LEISTER

PROCESS HEAT

Industrial processes with hot-air.

Diverse and efficient.

Leister delivers performances.

Wherever you need to apply heat, Leister provides the ideal solution. We have been the worldwide leader in the field of plastic welding and hot-air blowers for over 50 years. For several years now we have also been offering innovative and effective laser systems and micro-systems. We develop and produce all of our products in Switzerland – so you can always rely on the proverbial Leister quality. And because 98% of our production is exported, therefore, we have established a dense network of service centers throughout the world – guaranteeing excellent service anytime and anywhere.

Headquarters in Sarnen, Switzerland

LEISTER

Plastic Welding
For decades now, we have been the worldwide market leader. The proverbial performance and reliability of our products makes Leister the first choice. Our tools are used in roof sealing systems, floor coverings, plastic sheeting, in earthworks, hydraulic and tunnel engineering, in process equipment manufacturing and for vehicle repair.

NOVOLAS™

Lasersystems
Our innovative solutions for precision welding of plastics open up new production methods in automobile manufacturing, in medical and sensory technology, electronics, as well as in micro-systems technology or in soldering electronic components.

LEISTER

Process heat
Whether for activation, heating, curing, melting, shrinking, welding, sterilization, drying or warming: hot-air is increasingly deployed in industrial processes. Leister customers profit from our extensive engineering knowledge and benefit from our advice in the conceptual design of hot-air applications.

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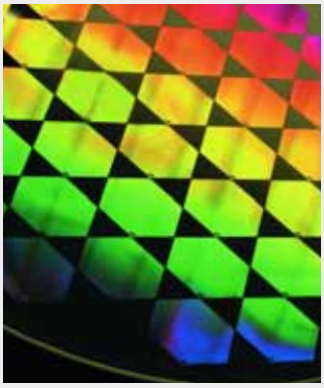


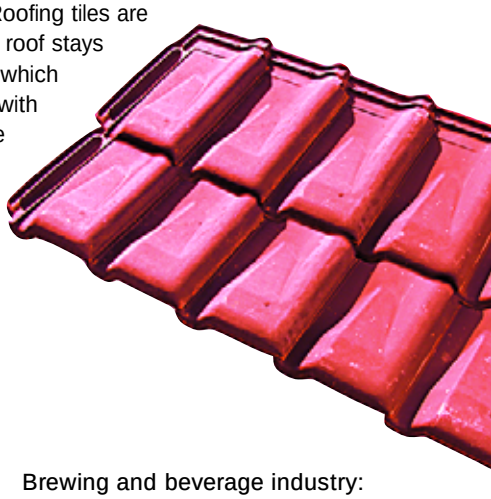
Microsystems
In tomorrow's world, the smallest of structures will play a huge role! In order for our customers to keep ahead of the field in the future, we are already developing and producing micro-mechanical sensors and micro-optical components in our cleanroom today.

Leister hot-air technology: proved thousands of times.

- prewarming and heating
- shrinking
- welding
- activating or detaching
- igniting and burning
- removing
- separating or fusing
- pasteurizing and sterilizing
- smoothing and shining
- accelerating
- dissolving
- connecting
- simulating
- de-icing
- inspecting

Automobile industry: To permanently bond car doors and plastic trim, plastic rivets have to be heated and the rivet heads formed with cold dies. Using several Leister LE MINIs, the individual rivets can be heated simultaneously with pinpoint precision.

Construction industry: Roofing tiles are additionally coated so the roof stays sealed longer. Tunnels, in which the roofing tiles are dried with several high-performance Leister air heaters, ensure the production line flows.



Food industry: To make sure that delicacies can also be visually savored, they are smoothed after production. With electronically controlled hot-air from Leister.

Brewing and beverage industry: Shrinkable plastics are increasingly replacing metal caps. A Leister HOTWIND S or an LHS series air heater with the appropriate blower supply the spoon reflector with air.

Pad printing: Printing ink has to dry quickly so the object printed can be further processed. Leister supports the printing industry with quiet hot-air blowers and special reflectors.

Logistics: To ensure the stack holds, a PE shrink film cover is placed over it and shrinked with a Leister hot-air blower.

Food industry: Thanks to Leister, the PE-coated milk carton can be dried, sterilized and welded.

Food industry: Coffee can also be roasted with hot-air from Leister. To ensure nothing burns, the temperature is precisely controlled.

Leister Process Heat: the complete range at a glance.

Air heaters	LHS CLASSIC		LHS PREMIUM		LHS SYSTEM	
Page 6 / 7						
Type	20S	20L	20S	20L	20S	20L
Power consumption [kW]	1.0 – 2.0	3.3	1.0 – 2.0	3.3	1.0 – 2.0	3.3

Air heaters	LHS CLASSIC		LHS PREMIUM		LHS SYSTEM	
Page 8 / 9						
Type	40S	40L	40S	40L	40S	40L
Power consumption [kW]	2.0 – 4.0	2.0 – 4.0	2.0 – 4.0	2.0 – 4.0	2.0 – 4.0	2.0 – 4.0

Air heaters	LHS CLASSIC		LHS PREMIUM		LHS SYSTEM	
Page 10 / 11						
Type	60S	60L	60S	60L	60S	60L
Power consumption [kW]	4.0 – 6.0	5.0 – 16.0	4.0 – 6.0	5.0 – 16.0	4.0 – 6.0	5.0 – 16.0

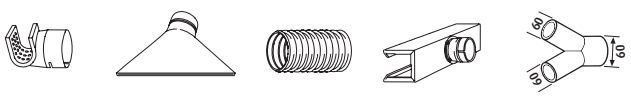
Air heaters	LE MINI		LE MINI SENSOR		LE MINI SENSOR KIT	
Page 12						
Power consumption [kW]	0.4	0.8	0.4	0.8	0.4	0.8

Air heaters	LE 700		LE DF (Doppelflansch)		LE HT (High temperature)		LE 40000
Page 13 – 18							
Type			5000 DF	10000 DF	5000 HT	10000 HT	
Power consumption [kW]	0.55	0.77	4.5 – 7.5	5.5 – 17	11	15	11 – 39

Hot-air blower	MISTRAL	HOTWIND S	VULCAN E
Page 19 – 21			
Power consumption [kW]	2.3 – 3.4	2.0 – 5.4	10.0 – 13.5

Controllers	CSS EASY	CSS	KSR DIGITAL	DSE control electronics
Page 22 / 23				
	for LHS SYSTEM	for LHS SYSTEM, LE MINI SENSOR	for LE 700, LE 40000, LE DF, LE HT HOTWIND S, VULCAN E	for LE DF (double flange) and LE HT (high temperature)

Gebläse	SILENCE	ASO	ROBUST	AIRPACK
Page 24 – 27				
Air flow l/min	4700 / 6000	13500 / 15900	1200 / 1300	3500 / 4500
Stat. pressure Pa	1000 / 1400	1600 / 2400	8000 / 10500	29000 / 29000

Page 28 – 33 Accessories	Page 34 – 39 Application examples
	  

Why do our customers trust Leister?

Leister hot-air systems are deployed in countless industrial production processes. There is hardly an industry, which does not profit from our diverse advantages – whether through cost-effectiveness or because many process simply become more efficient with hot-air.

Know-how
The decades of experience in plastics processing and in industrial processes make us the ideal hot-air technology partner.

Consulting
As worldwide market leader with our network of more than 120 sales and service centers in more than 60 countries, we are always local and can optimally consult you just where you are.

Extensive Leister product range
Every hot-air application in industrial processes can be matched with products from Leister. Our extensive product range includes:
- Innovative, system-compatible air heaters
- Powerful, robust blowers
- Compact, flexible hot-air blowers
- Comprehensive range of accessories

Customized solutions
Alongside our broad product range, we also offer you products developed according to your individual specifications.

Development
We constantly develop our products. Our customers therefore profit from supreme quality, reliability, performance and even more cost-effectiveness.

Applications Laboratory
Our Application Laboratory equipped with the most up-to-date measuring equipment is extremely well suited for simulating applications and processes. With this service, we support you in finding a fast and efficient solution.

Independent safety testing
All Leister air heater and hot-air blowers are tested by the independent test centre “Electrosuisse”. Another feature to ensure top quality and safety.

Combination options with air heaters, blowers and temperature regulators.

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		GS	GS	GS
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 Nl/min = standard litres / min compliant with DIN 1343.

Blower Type	Number LHS 20S × Power consumption kW	LHS 20S Air flow Nl/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 Nl/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

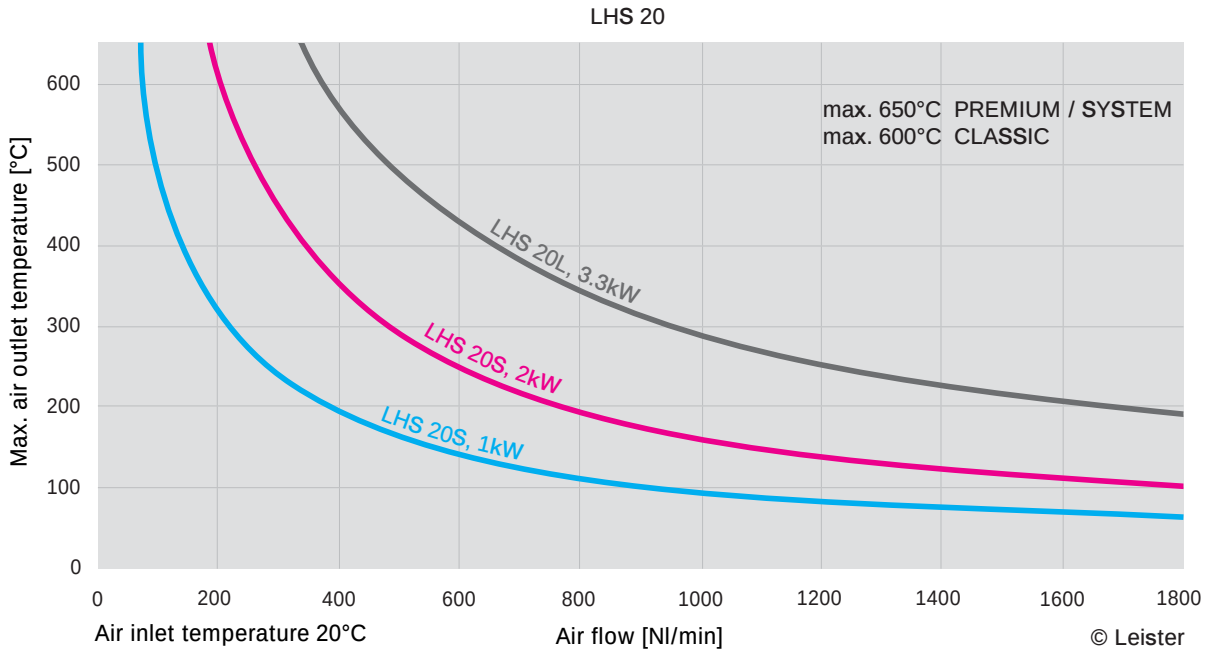
Voltage V ~		100		120		200		230	
Power consumption kW		1	2	1	2	1	2	1	2
CLASSIC	Order no.	117.642	117.647	117.644	117.648	117.645	117.649	117.646	117.650
PREMIUM	Order no.	125.862	125.866	125.863	125.867	125.864	125.868	125.865	125.869
SYSTEM	Order no.	125.948	125.952	125.949	125.953	125.950	125.954	125.951	125.955

LHS 20L

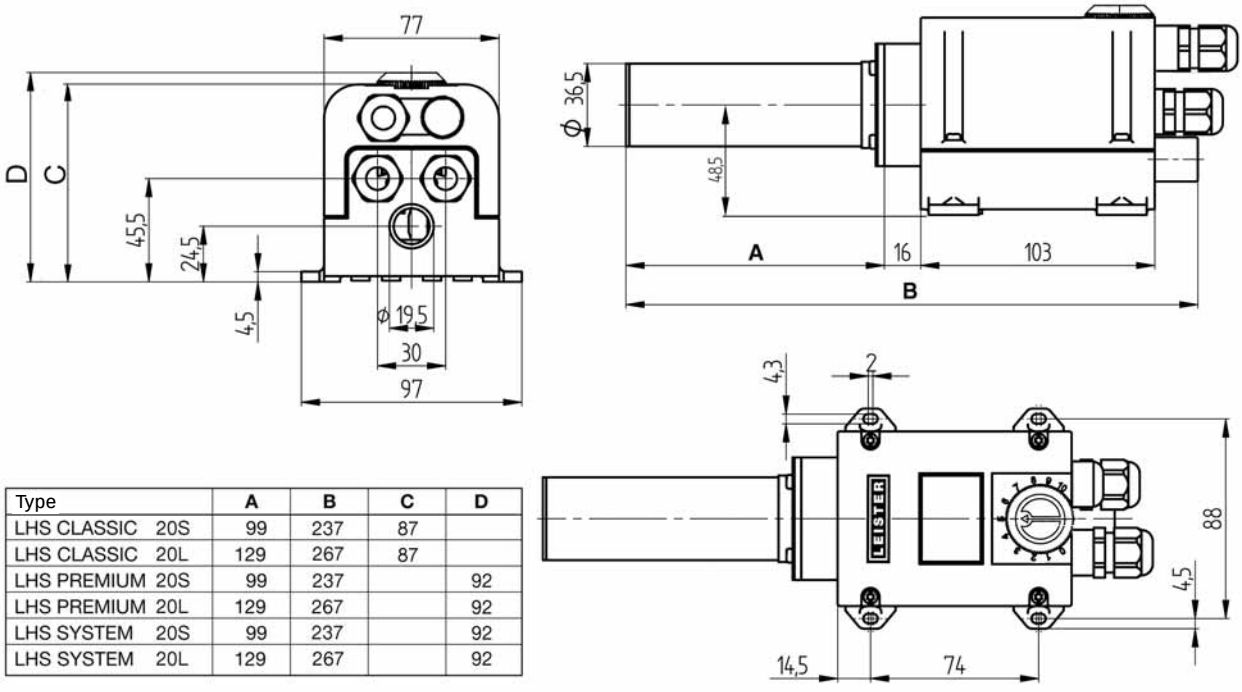
Voltage V ~		200	230
Power consumption kW		3.3	3.3
CLASSIC	Order no.	123.217	123.212
PREMIUM	Order no.	125.870	125.871
SYSTEM	Order no.	125.956	125.957

Accessories on page 28

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.



