

Solutions for Industrial Hot Air Processes

General Catalog



Leister Brand Products

Quality for Reliability

With innovative ideas and extensive application knowledge, we develop modules, devices and machines for the world market. Our focus is always on functionality, ergonomics and attractive design. Our consistent process and quality management, from the moment a product is an idea to the end of the product's service life, ensures the Leister quality that has been known for decades. Leister stands for performance in premium products - around the clock and around the globe.

We know how.

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We are Leister

Experienced engineers, product managers and specialists from ISO-9001-certified Leister in Switzerland develop products and systems for plastic welding applications and for generating industrial process heat. Based on innovative technologies - including hot air, contact heat, extrusion, and infrared - and our passion for customized solutions, we are able to significantly influence our market segment and set high standards worldwide. Our employees are proud to produce high-quality premium products with strong, reliable performance. Close cooperation with our worldwide customers, sales partners and suppliers is essential for our mutual success. Local experts provide sales and service support to our customers in over 100 countries. Eight country subsidiaries and 130 sales and service partners guarantee our worldwide presence and customer proximity.

Global Leader in Plastics Processing

Leister is characterized by products featuring a wide range of technologies for processing plastics and designed for a broad spectrum of applications. We develop and produce application-specific products, including accessories, for welding, shrinking, forming, heating and joining plastics in our business areas of plastic welding and industrial application.

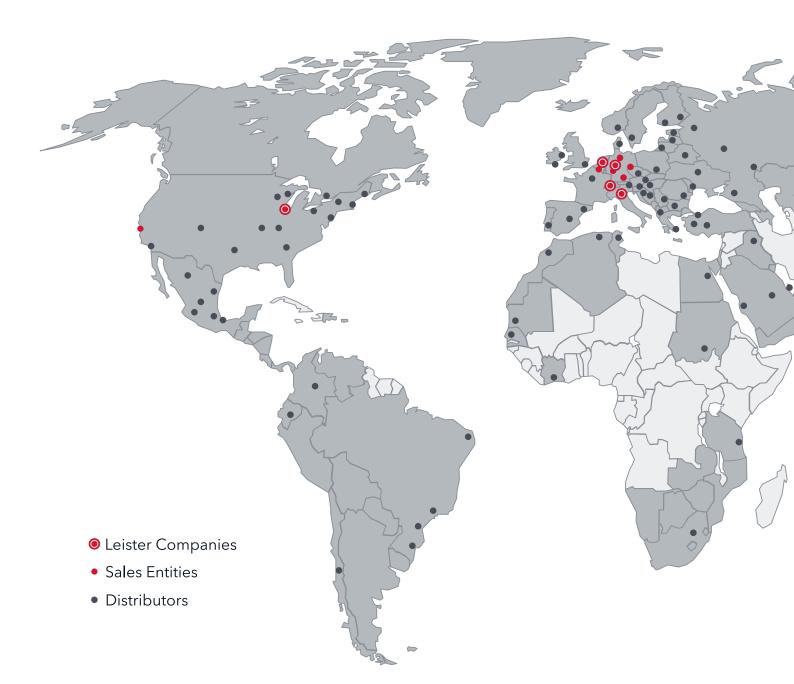
Industrial Application

Leister offers two technologies for the industrial sector: Hot air and infrared. This means that we cover the majority of industrial process heat and plastic joining applications. You will find the right solution for your challenge in our wide range of products.

Plastic Welding

The Leister product range for plastic welding includes hot-air hand tools, extruders and welding machines, including comprehensive accessories for craftsmen and industry. With over 75 years of experience, we offer you products and services that set standards in your respective areas of expertise.





Global Presence and Customer Proximity

Our worldwide network, with 130 sales and service partners for Leister products, ensures presence and proximity on all continents.

For decades, we have enjoyed close customer relationships through our global presence with eight country companies and our close network of local sales and service partners. In addition, you will increasingly see Leister products in our online shops.



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Find dealers near you

We are local. Worldwide.

Our sales and service partners regularly participate in training courses for applications, products and repairs and are certified accordingly. This way, we guarantee our customers competent service worldwide in accordance with our high standards.

Modern logistics hubs, as well as equipment and spare parts warehouses in all countries with a Leister representative, ensure deliveries worldwide.

Process Heat Advice

Are you interested in joining plastic parts together or processing products with hot air or infrared in your production process? Then Leister is right for you. We will be happy to advise you and help you find ideal solutions for your applications: With our hot air and infrared technologies, we are able to serve you at the highest levels.

You Have The Challenges, We Have The Solutions

The industrial solutions from Leister cover a wide range of products and services. If you need a solution with process heat, you will find suitable services and contacts for expert advice.

Our Scope of Services

- Over 75 years of experience with hot air welding applications
- Product and application support
- Application laboratory to simulate applications and processes
- Customized solutions to fit your individual needs



Leister Academy

The Leister Academy promotes the knowledge and professional competence of our customers, employees and sales partners. It offers many training sessions for different target groups and needs. Leister Academy experts convey their specialized knowledge in several languages - both in digital media and in on-site training courses. The Leister Academy offers:

- Technical training for various product segments
- Various e-learning media (online trainings and webinars)
- Training and development programs
- Classroom and remote training programs on various topics
- Trainer training programs (Train the Trainer)



Innovation and Technology

Leister is a technology leader in its market segments. Our core technologies - hot air, contact heat, extrusion, and infrared - are crucial for the longterm success of our customers.

Experts from research and development as well as product management work closely together to continuously develop our product portfolio. This allows them to focus on customer needs, market conditions and new application possibilities and material requirements.

Research and Development

Decades of experience in joining plastics and in industrial process heat make us your qualified partner. We develop new and optimize existing products with great passion, and in exchange with our customers from industry, construction and trade. Our customers benefit from high quality, reliability, innovation and efficiency.

Innovation Drives Us

15 % of our employees work in research and development. Specialists from the fields of product management, process engineering, mechanical engineering, electrical engineering and product design develop the products and solutions of tomorrow. Forward-thinking technologies are established early on and taken into account in product development, thanks to our focus on customer needs.

myLeister app

You can download the myLeister app free of charge from your app store (iOS) or from the Google Play Store (Android). Why not register today and take advantage of the numerous benefits offered by the app?

Useful Formulas

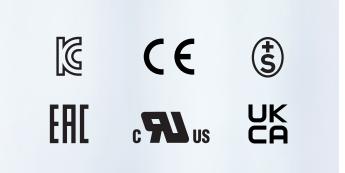
The majority of industrial processes require energy. This requires performance and time. In the myLeister app, you will find simple basic formulas that allow you to make an initial estimate of the required heating output. Additional application tests are recommended and supported by Leister.

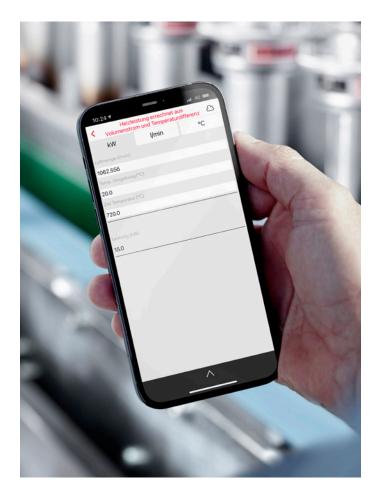


Certified Products Meet Global Standards

Our products are designed and developed according to national and international standards. Product standards, such as ISO, IEC, EN or UL standards, are also taken into account, as well as application-related standards and guidelines.

In addition, accredited and independent third parties check our products for compliance with standards. If the products meet the required criteria, they are certified and carry the UL Listing Mark and/or the CE mark, for example, as well as various local certifications. These certificates are issued under the condition that the product manufacturer permits regular checks. Within the scope of unannounced audits, inspectors ensure that production is in accordance with the test sample.



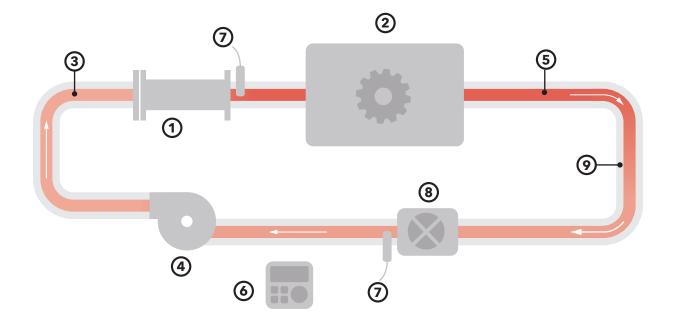


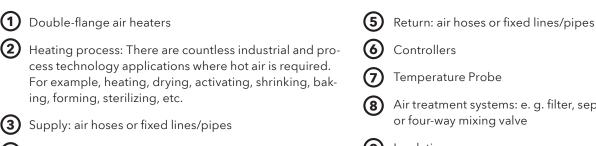
Hot Air Recirculation - Save Energy with Leister

The hot air required in industrial processes often escapes unused into the atmosphere. Too bad, because wasting resources is bad for the environment and costs a lot of money. Leister air recycling and temperature-resistant air heaters and blowers return hot air up to 350 °C (662 °F) back into the air heater.

If you use Leister air heaters such as LHS 210/410 SF, DF, HT or LE 5000/10000 DF, HT, each as the "R" version (suitable for recirculation), you can feed the hot exhaust air back into the process via hot air recirculation. This way you can save up to 70 % on your energy costs and also reduce your carbon footprint.

Hot Air Recycling with Air Heaters and Blowers from Leister





Recycling-enabled blower

Air treatment systems: e.g. filter, separator, bypass

(9) Insulation

Applications



Drying Process

Leister's heat guns, air heaters, blowers, and infrared heaters are ideal for all kinds of drying processes. These devices are used in various drying applications.



Ignition

Wood heating is back in fashion. Using this renewable raw material for heating is carbon neutral and, in addition to being environmentally friendly, is no more expensive than using gas or oil heating systems, if handled properly.



Film Shrinkage

Hot air is ideal for processing shrink films and shrink hoses. There are two main areas for this: Heat shrinking in packaging technology and heat shrinking in electrical engineering.



Heat Treatment

Whether lipstick or chocolate praline, hot air is ideal for refining food and cosmetic products and is used in many different ways.



Embossing Process

From car dashboards to embossed artificial leather for handbags - coated textiles can be found almost anywhere.



Sterilization Procedures

Sterilization means the complete killing of microorganisms and bacteria. It is mainly used for equipment used in food processing, medicine and microbiology. Food is sterilized at temperatures above 100 °C (212 °F) for preservation.



Lamination Process

Lamination describes a bonding process in which different materials, usually with large surfaces, are firmly and inseparably joined together. Lamination processes are available with and without the use of binding agents.



Plastic Forming

Plastic membranes and linoleum are easily molded with hot air. Plastic pipes and acrylic glass panes are also heated with hot air to bend them; they then retain their new shape after cooling.



Thermoforming Process

In thermoforming, a plate-shaped plastic is heated uniformly before it is formed three-dimensionally by vacuum deep drawing or in a closed mold with a press.



Longitudinal Seam Welding

Food and beverage packaging can be safely sealed and longitudinally seam-welded using hot air. Hot air is an alternative to gas with many advantages, such as reducing carbon emissions during operation.



Coffee Roasting

Roasting machines with a batch size of up to 30 kilograms can be operated identically with electrically generated hot air instead of gas. In the process, roasting masters achieve the same great taste experience and the same reproducible roasting quality.



Tube Filling

Plastic tubes are in demand worldwide as safe and practical packaging for a range of products in the cosmetics, food and pharmaceutical industries. Safe and fast welding of filled tubes is essential.

Hot Air Blowers

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Hot Air Blowers: Highlights and Features

MISTRAL PREMIUM/SYSTEM



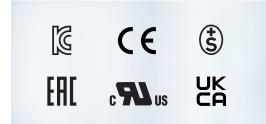
- Integrated heating element and device protection
- Even airflow distribution
- Aerodynamically optimized air speed
- Extensive certifications



Low maintenance due to brushless blower motor (MISTRAL 6 PREMIUM, MISTRAL 6 SYSTEM)



Display with status information and for programming



Extensive certifications

	MISTRAL 2 PREMIUM	MISTRAL 6 PREMIUM	MISTRAL 6 SYSTEM
Brush motor			
Brushless blower motor			Ø
Integrated heating element and device protection	0		0

Integrated heating element and device protection		
Integrated code switch for potentiometer (internal/external)		
Heating output and air volume with e-drive infinitely adjustable		0
Automatic cool-down function		
Blower and heating can be switched on and off separately	Ø	0
Remote control interface for temperature/air volume		
Integrated temperature probe		
Display of target/actual values		Ø
Alarm output (relay contact)		

HOTWIND PREMIUM/SYSTEM



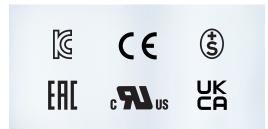
- Stepless control of heating and blower
- Automatic cool-down function
- Protection against heating element or device overheating
- Low maintenance due to brushless motor
- Integrated temperature probe (SYSTEM)



Interface with alarm contact for controlling air volume and heat power, with 4-20 [mA] or 0-10 [V] signal (SYSTEM)



Display with status information (SYSTEM)



	HOTWIND PREMIUM	HOTWIND SYSTEM
Heat output and air volume steplessly adjustable with potentiometer		
Integrated power electronics		
Protection against heating element or device overheating		
Brushless blower motor	Ø	0
Alarm output		0
Integrated temperature probe		0
Integrated temperature controller		0
Remote control interface for temperature or power set point		0
Remote control interface for air volume adjustment		0
Display for showing the setpoint and actual values (°C or °F)		0

VULCAN SYSTEM



1 kW

- Remote control with analog interface
- Easy to integrate thanks to compact design
- Temperature infinitely adjustable with potentiometer
- Integrated heating element and device protection



Potentiometer for infinitely variable heat output adjustment

	VULCAN SYSTEM 6 kW	VULCAN SYSTEM 10/1
Temperature infinitely adjustable with potentiometer	\bigcirc	0
Interface for temperature control	Ø	
Standard interface via a 4-20 mA or a 0-10 V signal	Ø	0
Integrated power electronics	0	
Protection against heating element or device overheating	Ø	0
Brushless blower motor controllable with frequency converter	0	0
Alarm output	0	0
Integrated temperature controller	Ø	0
Display of target/current values	0	0



Blower motor can be controlled with external frequency converter



Display of target/current values

IGNITER



- For heating boilers of all categories (pellets, wood chips, logs and other biomass)
- Easy to integrate
- Heating element and device protection
- Simple adaptation to the ignition tube



Plug directly on the device for easy removal and installation



Mounting brackets for perfect positioning in the heating boiler



Fast ignition process for clean combustion

	IGNITER BR4	IGNITER BM4
Plug directly on the device	0	0
Connection adapter for air hose directly on the device with internal 1-inch thread		0
Simple adaptation of the ignition tube		0
Device protection via temperature protection circuit	Ø	0
Heating element protection with phototransistor	0	0
Tube extension adapter M14 or 3/8" thread available		

MISTRAL 2 PREMIUM

MISTRAL 6 PREMIUM



The MISTRAL 2 PREMIUM hot air blower is an affordable, entry-level variant. It has a brush motor, heating element and device protection, as well as a potentiometer for adjusting the heating power.



