

# LHS 20: The small and compact models.

The «20» design line air heaters operate within a power range of 1 – 3.3 kW. They are available as single-phase models in the voltage range 100 to 230 V. Air inlet and air outlet connections are compatible with the predecessor heater type LE 3000 and its accessories. The L in the 20L design line stands for high power and a correspondingly long heating element than for the 20S version.

Air heater

## LHS CLASSIC 20S / 20L



Air heater

## LHS PREMIUM 20S / 20L



Air heater

## LHS SYSTEM 20S / 20L



### Technical data

#### LHS 20S / 20L

	CLASSIC	PREMIUM	SYSTEM
Max. air outlet temperature °C	600	650	650
Min. air flow acc. to graph page 7			
Max. air inlet temperature °C	80	80	80
Max. ambient temperature °C	65	65	65
Weight g			
20S	550	550	550
20L	650	650	650
Mark of conformity	CE	CE	CE
Approval mark	Ⓢ	Ⓢ	Ⓢ
Certification scheme	CCA	CCA	CCA
Protection classe II	Ⓢ	Ⓢ	Ⓢ

### 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 in NI/min = standard litres / min compliant with DIN 1343.

Blower Type	Number LHS 20S × Power consumption kW	LHS 20S Air flow NI/min	LHS 20S Temperature °C
ROBUST	1 × 1.0	1 × 640	160
ROBUST	2 × 1.0	2 × 420	200
ROBUST	4 × 1.0	4 × 240	300
ROBUST	1 × 2.0	1 × 590	300
ROBUST	2 × 2.0	2 × 390	380
ROBUST	4 × 2.0	4 × 220	540

Blower Type	Number LHS 20L × Power consumption kW	LHS 20L Air flow NI/min	LHS 20L Temperature °C
ROBUST	1 × 3.3	1 × 550	520
ROBUST	2 × 3.3	2 × 390	610
AIRPACK	1 × 3.3	1 × 1750	230
AIRPACK	2 × 3.3	2 × 1210	270
AIRPACK	4 × 3.3	4 × 700	340

Air flow and temperature specifications may deviate from ideal values due to modifications of the hot-air system (nozzles, hose length, etc.).

### LHS 20S

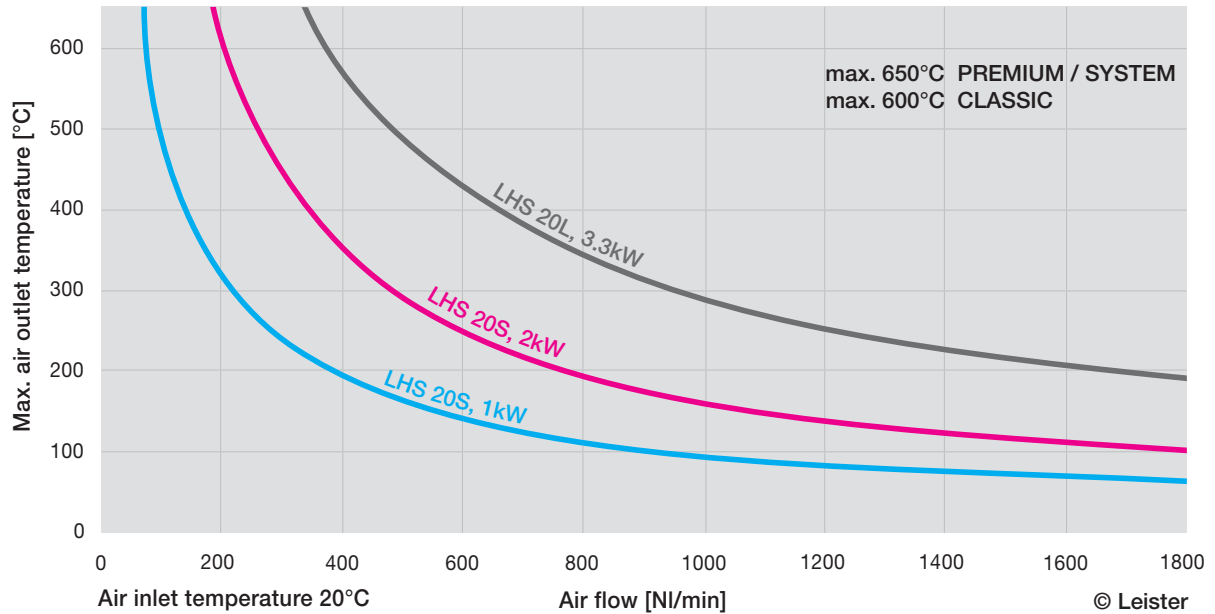
Voltage V ~	120		230	
Power consumption kW	1	2	1	2
<b>CLASSIC</b> Order no.	117.644	117.648	117.646	117.650
<b>PREMIUM</b> Order no.	125.863	125.867	125.865	125.869
<b>SYSTEM</b> Order no.	125.949	125.953	125.951	125.955