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

LHS 40: The hot mid-range models.

The «40» design line operates within the power range 2 – 4 kW. They are available as single-phase versions in the voltage range 100 – 230 V, and also as the three-phase version 40L for the voltage range 3 x 230 to 3 x 440 V. Air inlet and air outlet connections are compatible with the predecessor heater type LE 3300 and its accessories.

Air heater

LHS CLASSIC 40S / 40L

Air heater

LHS PREMIUM 40S / 40L

Air heater

LHS SYSTEM 40S / 40L

Technical data LHS 40S / 40L		**CLASSIC**	**PREMIUM**	**SYSTEM**
Max. air outlet temperature °C		600	650	650
Min. air flow acc. to graph page 9				
Max. air inlet temperature °C		80	80	80
Max. ambient temperature °C		65	65	65
Weight g	40S	850	850	850
	40L	950	950	950
Mark of conformity		CE	CE	CE
Approval mark		GS	GS	GS
Certification scheme		CCA	CCA	CCA
Protection classe II		⧈	⧈	⧈

40S

Voltage V ~		100	120	200		230	
Power consumption kW		2	2	2	4	2	4
CLASSIC	Order no.	118.575	118.576	118.577	118.579	118.578	118.101
PREMIUM	Order no.	125.872	125.873	125.874	125.876	125.875	125.877
SYSTEM	Order no.	125.963	125.964	125.965	125.967	125.966	125.968

40L

Voltage V ~		3 × 230		3 × 400		3 × 440	
Power consumption kW		2	4	2	4	2	4
CLASSIC	Order no.	118.580	118.581	118.582	118.583	118.584	118.585
PREMIUM	Order no.	125.578	125.881	125.879	125.882	125.880	125.883
SYSTEM	Order no.	125.969	125.972	125.970	125.973	125.971	125.974

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 Nl/min = standard litres / min compliant with DIN 1343.

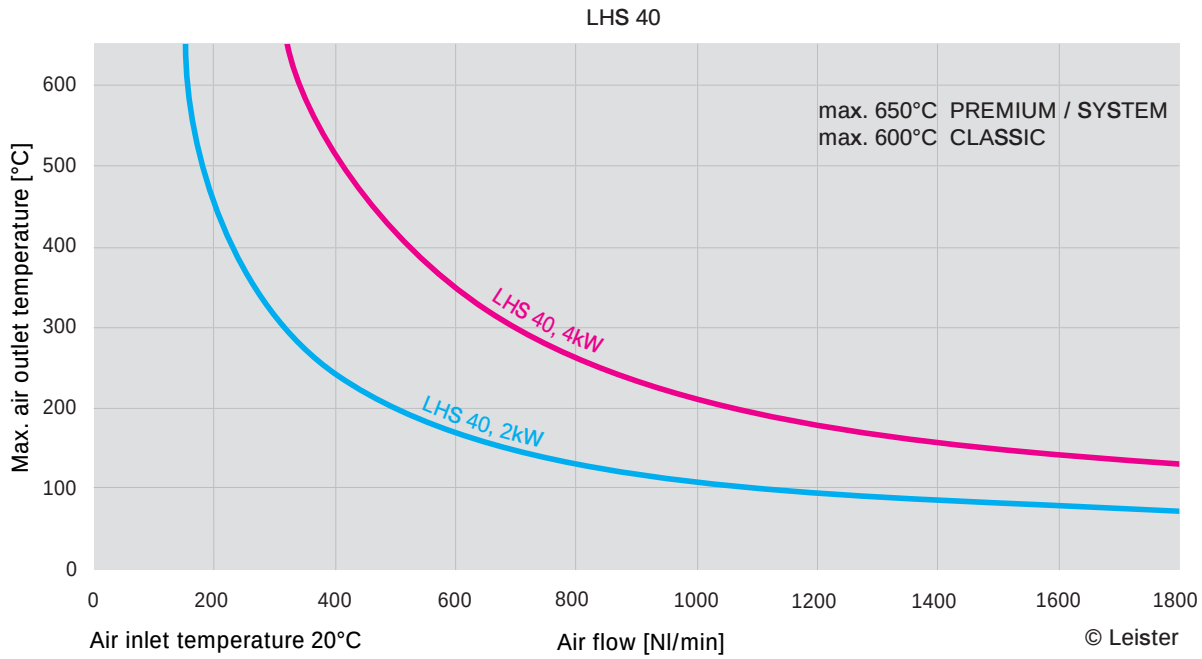
Blower Type	**Number LHS 40S × Power consumption kW**	**LHS 40S Air flow Nl/min**	**LHS 40S Temperature °C**
ROBUST	1 × 2.0	1 × 840	200
ROBUST	2 × 2.0	2 × 480	300
ROBUST	4 × 2.0	4 × 250	450
ROBUST	1 × 4.0	1 × 810	370
ROBUST	2 × 4.0	2 × 470	540
SILENCE	1 × 2.0	1 × 510	280
SILENCE	2 × 2.0	2 × 460	290
SILENCE	4 × 2.0	4 × 380	300
SILENCE	1 × 4.0	1 × 440	600
SILENCE	2 × 4.0	2 × 410	600
SILENCE	4 × 4.0	4 × 330	600
ASO	4 × 2.0	4 × 500	230
ASO	4 × 4.0	4 × 480	450

Blower Type	**Number LHS 40L × Power consumption kW**	**LHS 40L Air flow Nl/min**	**LHS 40L Temperature °C**
ROBUST	1 × 2.0	1 × 890	210
ROBUST	2 × 2.0	2 × 510	310
ROBUST	4 × 2.0	4 × 270	470
ROBUST	1 × 4.0	1 × 810	390
ROBUST	2 × 4.0	2 × 450	560
SILENCE	1 × 2.0	1 × 567	295
SILENCE	2 × 2.0	2 × 453	320
SILENCE	4 × 2.0	4 × 368	330
SILENCE	1 × 4.0	1 × 410	620
SILENCE	2 × 4.0	2 × 400	620
SILENCE	4 × 4.0	4 × 330	630
ASO	4 × 2.0	4 × 500	270

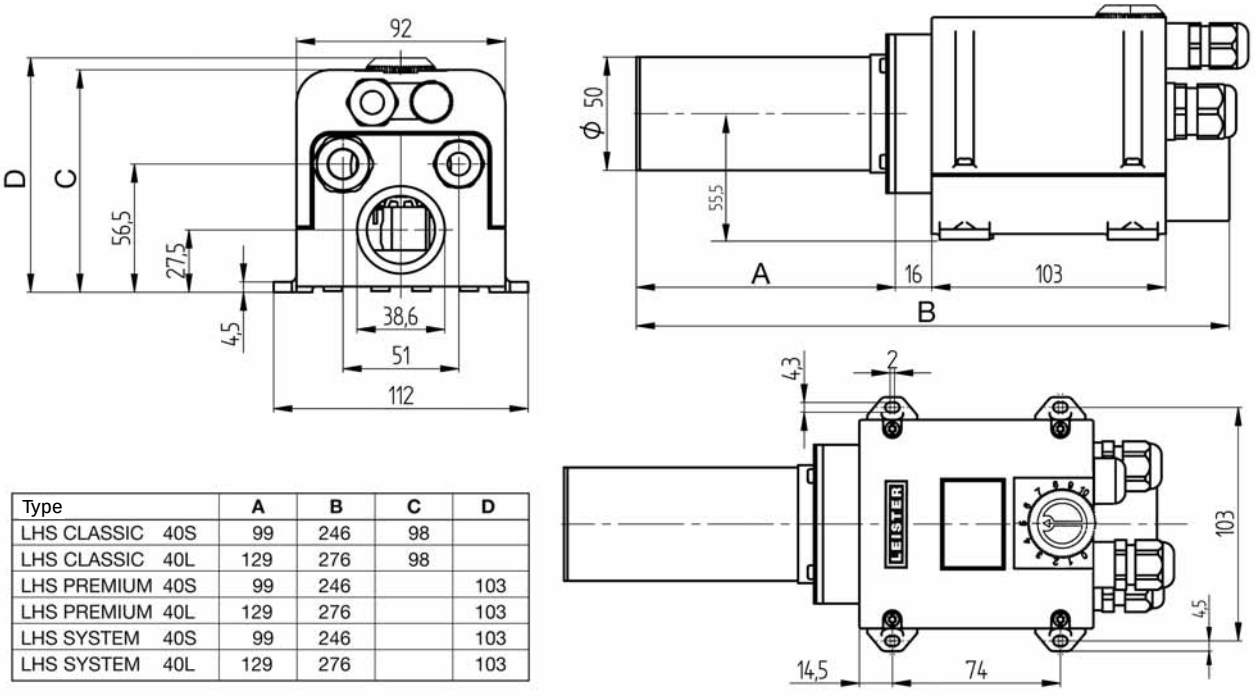
Air flow and temperature specifications may deviate from ideal values due to modifications of the hot-air system (nozzles, hose length, etc.).

Accessories on page 28

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.



Installation dimensions in mm LHS CLASSIC, PREMIUM, SYSTEM / 40S and 40L



Type	A	B	C	D
LHS CLASSIC 40S	99	246	98	
LHS CLASSIC 40L	129	276	98	
LHS PREMIUM 40S	99	246		103
LHS PREMIUM 40L	129	276		103
LHS SYSTEM 40S	99	246		103
LHS SYSTEM 40L	129	276		103

LHS 60: The large powerful models.

The «60» design line operates within the power range 5 – 16 kW. They are all available as three-phase versions for the voltage range 3 x 230 to 3 x 480 V. The air outlet connections of the 60S are compatible with the predecessor heater types LE 5000 and its accessories, the 60L with the predecessor heater type LE 10000 and its accessories. «L» stands for a large diameter heating element for maximum power and air flow.

Air heater

LHS CLASSIC 60S / 60L

Air heater

LHS PREMIUM 60S / 60L

Air heater

LHS SYSTEM 60S / 60L

Technical data LHS 60S / 60L		**CLASSIC**	**PREMIUM**	**SYSTEM**
Max. air outlet temperature °C		600	650	650
Min. air flow acc. to graph page 11				
Max. air inlet temperature °C		80	80	80
Max. ambient temperature °C		65	65	65
Weight kg	60S	3.15	3.15	3.15
	60L	3.65	3.65	3.65
Mark of conformity		CE	CE	CE
Approval mark		GS	GS	GS
Certification scheme		CCA	CCA	CCA
Protection classe I		⏚	⏚	⏚

60S

Voltage V ~		3 × 230		3 × 400		3 × 440		3 × 480	
Power consumption kW		4	6	4	6	4	6	4	6
CLASSIC	Order no.	118.588	118.007	118.589	118.590	118.591	118.592	118.593	118.594
PREMIUM	Order no.	125.884	125.888	125.885	125.889	125.886	125.890	126.040	126.041
SYSTEM	Order no.	125.991	125.994	125.992	125.995	125.993	125.996	126.042	126.043

60L

Voltage V ~		3 × 230		3 × 400		3 × 440		3 × 480	
Power consumption kW		8	10	5	8	5	8	5	8
CLASSIC	Order no.	118.595	118.596	123.225	118.597	123.226	118.601	123.227	118.606
PREMIUM	Order no.	125.887	125.891	125.926	125.929	125.927	125.930	125.928	125.931
SYSTEM	Order no.	125.997	125.998	125.999	126.002	126.000	126.003	126.001	126.004

Voltage V ~			3 × 400		3 × 440		3 × 480	
Power consumption kW			11	16	11	16	11	16
CLASSIC	Order no.		123.230	117.968	123.231	118.605	123.232	118.610
PREMIUM	Order no.		125.932	125.935	125.933	125.936	125.934	125.937
SYSTEM	Order no.		126.005	126.008	126.006	126.009	126.007	126.010

Combination possibilities

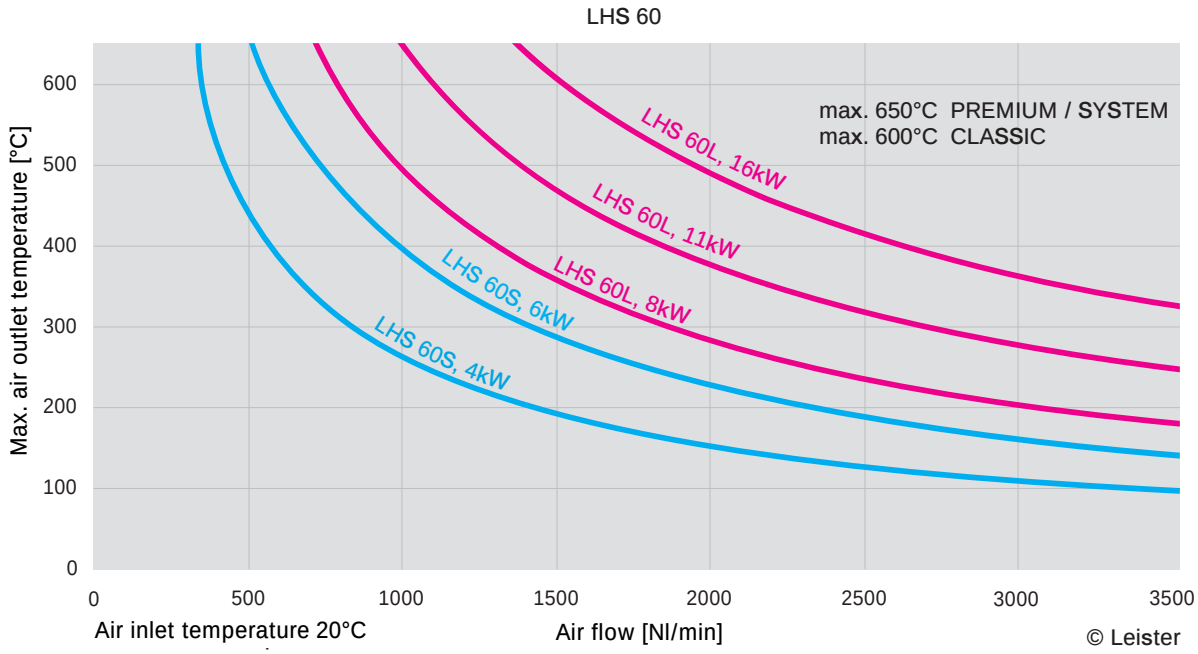
- Leister air heater at maximum heat power and without nozzle with Leister blower at 50 Hz, 1.5 m hose length and unimpeded air outflow.
- Hot-air temperature 3 mm after air outlet, measured at the hottest point.
- Air flow in Nl/min = standard litres / min compliant with DIN 1343.