The MISTRAL 6 PREMIUM hot air blower differs from the MISTRAL 2 PREMIUM in that it has a brushless, maintenance-free motor, heating element and device protection, making it ideal for continuous operation. This hot air blower is available in two different heater tube diameters.

Technical data

Phases	1x	
Voltage	230 V	
Current	15 A	
Frequency	50/60 Hz	
Power	3400 W	
Max. air outlet temperature	520 °C	968 °F
Airflow (20°C)	350 l/min	12.36 cfm
Static pressure	3500 Pa	0.5 psi
Max. ambient temperature	65 °C	149 °F
Overheating protection	Yes	
Display	No	
Nozzle connection ø	50 mm / 2 in	
Length	322.2 mm	12.68 in
Width	90 mm	3.54 in
Height	91.2 mm	3.59 in
Noise emission level	65 dB (A)	
Approvals	CE; S+	
Protection class	II	

Technical data

leennear data			
Phases	1x		
Voltage	120-230 V		
Current	10-20 A		
Frequency	50/60 Hz; 60 Hz		
Power	2300-4500 W		
Max. air outlet temperature	430-650 °C	806-1202 °F	
Airflow (20°C)	300-400 l/min	10.59-14.12 cfm	
Static pressure	2500-3000 Pa	0.36-0.43 psi	
Max. ambient temperature	65 °C	149 °F	
Overheating protection	Yes		
Display	No		
Nozzle connection ø	36.5 mm / 1.45 in;	50 mm / 2 in	
Length	321.2-352.2 mm	12.64-13.86 in	
Width	90 mm	3.54 in	
Height	91.2 mm	3.59 in	
Noise emission level	65 dB (A)		
Approvals	CE; EAC; KC; S+;	CE; EAC; KC; S+; UKCA; cURus	
Protection class			

Product items

MISTRAL 2 PREMIUM, 230V/3400W, ø50mm

147.963

Product items

MISTRAL 6 PREMIUM, 220V/3100W, ø50mm, 60Hz, KC 146.	522
MISTRAL 6 PREMIUM, 120V/2400W, ø50mm 147.	965
MISTRAL 6 PREMIUM, 230V/3400W, ø50mm 147.	966
MISTRAL 6 PREMIUM, 230V/4500W, ø50mm 147.	967
MISTRAL 6 PREMIUM, 230V/2300W, ø36.5mm 148.	006



Configure product



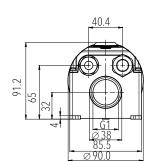
MISTRAL 6 SYSTEM

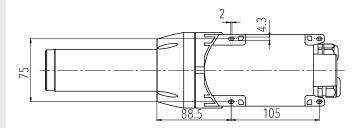


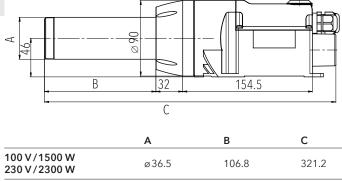
In addition to the brushless motor and the heating element and device protection, the MISTRAL 6 SYSTEM has a cooldown mode, a display with status information and an interface for controlling the temperature and air volume. Available in two different heater tube diameters.



Phases	1x	
Voltage	100-230 V	
Current	10-20 A	
Frequency	50/60 Hz; 60 Hz	
Power	1500-4500 W	
Max. air outlet temperature	650 °C	1202 °F
Air temperature control	Closed loop	
Airflow (20°C)	100-400 l/min	3.53-14.12 cfm
Static pressure	3500 Pa	0.5 psi
Max. ambient temperature	65 °C	149 °F
Overheating protection	Yes	
Display	Yes	
Interfaces	0-10V; 4-20mA	
Nozzle connection ø	36.5 mm / 1.45 in;	50 mm / 2 in
Length	321.2-352.2 mm	12.64-13.86 in
Width	90 mm	3.54 in
Height	91.2 mm	3.59 in
Noise emission level	65 dB (A)	
Approvals	CE; KC; S+; UKCA; cURus	
Protection class		







230 V/4500 W	ø 50	137.8	352.2
120 V/2400 W 200 V/3000 W 220 V/3100 W 230 V/3400 W	ø 50	108	322.5

MISTRAL PREMIUM/SYSTEM installation dimensions in mm

Product items

MISTRAL 6 SYSTEM, 220V/3100W, ø50mm, 60Hz, KC	146.524
MISTRAL 6 SYSTEM, 230V/3400W, ø50mm	146.701
MISTRAL 6 SYSTEM, 230V/4500W, ø50mm	147.968
MISTRAL 6 SYSTEM, 120V/2400W, ø50mm	147.969
MISTRAL 6 SYSTEM, 100V/1500W, ø36.5mm	147.972
MISTRAL 6 SYSTEM, 200V/3000W, ø50mm	147.973
MISTRAL 6 SYSTEM, 230V/2300W, ø36.5mm	147.975



HOTWIND PREMIUM

HOTWIND SYSTEM



The HOTWIND PREMIUM has a maintenance-free brushless motor, a cool-down mode and integrated protection against heating element and device overheating. The air volume and heat output are infinitely variable.



The HOTWIND SYSTEM has a maintenance-free brushless motor, a cool-down mode and integrated protection against heating element and device overheating. It also has an interface for controlling the temperature and air volume.

Technical data

Phases	1x	
Voltage	120-400 V	
Current	10-20 A	
Frequency	50/60 Hz; 60 Hz	
Power	2300-5400 W	
Max. air outlet temperature	650-800 °C	1202-1472 °F
Airflow (20°C)	200-900 l/min	7.06-31.78 cfm
Static pressure	800-1000 Pa	0.11-0.14 psi
Max. ambient temperature	60 °C	140 °F
Overheating protection	Yes	
Display	No	
Nozzle connection ø	62 mm / 2.45 in	
Length	332-357 mm	13.07-14.05 in
Width	106 mm	4.17 in
Height	179 mm	7.04 in
Weight	2.2-2.4 kg	4.85-5.29 lb
Power cable length	3 m	9.84 ft
Noise emission level	< 70 dB(A)	
Approvals	CE; EAC; KC; S+; UKCA; cURus	
Protection class		

Technical data

reennear aata		
Phases	1x	
Voltage	120-400 V	
Current	10-20 A	
Frequency	50/60 Hz; 60 Hz	
Power	2300-5400 W	
Max. air outlet temperature	650 °C	1202 °F
Air temperature control	Closed loop	
Airflow (20°C)	200-900 l/min	7.06-31.78 cfm
Static pressure	800-1000 Pa	0.11-0.14 psi
Max. ambient temperature	60 °C	140 °F
Overheating protection	Yes	
Display	Yes	
Interfaces	0-10V; 4-20mA	
Nozzle connection ø	62 mm / 2.45 in	
Length	332 mm	13.07 in
Width	106 mm	4.17 in
Height	179 mm	7.04 in
Weight	2.2-2.4 kg	4.85-5.29 lb
Power cable length	3 m	9.84 ft
Noise emission level	< 70 dB(A)	
Approvals	CE; EAC; KC; S+; UKCA; cURus	
Protection class	II	

Product items

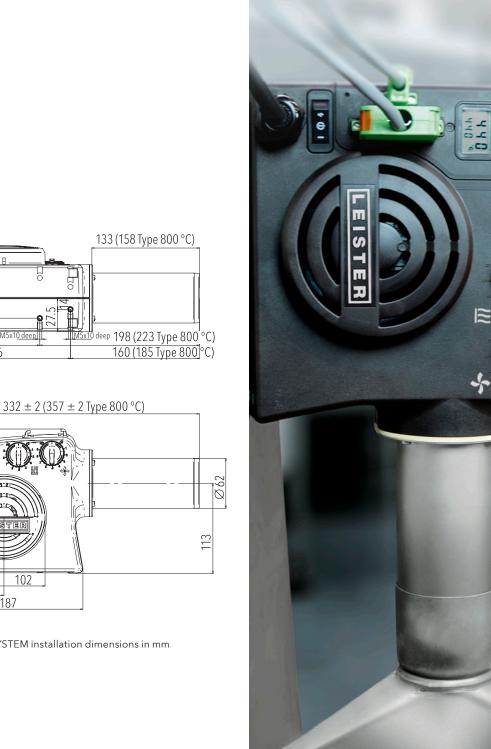
HOTWIND PREMIUM, 120V/2300W, cURus, w/o plug	140.095
HOTWIND PREMIUM, 230V/3680W, cURus, w/o plug	140.098
HOTWIND PREMIUM, 230V/3100W, 800°C, EU plug	142.608
HOTWIND PREMIUM, 230V/3680W, EU plug	142.609
HOTWIND PREMIUM, 230V/2300W, EU plug	142.612
HOTWIND PREMIUM, 230V/2300W, cURus, w/o plug	142.643
HOTWIND PREMIUM, 400V/5400W, cURus, w/o plug	142.644
HOTWIND PREMIUM, 220V/3350W, 60Hz, KC, KR plug	143.299

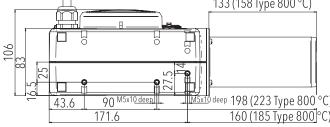
Product items

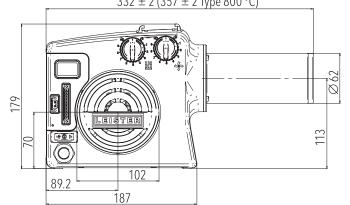
HOTWIND SYSTEM, 230V/2300W, cURus, w/o plug	140.096
HOTWIND SYSTEM, 120V/2300W, cURus, w/o plug	142.636
HOTWIND SYSTEM, 230V/3700W, cURus, w/o plug	142.640
HOTWIND SYSTEM, 400V/5400W, cURus, w/o plug	142.641
HOTWIND SYSTEM, 230V/3700W, EU plug	142.645
HOTWIND SYSTEM, 230V/2300W, EU plug	142.646
HOTWIND SYSTEM, 220V/3350W, 60Hz, KC, KR plug	143.804











HOTWIND PREMIUM/SYSTEM installation dimensions in mm

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VULCAN SYSTEM 6 kW



The VULCAN SYSTEM 6 kW has a heating power of 6 kW and integrated protection against heating element and device overheating. And thanks to the standard analog interface, the hot air blower can also be controlled remotely.

VULCAN SYSTEM 10/11 kW



The VULCAN SYSTEM 10/11 kW has a heating power of 10/11 kW and integrated protection against heating element and device overheating. And thanks to the standard analog interface, the hot air blower can also be controlled remotely.

Technical data

Phases	Зx	
Voltage	230-480 V	
Current	7-15 A	
Frequency	50/60 Hz	
Power	6000 W	
Max. air outlet temperature	650 °C	1202 °F
Air temperature control	Closed loop	
Max. ambient temperature	65 °C	149 °F
Overheating protection	Yes	
Display	Yes	
Interfaces	0-10V; 4-20mA	
Nozzle connection ø	62 mm / 2.45 in	
Length	410 mm	16.14 in
Width	276 mm	10.86 in
Height	231 mm	9.09 in
Noise emission level	65 dB (A)	
Approvals	CE; EAC; S+; UKC	A
Protection class	1	

Technical data

Phases	Зx	
Voltage	230-480 V	
Current	13-25 A	
Frequency	50/60 Hz	
Power	10000-11000	W
Max. air outlet temperature	650 °C	1202 °F
Air temperature control	Closed loop	
Max. ambient temperature	65 °C	149 °F
Overheating protection	Yes	
Display	Yes	
Interfaces	0-10V; 4-20m	A
Nozzle connection ø	92 mm / 3.6 ir	ו
Length	410 mm	16.14 in
Width	276 mm	10.86 in
Height	231 mm	9.09 in
Noise emission level	65 dB (A)	
Approvals	CE; EAC; S+;	UKCA
Protection class		

Product items

VULCAN SYSTEM, 3 x 400V/6kW	143.402	VULCAN SYSTEM, 3 x 400V/11kW
VULCAN SYSTEM, 3 x 480V/6kW	143.405	VULCAN SYSTEM, 3 x 480V/11kW
VULCAN SYSTEM, 3 x 230V/6kW	143.407	VULCAN SYSTEM, 3 x 230V/10kW

Product items

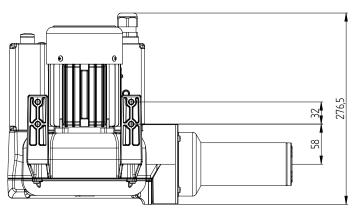
VULCAN SYSTEM, 3 x 400V/11kW	
VULCAN SYSTEM, 3 x 480V/11kW	
VULCAN SYSTEM, 3 x 230V/10kW	

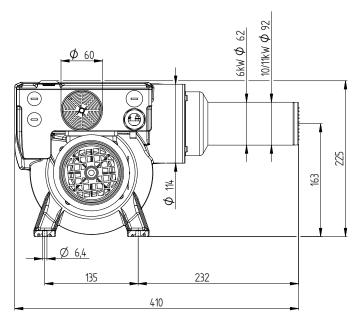
140.463 143.404 143.406











VULCAN SYSTEM installation dimensions in mm



IGNITER BM4

IGNITER BR4



The IGNITER BM4 is available in various outputs and has integrated protection against heating element and device overheating. The ignition blower was specially developed for installation in pellet, wood chip and log boilers.



The IGNITER BR4 ignition blower provides 3.4 kW and thus optimizes the ignition process. It is particularly suitable for installation in larger woodchip heaters, even with moist wood fuel, and for pellet heaters.

