

Leister's air heaters: From mini to giant.

Leister's air heater highlight: The LHS series.



Picture: LHS 21S SYSTEM (p. 28 – 29)

1		Compact: Small dimensions for installation in tight spaces.
2		Reliable: Very durable heating elements thanks to innovative, patented heating element protection.
3		Easy Maintenance: Faster and easier heating element change.
4		Power electronics: External power control becomes obsolete and system design times are reduced.
5		Thermocouple: The integral thermocouple in SYSTEM devices improves precision and enables reproducibility.
6		User friendly: The display of the SYSTEM devices provides users precise local information.

7 Professional integration or controlled stand-alone operation

Operation modes LHS SYSTEM	Control mode	Adjustment mode
Internal (potentiometer) set point.	Temperature set point by potentiometer. Display shows temperature set point and actual temperature.	Capacity set point by potentiometer. Display shows capacity set point in % and actual temperature.
External (interface) set point.	Temperature set point by external controller. Display shows temperature set point and actual temperature.	Capacity set point by external controller. Display shows capacity set point in % and actual temperature.

The LHS air heater family

The LHS air heater family covers an impressive power range from 550 W to 40 kW. The diversity of this portfolio makes it ideal for practically all hot-air applications. By choosing LHS air heaters, you are investing in devices that are manufactured using state-of-the-art technology. Between them, the CLASSIC, PREMIUM and SYSTEM models offer the ideal solutions for users' differing requirements.

Features	CLASSIC	PREMIUM	SYSTEM
Easy to integrate (mounted from above)	✓	✓	✓
Overheat detection with alarm output for the heating element	✓		
Tool overheat detection with alarm output	✓		
Overheat protection with alarm output for the heating element		✓	✓
Tool overheat protection with alarm output		✓	✓
Infinitely adjustable heating capacity via potentiometer		✓	✓
Remote control via analogue interface (4 – 20 mA or 0 – 10 V)			✓
Various open-loop and closed-loop control modes available for selection			✓ *
LED display (target/actual value display)			✓ *

* = except the LHS 91 SYSTEM

Air Heaters
Controllers

Alongside its optimised design and traditional Leister quality, the patented heating element protection guarantees yet another increase to the service life of the heating element. Thanks to their built-in temperature probes and controllers, integrating the LHS SYSTEM air heaters has never been easier. The integrated power electronics make external power controls a thing of the past and even simplify the wiring.

Model	LHS 15		LHS 21		LHS 41		LHS 61		LHS 91					
			S	L	S	L	S	L						
Power Range from – to	550 W	800 W	1000 W	3.3 kW	2.0 kW	3.6 kW	2.0 kW	5.5 kW	4.0 kW	9.0 kW	5.0 kW	16 kW	11 kW	40 kW
Catalogue page	26		28		30		32		34					

LHS 15: Tiny and reliable.

The tiny air heater provides hot-air up to 650 °C. All prominent features of Leister air heaters also are offered with this tiny heater: long-life heating element, reliable protection systems, standard interfaces. Simply summarizing – the same Leister quality as usual. This makes it a perfect tool for applications in Semiconductor, Electronics, Automotive and other industries.

Air heater

LHS 15

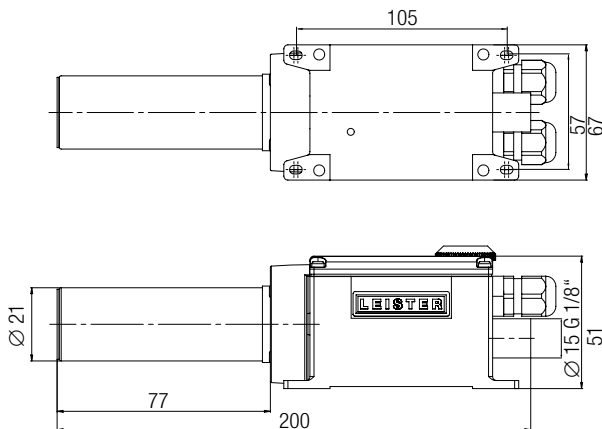


Technical data

Max. air outlet temperature	°C	650
Max. air inlet temperature	°C	65
Max. ambient temperature	°C	65
Min. air flow		As per diagram page 27
Relative humidity	%	5 – 95 non condensing
Max. inlet pressure	kPa	100
Weight	kg	0.48

Conformity mark	CE
Approval mark	Ⓢ
Protection class II	□

Installation dimensions in mm



Combination possibilities

- Leister air heater at maximum heat power and without nozzle with Leister blower at 50 Hz, 1.5 m hose length and unimpeded air outflow.
- Hot-air temperature 3 mm after air outlet, measured at the hottest point.
- Air flow at 0 °C, 101.3 kPa compliant with DIN 1343.

Power Typ	Number LHS 15 x power cons. W	Air flow l/min.	Temperatur °C
ROBUST	1 × 800	1 × 150	420
ROBUST	2 × 800	2 × 130	460

Air flow and temperature values may deviate from those above based on the design of the entire hot-air system (including nozzles, air hoses, environmental conditions).