Blower Type	**Number LHS 60S × Power consumption kW**	**LHS 60S Air flow Nl/min**	**LHS 60S Temperature °C**
ROBUST	2 × 4.0	2 × 500	490
ROBUST	1 × 6.0	1 × 910	410
SILENCE	2 × 4.0	2 × 620	380
SILENCE	1 × 6.0	1 × 690	500
SILENCE	2 × 4.0	2 × 620	380
SILENCE	2 × 6.0	2 × 590	510
ASO	2 × 4.0	2 × 830	310
ASO	2 × 6.0	2 × 743	430
ASO	4 × 6.0	4 × 667	470
AIRPACK	1 × 4.0	1 × 3080	120
AIRPACK	2 × 4.0	2 × 1730	170
AIRPACK	4 × 4.0	4 × 960	280
AIRPACK	1 × 6.0	1 × 2950	160
AIRPACK	2 × 6.0	2 × 1700	240
AIRPACK	4 × 6.0	4 × 970	390
Blower Type	**Number LHS 60L × Power consumption kW**	**LHS 60L Air flow Nl/min**	**LHS 60L Temperature °C**
ROBUST	1 × 8.0	1 × 1038	500
SILENCE	2 × 8.0	2 × 1029	440
SILENCE	1 × 11.0	1 × 1220	480
SILENCE	2 × 11.0	2 × 980	560
AIRPACK	1 × 8.0	1 × 3433	190
AIRPACK	2 × 8.0	2 × 2313	310
AIRPACK	4 × 8.0	4 × 979	510
AIRPACK	1 × 11.0	1 × 3380	230
AIRPACK	2 × 11.0	2 × 1840	380
AIRPACK	4 × 11.0	4 × 1010	590
AIRPACK	1 × 16.0	1 × 3450	360
AIRPACK	2 × 16.0	2 × 1930	550
ASO	1 × 11.0	1 × 1600	390
ASO	2 × 11.0	2 × 1480	420
ASO	4 × 11.0	4 × 1160	520
ASO	1 × 16.0	1 × 1500	610

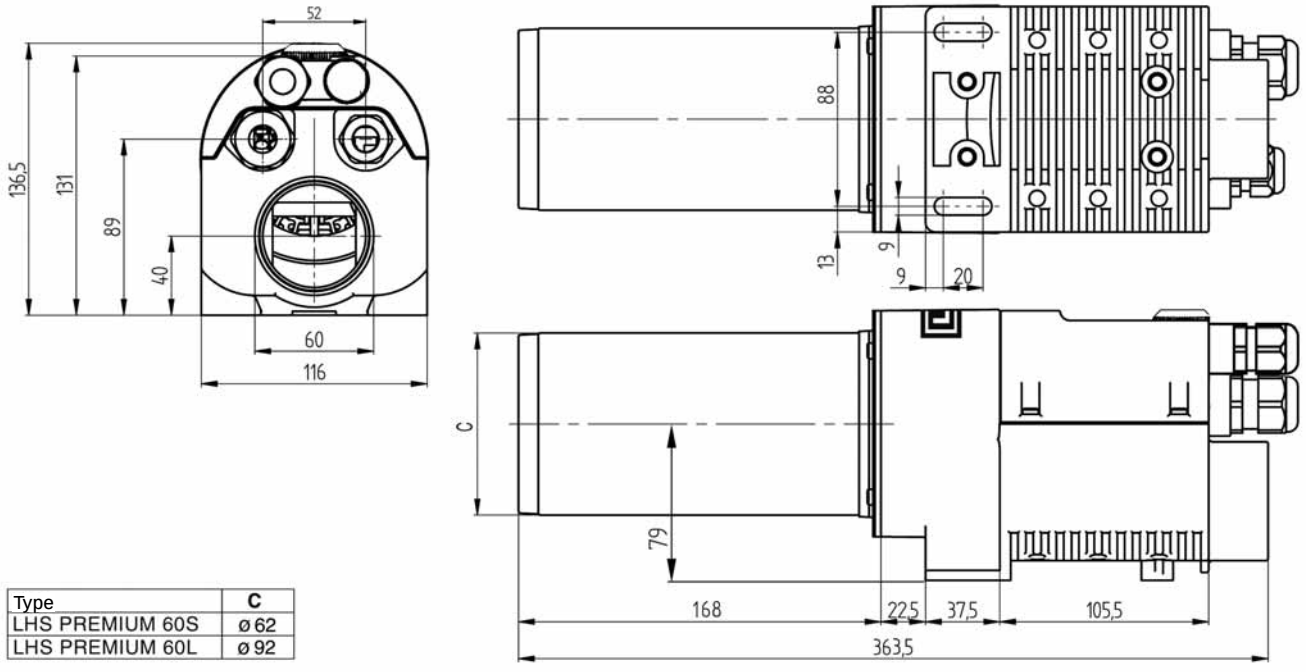
Air flow and temperature specifications may deviate from ideal values due to modifications of the hot-air system (nozzles, hose length, etc.).

Accessories on page 29

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.



Installation dimensions in mm LHS CLASSIC, PREMIUM, SYSTEM / 60S and 60L



Type	C
LHS PREMIUM 60S	ø 62
LHS PREMIUM 60L	ø 92

LE MINI: The precisely accurate mini's.

The world's smallest air heater with integrated temperature probe. Especially suited for applications in which heat is concentrated to a point. They are simple to integrate even into the tightest of spaces. LE MINI operates with compressed air at a pressure of 0.2 MPa (2 bar). Model versions are available with or without an integrated sensor. The SENSOR KIT add-on box offers a ready-to-use solution with its integrated power electronics and temperature regulator.

Air heater

LE MINI

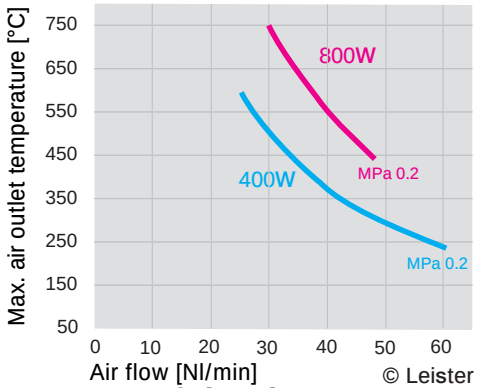
Air heater

LE MINI SENSOR

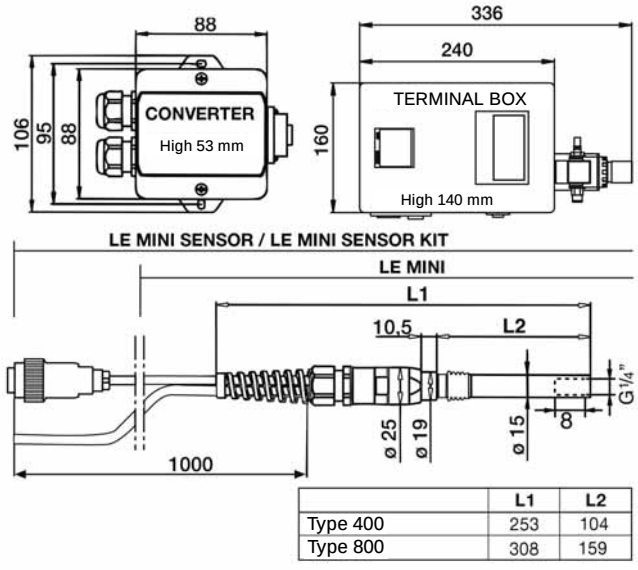
Air heater

LE MINI SENSOR KIT

Technical data		LE MINI	LE MINI SENSOR	LE MINI SENSOR KIT
Temperature regulator integrated in the connection box				•
Integrated temperature probe			•	•
Thermoswitch for device production		•	•	•
Heating element protection			•	•
Analogue interface (passive) 4 – 20 mA			•	
Pressure reduction valve				•
Max. air outlet temperature °C	400 W	600	600	600
	800 W	750	750	750
Min. air flow l/min.	400 W	25	10	
	800 W	30	10	10
Max. supply air pressure Mpa		0.2	0.2	0.2
Weight Mini g	400 W	120	120	120
	800 W	150	150	150
Weight Converter g			190	
Weight Terminal box g				2150
Mark of conformity		CE	CE	CE
Approval mark		ⓢ	ⓢ	
Certification scheme		CCA	CCA	
Protection classe II		⧈	⧈	⧈



Installation dimensions in mm



	L1	L2
Type 400	253	104
Type 800	308	159

Voltage V ~		120	230	230
Power consumption W		400	400	800
LE MINI	Order no.	115.683	115.682	115.369
LE MINI SENSOR	Order no.	117.371	117.370	117.369
LE MINI SENSOR KIT	Order no.	128.536		125.416

Accessories on page 30

LE 700: The proven classic.

The compact universal device with integrated power electronics for a wide range of applications in the range up to 800 W and 600°C air temperature. This small air heater is suitable for blower or compressed air operation. Given a risk of overheating of the heating element, the power automatically reduces.

Air heater

LE 700

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 Nl/min = standard litres / min compliant with DIN 1343.

Power Typ	Number LE × Power consumption W	Air flow Nl/min	Temperature °C
ROBUST	1 × 770	1 × 150	420
ROBUST	2 × 770	2 × 150	420

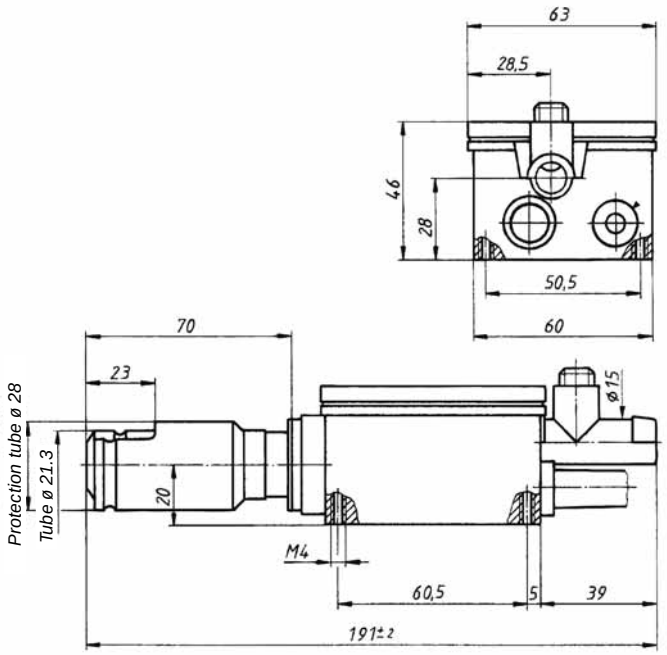
Air flow and temperature specifications may deviate from ideal values due to modifications of the hot-air system (nozzles, hose length, etc.).

Technical data LE 700	Without Electronic	With Electronic	For KSR DIGITAL
Heating power adjustable steplessly adjustable with potentiometer		•	
Thermoswitch for device production	•	•	•
Integrated heating element protection		•	•
Remote control interface for KSR DIGITAL temperature regulator or external PLC control with isolation amplifier 0 – 6.5 V incl. 1 m cable and plug			•
Max. air outlet temperature °C	600	600	600
Min. air flow l/min. 550 W	80	60	60
770 W	100	80	80
Max. air inlet temperature °C	100	50	50
Max. ambient temperature °C	100	60	60
Weight g	200	260	260
Mark of conformity	CE	CE	CE
Approval mark		GS	
Protection classe II	⧈	⧈	⧈

Voltage V ~		120	230
Power consumption W		550	770
Without Electronic	Order no.		101.352
With Electronic	Order no.	101.354	101.351
For KSR DIGITAL	Order no..		116.650

Accessories on page 30 Additional versions on request

Installation dimensions in mm



Double-flange air heaters: The recycling specialists.

As a result of their two flanges and the compact construction, double-flange air heaters are suitable for integration in air duct systems. The supply air temperature can be extremely high at 160 °C. So preheated air can be reused and valuable energy saved.