Technical data

Phases	1x	
Voltage	120-230 V	
Frequency	50/60 Hz	
Power	600-1600 W	
Max. air outlet temperature	500-600 °C	932-1112 °F
Airflow (20°C)	80-230 l/min	2.82-8.12 cfm
Static pressure	300-2480 Pa	0.04-0.35 psi
Max. ambient temperature	65 °C	149 °F
Overheating protection	Yes	
Display	No	
Nozzle connection ø	31.5 mm / 1.25 i	n; G 3/8 in; M14
Length	283 mm	11.14 in
Noise emission level	58; 68 dB (A)	
Approvals	CE; S+; cURus	
Protection class		

Technical data

Phases	1x	
Voltage	230 V	
Frequency	50/60 Hz	
Power	3400 W	
Max. air outlet temperature	650 °C	1202 °F
Airflow (20°C)	360 l/min	12.71 cfm
Static pressure	4000 Pa	0.58 psi
Max. ambient temperature	65 °C	149 °F
Overheating protection	Yes	
Display	No	
Nozzle connection ø	50 mm / 2 in	
Length	294 mm	11.57 in
Noise emission level	68 dB (A)	
Approvals	CE; S+	
Protection class	II	

Product items	
IGNITER BM4, 230V/1600W	139.231
IGNITER BM4, 230V/600W	139.232
IGNITER BM4, 230V/1100W	140.711
IGNITER BM4, 120V/1550W	141.881
IGNITER BM4, 230V/1100W, 3/8"	142.421
IGNITER BM4, 230V/1100W, M14	144.012
IGNITER BM4, 230V/1600W, M14	145.449

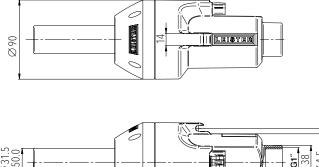
Product items

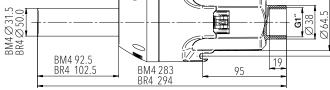
IGNITER BR4, 230V/3400W

146.296









61 Q

IGNITER BM4/BR4 installation dimensions in mm





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LE MINI SENSOR

LE MINI SENSOR KIT

LE 5000 HT-U / HT-S

LE 5000 DF

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Air heater: Highlights and Features

LHS 15/21/41/61/91



- Easy to integrate
- Durable heating elements due to heating element protection
- Device overheating protection or detection
- Heating element overheating protection or detection
- Integrated power electronics



CLASSIC: Detection of heating element and device overheating with alarm output

	BASIC	CLASSIC	PREMIUM	SYSTEM
Higher inlet temperature	I			
Overheat detection with alarm output for the heating element				
Device overheat detection with alarm output				
Overheat protection with alarm output for the heating element			Ø	Ø
Device overheat protection with alarm output				
Continuously variable heating output adjustment via potentiometer				0
Remote control via analog interface				0
Various open-loop and closed-loop control modes available for selection*				0
LED display (target/actual value display)*				0
*except LHS 91 SYSTEM				



PREMIUM: Easy-to-use potentiometer



SYSTEM: Digital display of nominal and current values

LHS 210/410



- Compact, suitable for tight spaces
- Power supply easy to connect
- Connection housing outside air flow
- Connection box protected against overheating (R version)
- Maximum inlet temperature 350 °C / 662 °F (R version)



Easily integrated into industrial processes



Unhindered air flow

	SF	SF-R	DF	DF-R	SF HT	SF-R HT	DF HT	DF-R H1
Single flange	0	0			0	I		
Double flange			0	Ø				0
Suitable for hot air recirculation				0				0
Compatible with various nozzles								
Installation possible in piping system								
For temperatures up to 900 °C/1652 °F								0



SF versions compatible with various nozzles



- Small and compact
- Available as 400 W and 800 W
- Thermoswitch for device protection
- Compressed air operated
- External temperature signal 4-20 mA



Particularly narrow heating pipe, nozzles can be connected with adapter



LE MINI: Cable and hose length 3 m / 9.84 ft LE MINI SENSOR: Cable length 1 m / 3.28 ft, Hose length 3 m / 9.84 ft



Simple operation with controller (LE MINI SENSOR KIT)

	LE MINI	LE MINI SENSOR	LE MINI SENSOR KIT
Integrated temperature controller			
Integrated temperature probe			
Thermoswitch for device protection	Ø		
Heating element protection			
Analog output interface (passive) 4-20 mA			
Pressure reduction valve			



LE 5000 HT-U/HT-S



- Reduced CO₂ footprint
- No high costs for safety requirements
- Low housing temperature for better safety
- Energy efficient
- For welding the longitudinal seam on beverage packaging



More safety due to low housing temperature



Up to 900 °C / 1652 °F outlet temperature



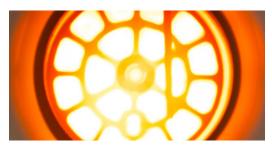
UL certification

	LE 5000 HT-U	LE 5000 HT-S
Air outlet temperature of 900 °C / 1652 °F	Ø	0
Sealing speeds of up to 700 m/min in the welding process	Ø	0
Maximum inlet temperature of 80 °C/176 °F	Ø	
Type S		Ø
Туре U	Ø	

LE 5000/10000



- Robust design
- Temperature control with SSR and controller
- HT version: Air outlet up to 900 °C/1652 °F
- R version: Air inlet temperature of up to 350 °C / 662 °F
- C version: Clean air



Up to 900 °C/1652 °F, 22 kW output



Temperature-resistant cable (DF-R/DF-R HT)

	LE 5000/10000 HT	LE 5000/10000 DF	LE 5000/10000 DF HT	LE 5000/10000/DF-R	LE 10000 DF-R HT	LE 10000 DF-C
Suitable for recycling air up to 350 °C / 662 °F						
Air outlet temperature of 900 °C / 1652 °F						
Clean Air						0
Can be integrated in pipe system						



Robust design

LHS 15 CLASSIC

LHS 15 PREMIUM



The LHS 15 CLASSIC is available in 550 or 770 W. It has detection of heating element and device overheating with alarm output. It can be perfectly integrated into the control circuit via SSR.



The LHS 15 PREMIUM is available in 550 or 770 W and has protection against heating element and device overheating with alarm output. The heating power is steplessly adjustable with a potentiometer.

Technical data

Phases	1x			
Voltage	120-230 V			
Current	3.5-4.5 A			
Frequency	50/60 Hz			
Power	550-770 W			
Max. air outlet temperature	650 °C	1202 °F		
Max. air inlet temperature	65 °C	149 °F		
Max. ambient temperature	65 °C	149 °F		
Min. airflow	60 l/min	2.11 cfm		
Max. inlet pressure	100 kPa	14.5 psi		
Overheating protection	No			
Alarm output	Normally open contact			
Display	No			
Nozzle connection ø	21.3 mm / 0.85 in			
Length	201 mm	7.91 in		
Width	67 mm	2.63 in		
Height	51 mm	2 in		
Weight	0.48 kg	1.05 lb		
Approvals	CE; S+; UKCA			
Protection class	II			

Phases	1x			
Voltage	120-230 V			
Current	3.5-4.5 A			
Frequency	50/60 Hz			
Power	550-770 W			
Max. air outlet temperature	650 °C	1202 °F		
Max. air inlet temperature	65 °C	149 °F		
Max. ambient temperature	65 °C	149 °F		
Air temperature control	Open loop			
Min. airflow	60 l/min	2.11 cfm		
Max. inlet pressure	100 kPa	14.5 psi		
Overheating protection	Yes			
Alarm output	Normally open contact			
Display	No			
Nozzle connection ø	21.3 mm / 0.85 in			
Length	201 mm	7.91 in		
Width	67 mm	2.63 in		
Height	56 mm	2.2 in		
Weight	0.48 kg	1.05 lb		
Approvals	CE; S+; UKCA			
Protection class	II			

Product items

LHS 15 CLASSIC, 120V/550W LHS 15 CLASSIC, 230V/770W

139.873 139.874

Product items

Technical data

LHS 15 PREMIUM, 230V/770W LHS 15 PREMIUM, 120V/550W 139.893 139.908



Configure



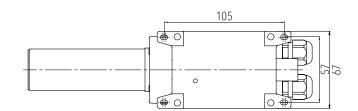
LHS 15 SYSTEM

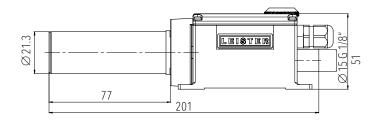


The LHS 15 SYSTEM is available in 550 or 770 W. It has a display to show the set/actual values, a remote control interface and a protection against heating element and device overheating with alarm output.

Technical data

Phases	1x	
Voltage	120-230 V	
Current	3.5-4.5 A	
Frequency	50/60 Hz	
Power	550-770 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	65 °C	149 °F
Max. ambient temperature	65 °C	149 °F
Air temperature control	Closed loop	
Min. airflow	60 l/min	2.11 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	Yes	
Alarm output	Normally open contact	
Display	Yes	
Interfaces	0-10V; 4-20m	A
Nozzle connection ø	21.3 mm / 0.8	5 in
Length	201 mm	7.91 in
Width	67 mm	2.63 in
Height	56 mm	2.2 in
Weight	0.48 kg	1.05 lb
Approvals	CE; S+; UKCA	
Protection class	II	
Protection class	II	



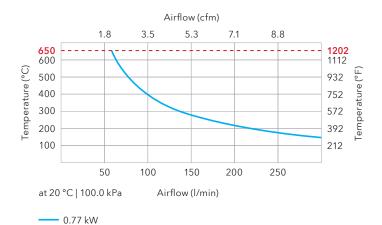


LHS 15 installation dimensions in mm

Product items

LHS 15 SYSTEM, 120V/550W	
LHS 15 SYSTEM, 230V/770W	

139.894 139.895



Configure product

LHS 21S CLASSIC

LHS 21S PREMIUM



The LHS 21S CLASSIC is available in 1 or 2 kW. It has detection of heating element and device overheating with alarm output. It can be perfectly integrated into the control circuit via SSR.



The LHS 21S PREMIUM is available in 1 or 2 kW. It has protection against heating element and device overheating with alarm output. The heating power is steplessly adjustable with a potentiometer.

Technical data

1x	
120-230 V	
4.5-17 A	
50/60 Hz	
1000-2000 W	
650 °C	1202 °F
65 °C	149 °F
65 °C	149 °F
80-160 l/min	2.82-5.65 cfm
100 kPa	14.5 psi
No	
Normally open contact	
No	
36.5 mm / 1.45 in	
236 mm	9.29 in
67 mm	2.63 in
66 mm	2.59 in
0.55 kg	1.21 lb
CE; S+; UKCA	
II	
	120-230 V 4.5-17 A 50/60 Hz 1000-2000 W 650 °C 65 °C 80-160 l/min 100 kPa No Normally open cor No 36.5 mm / 1.45 in 236 mm 67 mm 66 mm 0.55 kg CE; S+; UKCA

Technical data

Phases	1x	
Voltage	120-230 V	
Current	4.5-17 A	
Frequency	50/60 Hz	
Power	1000-2000 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	65 °C	149 °F
Max. ambient temperature	65 °C	149 °F
Air temperature control	Open loop	
Min. airflow	80-160 l/min	2.82-5.65 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	Yes	
Alarm output	Normally open contact	
Display	No	
Nozzle connection ø	36.5 mm / 1.45	in
Length	236 mm	9.29 in
Width	67 mm	2.63 in
Height	71 mm	2.79 in
Weight	0.55 kg	1.21 lb
Approvals	CE; EAC; S+; UKCA	
Protection class	II	

Product items

LHS 21S CLASSIC, 120V/1kW	139.868	LHS 21S PREM
LHS 21S CLASSIC, 230V/1kW	139.869	LHS 21S PREM
LHS 21S CLASSIC, 120V/2kW	139.870	LHS 21S PREM
LHS 21S CLASSIC, 230V/2kW	139.871	LHS 21S PREM

Product items

LHS 21S PREMIUM, 230V/2kW	139.909
LHS 21S PREMIUM, 120V/1kW	140.454
LHS 21S PREMIUM, 230V/1kW	140.455
LHS 21S PREMIUM, 120V/2kW	140.456





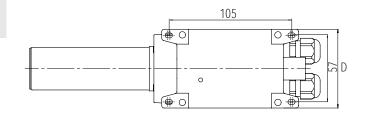
LHS 21S SYSTEM

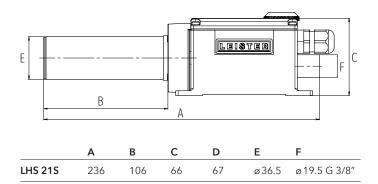


The LHS 21S SYSTEM is available in 1 or 2 kW. It has a display to show the set/actual values, remote control interface and a protection against heating element and device overheating with alarm output.

Technical data

1x	
120-230 V	
4.5-17 A	
50/60 Hz	
1000-2000 W	
650 °C	1202 °F
65 °C	149 °F
65 °C	149 °F
Closed loop	
80-160 l/min	2.82-5.65 cfm
100 kPa	14.5 psi
Yes	
Normally open contact	
Yes	
0-10V; 4-20mA	
36.5 mm / 1.45 i	n
236 mm	9.29 in
67 mm	2.63 in
71 mm	2.79 in
0.55 kg	1.21 lb
CE; EAC; S+; UKCA	
I	
	50/60 Hz 1000-2000 W 650 °C 65 °C Closed loop 80-160 l/min 100 kPa Yes Normally open c Yes 0-10V; 4-20mA 36.5 mm / 1.45 ii 236 mm 67 mm 71 mm 0.55 kg CE; EAC; S+; UK



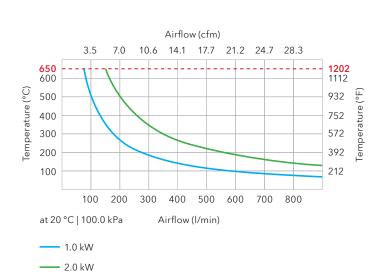


LHS 21S installation dimensions in mm

Product items

LHS 21S SYSTEM, 230V/2kW	139.910
LHS 21S SYSTEM, 120V/1kW	140.458
LHS 21S SYSTEM, 230V/1kW	140.459
LHS 21S SYSTEM, 120V/2kW	140.460





LHS 21L CLASSIC

LHS 21L PREMIUM



The LHS 21L CLASSIC 3.3 kW has a longer heating tube. It has heating element and device overheating detection with alarm contact. It can be perfectly integrated into the control circuit via SSR.



The LHS 21L PREMIUM 3.3 kW has a longer heating tube. It has protection against heating element and device overheating with alarm output. The heating power is steplessly adjustable with a potentiometer.

Technical data

Phases	1x	
Voltage	230 V	
Current	14 A	
Frequency	50/60 Hz	
Power	3300 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	65 °C	149 °F
Max. ambient temperature	65 °C	149 °F
Min. airflow	260 l/min	9.18 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Alarm output	Normally open contact	
Display	No	
Nozzle connection ø	36.5 mm / 1.4	5 in
Length	266 mm	10.47 in
Width	67 mm	2.63 in
Height	66 mm	2.59 in
Weight	0.65 kg	1.43 lb
Approvals	CE; EAC; S+; UKCA	
Protection class		

Phases 1x 230 V Voltage 14 A Current 50/60 Hz Frequency 3300 W Power Max. air outlet temperature 650 °C 1202 °F 65 °C 149 °F Max. air inlet temperature 149 °F Max. ambient temperature 65 °C Air temperature control Open loop 9.18 cfm Min. airflow 260 l/min 100 kPa 14.5 psi Max. inlet pressure Overheating protection Yes Alarm output Normally open contact Display No Nozzle connection ø 36.5 mm / 1.45 in Length 266 mm 10.47 in

67 mm

71 mm

0.65 kg

Ш

CE; EAC; S+; UKCA

Product items

LHS 21L CLASSIC, 230V/3.3kW

139.872

Product items

Width

Height

Weight

Approvals

Protection class

Technical data

LHS 21L PREMIUM, 230V/3.3kW

140.457

2.63 in

2.79 in 1.43 lb



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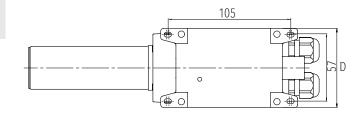
LHS 21L SYSTEM

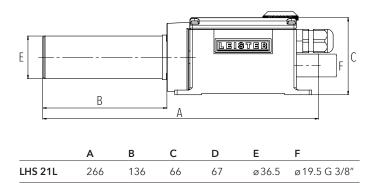


The LHS 21L SYSTEM 3.3 kW has a longer heating tube. It has a display to show the set/actual values, remote control interface and protection against heating element and device overheating with alarm output.