### LHS 20L

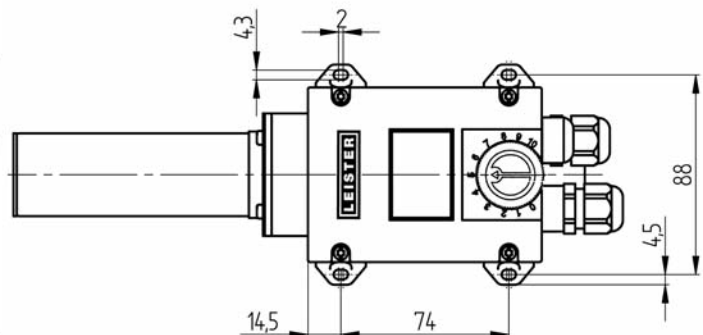
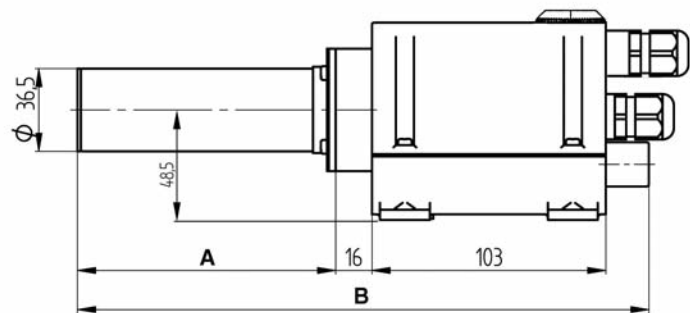
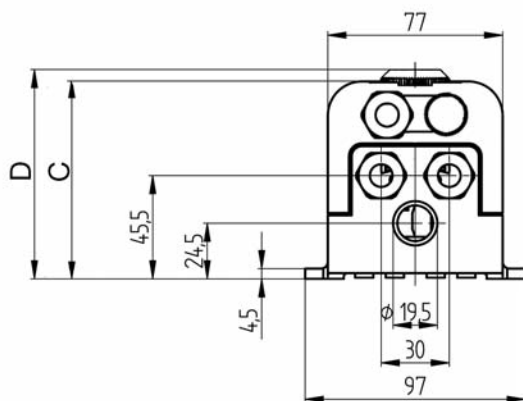
Voltage V ~	230
Power consumption kW	3.3
<b>CLASSIC</b> Order no.	123.212
<b>PREMIUM</b> Order no.	125.871
<b>SYSTEM</b> Order no.	125.957

LHS CLASSIC	LHS PREMIUM	LHS SYSTEM
Heating power not adjustable	Heating power steplessly adjustable with potentiometer	Heating power steplessly adjustable with potentiometer or remote control interface
Detection of heating element and device overheating with alarm output	Protection against heating element and device overheating with alarm output	Protection against heating element and device overheating with alarm output
		Remote control interface for CSS, CSS EASY temperature controllers or external PLC control 4–20 mA / 0–10 V, galvanically isolated.