Air heater

LE 5000 DF

Technical data **LE 5000 double flange**	
Easy to integrate in existing air systems	•
Suitable for recycling air	•
Simple and safe fixture options	•
No integrated power electronics	•
Max. air outlet temperature °C	700
Max. air inlet temperature °C	160
Min. air flow l/min 4.5 kW	450
7.5 kW	850
Max. ambient temperature °C	100
Weight kg	1.9
Mark of conformity	CE
Protection classe I	⏚

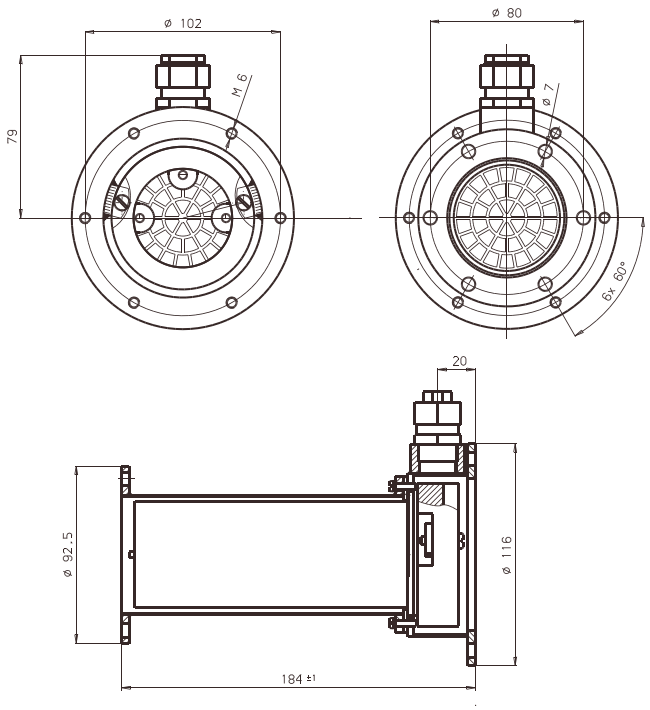
Optional power controller
DSE three-phase controller (Page 23)

Optional temperature regulation
DSE three-phase controller and KSR DIGITAL temperature regulator (Page 22 / 23)

Voltage V ~		3 × 400	3 × 400
Power consumption kW		4.5	7.5
LE 5000 DF	Order no.	117.551	114.240

Additional versions on request

Installation dimensions in mm



Air heater

LE 10 000 DF

Technical data LE 10000 double flange		LE 10000 DF	LE 10000 DF HT
Easy to integrate in existing air systems			• •
Suitable for recycling air			• •
Simple and safe fixture options			• •
No integrated power electronics			• •
Max. air outlet temperature °C			650 900
Max. air inlet temperature °C			160 160
Min. air flow l/min.	5.5 kW	500	
	11 kW	1100	
	17 kW	1750	
	15 kW HT		830
Max. ambient temperature °C	100	100	
Weight kg		3.4	4.0
Mark of conformity		CE	CE
Protection classe I		⏚	⏚

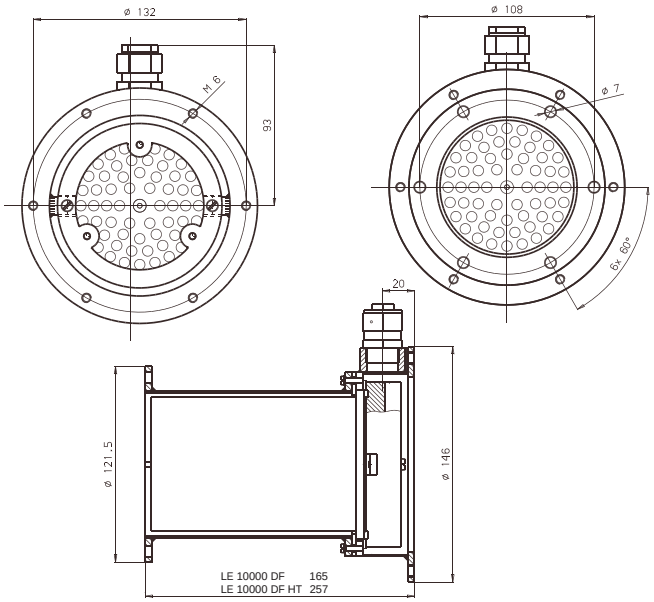
Optional power controller
DSE three-phase controller (Page 23)

Optional temperature regulation
DSE three-phase controller and KSR DIGITAL temperature regulator (Page 22 / 23)

Voltage V ~		3 × 400	3 × 400	3 × 400	3 × 400
Power consumption kW		5.5	11	17	15
LE 10000 DF	Order no.	115.571	114.555	116.135	
LE 10000 DF HT	Order no.				116.056

Additional versions on request

Installation dimensions in mm



High temperature air heater: Our hottest models.

The high temperature air heaters are suitable for temperatures up to 900 °C. The devices have no integrated power electronics. The air temperature is nevertheless steplessly controllable by adding a Leister three-phase controller (DSE). In addition to a DSE, the air temperature can be precisely regulated with a KSR DIGITAL regulator.

High temperature air heater

LE 5000 HT (up to 900°C)

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 Nl/min = standard litres / min compliant with DIN 1343.

Power Typ	Number LE × Power consumption W	Air flow Nl/min	Temperature °C
ROBUST	1 × 11000	1 × 800	800
AIRPACK	1 × 11000	1 × 2800	360
AIRPACK	2 × 11000	2 × 1500	550

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

Technical data **High temperature LE 5000 HT**	
No integrated power electronics	•
Heating element tube with protective tube	•
Max. air outlet temperature °C	900
Max. air inlet temperature °C	100
Min. air flow l/min.	635
Max. ambient temperature °C	100
Weight kg	2.25
Mark of conformity	CE
Protection classe I	⏚

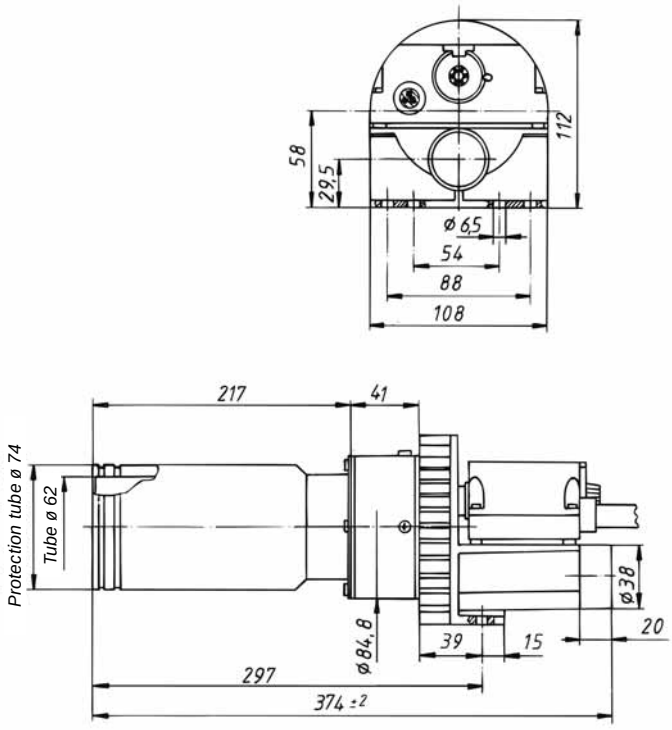
Optional power controller
DSE three-phase controller (Page 23)

Optional temperature regulation
DSE three-phase controller and KSR DIGITAL temperature regulator (Page 22 / 23)

Voltage V ~	3 × 400
Power consumption W	11
Order no.	108.717

Accessories on page 29 Additional versions on request

Installation dimensions in mm



High temperature air heater

LE 10000 HT (up to 900°C)

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 Nl/min = standard litres / min compliant with DIN 1343.

Power Typ	Number LE × Power consumption	Air flow Nl/min	Temperature °C
ROBUST	1 × 15000	1 × 1100	850
ASO	1 × 15000	1 × 2200	690
ASO	2 × 15000	2 × 2100	700
AIRPACK	1 × 15000	1 × 3400	340
AIRPACK	2 × 15000	2 × 1650	620

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

Technical data High temperature LE 10000 HT	
No integrated power electronics	•
Heating element tube with protective tube	•
Max. air outlet temperature °C	900
Max. air inlet temperature °C	100
Min. air flow l/min.	830
Max. ambient temperature °C	100
Weight kg	4.0
Mark of conformity	CE
Protection classe I	⏚

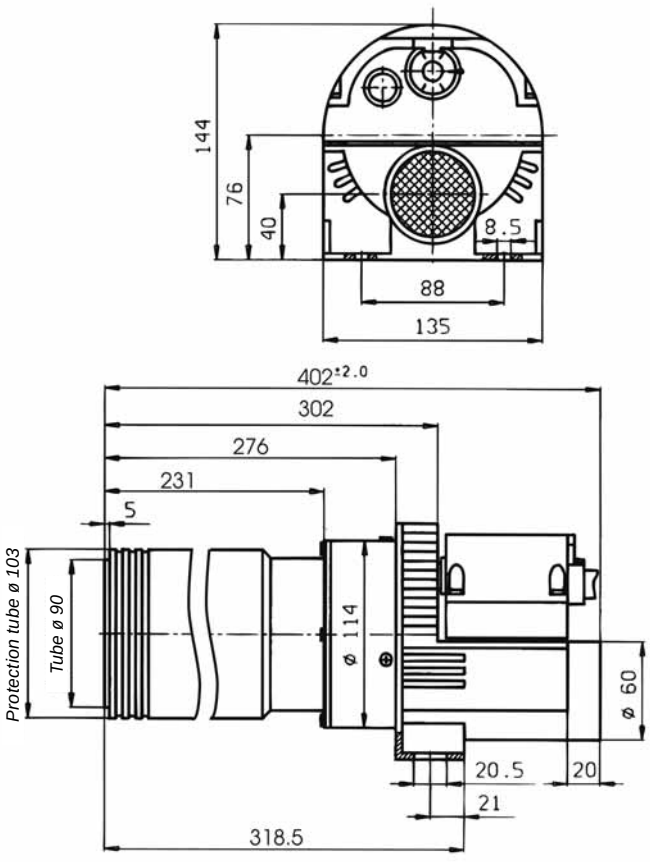
Optional power controller
DSE three-phase controller (Page 23)

Optional temperature regulation
DSE three-phase controller and KSR DIGITAL temperature regulator (Page 22 / 23)

Voltage V ~	3 × 400	3 × 480
Power consumption kW	15	15
Order no.	110.568	113.349

Accessories on page 29 Additional versions on request

Installation dimensions in mm



LE 40000: The powerful air heater.

With up to 39 kW our most powerful device. It is deployed where a large air flow is required at a high temperature. The air heater 40 000 is available in diverse versions, with or without power electronics. The optional KSR DIGITAL regulator allows the air temperature to be regulated.

Air heater

LE 40000

Combination possibilities

Leister air heater with Leister blower at maximum heat power. hot-air temperature 3 mm after air outlet, measured at the hottest point, at hose length and unimpeded air outflow. Air flow in l/min when air heater is not heated and air inlet is 20 °C.

Power Typ	Number LE × Power consumption W	Air flow Nl/min	Temperature °C
ASO	1 × 25000	1 × 8150	200
ASO	2 × 32000	2 × 4200	500
AIRPACK	2 × 32000	1 × 3300	540

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

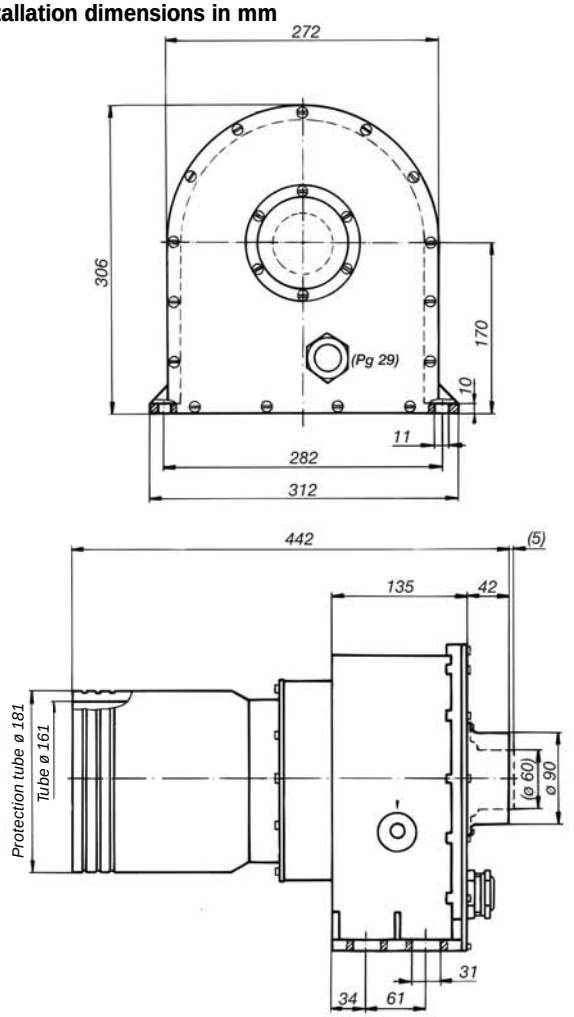
Technical data LE 40000	Without Electronic	With Electronic	For KSR DIGITAL
Heating power adjustable steplessly adjustable with potentiometer		•	
Thermoswitch for device protection	•	•	•
Integrated heating element protection		•	•
Remote control interface for KSR DIGITAL temperature regulator or external PLC control 0 – 12 V incl. 3 m cable and plug			•
Max. air outlet temperature °C	650	650	650
Min. air flow l/min	3000	2800 – 4000	
Max. air inlet temperature °C	100	80	80
Max. ambient temperature °C	100	80	80
Weight kg	13.2	13.5	13.5
Mark of conformity	CE	CE	CE
Approval mark		GS	
Protection classe I	⏚	⏚	⏚

Voltage V ~		3 × 400 – 440	3 × 400 – 440	3 × 480
Power consumption kW		11 – 13	32 – 39	32
Without Electronic	Order no.		100.764	100.766
With Electronic	Order no.	100.763	100.168	
For KSR DIGITAL	Order no.		110.540	

Accessories on page 30

Additional versions on request

Installation dimensions in mm



MISTRAL: The maintenance-free innovation.