Technical data

Phases	1x	
Voltage	230 V	
Current	14 A	
Frequency	50/60 Hz	
Power	3300 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	65 °C	149 °F
Max. ambient temperature	65 °C	149 °F
Air temperature control	Closed loop	
Min. airflow	260 l/min	9.18 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	Yes	
Alarm output	Normally open contact	
Display	Yes	
Interfaces	0-10V; 4-20m/	4
Nozzle connection ø	36.5 mm / 1.45	5 in
Length	266 mm	10.47 in
Width	67 mm	2.63 in
Height	71 mm	2.79 in
Weight	0.65 kg	1.43 lb
Approvals	CE; EAC; S+; UKCA	
Protection class		



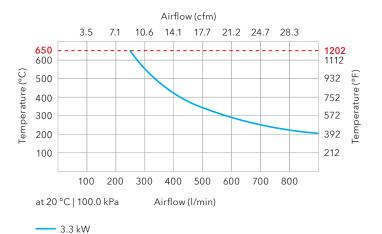


LHS 21L installation dimensions in mm

Product items

LHS 21L SYSTEM, 230V/3.3kW

140.461





LHS 41S CLASSIC

LHS 41S PREMIUM



The LHS 41S CLASSIC is available in 2 or 3.6 kW. It has heating element and device overheating detection with alarm contact. It can be perfectly integrated into the control circuit via SSR.



The LHS 41S PREMIUM is available in 2 or 3.6 kW. It has protection against heating element and device overheating with alarm output. The heating power is steplessly adjustable with a potentiometer.

Technical data

Phases	1x	
Voltage	120-230 V	
Current	9-17 A	
Frequency	50/60 Hz	
Power	2000-3600 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	65 °C	149 °F
Max. ambient temperature	65 °C	149 °F
Min. airflow	160-280 l/min	5.65-9.88 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Alarm output	Normally open contact	
Display	No	
Nozzle connection ø	50 mm / 2 in	
Length	245 mm	9.64 in
Width	85 mm	3.34 in
Height	86 mm	3.38 in
Weight	0.85 kg	1.87 lb
Approvals	CE; S+; UKCA	
Protection class		

Phases	1x	
Voltage	120-230 V	
Current	9-17 A	
Frequency	50/60 Hz	
Power	2000-3600 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	65 °C	149 °F
Max. ambient temperature	65 °C	149 °F
Air temperature control	Open loop	
Min. airflow	160-280 l/min	5.65-9.88 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	Yes	
Alarm output	Normally open c	ontact
Display	No	
Nozzle connection ø	50 mm / 2 in	
Length	245 mm	9.64 in
Width	85 mm	3.34 in
Height	91 mm	3.58 in
Weight	0.85 kg	1.87 lb
Approvals	CE; S+; UKCA	
Protection class	I	

Product items

LHS 41S CLASSIC, 230V/3.6kW	143.290	LHS
LHS 41S CLASSIC, 230V/2kW	143.291	LHS
LHS 41S CLASSIC, 120V/2kW	143.292	LHS

Product items

Technical data

LHS 41S PREMIUM, 230V/3.6kW	143.283
LHS 41S PREMIUM, 230V/2kW	143.287
LHS 41S PREMIUM, 120V/2kW	143.289



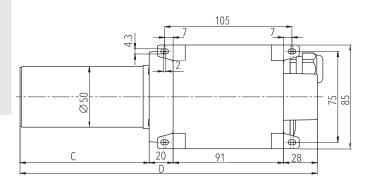
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LHS 41S SYSTEM

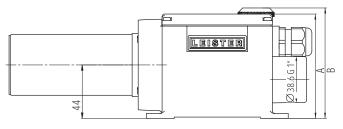


The LHS 41S SYSTEM is available in 2 or 3.6 kW. It has a display to show the set/actual values, remote control interface and protection against heating element and device overheating with alarm output.





Phases	1x	
Voltage	120-230 V	
Current	9-17 A	
Frequency	50/60 Hz	
Power	2000-3600 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	65 °C	149 °F
Max. ambient temperature	65 °C	149 °F
Air temperature control	Closed loop	
Min. airflow	160-280 l/min	5.65-9.88 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	Yes	
Alarm output	Normally open c	ontact
Display	Yes	
Interfaces	0-10V; 4-20mA	
Nozzle connection ø	50 mm / 2 in	
Length	245 mm	9.64 in
Width	85 mm	3.34 in
Height	91 mm	3.58 in
Weight	0.85 kg	1.87 lb
Approvals	CE; S+; UKCA	
Protection class		

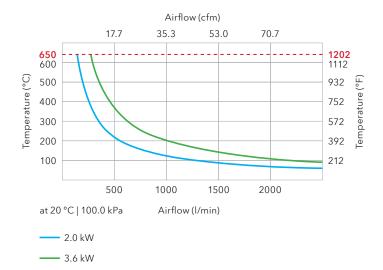


	Α	В	С	D	
LHS 41S CLASSIC	86	86	106	245	
LHS 41S PREMIUM	86	91	106	245	
LHS 41S SYSTEM	86	91	106	245	

LHS 41S installation dimensions in mm

Product items

LHS 41S SYSTEM, 230V/3.6kW	142,489
LHS 41S SYSTEM, 230V/2kW	143.278
LHS 41S SYSTEM, 120V/2kW	143.279





LHS 41L CLASSIC

LHS 41L PREMIUM



The LHS 41L CLASSIC has a longer heating tube and is available in 2, 4.4 or 5.5 kW. It has heating element and device overheating detection with alarm contact. It can be perfectly integrated into the control circuit via SSR.



The LHS 41L PREMIUM has a longer heating tube and is available in 2, 4.4 or 5.5 kW. It has protection against heating element and device overheating with alarm output. The heating power is steplessly adjustable with a potentiometer.

Technical data

Phases	1x		
Voltage	230-400 V		
Current	5-19 A		
Frequency	50/60 Hz		
Power	2000-5500 W		
Max. air outlet temperature	650 °C	1202 °F	
Max. air inlet temperature	65 °C	149 °F	
Max. ambient temperature	65 °C	149 °F	
Min. airflow	160-420 l/min	5.65-14.83 cfm	
Max. inlet pressure	100 kPa	14.5 psi	
Overheating protection	No		
Alarm output	Normally open contact		
Display	No		
Nozzle connection ø	50 mm / 2 in		
Length	275 mm	10.82 in	
Width	85 mm	3.34 in	
Height	86 mm	3.38 in	
Weight	0.95 kg	2.09 lb	
Approvals	CE; S+; UKCA		
Protection class			

Technical data

icennical data		
Phases	1x	
Voltage	230-400 V	
Current	5-19 A	
Frequency	50/60 Hz	
Power	2000-5500 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	65 °C	149 °F
Max. ambient temperature	65 °C	149 °F
Air temperature control	Open loop	
Min. airflow	160-420 l/min	5.65-14.83 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	Yes	
Alarm output	Normally open c	ontact
Display	No	
Nozzle connection ø	50 mm / 2 in	
Length	275 mm	10.82 in
Width	85 mm	3.34 in
Height	91 mm	3.58 in
Weight	0.95 kg	2.09 lb
Approvals	CE; S+; UKCA	
Protection class		

Product items

LHS 41L CLASSIC, 400V/2kW	143.293	LHS 41L PF
LHS 41L CLASSIC, 400V/4.4kW	143.294	LHS 41L PF
LHS 41L CLASSIC, 230V/4.4kW	145.726	LHS 41L PF
LHS 41L CLASSIC, 400V/5.5kW	145.727	LHS 41L PF

Product items

LHS 41L PREMIUM, 400V/2kW	143.281
LHS 41L PREMIUM, 400V/4.4kW	143.282
LHS 41L PREMIUM, 230V/4.4kW	145.435
LHS 41L PREMIUM, 400V/5.5kW	145.438





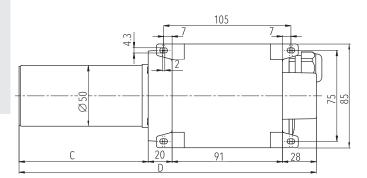
LHS 41L SYSTEM

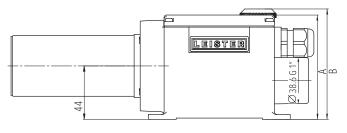


The LHS 41L SYSTEM has a longer heating tube and is available in 2, 4.4 or 5.5 kW. It has a display to show the set/actual values, remote control interface and protection against heating element and device overheating with alarm output.

Technical data

Phases	1x		
Voltage	230-400 V		
Current	5-19 A		
Frequency	50/60 Hz		
Power	2000-5500 W		
Max. air outlet temperature	650 °C	1202 °F	
Max. air inlet temperature	65 °C	149 °F	
Max. ambient temperature	65 °C	149 °F	
Air temperature control	Closed loop		
Min. airflow	160-420 l/min	5.65-14.83 cfm	
Max. inlet pressure	100 kPa	14.5 psi	
Overheating protection	Yes		
Alarm output	Normally open contact		
Display	Yes		
Interfaces	0-10V; 4-20mA		
Nozzle connection ø	50 mm / 2 in		
Length	275 mm	10.82 in	
Width	85 mm	3.34 in	
Height	91 mm	3.58 in	
Weight	0.95 kg	2.09 lb	
Approvals	CE; S+; UKCA		
Protection class			



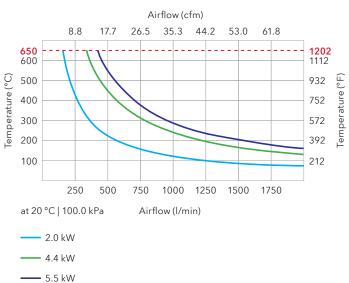


	Α	В	С	D	
LHS 41L CLASSIC	86	86	136	275	
LHS 41L PREMIUM	86	91	136	275	
LHS 41L SYSTEM	86	91	136	275	

LHS 41L installation dimensions in mm

Product items		<mark>6</mark> 6
LHS 41L SYSTEM, 400V/2kW LHS 41L SYSTEM, 400V/4.4kW	142.492 143.280	() 5 () 9 1
LHS 41L SYSTEM, 400V/5.5kW LHS 41L SYSTEM, 230V/4.4kW	145.728 145.729	peratui 8





LHS 61S CLASSIC

LHS 61S PREMIUM



The LHS 61S CLASSIC is available in 4, 6, 8, 8.5 or 9 kW. It has heating element and device overheating detection with alarm contact. It can be perfectly integrated into the control circuit via SSR.



The LHS 61S PREMIUM is available in 4, 6, 8, 8.5 or 9 kW. It has protection against heating element and device overheating with alarm output. The heating power is steplessly adjustable with a potentiometer.

Technical data

Phases	1x; 3x	
Voltage	230-480 V	
Current	5-21 A	
Frequency	50/60 Hz	
Power	4000-9000 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	65 °C	149 °F
Max. ambient temperature	65 °C	149 °F
Min. airflow	310-690 l/min	10.94-24.36 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Alarm output	Normally open contact	
Display	No	
Nozzle connection ø	62 mm / 2.45 in	
Length	363 mm	14.29 in
Width	116 mm	4.56 in
Height	136 mm	5.35 in
Weight	3.15 kg	6.94 lb
Approvals	CE; S+; UKCA	
Protection class		

Phases	1x; 3x	
Voltage	230-480 V	
Current	5-21 A	
Frequency	50/60 Hz	
Power	4000-9000 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	65 °C	149 °F
Max. ambient temperature	65 °C	149 °F
Air temperature control	Open loop	
Min. airflow	310-690 l/min	10.94-24.36 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	Yes	· · · ·
Alarm output	Normally open contact	
Display	No	
Nozzle connection ø	62 mm / 2.45 in	
Length	363 mm	14.29 in
Width	116 mm	4.56 in
Height	136 mm	5.35 in
Weight	3.15 kg	6.94 lb
Approvals	CE; S+; UKCA	
Protection class		

Product items	
LHS 61S CLASSIC, 3 x 400V/6kW	143.490
LHS 61S CLASSIC, 3 x 230V/6kW	143.696
LHS 61S CLASSIC, 3 x 400V/9kW	143.697
LHS 61S CLASSIC, 3 x 480V/6kW	143.698
LHS 61S CLASSIC, 3 x 230V/4kW	143.707
LHS 61S CLASSIC, 3 x 400V/4kW	143.708
LHS 61S CLASSIC, 3 x 480V/4kW	143.709
LHS 61S CLASSIC, 480V/8kW	145.730
LHS 61S CLASSIC, 400V/8.5kW	145.732

Product items

Technical data

LHS 61S PREMIUM, 3 x 400V/6kW	143.481
LHS 61S PREMIUM, 3 x 480V/6kW	143.483
LHS 61S PREMIUM, 3 x 230V/6kW	143.484
LHS 61S PREMIUM, 3 x 230V/6kW	143.464
LHS 61S PREMIUM, 3 x 400V/4kW	143.715
LHS 61S PREMIUM, 3 x 400V/9kW	143.716
LHS 61S PREMIUM, 3 x 480V/4kW	143.717
LHS 61S PREMIUM, 480V/8kW	145.439
LHS 61S PREMIUM, 400V/8.5kW	145.442



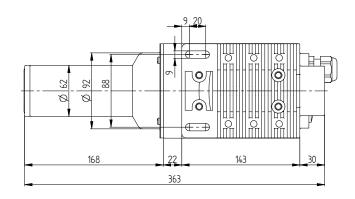
Configure



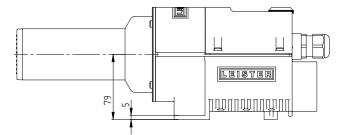
LHS 61S SYSTEM

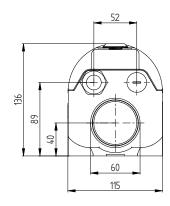


The LHS 61S SYSTEM is available in 4, 6, 8, 8.5 or 9 kW. It has a display to show the set/actual values, a remote control interface and protection against heating element and device overheating with alarm output.



