

Cartivel

APEN LRP

Suspended Gas Fired Unit Heaters



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Sales Brochure

LRP Series

Suspended Unit Heaters



Heater Design

- Heater range has been designed to be compact and light weight, with excellent aesthetic qualities.
- Combustion chamber and heat exchanger manufactured in AISI441 stainless steel. Advanced manufacturing techniques and robot welding ensure accuracy and high quality for long service life.

Technical

- Fully complies with the requirements of ErP2021. UKCA and CE approvals.
- Range of seven heat outputs from 15.1kW to 91.1kW.
- Modulating premix burner.
- Efficiencies of up to 96.8% on low fire.
- Heater comes complete with LPG conversion kit as standard.
- LED display panel on front of heater shows heater operating mode. Also shows error code in the event of malfunction.

Installation

- Heaters can be suspended from threaded rod or mounted on wall brackets.
- All units can be installed as horizontal or vertical airflow.
- Very long flue and combustion air runs are possible with the LRP range. Up to 30m horizontal can be achieved with both flue and combustion air.
- Easy commissioning using LED display panel on the front of the heater.
- Rear mounted flue and combustion air connection as standard. Can be converted to top connection on site.
- Simple single phase electrical connection via plug in rear of heater.

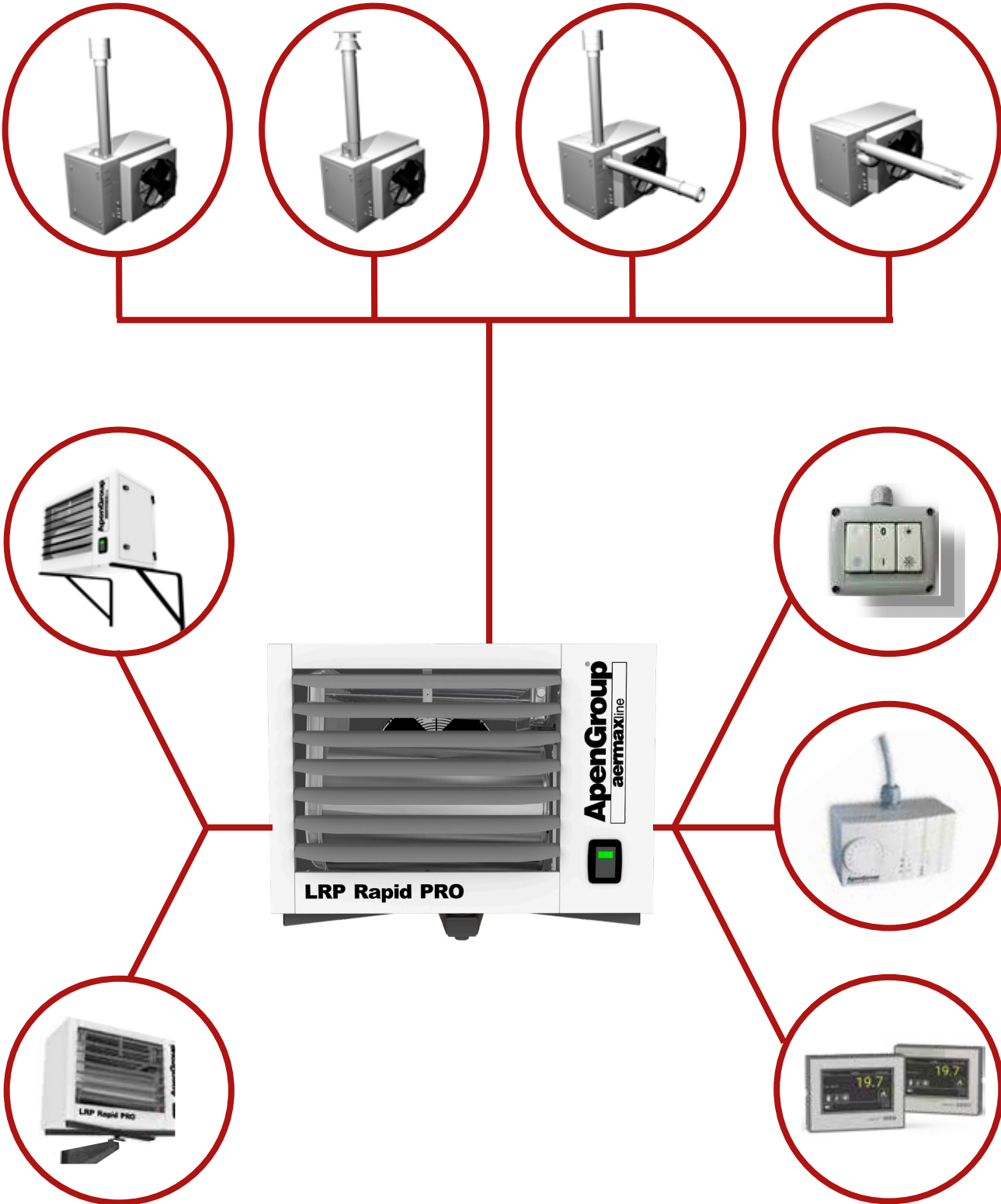
Controls

- Standard control option is the Smart Easy unit. Four core control cable connection to heater.
- Upgrade to the Smart Web option and get remote access to the heater via the internet.
- BMS connection option standard feature.
- Other control options available.

Applications

- In addition to general industrial application, the quiet operation and compact design of the LRP range make it suitable for a wide range of commercial and leisure projects too.

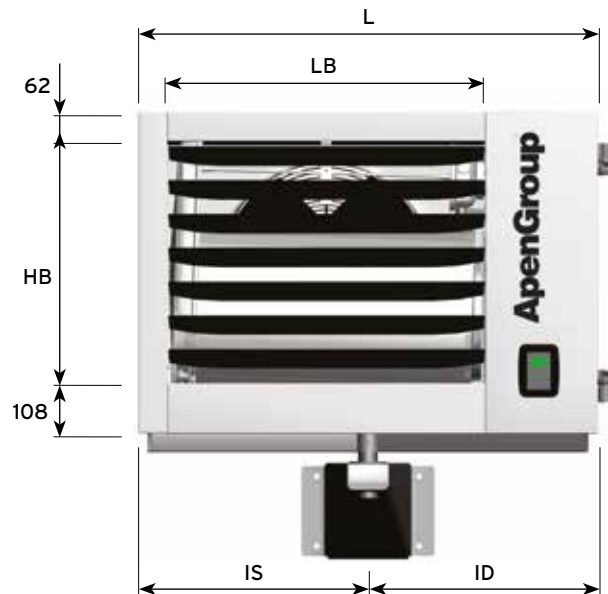
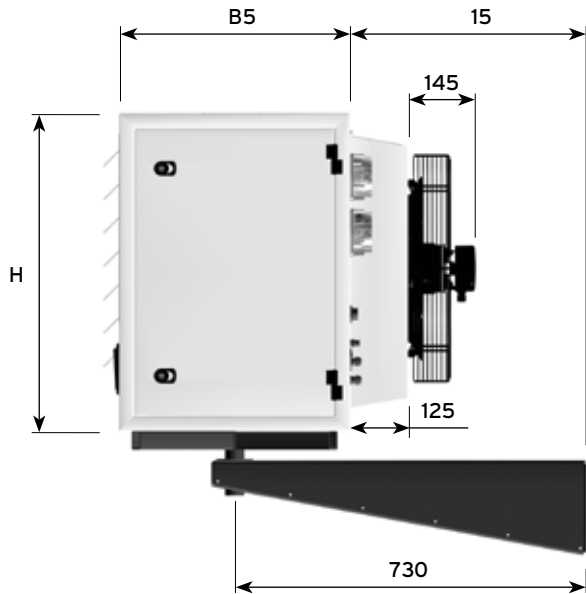
Accessories