Sometimes there is no space for a separate blower. Or a handy, mobile device is called for. There are many reasons for integrating blowers and air heaters in a compact device – a hot-air blower. MISTRAL, with its high speed, brushless (and therefore maintenance-free) blower motor and the innovative bearing technology, is ideally suited for deployment in harsh industrial environments. It reaches even into the most inaccessible places.

Hot-air blower

MISTRAL

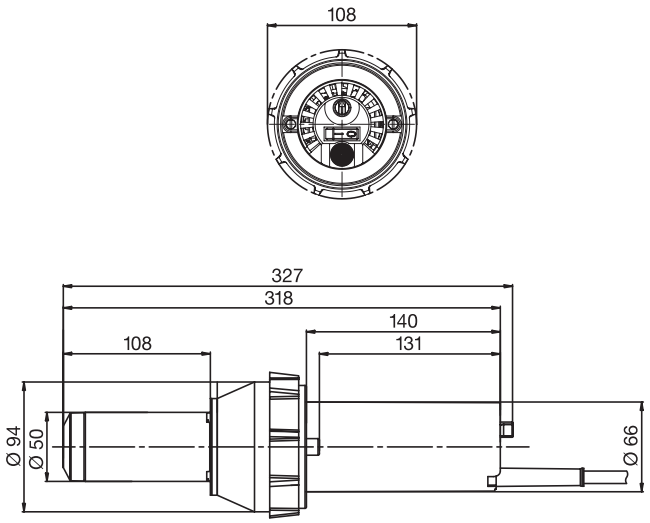
Technical data MISTRAL	
Maintenance-free, brushless blower motor for continuous operation	•
Mains switch	•
Heating power adjustable steplessly adjustable with potentiometer	•
Air filter	•
Manual air slider	•
Integrated device and heating element protection	•
Max. air outlet temperature °C	650
Max. air flow l/min.	350
Weight with 3 m cable kg	1.5
Mark of conformity	CE
Approval mark	GS
Certification scheme	CCA
Protection classe II	⧈

Voltage V ~	120	230	230
Power consumption W	2700	2300	3400
Plug	without	Euro	Euro
Order no.	117.843	117.840	117.839

Accessories on page 28

Additional versions on request

Installation dimensions in mm



HOTWIND S: The flexible hot-air blower.

Weighing just 3.2 kg and with its handle, HOTWIND S can be used both as an integrated or bench device. This enormous flexibility combined with the high maximum temperature of up to 800°C and the wide range of accessories means that HOTWIND S can be used in a variety of ways.

Hot-air blower

HOTWIND S

Technical data HOTWIND S		For KSR DIGITAL
Heating power steplessly adjustable with potentiometer	•	
Mains switch and heating switch	•	•
Integrated device and heating element protection	•	•
Remote control interface for KSR DIGITAL temperature regulator or external PLC control with isolation amplifier 0 – 6.5 V incl. cable and plug		•
Manual air slider, extendable handle	•	•
Static pressure Pa	200	200
Weight with 3 m cable kg	3.2	3.2
Mark of conformity	CE	CE
Approval mark	ⓢ	
Certification scheme	CCA	
Protection classe II	⧈	⧈

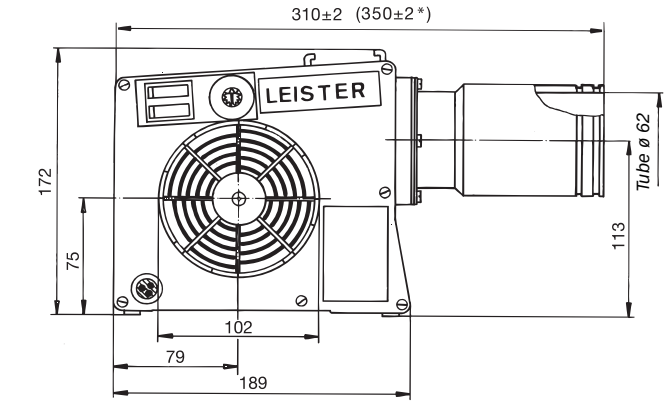
Voltage V		120	230	230	230	230
Power consumption W		2300	2300	3100	3700	3700
Max. air outlet temperature °C		560	560	800	650	650
Max. air flow l/min. (20 °C)		450	450	350	550	550
Without plug	Order no.	102.609		102.604	102.585	
Euro plug	Order no.		102.586	102.602	102.581	
Euro plug for KSR DIGITAL	Order no.					108.738

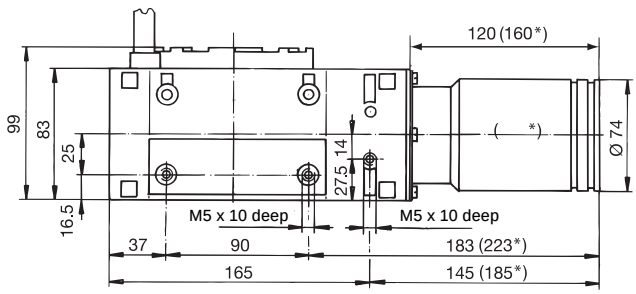
Voltage V		400 – 440	480
Power consumption W		4400 – 5400	3700
Max. air outlet temperature °C		620	650
Max. Air flow l/min. (20 °C)		600	550
Without plug	Order no.	102.607	102.593
CEKON plug	Order no.	102.605	
CEKON plug for KSR DIGITAL	Order no.	113.672	

Accessories on page 29

Additional versions on request

Installation dimensions in mm





* **Dimensions HOTWIND S 800 °C**

VULCAN E: The muscle man.

The muscle man among the hot-air blowers leaves no doubts about its performance. It is compactly built and easy to integrated in industrial processes.

Hot-air blower

VULCAN E

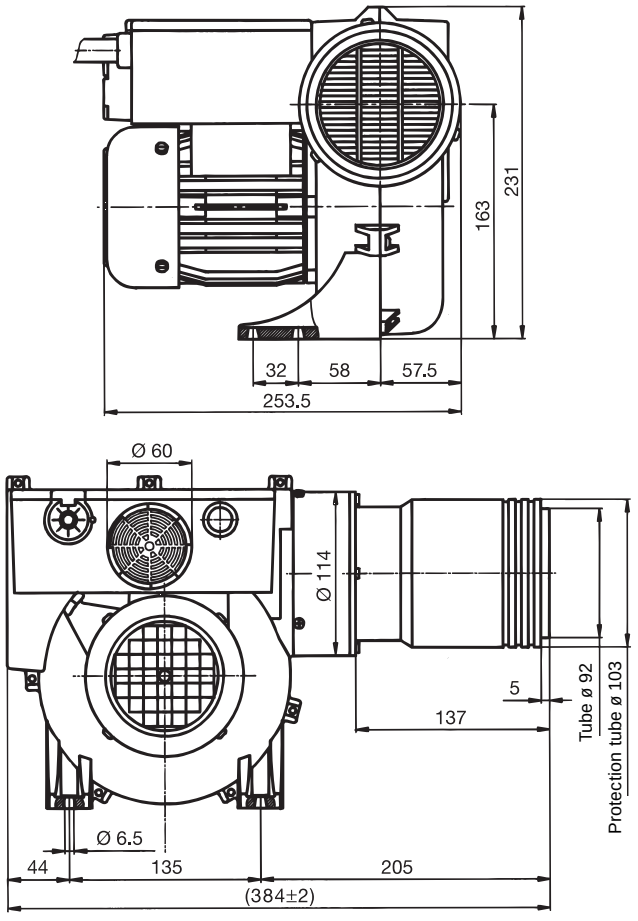
Technical data VULCAN E		**For KSR DIGITAL**
Heating power steplessly adjustable with potentiometer	•	
Manual air slider	•	
Heating element tube with protective tube	•	•
Integrated device and heating element protection	•	•
Remote control interface for KSR DIGITAL temperature regulator or external PLC control 0 – 12 V incl. 5 m cable and plug		•
Max. air outlet temperature °C	650	650
Max. air flow l/min. (20 °C) 3 × 230 V~	850 / 1500	850 / 1500
Max. air flow l/min. (20 °C) 3 × 400 – 440 V~	950 / 1700	950 / 1700
Weight kg	9.3	9.3
Mark of conformity	CE	CE
Approval mark		
Certification scheme	CCA	
Protection classe II		

Voltage V ~		3 × 230	3 × 400 – 440	3 × 400 – 440	3 × 500
Power consumption kW		10	5.6 – 7.6	11 – 13.5	10
Frequency Hz		50 / 60	50 / 60	50 / 60	60
	Order no.	103.577	110.633	103.578	112.150
For KSR DIGITAL	Order no.			115.599	

Accessories on page 29

Additional versions on request

Installation dimensions in mm



Temperature regulators: The masters of precision.

Leister temperature regulators allow the air temperature of air heater and hot-air blowers to be precisely regulated. The regulators are perfectly matched to the Leister devices and facilitate easy and fast installation. They include a display for target/actual temperature and two freely programmable alarm outputs.

Temperature controller

CSS EASY

Temperature controller

CSS

Temperature controller

KSR DIGITAL

Technical data	CSS EASY	CSS	KSR DIGITAL
Suitable for LEISTER air heaters	LHS SYSTEM	LHS SYSTEM, LE MINI SENSOR Universally deployable temperature regulator	LE 700, LE 5000 DF und HT, LE 10000 DF and HT, LE 40000, HOTWIND S, VULCAN E
Regulation type	PID	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	Accuracy better than 0.2% of scale value at 25 °C
Switchover °C °F	Configurable via keypad	Configurable via keypad	Configurable via keypad
Temperature sensor / input	Type K / socket	Type K, PT100, screw connectors	Type K / socket
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	2 alarms independently configurable Output at 2 floating relay contacts 2mm receptacle
Connection to air heater	RJ-45 socket for Leister Control Cable (see Accessories)	Screw connectors	Socket, compatible with KSR models
Voltage	100 – 240 VAC, max. 8VA	100 – 240 VAC, max. 8VA	100 – 240 VAC, max. 8 VA
Mains connection lead	2 m, with Euro plug	Without lead, screw connectors	2 m, without plug
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	Regulator built into housing, ready to operate, can also be integrated into the front panel, with cut-out 67 × 67 mm
Size L × W × H	175 × 72 × 72 mm	109 × 48 × 48 mm	175 × 72 × 72 mm
Weight kg	0.45	0.2	0.5
Mark of conformity	CE	CE	CE
Protection classe II	⧈	⧈	⧈
Order no.	125.944	123.039	For LE 700, 230 V / 700 W °C 110.338 For DSE / HT / DF °C 111.164 For HOTWIND S, 230 V / 3700 W °C 110.350 For HOTWIND S, 400 – 440 V / 4 – 5.4 kW °C 110.353 For VULCAN E, 400 – 440 V / 11 – 13.5 kW °C 110.364 For LE 40000, 400 – 440 V / 32 – 39 kW °C 110.362

Accessories on page 33

Controllers and interfaces: The clever combination.

The power of non-electronic air heaters can be steplessly controlled externally With the DSE three-phase controller. The air temperature can also be regulated in combination with the KSR DIGITAL regulator. The isolation amplifier offers galvanic isolation of the control interface for the LE 700 air heater and the HOTWIND S hot-air blower.

Controller

Thre-phase adjustment unit DSE

Technical data
Three-phase adjustment unit DSE

External power electronics module for non-electronic air heaters of series LE 5000 HT and LE 10000 HT, LE 5000 DF and LE 10000 DF

	Potentiometer-operation	for KSR DIGITAL
Heating power steplessly adjustable with potentiometer	•	
Remote control interface for KSR DIGITAL temperature regulator or external PLC control 0 – 12 V		•
Size (L × W × H) mm	230 × 165 × 86	
Fixture hole pitch mm	150 × 150	
Mark of conformity	CE	
Protection classe II	⏚	

DSE for		KSR	Potentiometer	KSR
Power supply voltage	V ~	3 × 230	3 × 400 – 440	3 × 400 – 440
Max. current	A	3 × 20	3 × 20	3 × 20
Order no.		110.574	110.571	110.572

Additional versions on request

Interface

Interface

Technische Daten
Interface

This interface has to be used for reference voltage operation of LE 700 und HOTWIND S

Power consumption	mA	10
Input range	V DC	0 – 7.5
Output range	V DC	0 – 7.5
Size (L × W × H)	mm	165 × 60 × 80

Interface				
Power supply voltage	V	120	230	400
For LE 700 KSR	Order no.	129.448	129.563	
For HOTWIND S KSR	Order no.	129.572	129.573	129.574

Additional versions on request

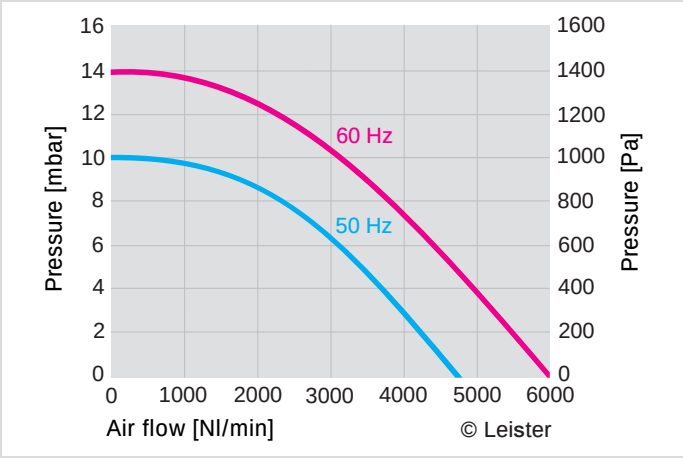
SILENCE: The quieter option.