Technical data Phases 1x; 3x 230-480 V Voltage Current 5-21 A Frequency 50/60 Hz Power 4000-9000 W Max. air outlet temperature 650 °C 1202 °F Max. air inlet temperature 65 °C 149 °F 65 °C 149 °F Max. ambient temperature Closed loop Air temperature control 10.94-24.36 cfm 310-690 l/min Min. airflow 100 kPa 14.5 psi Max. inlet pressure Overheating protection Yes Normally open contact Alarm output Display Yes Interfaces 0-10V; 4-20mA Nozzle connection ø 62 mm / 2.45 in Length 363 mm 14.29 in Width 116 mm 4.56 in 5.35 in Height 136 mm Weight 3.15 kg 6.94 lb CE; S+; UKCA Approvals Protection class L

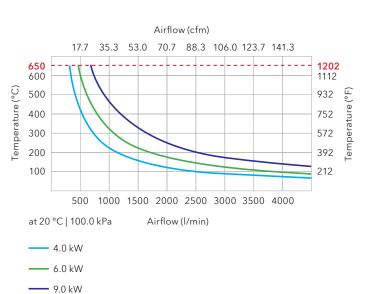




LHS 61S installation dimensions in mm

Product items	
LHS 61S SYSTEM, 3 x 400V/6kW	142.496
LHS 61S SYSTEM, 3 x 230V/4kW	143.726
LHS 61S SYSTEM, 3 x 230V/6kW	143.727
LHS 61S SYSTEM, 3 x 400V/4kW	143.728
LHS 61S SYSTEM, 3 x 400V/9kW	143.729
LHS 61S SYSTEM, 3 x 480V/4kW	143.730
LHS 61S SYSTEM, 3 x 480V/6kW	143.731
LHS 61S SYSTEM, 480V/8kW	145.733
LHS 61S SYSTEM, 400V/8.5kW	145.734





LHS 61L CLASSIC

LHS 61L PREMIUM



The LHS 61L CLASSIC is available in 5, 8, 10, 11 or 16 kW. It has heating element and device overheating detection with alarm contact. It can be perfectly integrated into the control circuit via SSR.



The LHS 61L PREMIUM is available in 5, 8, 10, 11 or 16 kW. It has protection against heating element and device overheating with alarm output. The heating power is steplessly adjustable with a potentiometer.

Technical data

3x	
230-480 V	
7-25 A	
50/60 Hz	
5000-16000 W	
650 °C	1202 °F
65 °C	149 °F
65 °C	149 °F
390-1250 l/min	13.77-44.14 cfm
100 kPa	14.5 psi
No	
Normally open contact	
No	
92 mm / 3.6 in	
363 mm	14.29 in
116 mm	4.56 in
136 mm	5.35 in
3.65 kg	8.04 lb
CE; S+; UKCA	
	230-480 V 7-25 A 50/60 Hz 5000-16000 W 650 °C 65 °C 390-1250 l/min 100 kPa No Normally open co No 92 mm / 3.6 in 363 mm 116 mm 136 mm 3.65 kg

Phases 3x 230-480 V Voltage 7-25 A Current Frequency 50/60 Hz 5000-16000 W Power 650 °C 1202 °F Max. air outlet temperature 65 °C 149 °F Max. air inlet temperature 65 °C 149 °F Max. ambient temperature Air temperature control Open loop 13.77-44.14 cfm 390-1250 l/min Min. airflow 100 kPa Max. inlet pressure 14.5 psi Overheating protection Yes Alarm output Normally open contact Display No Nozzle connection ø 92 mm / 3.6 in 14.29 in Length 363 mm Width 116 mm 4.56 in Height 136 mm 5.35 in 3.65 kg 8.04 lb Weight CE; S+; UKCA Approvals Protection class L

Product items	
LHS 61L CLASSIC, 3 x 480V/16kW	143.487
LHS 61L CLASSIC, 3 x 400V/16kW	143.488
LHS 61L CLASSIC, 3 x 230V/10kW	143.489
LHS 61L CLASSIC, 3 x 400V/11kW	143.699
LHS 61L CLASSIC, 3 x 480V/11kW	143.700
LHS 61L CLASSIC, 3 x 230V/8kW	143.710
LHS 61L CLASSIC, 3 x 400V/5kW	143.711
LHS 61L CLASSIC, 3 x 400V/8kW	143.712
LHS 61L CLASSIC, 3 x 480V/8kW	143.713

Product items

Technical data

LHS 61L PREMIUM, 3 x 400V/16kW	143.485
LHS 61L PREMIUM, 3 x 480V/16kW	143.486
LHS 61L PREMIUM, 3 x 230V/8kW	143.718
LHS 61L PREMIUM, 3 x 230V/10kW	143.719
LHS 61L PREMIUM, 3 x 400V/5kW	143.720
LHS 61L PREMIUM, 3 x 400V/8kW	143.721
LHS 61L PREMIUM, 3 x 400V/11kW	143.722
LHS 61L PREMIUM, 3 x 480V/8kW	143.723
LHS 61L PREMIUM, 3 x 480V/11kW	143.724



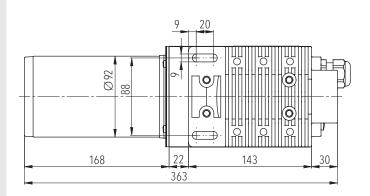
Configure



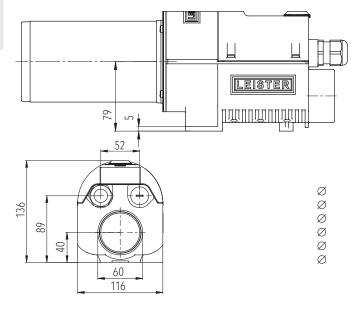
LHS 61L SYSTEM



The LHS 61L SYSTEM is available in 5, 8, 10, 11 or 16 kW. It has a display to show the set/actual values, a remote control interface and protection against heating element and device overheating with alarm output.



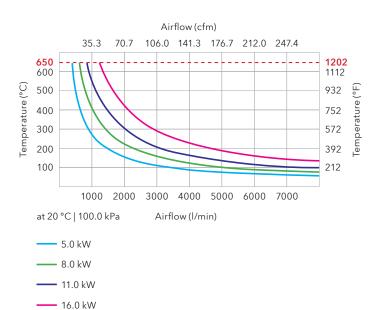
Phases	Зх	
Voltage	230-480 V	
Current	7-25 A	
Frequency	50/60 Hz	
Power	5000-16000 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	65 °C	149 °F
Max. ambient temperature	65 °C	149 °F
Air temperature control	Closed loop	
Min. airflow	390-1250 l/min	13.77-44.14 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	Yes	
Alarm output	Normally open co	ontact
Display	Yes	
Interfaces	0-10V; 4-20mA	
Nozzle connection ø	92 mm / 3.6 in	
Length	363 mm	14.29 in
Width	116 mm	4.56 in
Height	136 mm	5.35 in
Weight	3.65 kg	8.04 lb
Approvals	CE; S+; UKCA	
Protection class	1	



LHS 61L installation dimensions in mm

Product items	
LHS 61L SYSTEM, 3 x 400V/11kW	142.568
LHS 61L SYSTEM, 3 x 400V/16kW	143.478
LHS 61L SYSTEM, 3 x 480V/16kW	143.479
LHS 61L SYSTEM, 3 x 230V/8kW	143.732
LHS 61L SYSTEM, 3 x 230V/10kW	143.733
LHS 61L SYSTEM, 3 x 400V/5kW	143.734
LHS 61L SYSTEM, 3 x 400V/8kW	143.735
LHS 61L SYSTEM, 3 x 480V/8kW	143.736
LHS 61L SYSTEM, 3 x 480V/11kW	143.737





LHS 91 BASIC

LHS 91 SYSTEM



The LHS 91 BASIC is available in 11, 32 or 40 kW. It is suitable for heating and drying processes and can be operated with a higher inlet temperature of up to 100 °C / 212 °F.



The LHS 91 SYSTEM is available in 11, 32 or 40 kW. It has integrated heating element and device overheating protection. Like all SYSTEM appliances, it has an interface for external control.

Technical data

Phases	Зx	
Voltage	400-480 V	
Current	16-48 A	
Frequency	50/60 Hz	
Power	11000-40000 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	100 °C	212 °F
Max. ambient temperature	60 °C	140 °F
Min. airflow	834-3200 l/min	29.45-113 cfm
Overheating protection	No	
Display	No	
Nozzle connection ø	161 mm / 6.35 in	
Length	444 mm	17.48 in
Width	312 mm	12.28 in
Height	306 mm	12.04 in
Weight	13.5 kg	29.76 lb
Approvals	CE; S+	
Protection class		

Phases Зx 400-480 V Voltage 16-48 A Current Frequency 50/60 Hz 11000-40000 W Power Max. air outlet temperature 650 °C 1202 °F Max. air inlet temperature 50 °C 122 °F 60 °C 140 °F Max. ambient temperature Air temperature control Closed loop 840-3200 l/min 29.66-113 cfm Min. airflow Overheating protection Yes Alarm output Normally open contact No Display 0-10V; 4-20mA Interfaces Nozzle connection ø 161 mm / 6.35 in 17.48 in Length 444 mm Width 312 mm 12.28 in Height 306 mm 12.04 in 15.7 kg 34.61 lb Weight Approvals CE; S+ Protection class L

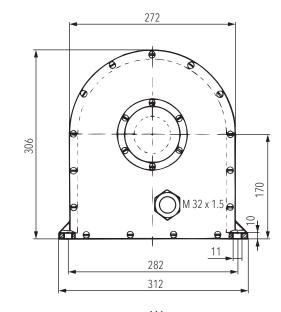
Product items		Product items	
LHS 91 BASIC, 3 x 400V/32kW	100.764	LHS 91 SYSTEM, 3 x 400V/32kW	140.356
LHS 91 BASIC, 3 x 480V/32kW	100.766	LHS 91 SYSTEM, 3 x 400V/11kW	140.358
LHS 91 BASIC, 3 x 400V/11kW	137.009	LHS 91 SYSTEM, 3 x 480V/40kW	145.685
LHS 91 BASIC, 3 x 480V/40kW	139.206	LHS 91 SYSTEM, 3 x 480V/32kW	146.862

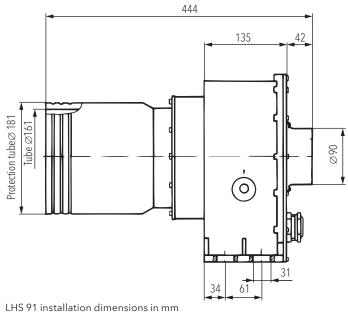
Technical data

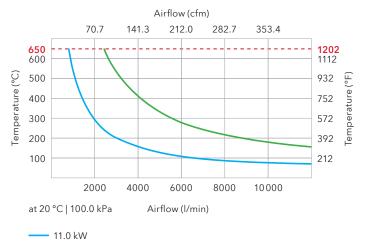


Configure









_____ 32.0 kW



LHS 210 SF

LHS 210 SF-R



The LHS 210 SF is available in 1, 2 or 3.3 kW and can be equipped with various nozzles. With an SSR, the air heater can be integrated into a control circuit using a PWM signal.



The LHS 210 SF-R is available in 1, 2 or 3.3 kW. It has the same properties as the LHS 210 SF and is also hot-air recyclable. This enables considerable cost and energy savings to be achieved.

Technical data

Phases	1x	
Voltage	120-230 V	
Current	4.5-17 A	
Frequency	50/60 Hz	
Power	1000-3300 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	100 °C	212 °F
Max. ambient temperature	65 °C	149 °F
Min. airflow	80-250 l/min	2.82-8.82 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Display	No	
Nozzle connection ø	36.5 mm / 1.45	in
Length	178 mm	7 in
Width	67 mm	2.63 in
Height	175 mm	6.88 in
Weight	1.19 kg	2.62 lb
Approvals	CE; S+; UKCA; c	CURus
Protection class		

Phases	1x	
Voltage	120-230 V	
Current	4.5-17 A	
Frequency	50/60 Hz	
Power	1000-3300 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	350 °C	662 °F
Max. ambient temperature	65 °C	149 °F
Min. airflow	80-250 l/min	2.82-8.82 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Display	No	
Nozzle connection ø	36.5 mm / 1.45 in	
Length	178 mm	7 in
Width	67 mm	2.63 in
Height	282 mm	11.1 in
Weight	1.51 kg	3.32 lb
Approvals	CE; S+; UKCA; cU	Rus
Protection class		

Product items

LTS 210 SF, 2500/5.3800 170.701 LTS 210 SF-K, 2500/5.3800 170.71	LHS 210 SF, 120V/2kW	170.898	LHS 210 SF-R, 120V/2kW	170.909
	LHS 210 SF, 230V/1kW	170.899	LHS 210 SF-R, 230V/1kW	170.910
	LHS 210 SF, 230V/2kW	170.900	LHS 210 SF-R, 230V/2kW	170.911
	LHS 210 SF, 230V/3.3kW	170.901	LHS 210 SF-R, 230V/2.3kW	170.912

Product items

Technical data







LHS 210 DF

LHS 210 DF-R



The LHS 210 DF is available in 1, 2 or 3.3 kW. The flange makes it easy to install in pipe systems. With an SSR, the air heater can be integrated into a control circuit using a PWM signal.



The LHS 210 DF-R is available in 1, 2 or 3.3 kW. It has the same features as the LHS 210 DF and is also hot air recyclable. This enables considerable cost and energy savings to be achieved.

Technical data

Phases	1x				
Voltage	120-230 V	120-230 V			
Current	4.5-17 A				
Frequency	50/60 Hz				
Power	1000-3300 W				
Max. air outlet temperature	650 °C	1202 °F			
Max. air inlet temperature	100 °C	212 °F			
Max. ambient temperature	65 °C	149 °F			
Min. airflow	80-250 l/min	2.82-8.82 cfm			
Max. inlet pressure	100 kPa	14.5 psi			
Overheating protection	No				
Display	No				
Length	168 mm	6.61 in			
Width	67 mm	2.63 in			
Height	175 mm	6.88 in			
Weight	1.25 kg	2.75 lb			
Approvals	CE; S+; UKCA; c	CE; S+; UKCA; cURus			
Protection class	I				

Phases	1x	
Voltage	120-230 V	
Current	4.5-17 A	
Frequency	50/60 Hz	
Power	1000-3300 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	350 °C	662 °F
Max. ambient temperature	65 °C	149 °F
Min. airflow	80-250 l/min	2.82-8.82 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Display	No	
Length	168 mm	6.61 in
Width	67 mm	2.63 in
Height	282 mm	11.1 in
Weight	1.57 kg	3.46 lb
Approvals	CE; S+; UKCA; c	:URus
Protection class	1	

170.931
170.932
170.933
170.934





LHS 210 SF HT

LHS 210 SF-R HT



The LHS 210 SF HT is available in 3.3 kW, reaches a maximum air outlet temperature of 900 °C / 1652 °F and can be equipped with various nozzles. With an SSR, the air heater can be integrated into a control circuit using a PWM signal.



The LHS 210 SF-R HT is available in 3.3 kW. It has the same features as the LHS 210 SF HT and is also capable of hot air recycling. This enables considerable cost and energy savings to be achieved.