### LHS 20



### Installation dimensions in mm LHS CLASSIC, PREMIUM, SYSTEM / 20S and 20L



Type	A	B	C	D
LHS CLASSIC 20S	99	237	87	
LHS CLASSIC 20L	129	267	87	
LHS PREMIUM 20S	99	237		92
LHS PREMIUM 20L	129	267		92
LHS SYSTEM 20S	99	237		92
LHS SYSTEM 20L	129	267		92

## Temperature controller

### CSS EASY




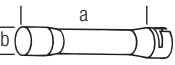

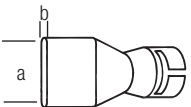
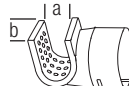

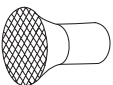
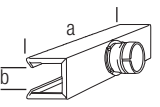
## Temperature controller

### CSS

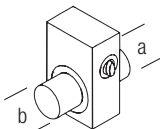
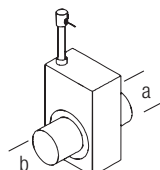


Technical data	CSS EASY	CSS
Suitable for LEISTER air heaters	LHS SYSTEM	LHS SYSTEM Universally deployable temperature regulator
Regulation type	PID	PID
Ready to use with preconfigured parameter set	•	• (for LHS SYSTEM)
Configuration with PC and programming cable (see Accessories)	•	•
Accuracy	Accuracy better than 0.2% of scale value at 25 °C	Accuracy better than 0.2% of scale value at 25 °C
Switchover °C °F	Configurable via keypad	Configurable via keypad
Temperature sensor / input	Type K / socket	Type K, PT100, screw connectors
Alarm output	2 alarms independently configurable Output at 2 floating relay contacts Output at 2 floating relay contacts	2 alarms independently configurable Output at 2 floating relay contacts Screw connectors
Connection to air heater	RJ-45 socket for Leister Control Cable (see Accessories)	Screw connectors
Voltage	100 – 240 VAC, max. 8VA	100 – 240 VAC, max. 8VA
Mains connection lead	2 m, with Euro plug	Without lead, screw connectors
Mechanics	Regulator built into housing, ready to operate, can also be integrated into the front panel, with cut-out 67 × 67 mm	Regulator for front panel integration, with cut-out 45 × 45 mm
Size L × W × H	175 × 72 × 72 mm	109 × 48 × 48 mm
Weight kg	0.45	0.2
Mark of conformity	CE	CE
Protection classe II	□	□
Order no.	125.944	123.039





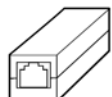
**Accessories LHS Type 20**  
(Ø 36.5 mm)

125.316		Flange connector, push-fit a = 62 mm
107.251		Extension tube, push-fit (a × b) 210 × 36.5 mm
107.003		Deflecting nozzle 90°, push-fit Ø 12 mm
107.261 108.078 105.982		Wide slot nozzle, push-fit (a × b) 70 × 4 mm 100 × 4 mm 150 × 4 mm
107.308 107.309		Sieve reflector, push-fit (a × b) 34 × 50 mm 20 × 35 mm
107.314		Spoon reflector, push-fit (a × b) 25 × 30 mm
107.319		Sieve reflector, push-fit Ø 65 mm
106.132		Shell reflector, push-fit (a × b) 150 × 25 mm

**Air flow adjuster and on/off switch**

108.755		Hand operated air flow adjuster and on/off switch. Size 214 × 88 × 133 mm a = 40 mm, b = 38 mm
107.299		Air flow off/on switch The air flow is interrupted on command (pneumatic 5 bar) to the heaters. Size 214 × 88 × 133 mm a = 40 mm, b = 38 mm

**Accessories CSS, CSS EASY**

106.956		Thermocouple with plug, 1 m cable
106.958 106.960 106.962		Thermocouple extension cable with plug and connection 2 m 4 m 10 m
126.596		Programming cable with connection with DSUB9/V.24 connector for configuration with PC.
125.988 125.989		Controller cable RJ 45-connector and cable gland 3 m 5 m
125.990		Coupler for controller cable

**Special nozzles on request**

If using non-Leister blowers, compressors and accessories no guarantee can be given by us