No blower no air! In industrial processes a blower often supplies several air heaters in parallel. It excels through its high power and compact design. The durable and maintenance-free blowers are a result of uncompromising quality standards and decades of experience.

The mid-range blower SILENCE is very quiet in operation at 61 dB(A). It delivers high air flows and can be installed in all orientations.

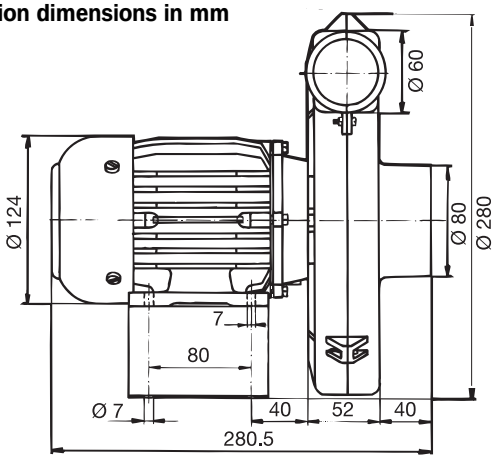
Medium pressure blower

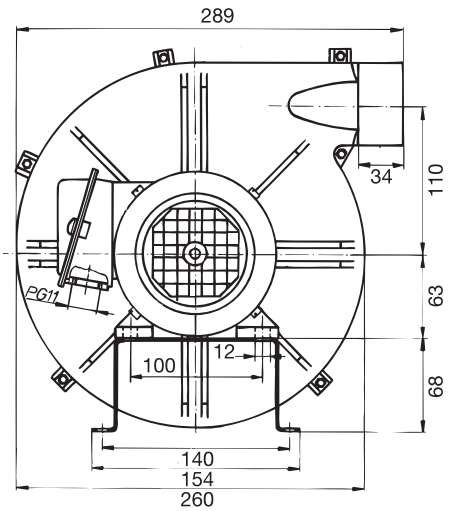
SILENCE



Technical data Design radial blower			
Frequency	Hz	50	60
Air flow (20 °C)	l/min	4700	6000
Static pressure	Pa	1000	1400
Max. ambient temperature	°C	60	60
Noise emission level	LpA (dB)	61	61
Environmental protection (IEC 60529)		IP 54	IP 54
Outside diameter air inlet	mm	∅ 80	∅ 80
Outside diameter air outlet	mm	∅ 60	∅ 60
Weight	kg	9.0	9.0
Mark of conformity		CE	CE
Protection classe I		⏚	⏚

Installation dimensions in mm





Voltage	V~ 50Hz 60Hz	1 × 230	3 × 230 / 400 3 × 440 – 480	3 × 500
Power consumption	W	250	250	250
Without cable	Order no.		103.507	103.513
3 m cable / Euro plug	Order no.	103.510		

Accessories on page 31

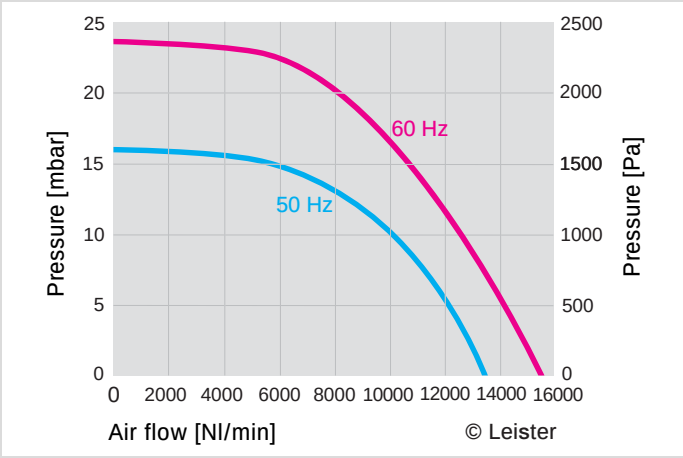
Additional versions on request

ASO: The air flow giant.

At 50 Hz 13,500 l/min of air is forwarded, at 60 Hz 15,900 l/min. With the appropriate accessories it can supply several Leister air heaters in parallel.

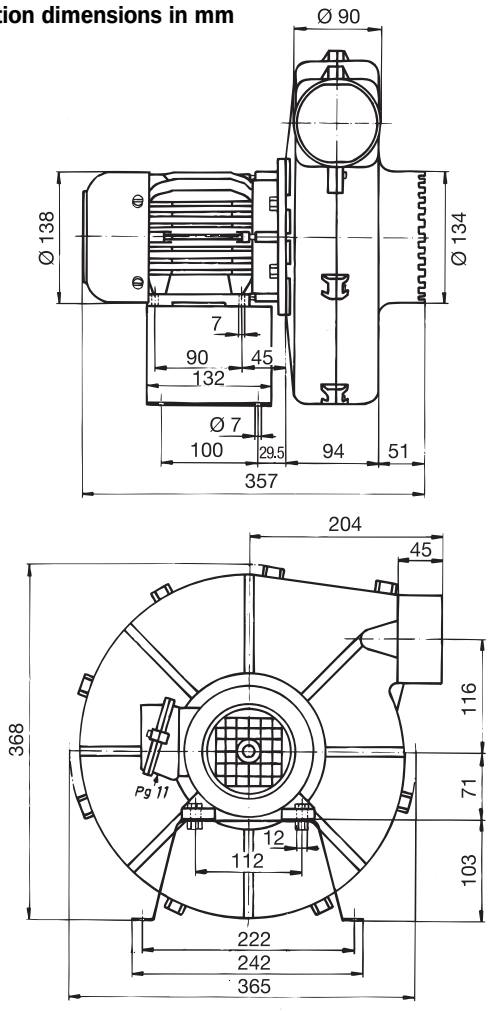
Medium pressure blower

ASO



Technical data Design radial blower			
Frequency	Hz	50	60
Air flow (20 °C)	l/min	13500	15900
Static pressure	Pa	1600	2400
Max. ambient temperature	°C	60	60
Noise emission level	LpA (dB)	70	70
Environmental protection (IEC 60529)		IP 54	IP 54
Outside diameter air inlet	mm	∅ 134	∅ 134
Outside diameter air outlet	mm	∅ 90	∅ 90
Weight	kg	15.0	15.0
Mark of conformity		CE	CE
Protection classe I		⏚	⏚

Installation dimensions in mm



Voltage	V~ 50Hz 60Hz	1 × 230	3 × 230 / 400 3 × 440 – 480	3 × 500
Power consumption	W	550	550	550
Without cable	Order no.		103.527	103.532
3 m cable / Euro plug	Order no.	103.530		

Accessories on page 31

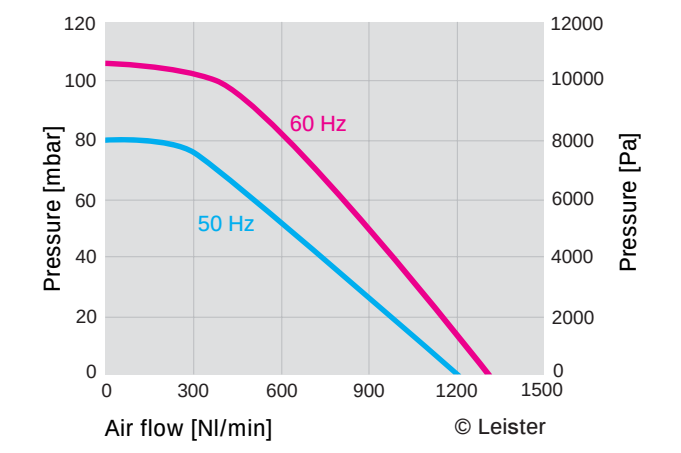
Additional versions on request

ROBUST: The name speaks for itself.

Very compact design with enormous power. Thanks to the efficient sound insulation it is very quiet, can be installed in all orientations and is indestructible even under extreme conditions and in continuous operation.

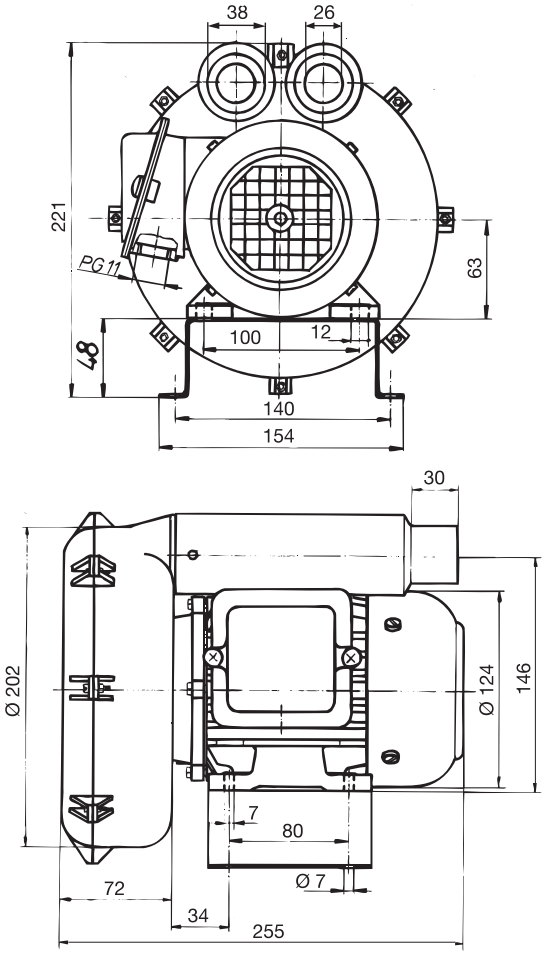
High pressure blower

ROBUST



Technical data Design regenerative blower			
Frequency	Hz	50	60
Air flow (20 °C)	l/min	1200	1300
Static pressure	Pa	8000	10500
Max. ambient temperature	°C	60	60
Noise emission level	LpA (dB)	62	62
Environmental protection (IEC 60529)		IP 54	IP 54
Outside diameter air inlet	mm	∅ 38	∅ 38
Outside diameter air outlet	mm	∅ 38	∅ 38
Weight	kg	8.0	8.0
Mark of conformity		CE	CE
Protection classe I		⏚	⏚

Installation dimensions in mm



Voltage	V~ 50Hz 60Hz	1 × 120	1 × 230	3 × 230 / 400 3 × 440 – 480	3 × 500
Power consumption	W	250	250	250	250
Without cable	Order no.	103.434		103.429	103.435
3 m cable / Euro plug	Order no.		103.432		

Accessories on page 32

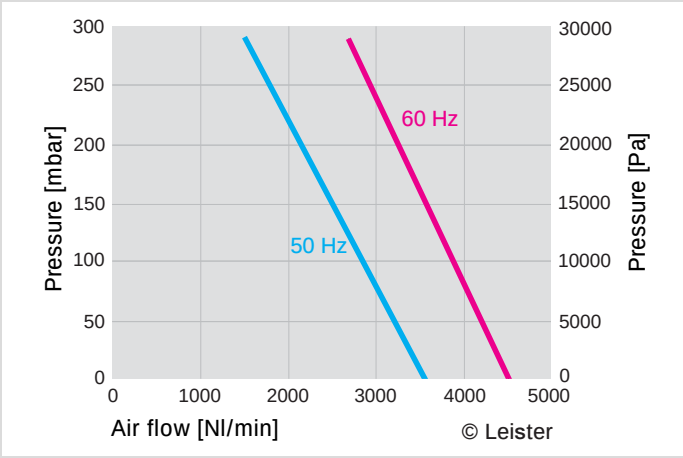
Additional versions on request

AIRPACK: The full pressure provider.

If high air pressure is required, AIRPACK is the only answer! It is deployable everywhere large volumes of air are transported under high pressure. Its power means it can supply several LEISTER air heaters in parallel. AIRPACK delivers sufficient pressure to efficiently supply Leister blow-off nozzles.