Technical data

Phases	1x			
Voltage	230 V			
Current	14.5 A			
Frequency	50/60 Hz			
Power	3300 W			
Max. air outlet temperature	900 °C	1652 °F		
Max. air inlet temperature	100 °C	212 °F		
Max. ambient temperature	65 °C	149 °F		
Min. airflow	175 l/min	6.18 cfm		
Max. inlet pressure	100 kPa	14.5 psi		
Overheating protection	No			
Display	No			
Nozzle connection ø	36.5 mm / 1.4	5 in		
Length	278 mm	10.94 in		
Width	67 mm	2.63 in		
Height	175 mm	6.88 in		
Weight	1.45 kg	3.19 lb		
Approvals	CE; UKCA; cURus			
Protection class				

1x	
230 V	
14.5 A	
50/60 Hz	
3300 W	
900 °C	1652 °F
350 °C	662 °F
65 °C	149 °F
175 l/min	6.18 cfm
100 kPa	14.5 psi
No	
No	
36.5 mm / 1.45 ir	ו
278 mm	10.94 in
67 mm	2.63 in
282 mm	11.1 in
1.78 kg	3.92 lb
CE; UKCA; cURus	5
1	
	230 V 14.5 A 50/60 Hz 3300 W 900 °C 350 °C 65 °C 175 l/min 100 kPa No No 36.5 mm / 1.45 ir 278 mm 67 mm 282 mm 1.78 kg

Product items

LHS 210 SF HT, 230V/3.3kW

176.891

Product items

LHS 210 SF-R HT, 230V/3.3kW

176.894



Configure



LHS 210 DF HT

LHS 210 DF-R HT



The LHS 210 DF HT is available in 3.3 kW, it reaches a maximum air outlet temperature of 900 °C / 1652 °F and the flange makes it easy to install in pipe systems. With an SSR, the air heater can be integrated into a control circuit using a PWM signal.

The LHS 210 DF-R HT is available in 3.3 kW. It has the same features as the LHS 210 DF HT and is also capable of hot air recycling. This enables considerable cost and energy savings to be achieved.

Technical data

1x			
230 V			
14.5 A			
50/60 Hz			
3300 W			
900 °C	1652 °F		
100 °C	212 °F		
65 °C	149 °F		
175 l/min	6.18 cfm		
100 kPa	14.5 psi		
No			
No			
268 mm	10.55 in		
67 mm	2.63 in		
175 mm	6.88 in		
1.53 kg	3.37 lb		
CE; UKCA; cURus			
	230 V 14.5 A 50/60 Hz 3300 W 900 °C 100 °C 65 °C 175 I/min 100 kPa No No 268 mm 67 mm 175 mm 1.53 kg		

Phases	1x	
Voltage	230 V	
Current	14.5 A	
Frequency	50/60 Hz	
Power	3300 W	
Max. air outlet temperature	900 °C	1652 °F
Max. air inlet temperature	350 °C	662 °F
Max. ambient temperature	65 °C	149 °F
Min. airflow	175 l/min	6.18 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Display	No	
_ength	268 mm	10.55 in
Width	67 mm	2.63 in
Height	282 mm	11.1 in
Weight	1.86 kg	4.1 lb
Approvals	CE; UKCA; cUI	Rus
Protection class		

Product items

LHS 210 DF HT, 230V/3.3kW

176.897

Product items

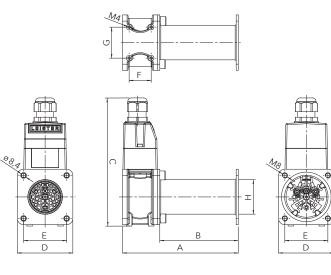
LHS 210 DF-R HT, 230V/3.3kW

176.900

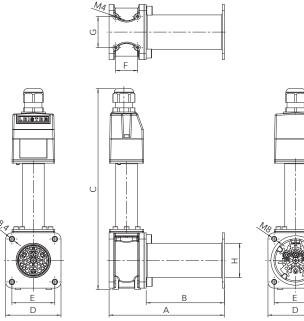








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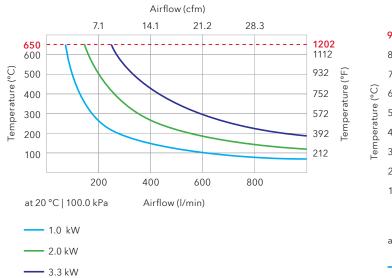


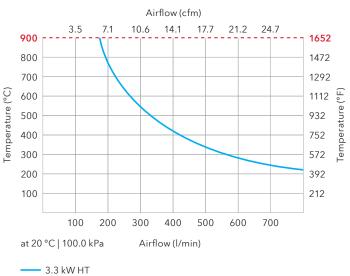
	Α	В	С	D	E	F	G	Н
LHS 210 SF	178	124	175	67	50.8	32	34	36.5
LHS 210 DF	168	114	175	67	50.8	32	34	36.5
LHS 210 SF HT	278	223	175	67	50.8	32	34	36.5
LHS 210 DF HT	268	213	175	67	50.8	32	34	36.5

LHS 210 SF/DF + SF HT/DF HT installation dimensions in mm

	Α	В	С	D	Е	F	G	н
LHS 210 SF-R	178	124	282	67	50.8	32	34	36.5
LHS 210 DF-R	168	114	282	67	50.8	32	34	36.5
LHS 210 SF-R HT	278	223	282	67	50.8	32	34	36.5
LHS 210 DF-R HT	268	213	282	67	50.8	32	34	36.5

LHS 210 SF-R/DF-R + SF-R HT/DF-R HT installation dimensions in mm







LHS 410 SF

LHS 410 SF-R



The LHS 410 SF is available in 2, 3.6, 4.4 or 5.5 kW and can be equipped with various nozzles. With an SSR, the air heater can be integrated into a control circuit using a PWM signal.



The LHS 410 SF-R is available in 2, 3.6, 4.4 or 5.5 kW. It has the same features as the LHS 410 SF and is also hot air recyclable. This enables considerable cost and energy savings to be achieved.

Technical data

Phases	1x					
Voltage	120-400 V	120-400 V				
Current	5-19.5 A	5-19.5 A				
Frequency	50/60 Hz	50/60 Hz				
Power	2000-5500 W					
Max. air outlet temperature	650 °C	1202 °F				
Max. air inlet temperature	100 °C	212 °F				
Max. ambient temperature	65 °C	149 °F				
Min. airflow	160-420 l/min	5.65-14.83 cfm				
Max. inlet pressure	100 kPa	14.5 psi				
Overheating protection	No					
Display	No					
Nozzle connection ø	50 mm / 2 in					
Length	178 mm	7 in				
Width	81 mm	3.18 in				
Height	186 mm	7.32 in				
Weight	1.55 kg	3.41 lb				
Approvals	CE; S+; UKCA; cl	JRus				
Protection class						

Technical data		
Phases	1x	
Voltage	120-400 V	
Current	5-19.5 A	
Frequency	50/60 Hz	
Power	2000-5500 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	350 °C	662 °F
Max. ambient temperature	65 °C	149 °F
Min. airflow	160-420 l/min	5.65-14.83 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Display	No	
Nozzle connection ø	50 mm / 2 in	
Length	178 mm	7 in
Width	81 mm	3.18 in
Height	293 mm	11.53 in
Weight	1.89 kg	4.16 lb
Approvals	CE; S+; UKCA; cUF	Rus
Protection class		

Product items		Product items	
LHS 410 SF, 120V/2kW	170.902	LHS 410 SF-R, 120V/2kW	170.913
LHS 410 SF, 230V/2kW	170.903	LHS 410 SF-R, 230V/2kW	170.914
LHS 410 SF, 230V/3.6kW	170.904	LHS 410 SF-R, 230V/3.6kW	170.915
LHS 410 SF, 230V/4.4kW	170.905	LHS 410 SF-R, 230V/4.4kW	170.916
LHS 410 SF, 400V/2kW	170.906	LHS 410 SF-R, 400V/2kW	170.917
LHS 410 SF, 400V/4.4kW	170.907	LHS 410 SF-R, 400V/4.4kW	170.918
LHS 410 SF, 400V/5.5kW	170.908	LHS 410 SF-R, 400V/5.5kW	170.919



Configure



LHS 410 DF

LHS 410 DF-R



The LHS 410 DF is available in 2, 3.6, 4.4 or 5.5 kW. The flange makes it easy to install in pipe systems. With an SSR, the air heater can be integrated into a control circuit using a PWM signal.



The LHS 410 DF-R is available in 2, 3.6, 4.4 or 5.5 kW. It has the same features as the LHS 410 DF and is also hot air recyclable. This enables considerable cost and energy savings to be achieved.

Technical data

Phases	1x					
Voltage	120-400 V	120-400 V				
Current	5-19.5 A	5-19.5 A				
Frequency	50/60 Hz	50/60 Hz				
Power	2000-5500 W	2000-5500 W				
Max. air outlet temperature	650 °C	1202 °F				
Max. air inlet temperature	100 °C	212 °F				
Max. ambient temperature	65 °C	149 °F				
Min. airflow	160-420 l/min	5.65-14.83 cfm				
Max. inlet pressure	100 kPa	14.5 psi				
Overheating protection	No					
Display	No					
Length	168 mm	6.61 in				
Width	81 mm	3.18 in				
Height	186 mm	7.32 in				
Weight	1.65 kg	3.63 lb				
Approvals	CE; S+; UKCA; cl	JRus				
Protection class						

Phases	1x	
Voltage	120-400 V	
Current	5-19.5 A	
Frequency	50/60 Hz	
Power	2000-5500 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	350 °C	662 °F
Max. ambient temperature	65 °C	149 °F
Min. airflow	160-420 l/min	5.65-14.83 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Display	No	
Length	168 mm	6.61 in
Width	81 mm	3.18 in
Height	293 mm	11.53 in
Weight	1.99 kg	4.38 lb
Approvals	CE; S+; UKCA; cl	JRus
Protection class	1	

Product items		Product items	
LHS 410 DF, 120V/2kW	170.924	LHS 410 DF-R, 120V/2kW	170.935
LHS 410 DF, 230V/2kW	170.925	LHS 410 DF-R, 230V/2kW	170.936
LHS 410 DF, 230V/3.6kW	170.926	LHS 410 DF-R, 230V/3.6kW	170.937
LHS 410 DF, 230V/4.4kW	170.927	LHS 410 DF-R, 230V/4.4kW	170.938
LHS 410 DF, 400V/2kW	170.928	LHS 410 DF-R, 400V/2kW	170.939
LHS 410 DF, 400V/4.4kW	170.929	LHS 410 DF-R, 400V/4.4kW	170.940
LHS 410 DF, 400V/5.5kW	170.930	LHS 410 DF-R, 400V/5.5kW	170.941





LHS 410 SF HT

LHS 410 SF-R HT



The LHS 410 SF HT is available in 4.4 or 5.5 kW, a maximum air outlet temperature of 900 °C / 1652 °F and can be equipped with various nozzles. With an SSR, the air heater can be integrated into a control circuit using a PWM signal.



The LHS 410 SF-R HT is available in 4.4 or 5.5 kW. It has the same features as the LHS 410 SF HT and is also capable of hot air recycling. This enables considerable cost and energy savings to be achieved.

Technical data

Phases	1x				
Voltage	230-400 V				
Current	14-19.5 A				
Frequency	50/60 Hz				
Power	4400-5500 W				
Max. air outlet temperature	900 °C	1652 °F			
Max. air inlet temperature	100 °C	212 °F			
Max. ambient temperature	65 °C	149 °F			
Min. airflow	292 l/min	10.31 cfm			
Max. inlet pressure	100 kPa	14.5 psi			
Overheating protection	No				
Display	No				
Nozzle connection ø	50 mm / 2 in				
Length	278 mm	10.94 in			
Width	81 mm	3.18 in			
Height	186 mm	7.32 in			
Weight	1.97 kg	4.34 lb			
Approvals	CE; UKCA; cUI	Rus			
Protection class	1				

1652 °F
662 °F
149 °F
10.31 cfm
14.5 psi
10.94 in
3.18 in
11.53 in
5.09 lb

Product items

LHS 410 SF HT, 230V/4.4kW LHS 410 SF HT, 400V/5.5kW

176.892 176.893

Product items

LHS 410 SF-R HT, 230V/4.4kW LHS 410 SF-R HT, 400V/5.5kW 176.895 176.896





LHS 410 DF HT

LHS 410 DF-R HT



The LHS 410 DF HT is available in 4.4 or 5.5 kW, a maximum air outlet temperature of 900 °C / 1652 °F and the flange makes it easy to install in pipe systems. With an SSR, the air heater can be integrated into a control circuit using a PWM signal.

The LHS 410 DF-R HT is available in 4.4 or 5.5 kW. It has the same features as the LHS 410 DF HT and is also capable of hot air recycling. This enables considerable cost and energy savings to be achieved.

Technical data

Phases	1x					
Voltage	230-400 V					
Current	14-19.5 A	14-19.5 A				
Frequency	50/60 Hz					
Power	4400-5500 W					
Max. air outlet temperature	900 °C	1652 °F				
Max. air inlet temperature	100 °C	212 °F				
Max. ambient temperature	65 °C	149 °F				
Min. airflow	292 l/min	10.31 cfm				
Max. inlet pressure	100 kPa	14.5 psi				
Overheating protection	No					
Display	No					
Length	268 mm	10.55 in				
Width	81 mm	3.18 in				
Height	186 mm	7.32 in				
Weight	2.09 kg	4.6 lb				
Approvals	CE; UKCA; cUF	Rus				
Protection class	I					

Phases	1x	
Voltage	230-400 V	
Current	14-19.5 A	
Frequency	50/60 Hz	
Power	4400-5500 W	
Max. air outlet temperature	900 °C	1652 °F
Max. air inlet temperature	350 °C	662 °F
Max. ambient temperature	65 °C	149 °F
Min. airflow	292 l/min	10.31 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Display	No	
Length	268 mm	10.55 in
Width	81 mm	3.18 in
Height	293 mm	11.53 in
Weight	2.42 kg	5.33 lb
Approvals	CE; UKCA; cUF	Rus
Protection class	1	

Product items

LHS 410 DF HT, 230V/4.4kW LHS 410 DF HT, 400V/5.5kW

176.898 176.899

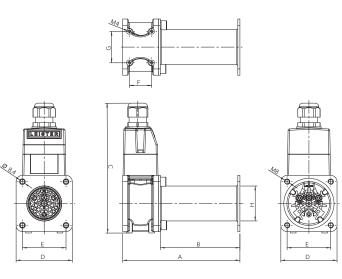
Product items

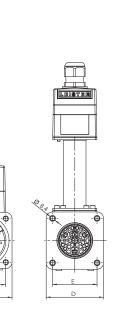
LHS 410 DF-R HT, 230V/4.4kW LHS 410 DF-R HT, 400V/5.5kW 176.901 176.902



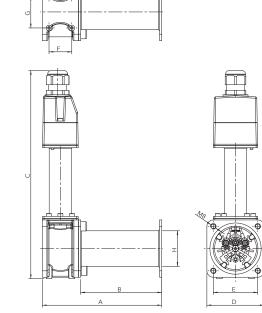








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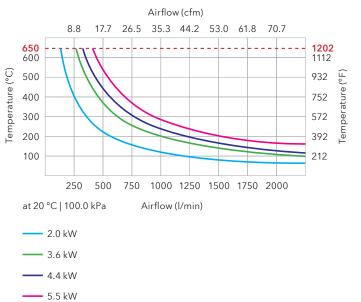


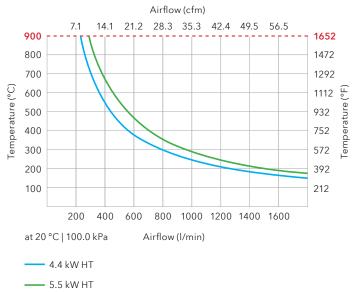
	Α	В	С	D	E	F	G	н
LHS 410 SF	178	124	186	81	62.5	32	45	50
LHS 410 DF	168	114	186	81	62.5	32	45	50
LHS 410 SF HT	278	223	186	81	62.5	32	45	50
LHS 410 DF HT	268	213	186	81	62.5	32	45	50

LHS 410 SF/DF + SF HT/DF HT installation dimensions in mm

	Α	В	С	D	Е	F	G	н
LHS 410 SF-R	178	124	293	81	62.5	32	45	50
LHS 410 DF-R	168	114	293	81	62.5	32	45	50
LHS 410 SF-R HT	278	223	293	81	62.5	32	45	50
LHS 410 DF-R HT	268	213	293	81	62.5	32	45	50

LHS 410 SF-R/DF-R + SF-R HT/DF-R HT installation dimensions in mm







LE MINI

LE MINI SENSOR



The LE MINI is a very small air heater and is available in 400 or 800 W. Operated with compressed air, it is used particularly for point-accurate work with process heat in industrial production.