Technical Data

| Model | | LRP018 | LRP028 | LRP035 | LRP045 | LRP055 | LRP075 | LRP102 | | | | | | | |
|---|-------------------|---|--------|----------------------|--------|----------------------|--------|----------------------|------|----------------------|------|----------------------|-------|----------------------|-------|
| Type of equipment | | B23 - B23P - C13 - C33 - C43 - C53 - C63 | | | | | | | | | | | | | |
| NOx Class | Val | 5 | | | | | | | | | | | | | |
| Heater Performance | | | | | | | | | | | | | | | |
| | | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max |
| Noiminal heat output (Hi) | kW | 10.1 | 16.5 | 16 | 27 | 20.2 | 34.8 | 26 | 44 | 29.8 | 52.2 | 44.4 | 73.5 | 51.8 | 100.0 |
| Useful heat output | kW | 9.7 | 15.1 | 15.4 | 24.6 | 19.6 | 32.4 | 25.0 | 40.6 | 28.8 | 48.1 | 42.5 | 67.5 | 49.9 | 91.1 |
| Hi efficiency (N.C.V.) | % | 95.8 | 91.8 | 96.3 | 91.2 | 96.8 | 93.1 | 96.3 | 92.3 | 96.8 | 92.1 | 95.8 | 91.8 | 96.4 | 91.1 |
| Hs efficiency (G.C.V.) | % | 86.2 | 82.6 | 86.7 | 82.1 | 87.1 | 83.8 | 86.7 | 83.1 | 87.1 | 82.9 | 86.2 | 82.6 | 86.8 | 82.0 |
| Flue losses with burner on (Hi) | % | 4.2 | 8.2 | 3.7 | 8.8 | 3.2 | 6.9 | 3.7 | 7.7 | 3.2 | 7.9 | 4.2 | 8.2 | 3.6 | 8.9 |
| Flue losses with burner off (Hi) | % | <0.1 | | <0.1 | | <0.1 | | <0.1 | | <0.1 | | <0.1 | | <0.1 | |
| Flue Gas Emissions | | | | | | | | | | | | | | | |
| Carbon monoxide - CO - (0% of O ₂) | ppm | <5 | | <5 | | <5 | | <5 | | <5 | | <5 | | <5 | |
| Emissions of nitrogen oxides NOx - (0% od O ₂) (Hi) | | 51mg/kWh - 29 ppm | | 55mg/kWh - 31 ppm | | 42mg/kWh - 24 ppm | | 55mg/kWh - 31 ppm | | 46mg/kWh - 26 ppm | | 60mg/kWh - 34 ppm | | 67mg/kWh - 38 ppm | |
| Pressure available at the flue | Pa | 80 | | 100 | | 120 | | 120 | | 130 | | 140 | | 140 | |
| Electrical Connections | | | | | | | | | | | | | | | |
| Supply voltage | V | 230 Vac - 50Hz single-phase | | | | | | | | | | | | | |
| Absorbed electrical power | kW | 0.1 | 0.143 | 0.15 | 0.197 | 0.13 | 0.184 | 0.25 | 0.32 | 0.268 | 0.33 | 0.454 | 0.493 | 0.49 | 0.582 |
| Protection rating | IP | IP20 | | | | | | | | | | | | | |
| Operating temperatures | °C | -15°C to +40°C - lower temperatures require buner compartment heating kit | | | | | | | | | | | | | |
| Connections | | | | | | | | | | | | | | | |
| Gas connection Ø | GAS | UNI/ISO 228/1-G 3/4" | | UNI/ISO 228/1-G 3/4" | | UNI/ISO 228/1-G 3/4" | | UNI/ISO 228/1-G 3/4" | | UNI/ISO 228/1-G 3/4" | | UNI/ISO 228/1-G 3/4" | | UNI/ISO 228/1-G 3/4" | |
| Intake/exhaust pipes Ø | mm | 80/80 | | 80/80 | | 80/80 | | 80/80 | | 80/80 | | 80/80 | | 100/100 | |
| Air Flow Rate | | | | | | | | | | | | | | | |
| Air flow rate (15°C) | m ³ /h | 2000 | | 2700 | | 3100 | | 4300 | | 4500 | | 7800 | | 9000 | |
| Air temperature increase | °C | 13.9 | 21.7 | 16.4 | 26.1 | 18.1 | 30.0 | 16.7 | 27.1 | 18.4 | 30.6 | 15.6 | 24.8 | 18.1 | 33.5 |
| Number and diameter of fans | | 1 x Ø350 (6P) | | 1 x Ø350 (4P) | | 1 x Ø450 (6P) | | 1 x Ø450 (4P) | | 1 x Ø450 (4P) | | 2 x Ø400 (4P) | | 2 x Ø450 (4P) | |
| Fan speed | rpm | 920 | | 1370 | | 920 | | 1370 | | 1370 | | 1370 | | 1370 | |
| Sound pressure (Lp) | dB(A) | 34 | | 44 | | 40 | | 49 | | 49 | | 51 | | 52 | |
| Weight | | | | | | | | | | | | | | | |
| Net weight | kg | 58 | | 58 | | 68 | | 70 | | 78 | | 102 | | 123 | |