High pressure blower

AIRPACK



Technical data Design regenerative blower			
Frequency	Hz	50	60
Air flow (20 °C)	l/min	3500	4500
Static pressure	Pa	29000	29000
Max. ambient temperature	°C	40	40
Noise emission level	LpA (dB)	73	73
Environmental protection (IEC 60529)		IP 54	IP 54
Outside diameter air inlet	mm	∅ 60	∅ 60
Outside diameter air outlet	mm	∅ 60	∅ 60
Weight	kg	25.0	25.0
Mark of conformity		CE	CE
Approval mark			
Protection classe I			

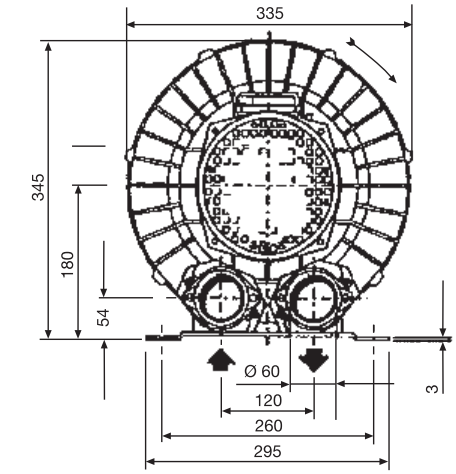
Voltage	V~ 50Hz	1 × 120	1 × 230	3 × 230 / 400	3 × 500
	60Hz			3 × 440 – 480	
Power consumption	W	250	250	250	250
Without cable	Order no.	103.434		103.429	103.435
3 m cable / Euro plug	Order no.		103.432		

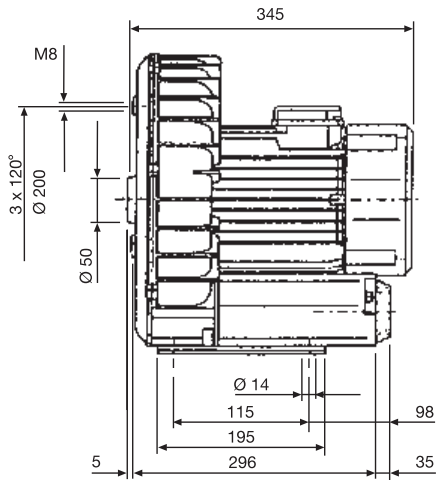
Voltage	V~ 50Hz		3 × 230 / 400
	60Hz		3 × 440 – 480
Power consumption	W		2200
Without cable	Order no.		119.358

Accessories on page 32

Additional versions on request

Installation dimensions in mm

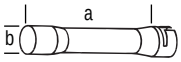
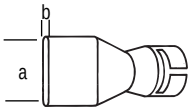
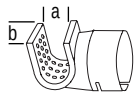
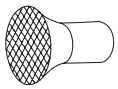
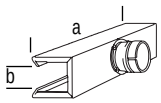




Solve every problem with the right accessories from Leister.

Some industrial hot-air applications can be solved «off the peg» with a hot-air device. But more often than not, the device has to be matched to the process. This takes place, on the one hand, through regulation and control of temperature and air flow. On the other hand, Leister offers an extensive accessories program. With nozzles and reflectors, the air stream can be concentrated to a point or expanded to fill a space. The accessory parts are proven in practice and are precisely matched to the respective hot-air device.

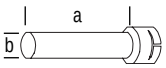
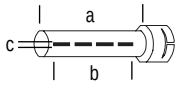
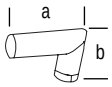
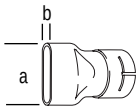
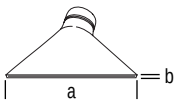
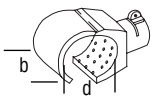
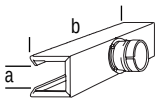
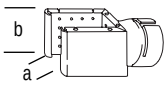
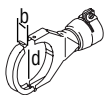
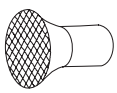
Accessories LHS Type 20
(Ø 36.5 mm)

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 ∅ 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 ∅ 65 mm
106.132		Shell reflector, push-fit (a × b) 150 × 25 mm

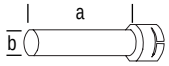
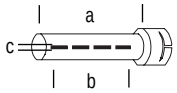
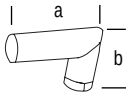
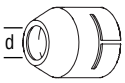
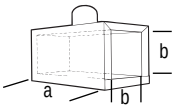
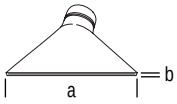
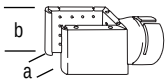
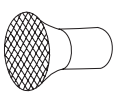
Special nozzles on request

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

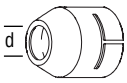
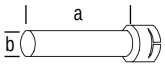
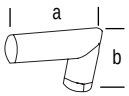
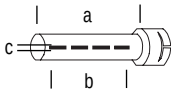
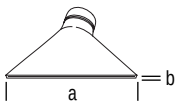
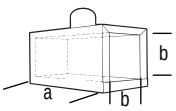
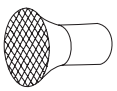
Accessories LHS Type 40 / MISTRAL
(Ø 50 mm)

107.254		Flange connector, push-fit a = 70 mm
122.332 122.924		Nozzle adapter a ∅ 50 mm to b ∅ 62 mm a ∅ 50 mm to b ∅ 36.5 mm
107.255		Extension nozzle, push-fit (a × b) 160 × 36.5 mm
105.950 107.257 105.955 105.952 105.956		Tubular nozzle, push-fit (a × b × c) 460 × 300 × 2 mm 590 × 420 × 1.7 mm 836 × 660 × 1 mm 900 × 800 × 0.9 mm 1000 × 820 × 0.9 mm
107.256		Angled nozzle, push-fit (a × b) ∅ 50 mm shank length 160 × 100 mm
105.961 107.258		Wide slot nozzle, push-fit (a × b) 45 × 12 mm, lenght 350 mm 70 × 10 mm
106.057 106.060 107.270 106.061		Wide slot nozzle, push-fit (a × b) 100 × 4 mm 150 × 6 mm 150 × 12 mm, with sieve insert 300 × 6 mm
107.331		Hinged reflector, aufschiebbar (d × b) 70 × 70 mm
107.340		Shell reflector, push-fit (a × b) 45 × 250 mm
107.327 107.333		Sieve reflector, push-fit (a × b) 85 × 85 mm 130 × 150 mm
107.330		Hinged reflector, push-fit (d × b) 125 × 22 mm
106.127		Sieve reflector, push-fit ∅ 65 mm

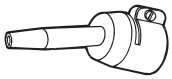
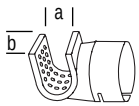
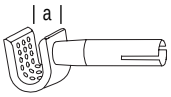
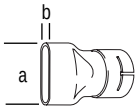
Accessories LHS Type 60S / HOTWIND S / LE 5000 HT
(Ø 62 mm)

125.317		Flange connector, push-fit a = 90 mm
107.247		Extension nozzle, push-fit (a × b) 200 × 40 mm
105.917 105.907 105.919 107.253 114.136 105.906		Tubular nozzle, push-fit (a × b × c) 303 × 153 × 6 mm 354 × 204 × 4.5 mm 456 × 306 × 3 mm 700 × 550 × 1.7 mm 795 × 655 × 1.5 mm 1100 × 1000 × 4 mm
107.265		Angled nozzle, push-fit (a × b) shank length 120 × 112 mm
107.245		Round nozzle, push-fit d = 40 mm
107.342 106.174 106.175		Shell reflector, push-fit (a × b) 400 × 50 mm 400 × 65 mm 400 × 80 mm
107.260 107.259 105.977 107.263 107.262 105.992 105.991		Wide slot nozzle, push-fit (a × b) 85 × 15 mm 150 × 12 mm 200 × 9 mm 250 × 12 mm 300 × 4 mm 400 × 4 mm 500 × 4 mm
106.143 107.329 107.336		Sieve reflector, push-fit (a × b) 45 × 75 mm 76 × 75 mm 110 × 152 mm
107.335		Sieve reflector, push-fit ∅ 150 mm
107.248		Stainless steel filter, push-fit on air intake > HOTWIND S

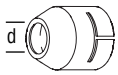
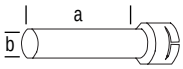
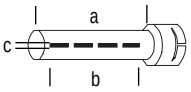
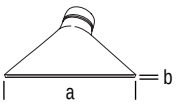
Accessories LHS Type 60L / VULCAN E / LE 10000 HT
(Ø 92 mm)

125.318		FlFlange connector, push-fit a = 120 mm
107.244		Round nozzle, push-fit d = 50 mm
107.273		Extension nozzle, push-fit (a × b) 500 × 60 mm
107.269		Angled nozzle, push-fit (a × b) Schenkellänge 175 × 175 mm
106.031 106.035 107.268 106.036 106.033 106.038		Tubular nozzle, push-fit (a × b × c) 1000 × 800 × 2 mm 1185 × 900 × 1.6 mm 1288 × 1000 × 1.5 mm 1535 × 1250 × 1.2 mm 1550 × 1350 × 1.1 mm 2225 × 2000 × 0.8 mm
107.274 106.028 107.272 106.018 106.024 107.267 106.023 106.026		Wide slot nozzle, push-fit (a × b) 130 × 17 mm 220 × 12 mm 300 × 12 mm 400 × 10 mm 500 × 7 mm 500 × 15 mm 600 × 4 mm 600 × 9 mm
107.341		Shell reflector, push-fit (a × b) 370 × 160 mm
107.276		Sieve reflector, push-fit ∅ 260 mm
107.277		Stainless steel filter, push-fit on air intake > VULCAN E

Accessories LE MINI and LE MINI SENSOR / LE 700
(Ø 21.3 mm)

107.282		Flange connector, push-fit a = 40 mm
107.144 107.145		Round nozzle, push-fit ∅ 5 mm ∅ 10 mm
107.152		Round nozzle , push-fit ∅ 12 mm
107.310 107.311		Sieve reflector, push-fit (a × b) 20 × 35 mm 50 × 35 mm
107.324		Sieve reflector, push-fit on round nozzle ∅ 5 mm a = 10 mm
105.549 105.559 105.548 105.547		Wide slot nozzle, push-fit (a × b) 10 × 2 mm, angled 20 × 2 mm, length 55 mm 40 × 5 mm 50 × 8 mm
117.955		Nozzle adapter, screw-in for nozzles LE 700 > LE MINI > LE MINI SENSOR
129.407		2 m cable with plug and connection > LE MINI SENSOR > LE MINI SENSOR KIT

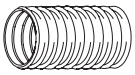
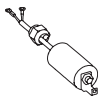
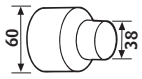
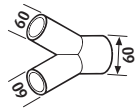
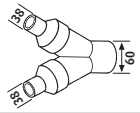
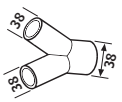
Accessories LE 40 000
(Ø 161 mm)

125.319		Flange connector, push-fit a = 192 mm
107.230		Round nozzle, push-fit d = 100 mm
107.233		Extension nozzle, push-fit (a × b) 400 × 100 mm
107.243 105.869		Tubular nozzle, push-fit (a × b × c) 1500 × 1350 × 4 mm 2000 × 1340 × 4 mm
107.235 107.234 105.856 105.859		Wide slot nozzle, push-fit (a × b) 500 × 15 mm 1200 × 10 mm 1600 × 8 mm 2000 × 10 mm
107.232		Air intake connection screw-on for ∅ 60 mm air hose

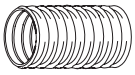
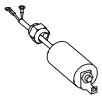
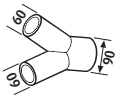
Special nozzles on request

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

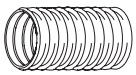
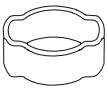
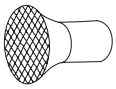
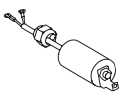
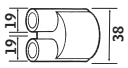
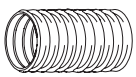
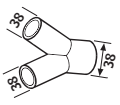
Accessories Medium pressure blower SILENCE
(Ø 60 mm)

107.288		PVC air hose ∅ 60 mm
107.287		Hose clip for ∅ 60 mm air hose
107.240		Closing cap ∅ 60 mm attacheable to hose connection adaptor 107.238 and 107.278
107.294		Stainless steel filter, push-fit on air intake
110.887		Motor capacitor 230 V
107.291		Hose connection adaptor with 1 air outlet for ∅ 38 mm hose. Push-fit on air outlet
107.278		Hose connection adaptor, Push-fit on air outlet
107.292		Hose connection adaptor with 2 air outlets for ∅ 38 mm hose. Push-fit on air outlet
107.293		Hose connection adaptor, Push-fit on adaptor 107.292

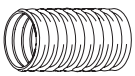
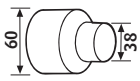
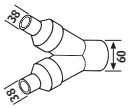
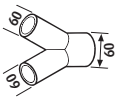
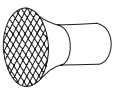
Accessories Medium pressure blower ASO
(Ø 90 mm)

107.237		PVC air hose ∅ 90 mm
107.236		Hose clip for ∅ 90 mm air hose
107.239		Stainless steel filter, push-fit on air intake
111.771		Motor capacitor 230 V
107.238		Hose connection adaptor, Push-fit

Accessories High pressure blower ROBUST
(Ø 38 mm)

107.350		PVC air hose, ∅ 19 mm
107.290		Hose clip for ∅ 19 mm air hose
107.242		Closing cap ∅ 19 mm attacheable to hose connection adaptor 107.298
107.354		Stainless steel filter push-fit on air intaker
108.623 104.017		Motor capacitor 230 V~ Motor capacitor 120 V~
107.298		Hose conncetion adaptor, push-fit on ROBUST blower and adaptor 107.293 for hose connection
107.286		PVC air hose, ∅ 38 mm
107.287		Hose clip for ∅ 38 and ∅ 60 mm air hose
107.241		Closing cap ∅ 38 mm push-fit on hose connection adaptors 107.292 and 107.293
107.293		Hose connection adaptor, push-fit

Accessories High pressure blower AIRPACK
(Ø 60 mm)

107.287		Hose clip for ∅ 38 and ∅ 60 mm air hose
107.241		Closing cap ∅ 38 mm push-fit on hose connection adaptors 107.292 and 107.293
107.288		PVC air hose, ∅ 60 mm
107.240		Closing cap ∅ 60 mm, push-fit on hose connection adaptors 107.278
107.291		Hose connection adaptor with 1 air outlet for ∅ 38 mm hose. Push-fit on air outlet
107.292		Hose connection adaptor with 2 air outlets for ∅ 38 mm hose. Push-fit on air outlet
107.278		Hose connection adaptor, Push-fit on air outlet
110.895		Stainless steel filter push-fit on air intaker

Special nozzles on request

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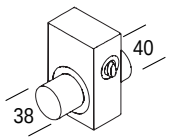
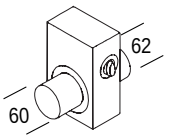
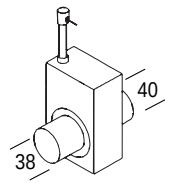
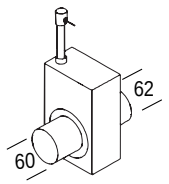
Air flow adjuster and on/off switch

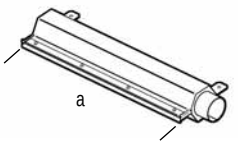
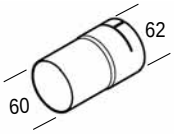
108.755		Hand operated air flow adjuster and on/off switch. Size 214 × 88 × 133 mm > LHS 20 > LHS 40 > ROBUST
107.295		Hand operated air flow adjuster and on/off switch. Size 214 × 88 × 133 mm > LHS 60 > SILENCE
107.299		Air flow off/on switch The air flow is interrupted on command (pneumatic 5 bar) to the heaters. Size 214 × 88 × 133 mm > LHS 20 > LHS 40 > ROBUST
107.296		Air flow off/on switch The air flow is interrupted on command (pneumatic 5 bar) to the heaters. Siz 214 × 88 × 133 mm > LHS 60 > SILENCE

Compatibility of the LHS line with its predecessors.