The LE MINI SENSOR is available in 400 or 800 W. The device has an integrated temperature sensor which can be read out externally. It also has a thermal switch for appliance protection and heating element protection.

Technical data

Phases	1x	
Voltage	120-230 V	
Frequency	50/60 Hz	
Power	400-800 W	
Max. air outlet temperature	600-750 °C	1112-1382 °F
Max. air inlet temperature	60 °C	140 °F
Max. ambient temperature	60 °C	140 °F
Min. airflow	25-30 l/min	0.88-1.05 cfm
Max. inlet pressure	200 kPa	
Overheating protection	No	
Display	No	
Length	253-308 mm	9.96-12.12 in
Width	25 mm	0.98 in
Height	25 mm	0.98 in
Weight	0.12-0.15 kg	0.26-0.33 lb
Approvals	CE; S+; UKCA	
Protection class	II	

Technical data			
Phases	1x		
Voltage	120-230 V		
Frequency	50/60 Hz		
Power	400-800 W		
Max. air outlet temperature	600-750 °C	1112-1382 °F	
Max. air inlet temperature	60 °C	140 °F	
Max. ambient temperature	60 °C	140 °F	
Min. airflow	10 l/min	0.35 cfm	
Max. inlet pressure	200 kPa		
Overheating protection	Yes		
Alarm output	Normally open contact		
Display	No		
Interfaces	4-20mA		
Length	253-308 mm	9.96-12.12 in	
Width	25 mm	0.98 in	
Height	25 mm	0.98 in	
Weight	0.31-0.34 kg	0.68-0.74 lb	
Approvals	CE; S+; UKCA		
Protection class	11		

Product items

LE MINI, 230V/800W	115.369	LE MI
LE MINI, 230V/400W	115.682	LE MI
LE MINI, 120V/400W	115.683	LE MI

Product items

LE MINI SENSOR, 230V/800W	117.369
LE MINI SENSOR, 230V/400W	117.370
LE MINI SENSOR, 120V/400W	117.371







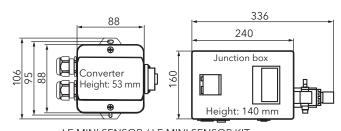
LE MINI SENSOR KIT

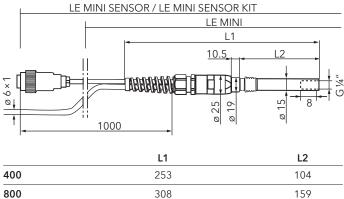


The LE MINI SENSOR KIT is available in 400 or 800 W. Power electronics including temperature controller are integrated in the connection box. This makes the kit the perfect plug'n play solution.

Technical data

Phases	1x	
Voltage	120-230 V	
Frequency	50/60 Hz	
Power	400-800 W	
Max. air outlet temperature	600-750 °C	1112-1382 °F
Max. air inlet temperature	60 °C	140 °F
Max. ambient temperature	60 °C	140 °F
Air temperature control	Closed loop	
Min. airflow	10 l/min	0.35 cfm
Max. inlet pressure	200 kPa	29 psi
Overheating protection	Yes	
Alarm output	Normally open o	contact
Display	Yes	
Length	253-308 mm	9.96-12.12 in
Width	25 mm	0.98 in
Height	25 mm	0.98 in
Weight	2.6 kg	5.73 lb
Approvals	CE; UKCA	
Protection class		

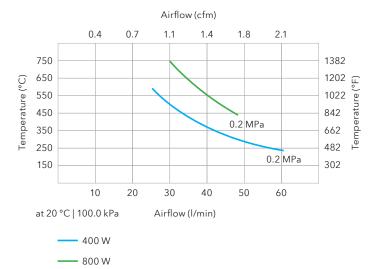




LE MINI/LE MINI SENSOR/LE MINI SENSOR KIT installation dimensions in mm

Product items

LE MINI SENSOR KIT, 230V/800W	125.416
LE MINI SENSOR KIT, 120V/400W	128.536





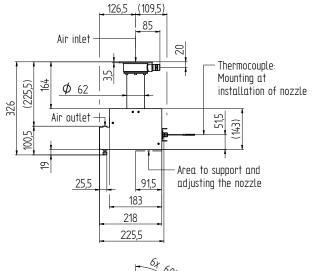
LE 5000 HT-U / HT-S

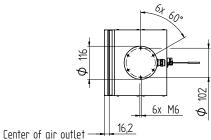


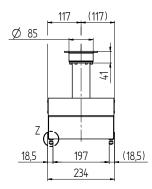
The sealing units for longitudinal sealing of beverage carton packaging with hot air are available in two different versions: LE 5000 HT-U and LE 5000 HT-S. Production speeds of up to 700 m/min can be achieved at a maximum temperature of up to 900 °C / 1652 °F.

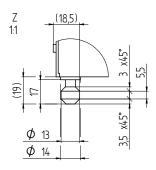
Technical data

Phases	3x	
Voltage	200-480 V	
Current	9-20 A	
Frequency	50/60 Hz	
Power	7000-7500 W	
Max. air outlet temperature	900 °C	1652 °F
Max. air inlet temperature	80 °C	176 °F
Max. ambient temperature	80 °C	176 °F
Min. airflow	400 l/min	14.12 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Display	No	
Version	Туре S; Туре U	
Length	224.5 mm	8.83 in
Width	234 mm	9.21 in
Height	326-327 mm	12.83-12.87 in
Weight	9 kg	19.84 lb
Approvals	CE; UKCA; cURus	
Protection class	I	











LE 5000 HT-U, 3 x 400V/7.5kW

LE 5000 HT-S, 3 x 400V/7.5kW



Product items

LE 5000 HT-U installation dimensions in mm

116.761

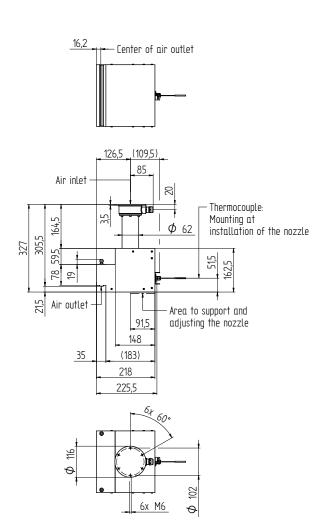
116.763

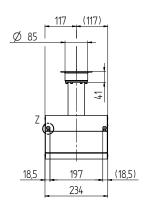
127.581

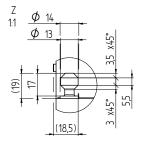
127.582

163.564

163.565







LE 5000 HT-S installation dimensions in mm



LE 5000 DF

LE 5000 DF HT



The LE 5000 DF is available in 4.5, 6.5, 7.5 or 8 kW. It achieves a maximum air outlet temperature of 700 °C / 1292 °F and can be operated at an inlet temperature of up to 150 °C / 302 °F. It is suitable for integration into air duct systems.



The LE 5000 DF HT is available in 7, 7.5 or 11 kW. It reaches a maximum air outlet temperature of 900 °C / 1652 °F and can be operated at an inlet temperature of up to 150 °C / 302 °F. It is suitable for integration into air duct systems.

Technical data

	-	
Phases	3x	
Voltage	230-400 V	
Current	7-20 A	
Frequency	50/60 Hz	
Power	4500-8000 W	
Max. air outlet temperature	700 °C	1292 °F
Max. air inlet temperature	150 °C	302 °F
Max. ambient temperature	100 °C	212 °F
Min. airflow	320-550 l/min	11.3-19.42 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Display	No	
Length	184 mm	7.24 in
Width	116 mm	4.56 in
Height	116 mm	4.56 in
Weight	1.9-2.6 kg	4.18-5.73 lb
Approvals	CE; EAC; UKCA;	cURus
Protection class		

Technical data

Phases	Зx	
Voltage	200-400 V	
Current	11-21 A	
Frequency	50/60 Hz	
Power	7000-11000 W	
Max. air outlet temperature	900 °C	1652 °F
Max. air inlet temperature	150 °C	302 °F
Max. ambient temperature	100 °C	212 °F
Min. airflow	380-580 l/min	13.41-20.48 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Display	No	
Length	246 mm	9.68 in
Width	116 mm	4.56 in
Height	116 mm	4.56 in
Weight	3.1 kg	6.83 lb
Approvals	CE; UKCA; cURu	S
Protection class		

Product items
LE 5000 DF, 3 x 400V/7.5kW
LE 5000 DF, 3 x 230V/8kW
LE 5000 DF, 3 x 400V/4.5kW
LE 5000 DF, 3 x 400V/6.5kW
LE 5000 DF, 3 x 400V/4.5kW, sealed

Product items

114.240 116.067 117.551 127.872

128.879

LE 5000 DF HT, 3 x 400V/7.5kW	147.334
LE 5000 DF HT, 3 x 400V/11kW	147.820
LE 5000 DF HT, 3 x 200V/7.0kW	151.676





LE 5000 DF-R

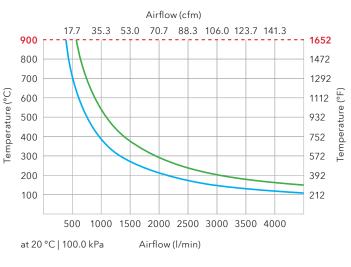


The LE 5000 DF-R is available in 4.5, 6.5, 7.5 or 8 kW. It achieves a maximum air outlet temperature of 700 °C / 1292 °F and is also capable of hot air recycling. This enables considerable cost and energy savings to be achieved.

LE 5000 DF/DF HT/DF-R installation dimensions in mm



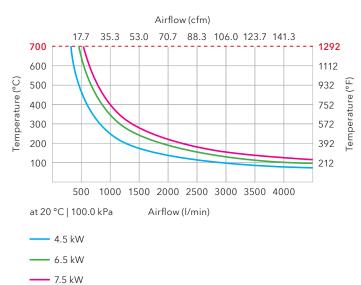
Phases	Зx	
Voltage	230-400 V	
Current	6.5-20 A	
Frequency	50/60 Hz	
Power	4500-8000 W	
Max. air outlet temperature	700 °C	1292 °F
Max. air inlet temperature	350 °C	662 °F
Max. ambient temperature	200 °C	392 °F
Min. airflow	320-550 l/min	11.3-19.42 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Display	No	
Length	184 mm	7.24 in
Width	116 mm	4.56 in
Height	116 mm	4.56 in
Weight	2 kg	4.4 lb
Approvals	CE; UKCA	
Protection class		



184 HT 246



— 11.0 kW HT



Product items	
LE 5000 DF-R, 3 x 400V/4.5kW	146.480
LE 5000 DF-R, 3 x 230V/8kW	146.793
LE 5000 DF-R, 3 x 400V/6.5kW	146.794
LE 5000 DF-R, 3 x 400V/7.5kW	146.795

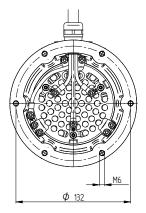
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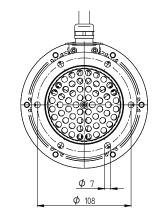
69

LE 10000 DF-C



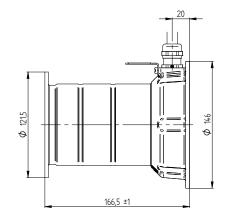
The LE 10000 DF-C air heater is suitable for integration in industrial air systems under hygienic conditions, e. g. manufacture of food and pharmaceutical, cosmetic and electronic products.





Technical data

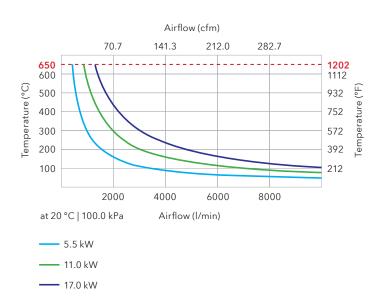
Phases	Зх	
Voltage	230-480 V	
Current	6-25 A	
Frequency	50/60 Hz	
Power	4500-17000 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	150 °C	302 °F
Max. ambient temperature	100 °C	212 °F
Min. airflow	320-1300 l/min	11.3-45.9 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Display	No	
Length	166.5 mm	6.55 in
Width	146 mm	5.74 in
Height	146 mm	5.74 in
Weight	3.9-5.02 kg	8.59-11.06 lb
Approvals	CE; UKCA; cURus	
Protection class		



LE 10000 DF-C installation dimensions in mm

Product items	
LE 10000 DF-C, 3 x 230V/8kW	146.288
LE 10000 DF-C, 3 x 230V/10kW	146.916
LE 10000 DF-C, 3 x 400V/5.5kW	147.323
LE 10000 DF-C, 3 x 400V/11kW	147.324
LE 10000 DF-C, 3 x 400V/17kW	147.325
LE 10000 DF-C, 3 x 480V/4.5kW	153.783
LE 10000 DF-C, 3 x 480V/8kW	154.088
LE 10000 DF-C, 3 x 480V/10kW	154.276





LE 10000 DF

LE 10000 DF HT



The LE 10000 DF is available in 5.5, 8, 11, 16 or 17 kW. It achieves a maximum air outlet temperature of 650 °C / 1202 °F and can be operated at an inlet temperature of up to 150 °C / 302 °F. It is suitable for integration into air duct systems.



The LE 10000 DF HT is available in 15 or 22 kW. It achieves a maximum air outlet temperature of 900 °C / 1652 °F and can be operated at an inlet temperature of up to 150 °C / 302 °F. It is suitable for integration into air duct systems.

