PROCESS OPTIMISATION WITH HOT AIR



LE-P AIR HEATERS



Generate an air flow Powerful, tried-andtested blowers generate the airflow required for the application.



Guide the air Air ducting systems made of heatresistant air hoses guide the airflow from the blower to the point of use.



Heat the air Electrically powered air heaters ensure the air is heated to the required tem perature.



Regulate the temperature

Microprocessor controlled regulators ensure precisely maintained temperatures when hot air is used.

	<u></u>
l L'r	
╎┌└	하드다
	עבוי

Apply the hot air At the point of use, the hot air is accurately fed through special nozzles for use in the respective application.



HAPRO Industriegeräte GmbH Schorberger Str. 40 · 42699 Solingen Phone: +49 212 317374 · Fax: +49 212 317315 www.hapro.de. Email: info@hapro.de

LE-P AIR HEATERS





The electrically powered air heaters of the LE-P series are mainly used where large quantities of gaseous media have to be heated. LE-P air heaters can be found, for example, in drying systems, hot-air shrink systems, heating cabinets, hot-air ducts and preheating systems. The heating elements and housings are made of high-quality stainless steel, which is why they heat dry, moist and mildly aggressive air as well as nitrogen in fresh air or recirculating air operation. The equipment is easy to control and, with its compact dimensions, can be installed with only a small footprint. All versions are designed for continuous operation. The air heaters are fully thermally insulated (with the exception of the inlet and outlet nozzles). The devices are available with an output of 24 – 72 kW, and special designs are possible. Inlet temperature in recirculating operation is max. 300 °C, continuous outlet temperature is 350 °C. Customized layout pressure-resistant up to 5 bar (LE-D).

Base set:

- Housing made of stainless steel (1.4301)
- Heating elements made of stainless steel (1.4301)
- Terminal boxes made of

powder-coated sheet steel

Optional items:

- Throttle valves
 Order No. 400190601 [outlet side]
 Order No. 400190605 [inlet side]
- Temperature sensor Order No. 40019002, Order No. 40019004
- Mounting brackets Order No. 901101

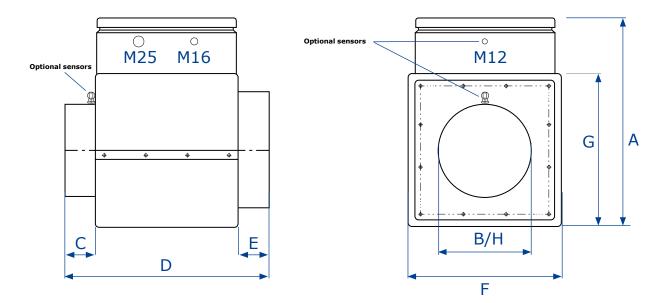
Options

- Air volume throttle damper on inlet or outlet side
- Outlet flange plate is manufactured according to customer specifications
- Connecting flanges for inlet and outlet are manufactured according to customer specifications
- Mounting elements for enclosures are manufactured according to customer specifications
- Nozzles for hot air distribution, special systems on request
- DIN-compliant overtemperature protection relay has an adjustable cut-off temperature
- Temperature sensor Pt 100 C600 on outlet side
- Temperature sensor NiCr-Ni or similar on outlet side
- Air flow monitoring on inlet side by means of differential pressure switch, pressure-wave switch or air flow monitor
- Temperature regulated by means of electronic controllers
- Power electronics: solid-state relay complete with heat sinks





Installation dimensions



Designation (details in mm)	Dimensions	LE-P 124 24 kW	LE-P 136 36 kW	LE-P 148 48 kW	LE-P 172 72 kW
Total height	А	450	450	450	450
Diameter of inlet nozzle	В	250 max.	250 max.	250 max.	250 max.
Length of outlet nozzle, including funnel	С	50	50	50	50
Total length with inlet and outlet nozzles	D	405	600	705	905
Length of inlet nozzle, incl. funnel	E	50	50	50	50
Width of the housing	F	330	330	330	330
Height of the housing	G	330	330	330	330
Diameter of the outlet nozzle	Н	250 max.	250 max.	250 max.	250 max.

Model	Order No.	Output kW	Voltage V	Description
LE-P 124	40018124	24,0	3 x 400	With overtemperature protection
LE-P 136	40018136	36,0	3 x 400	With overtemperature protection
LE-P 148	40018148	48,0	3 x 400	With overtemperature protection
LE-P 172	40018172	72,0	3 x 400	With overtemperature protection

Other sizes and capacities on request

PRICES LE-P AIR HEATERS

LE-P AIR HEATER

Model	Description		Order No.	Price
LE-P 124	3 x 400 V	24,0 KW	40018124	3950,00
LE-P 136	3 x 400 V	36,0 kW	40018136	4707,00
LE-P 148	3 x 400 V	48,0 kW	40018148	5879,00
LE-P 172	3 x 400 V	72,0 kW	40018172	7557,00

Accessories LE-P

Model	Description	Order No.	Price
NiCr-Ni	Installed temperature sensor $\emptyset = 1,5 \text{ mm x } 200 \text{ mm}$	40019002	88,00
Pt 100 C 600	Installed temperature sensor $\emptyset = 6 \text{ mm x } 125 \text{ mm}$	40019004	108,00
Throttle damper	Throttle damper at outlet connector	400190605	215,00
Throttle damper	Throttle damper at inlet connector	400190601	215,00
Bracket	Set mounting brackets for LE-P	901101	141,00

Spare parts LE-P

Model	Description	Order No.	Price
Safty tempera- ture limiter	365°C alterna- ting contact	40019365	112,00



As of April 2022

Hereby all previous price lists lose their validity. Prices per piece in Euro, incl. packaging from stock Solingen, plus VAT payable within 30 days net. No liability for misprints.