LRP Dimensions

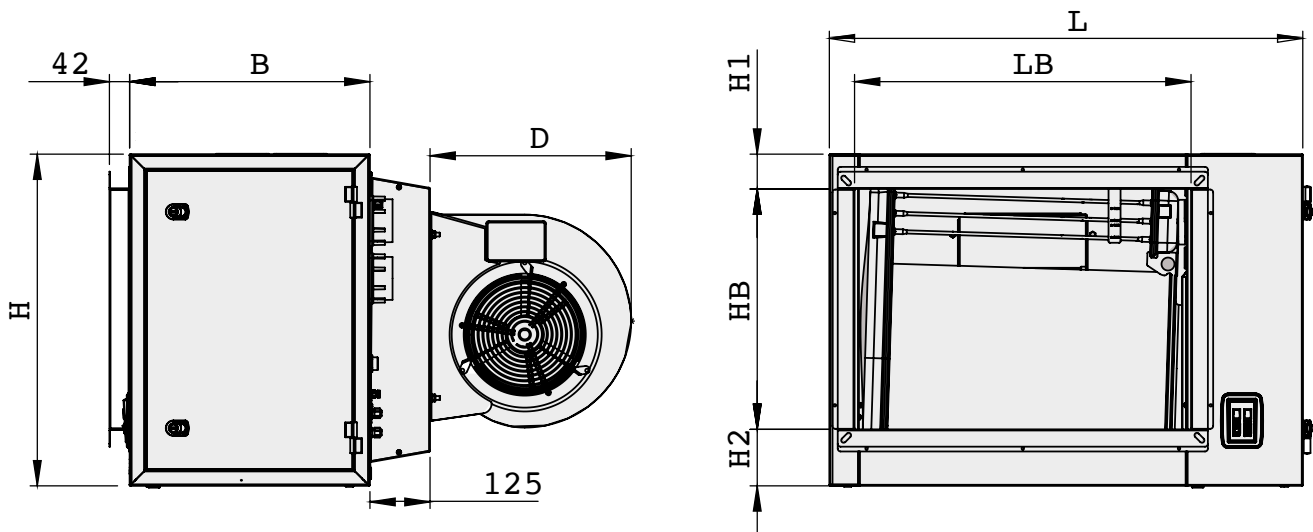


| Model | Overall Dimensions | | | Louvre | | Shelf | | Supply GAS | | |
|--------|--------------------|-----|------|--------|------|-------|-----|------------|-----|-----|
| | B | H | L | HB | LB | IS | ID | ØG | GO | GV |
| LRP018 | 500 | 690 | 795 | 520 | 490 | 395 | 400 | 3/4" | 180 | 255 |
| LRP028 | 500 | 690 | 795 | 520 | 490 | 395 | 400 | 3/4" | 180 | 255 |
| LRP035 | 500 | 690 | 985 | 520 | 680 | 490 | 495 | 3/4" | 180 | 255 |
| LRP045 | 500 | 690 | 985 | 520 | 680 | 490 | 495 | 3/4" | 180 | 255 |
| LRP055 | 500 | 765 | 985 | 595 | 680 | 490 | 495 | 3/4" | 180 | 255 |
| LRP075 | 500 | 765 | 1310 | 595 | 1010 | 605 | 710 | 3/4" | 180 | 255 |
| LRP102 | 500 | 845 | 1515 | 675 | 1180 | 720 | 795 | 3/4" | 210 | 255 |