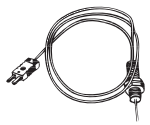
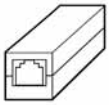
The accessory parts of the Leister LE generation of air heaters fit all the new LHS devices..

LE 700	accessories	fits	LE MINI with nozzle adapter
LE 3000	accessories	fits	LHS 20S and 20L
LE 3300	accessories	fits	LHS 40S and 40L
LE 5000	accessories	fits	LHS 60S
LE 10000	accessories	fits	LHS 60L
ELECTRON	accessories	fit	MISTRAL

Blow-off nozzles

125.907 125.908		Blow-off nozzle, push-fit Outlet opening adjustable 1 – 5.5 mm a = 300 mm a = 500 mm Connector ∅ 60 mm > AIRPACK
127.062		Nozzle adapter ∅ 62 mm to ∅ 60 mm, Length 110 mm, to connect with blow-off nozzle > LHS 60S

Accessories CSS, CSS EASY, KSR DIGITAL

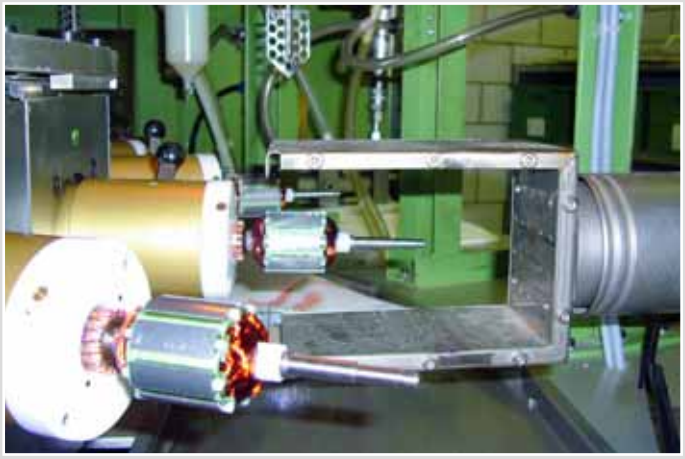
106.956		Thermocouple with plug, 1 m cable > CSS > CSS EASY > KSL DIGITAL
106.958 106.960 106.962		Thermocouple extension cable with plug and connection 2 m 4 m 10 m > CSS > CSS EASY > KSL DIGITAL
125.988 125.989		Controller cable RJ 45-connector and cable gland 3 m 5 m > LHS SYSTEM
125.990		Coupler for controller cable > LHS SYSTEM
126.596		Programming cable with connection with DSUB9/V.24 connector for c onfiguration with PC. > CSS > CSS EASY
111.331		Controller/extension cable 5 m > KSR DIGITAL > DSE

Examples of industrial hot-air applications.

Leister hot-air technology is used in countless industries. The following pages provide you with a small selection of practical examples. Our engineering specialists would be pleased to advise you in the planning and implementation of your projects.

The combination of blow-off nozzles and blowers allows fast and efficient drying of beverage bottles.

The plastic parts are deburred with a jet of hot-air following the injection moulding process.



Drying of wet rotors with hot-air and sieve reflector.

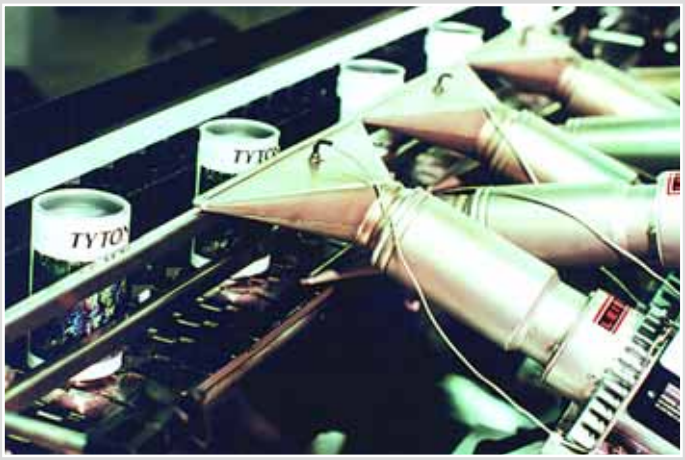
A hot-air blower with spoon reflector brands the paint after pad printing and so makes it scratch resistant.

Igniting wood pellets or wood chips with the Leister TRIAC S ECONOMY.

Three hot-air blowers shrinking shrink caps onto bottles.

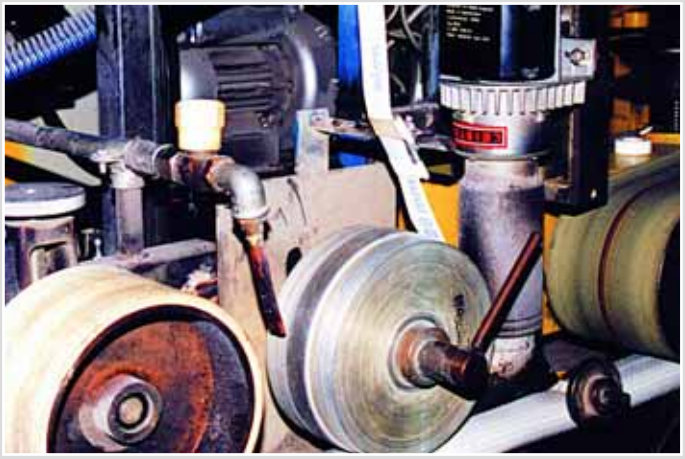
Drying and smoothing pills, dragées, sweets and their coatings with air heaters and blowers. Regulated air temperature with Leister controllers.

LE MINI SENSOR air heater warms a plastic rivet, which is then formed with a cold die.

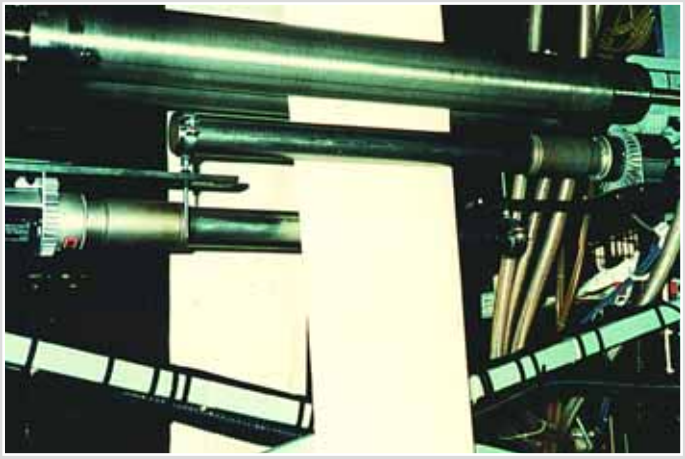


Shrinking a PE sleeve on cans with temperature regulated hot-air produces precise quality.

A blower supplies four air heaters printing ink on textiles.



Air heater with blower welding a PVC continuous hose.



Preheating a paper strip prior to printing with space-saving long tube nozzles.

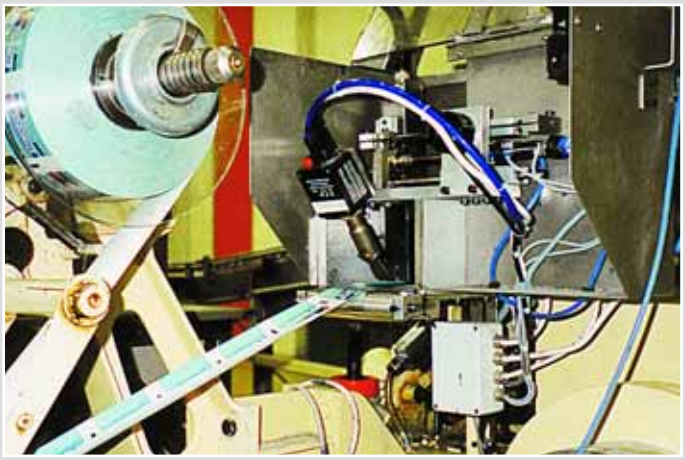
Two Heaters and two blowers used to dry impregnated Eternit piping. Two wide slot nozzles ensure the air is evenly distributed.

hot-air blowers shrink the foil for bulky packages.

Shrinking capsules with a hot-air blower and push-on spoon reflector.

Air heaters and blowers performing partial heating of a PVC pipe for subsequent shaping of the branches.

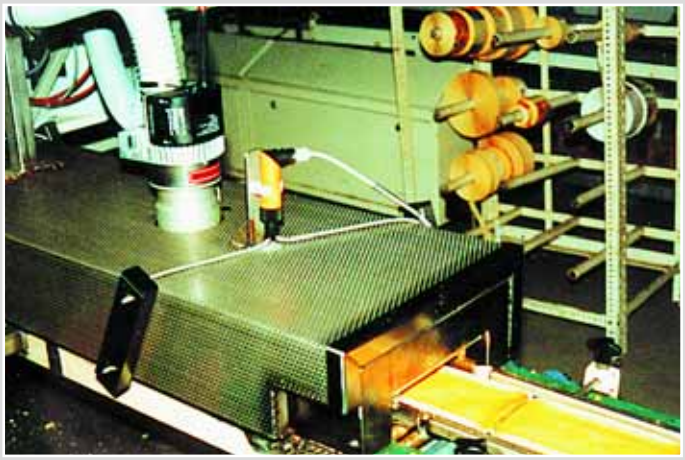
A Heater and blower used to heat the ends of fluorescent tubes. This removes the coating before gluing.



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

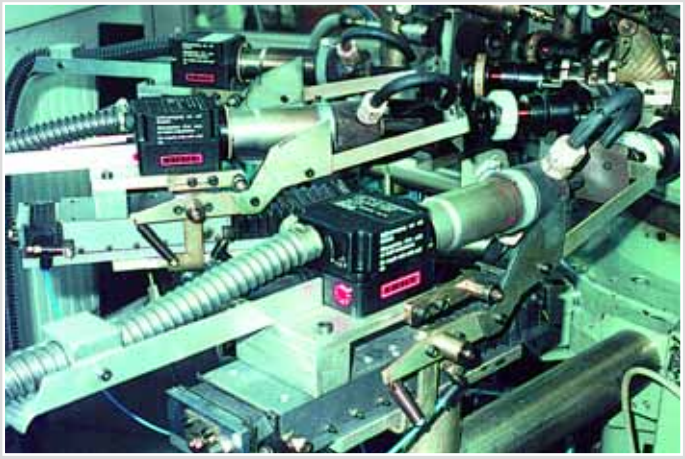
64 air heaters burn marking lines on insulating plates in a crosswise pattern without using paint.

Blower and air heater soldering cooling fins. With hot-air this work can be performed without mechanical distortion.

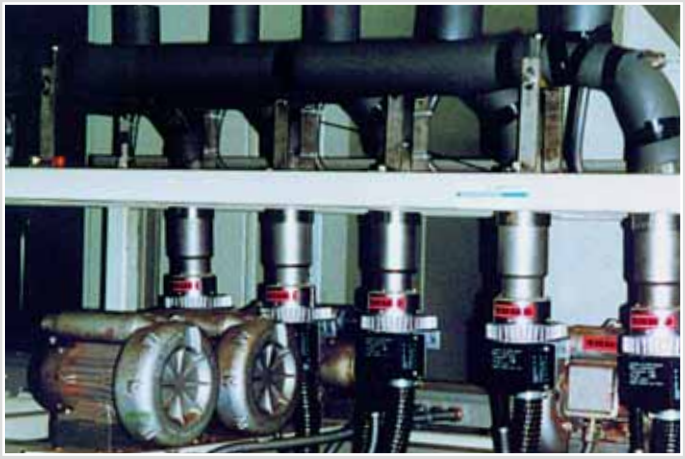


Destroying bacteria in bakery products with hot-air prior to packaging extends shelf life.

Edge shrinking of packaged decorative foil.



Melting of self-bonding wire on coils for transformers and motor windings is carried out in the winding process with hot-air.



Air heater heating a piping trench. Coated steel wires are melted together with hot-air.

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Subject to change without notice

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Leister Process Technologies is an **ISO 9001:2000** certified enterprise.

Our close worldwide network of more than 120 Sales and Service Centres in more than 60 countries.

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