 3,45      | 5,82      | 10,42 | 12,91 | 18,94  | 21,48  | 25,19  | 28,57       | 33,12    | 44,97    | 52,9     | 63,5     |
| Natural gas G25 (25 mbar)                         | m <sup>3</sup> /h | 4         | 6,76      | 12,1  | 15    | 22     | 25     | 29,3   | 33,24       | 38,53    | 52,3     | 61,5     | 73,8     |
| Propane G31 (37 mbar)                             | kg/h              | 2,48      | 4,27      | 7,65  | 9,48  | 13,91  | 15,77  | 18,49  | 20,98       | 24,32    | 32,8     | 38,6     | 46,3     |
| Butane G30 (28 mbar)                              | kg/h              | 2,52      | 4,34      | 7,77  | 9,62  | 14,12  | 16,01  | 18,77  | 21,29       | 24,68    | 33,5     | 39,4     | 47,3     |
| Sound pressure (at 5 m)                           | dB(A)             | 62        | 72        | 72    | 73    | 71     | 73     | 74     | 74          | 75       | 74       | 75       | 75       |
| Supply voltage                                    | V-Ph-Hz           | 230V-1-50 | 230V-1-50 |       |       |        |        |        | 400V-3+N-50 |          |          |          |          |
| Fan motor absorption                              | A                 | 3,1       | 6,7       | 3,5   | 4,9   | 6,3    | 8,3    | 11,3   | 2 x 6,3     | 2 x 8,3  | 2 x 8,3  | 2 x 11,3 | 2 x 11,3 |
| Fan motor capacity                                | kW                | 0,2       | 0,75      | 1,5   | 2,2   | 3      | 4      | 5,5    | 2 x 3       | 2x4      | 2 x 4    | 2 x 5,5  | 2 x 5,5  |
| ELECTRICAL DATA, WITH EXTERNAL PRESSURE = 300 PA  |                   |           |           |       |       |        |        |        |             |          |          |          |          |
| Supply voltage                                    | V-Ph-Hz           | 230V-1-50 |           |       |       |        |        |        | 400V-3+N-50 |          |          |          |          |
| Fan motor absorption                              | A                 | 4,6       | 3,5       | 4,9   | 6,3   | 8,3    | 11,3   | 15     | 2 x 6,3     | 2 x 11,3 | 2 x 11,3 | 2 x 15   | 2 x 15   |
| Fan motor capacity                                | kW                | 0,5       | 1,5       | 2,2   | 3     | 4      | 5,5    | 7,5    | 2 x 3       | 2 x 5,5  | 2 x 5,5  | 2 x 7,5  | 2 x 7,5  |

## Assembly/location suggestions



## Controls



### Control combination options

L-TYP + **1** + **3**

L-TYP + **2** + **3**

L-TYP + **1** + **3** + **4**

- 1 = Pintherm Connect (0629108)
- 2 = Room thermostat (0629013)
- 3 = Outlet temperature control KTR-090 U for automatic burner step control (0701050)
- 4 = Room sensor (0629086)