LRP-00C0 Centrifugal Fan Technical Data

| Model | | LRP035-00C0 | | LRP055-00C0 | | LRP075-00C0 | |
|--|-------------------|--|-------|-------------------------|------|-------------------------|-------|
| Type of equipment | | B23-B23P-C13-C33-C43-C53-C63 | | | | | |
| NOx Class | Val | 5 | | | | | |
| Heater Performance | | | | | | | |
| | | Min | Max | Min | Max | Min | Max |
| Nominal heat input (Hi) | kW | 20.2 | 34.8 | 29.8 | 52.2 | 44.4 | 73.5 |
| Useful heat output | kW | 19.6 | 32.4 | 28.8 | 48.1 | 42.5 | 67.5 |
| Hi efficiency (N.C.V) | % | 96.8 | 93.1 | 96.8 | 92.1 | 95.8 | 91.8 |
| Hi efficiency (G.C.V) | % | 87.1 | 83.8 | 87.1 | 82.9 | 86.2 | 82.6 |
| Flue losses with burner on (Hi) | % | 3.2 | 6.9 | 3.2 | 7.9 | 4.2 | 8.2 |
| Flue losses with burner off (Hi) | % | <0.1 | | <0.1 | | <0.1 | |
| Flue Gas Emissions | | | | | | | |
| Carbon monoxide - CO - (0% of O ₂) | ppm | <5 | | <5 | | <5 | |
| Emissions of nitrogen oxides NOx - (0% of O ₂)(Hi) | | 42mg/kWh - 24ppm | | 46mg/kWh - 26ppm | | 60mg/kWh - 34ppm | |
| Pressure available at the flue | Pa | 120 | | 130 | | 140 | |
| Electrical Characteristics | | | | | | | |
| Supply voltage | V | 230 Vac - 50Hz single-phase | | | | | |
| Absorbed electrical power | kW | 0.13 | 0.184 | 0.268 | 0.33 | 0.454 | 0.493 |
| Protection rating | IP | IP20 | | | | | |
| Operating temperatures | °C | -15°C to +40°C - lower temperatures require a burner compartment heating kit | | | | | |
| Connections | | | | | | | |
| Gas connection Ø | GAS | UNI/ISO 228/1-G 3/4" | | UNI/ISO 228/1-G 3/4" | | UNI/ISO 228/1-G 3/4" | |
| Intake/exhaust pipes Ø | mm | 80/80 | | 80/80 | | 80/80 | |
| Air Flow Rate | | | | | | | |
| Air flow rate (15°C) | m ³ /h | 3050 | | 3050 | | 4650 | |
| Available pressure | Pa | 140 | | 140 | | 140 | |
| Rated power | kW | 1120 | | 1260 | | 2080 | |

LRP-00C0 Centrifugal Fan Dimensions



| Model | Overall Dimensions | | | | Duct Outlet | | | | GAS Supply | | |
|-------------|--------------------|-----|------|-----|-------------|------|----|-----|------------|-----|-----|
| | B | H | L | D | HB | LB | H1 | H2 | ØG | GO | GV |
| LRP035-00C0 | 500 | 690 | 985 | 425 | 500 | 700 | 74 | 118 | 3/4" | 180 | 255 |
| LRP055-00C0 | 500 | 765 | 985 | 490 | 600 | 700 | 61 | 105 | 3/4" | 180 | 255 |
| LRP075-00C0 | 500 | 765 | 1310 | 420 | 600 | 1000 | 61 | 105 | 3/4" | 180 | 255 |

Get In Touch



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