Deflashing foil sleeves from charcoal filter elements



Air heater

LHS 15 CLASSIC



Heating power not adjustable

Detection of heating element and device overheating with alarm output

Air heater

LHS 15 PREMIUM



Heating power steplessly adjustable with potentiometer

Protection against heating element and device overheating with alarm output

Air heater

LHS 15 SYSTEM



Heating power or temperature steplessly adjustable with potentiometer or remote control interface

Protection against heating element and device overheating with alarm output

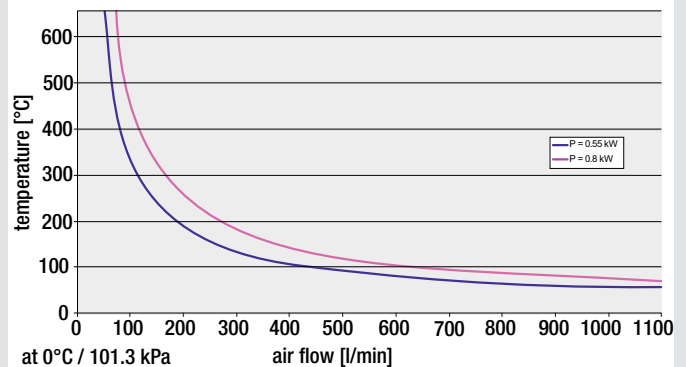
Remote control interface for external temperature controllers (Leister CSS, or PLCs)

Air Heaters
Controllers

Order no.:	CLASSIC	PREMIUM	SYSTEM
LHS 15 0.55 kW / 120 V	139.873	139.908	139.894
LHS 15 0.8 kW / 230 V	139.874	139.893	139.895

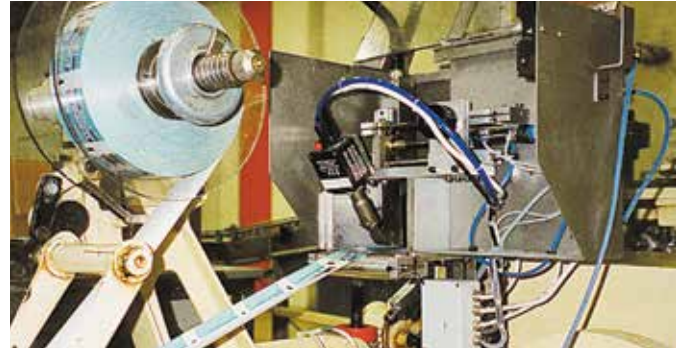
Contact a Leister sales partner in your region for professional advice and information on our other air heaters and blowers.

temperature – air flow characteristics


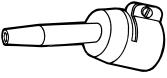

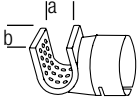
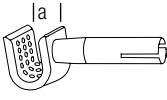
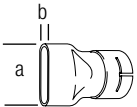

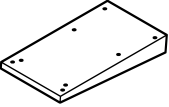


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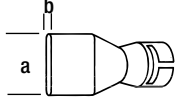
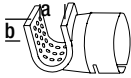
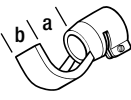
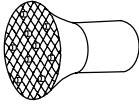
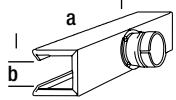
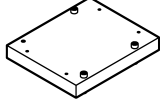




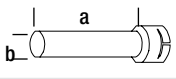

Air heater and blower for drying labels. Fast drying allows for high throughput speeds.



Accessories LHS 15 (Ø 21.3 mm)

	107.282 Flange connector, push-fit a = 40 mm
	107.144 Round nozzle, push-fit Ø 5 mm 107.145 Ø 10 mm
	107.152 Round nozzle, push-fit Ø 12 mm
	107.310 Sieve reflector, push-fit (a × b) 20 × 35 mm 107.311 50 × 35 mm
	107.324 Sieve reflector, push-fit on round nozzle Ø 5 mm a = 10 mm
	105.549 Wide slot nozzle, push-fit (a × b) 10 × 2 mm, angled 105.559 20 × 2 mm, length 55 mm 105.548 40 × 5 mm 105.547 50 × 8 mm
	144.035 Compressed air connection
	143.533 Adapter plate LHS 15 instead LE 700

Accessories LHS 21 (Ø 36.5 mm)

	107.261 Wide slot nozzle, push-fit (a × b) 70 × 4 mm 108.078 100 × 4 mm 105.982 150 × 4 mm
	107.308 Sieve reflector, push-fit (a × b) 35 × 50 mm 107.309 20 × 35 mm
	107.314 Spoon reflector, push-fit (a × b) 25 × 30 mm
	107.319 Sieve reflector «Douche», push-fit Ø 65 mm
	106.132 Shell reflector, push-fit (a × b) 150 × 25 mm
	142.230 Adapter plate LHS 21 instead LHS 20
	143.480 Adapter plate LHS 21 instead LE 3000
	133.515 Thermocouple holder
	144.037 Compressed air connection
	125.316 Flange connector, push-fit a = 62 mm
	107.251 Extension nozzle, push-fit (a × b) 210 × 36.5 mm
	107.003 Round nozzle, push-fit Ø 12 mm