Technical data

Phases	Зx	
Voltage	400-480 V	
Current	8-25 A	
Frequency	50/60 Hz	
Power	5500-17000 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	150 °C	302 °F
Max. ambient temperature	100 °C	212 °F
Min. airflow	420-1300 l/min	14.83-45.9 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Display	No	
Length	167 mm	6.57 in
Width	146 mm	5.74 in
Height	146 mm	5.74 in
Weight	3.4-4.5 kg	7.49-9.92 lb
Approvals	CE; EAC; UKCA; cURus	
Protection class		

Phases Зx Voltage 400-480 V 18-32 A Current Frequency 50/60 Hz 15000-22000 W Power Max. air outlet temperature 900 °C 1652 °F Max. air inlet temperature 150 °C 302 °F 100 °C 212 °F Max. ambient temperature Min. airflow 800-1200 l/min 28.25-42.37 cfm Max. inlet pressure 100 kPa 14.5 psi

Overheating protection	No	
Display	No	
Length	261-283 mm	10.27-11.14 in
Width	146 mm	5.74 in
Height	146 mm	5.74 in
Weight	4-6.1 kg	8.81-13.44 lb
Approvals	CE; EAC; UKCA; cURus	
Protection class		

Product items

LE 10000 DF, 3 x 400V/11kW	114.555
LE 10000 DF, 3 x 400V/5.5kW	115.571
LE 10000 DF, 3 x 400V/17kW	116.135
LE 10000 DF, 3 x 480V/8kW	117.276
LE 10000 DF, 3 x 480V/16kW	117.759
LE 10000 DF, 3 x 400V/17kW, sealed	130.865

Product items

Technical data

LE 10000 DF HT, 3 x 400V/15kW	116.056
LE 10000 DF HT, 3 x 480V/15kW	117.313
LE 10000 DF HT, 3 x 400V/22kW	167.217





LE 10000 DF-R

LE 10000 DF-R HT



The LE 10000 DF-R is available in 5.5, 8, 11, 16 or 17 kW. It achieves a maximum air outlet temperature of 650 °C / 1202 °F and is also capable of hot air recycling. This enables considerable cost and energy savings to be achieved.



The LE 10000 DF-R HT is available in 15 kW. It achieves a maximum air outlet temperature of 900 °C / 1652 °F and is also capable of hot air recycling. This enables considerable cost and energy savings to be achieved.

Technical data

Phases	Зx	
Voltage	400-480 V	
Current	8-25 A	
Frequency	50/60 Hz	
Power	5500-17000 W	
Max. air outlet temperature	650 °C	1202 °F
Max. air inlet temperature	350 °C	662 °F
Max. ambient temperature	200 °C	392 °F
Min. airflow	420-1300 l/min	14.83-45.9 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Display	No	
Length	167 mm	6.57 in
Width	146 mm	5.74 in
Height	146 mm	5.74 in
Weight	2.7-3.5 kg	5.95-7.71 lb
Approvals	CE; UKCA	
Protection class		

Technical data

Phases	Зx	
Voltage	400 V	
Current	22 A	
Frequency	50/60 Hz	
Power	15000 W	
Max. air outlet temperature	900 °C	1652 °F
Max. air inlet temperature	350 °C	662 °F
Max. ambient temperature	200 °C	392 °F
Min. airflow	800 l/min	28.25 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Display	No	
Length	261 mm	10.27 in
Width	146 mm	5.74 in
Height	146 mm	5.74 in
Weight	3.3 kg	7.27 lb
Approvals	CE	
Protection class	1	

Product items	
LE 10000 DF-R, 3 x 400V/11kW	146.479
LE 10000 DF-R, 3 x 400V/5.5kW	146.796
LE 10000 DF-R, 3 x 400V/17kW	146.797
LE 10000 DF-R, 3 x 480V/8kW	146.942
LE 10000 DF-R, 3 x 480V/16kW	146.946

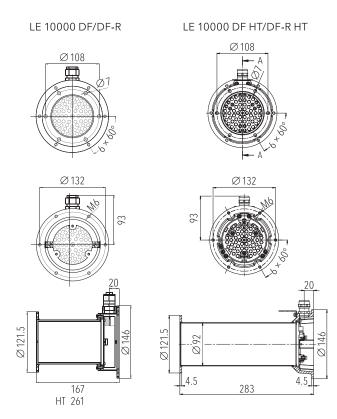
Product items

LE 10000 DF-R HT, 3 x 400V/15kW

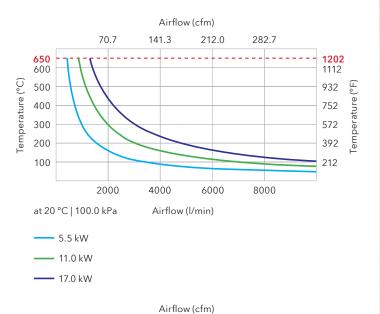
146.850

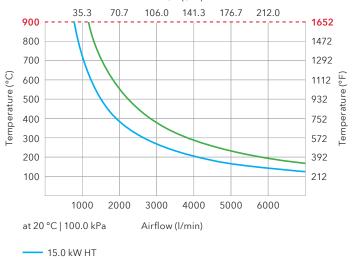






LE 10000 DF/DF HT/DF-R/DF-R HT installation dimensions in mm









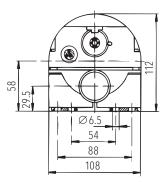
LE 5000 HT

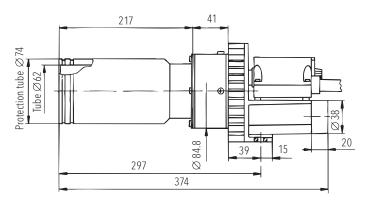


The LE 5000 HT is available in 11 kW. It achieves a maximum air outlet temperature of 900 $^{\circ}$ C / 1652 $^{\circ}$ F and can be operated at an inlet temperature of up to 100 $^{\circ}$ C / 212 $^{\circ}$ F. The air heater can be equipped with various nozzles.

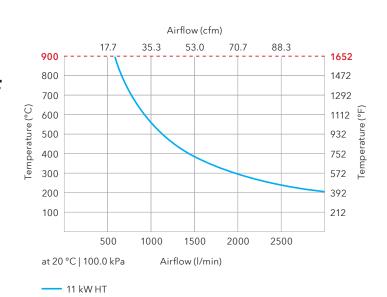
Technical data

Phases	Зх	
Voltage	400 V	
Current	16 A	
Frequency	50/60 Hz	
Power	11000 W	
Max. air outlet temperature	900 °C	1652 °F
Max. air inlet temperature	100 °C	212 °F
Max. ambient temperature	100 °C	212 °F
Min. airflow	580 l/min	20.48 cfm
Overheating protection	No	
Display	No	
Nozzle connection ø	62 mm / 2.45 i	n
Length	374 mm	14.72 in
Width	108 mm	4.25 in
Height	112 mm	4.4 in
Weight	2.25 kg 4.96 lb	
Approvals	CE	
Protection class		





LE 5000 HT installation dimensions in mm



Product items

LE 5000 HT, 3 x 400V/11kW

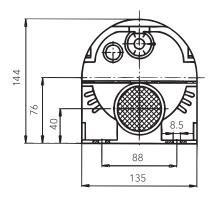
108.717



LE 10000 HT

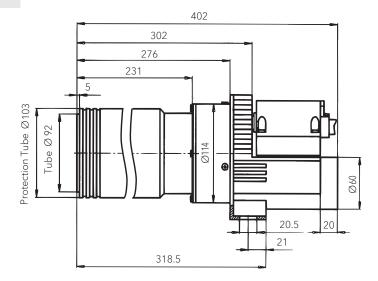


The LE 10000 HT is available in 15 kW. It reaches a maximum air outlet temperature of 900 $^{\circ}$ C / 1652 $^{\circ}$ F and can be operated at an inlet temperature of up to 100 $^{\circ}$ C / 212 $^{\circ}$ F. The air heater can be equipped with various nozzles.



Technical data

Phases	3x	
Voltage	400-480 V	
Current	18-22 A	
Frequency	50/60 Hz	
Power	15000 W	
Max. air outlet temperature	900 °C	1652 °F
Max. air inlet temperature	100 °C	212 °F
Max. ambient temperature	100 °C	212 °F
Min. airflow	800 l/min	28.25 cfm
Max. inlet pressure	100 kPa	14.5 psi
Overheating protection	No	
Display	No	
Nozzle connection ø	92 mm / 3.6 in	
Length	402 mm	15.82 in
Width	135 mm	5.31 in
Height	144 mm	5.66 in
Weight	4 kg	8.81 lb
Approvals	CE	
Protection class		

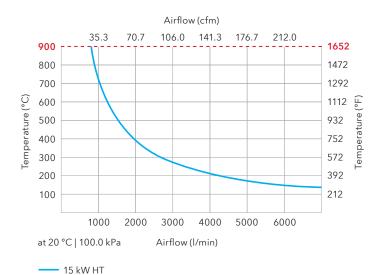


LE 10000 HT installation dimensions in mm

Product items

LE	10000	HT,	3 x	400V/1	5kW
LE	10000	HT,	3 x	480V/1	5kW

110.568 113.349





Solid state relay (SSR)



The single-phase and three-phase solid state relay (SSR) are suitable for controlling various Leister air heaters. They are controlled by a PWM signal provided by the CSS, E5CC or a PLC.

E5CC Temperature Controller



The E5CC temperature controller precisely regulates the air temperature of Leister air heaters and Leister hot air blowers. The display of the target and actual temperature as well as two freely programmable alarm outputs are integrated.

Technical data

Phases	1x; 3x	
Voltage	42-600 V	
Current	20-40 A	
Frequency	50/60 Hz	
Interfaces	PWM	
Ambient temperature	-40-80 °C	-40-176 °F
Length	110 mm	4.33 in
Width	17.8-72 mm	0.7-2.83 in
Height	103-125.5 mm	4.05-4.94 in
Weight	0.26-0.92 kg	0.57-2.02 lb
Approvals	CE; EAC; UL	

Technical data

Phases	1x	
Voltage	100-240 V	
Frequency	50/60 Hz	
Temperature sensor Type	K; N; PT100;	S
Output signals	4-20mA; PWI	N
Control behaviour	PID	
Length	66 mm	2.59 in
Width	48 mm	1.88 in
Height	48 mm	1.88 in
Weight	0.1 kg	0.22 lb
Plug	without plug	
Approvals	CE; UL	
Protection class	11	

Product items

Solid state relay (SSR), 3 x 600V/40A Solid state relay (SSR), 600V/20A 159.220 173.257

Product items

E5CC temperature controller, 100-240V

137.720

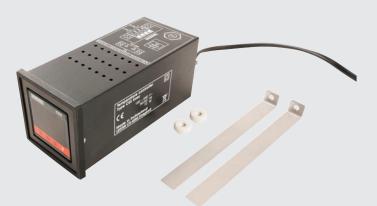




CSS EASY



The CSS temperature controller can be used universally and regulates the air temperature of air heaters and hot air blowers optimally and precisely. It also has a 24 VDC power supply.



The CSS EASY temperature controller can be used universally and regulates the air temperature of air heaters and hot air blowers optimally and precisely. It also has a 24 VDC power supply. It has an RJ45 plug.

Technical data

Phases	1x	
Voltage	100-240 V	
Frequency	50/60 Hz	
Temperature sensor Type	K; PT100; S	
Output signals	0-10V; 24VDC	; 4-20mA; PWM
Control behaviour	PID	
Length	109 mm	4.29 in
Width	48 mm	1.88 in
Height	48 mm	1.88 in
Weight	0.2 kg	0.44 lb
Plug	without plug	
Approvals	CE	
Protection class		

Technical data

Phases	1x	
Voltage	100-240 V	
Frequency	50/60 Hz	
Temperature sensor Type	К	
Output signals	0-10V; 24VDC	; 4-20mA
Control behaviour	PID	
Length	175 mm	6.88 in
Width	72 mm	2.83 in
Height	72 mm	2.83 in
Weight	0.45 kg	0.99 lb
Plug	CH T11, 2 pol	es, 10A
Approvals	CE	
Protection class		

Product items

CSS

123.039

Product items

CSS EASY

125.944







Possible combinations of blower and air heater

Blower combined with LHS 15

Blower Type	Number of LHS 15, Power in kW	Airflow I/min (cfm)	Temperature °C (°F)
ROBUST	1 × LHS 15, 0.77 kW	1 × 86 (3.037)	453 (847)
ROBUST	2 × LHS 15, 0.77 kW	2×81 (2.860)	479 (895)

Blower combined with LHS 21

Blower Type	Number of LHS 21, Power in kW	Airflow I/min (cfm)	Temperature °C (°F)
MONO	2 × LHS 21S, 1.0 kW	2 × 227 (8.016)	239 (461)
MONO	1 × LHS 21S, 2.0 kW	1 × 289 (10.206)	359 (679)
MONO	2 × LHS 21S, 2.0 kW	2 × 215 (7.593)	472 (882)
ROBUST	1 × LHS 21S, 1.0 kW	1 × 427 (15.079)	137 (279)
ROBUST	2 × LHS 21S, 1.0 kW	2 × 324 (11.442)	174 (345)
ROBUST	4 × LHS 21S, 1.0 kW	4×206 (7.275)	260 (501)
ROBUST	1 × LHS 21S, 2.0 kW	1 × 396 (13.985)	269 (517)
ROBUST	2 × LHS 21S, 2.0 kW	2 × 305 (10.771)	342 (647)
ROBUST	4 × LHS 21S, 2.0 kW	4 × 198 (6.992)	508 (946)
ROBUST	1 × LHS 21L, 3.3 kW	1 × 356 (12.572)	470 (878)
ROBUST	2 × LHS 21L, 3.3 kW	2 × 280 (9.888)	586 (1086)
AIRPACK	4×LHS 21L, 3.3 kW	4 × 711 (25.109)	250 (482)

Blower combined with LHS 210

Blower Type	Number of LHS 210, Power in kW	Airflow I/min (cfm)	Temperature °C (°F)
MONO	1 × LHS 210, 1.0 kW	1 × 297 (10.488)	187 (369)
MONO	1 × LHS 210, 2.0 kW	1 × 251 (8.864)	409 (769)
MONO	2 × LHS 210, 2.0 kW	2 × 195 (6.886)	517 (962)
ROBUST	1 × LHS 210, 1.0 kW	1 × 413 (14.585)	141 (286)
ROBUST	1 × LHS 210, 2.0 kW	1 × 396 (13.985)	297 (566)
ROBUST	1 × LHS 210, 3.3 kW	1 × 357 (12.607)	469 (875)
ROBUST	2 × LHS 210, 3.3 kW	2 × 278 (9.817)	589 (1092)
AIRPACK	4 × LHS 210, 3.3 kW	4 × 610 (21.542)	287 (548)

Blower combined with LHS 41

Blower Type	Number of LHS 41, Power in kW	Airflow l/min (cfm)	Temperature °C (°F)
MONO	1 × LHS 41S, 2.0 kW	1 × 465 (16.421)	233 (452)
MONO	1 × LHS 41S, 3.6 kW	1 × 440 (15.538)	419 (786)
ROBUST	2 × LHS 41S, 2.0 kW	2 × 418 (14.762)	257 (494)
ROBUST	4 × LHS 41S, 2.0 kW	4×230 (8.122)	443 (829)
ROBUST	1 × LHS 41S, 3.6 kW	1 × 638 (22.531)	298 (569)
ROBUST	2 × LHS 41S, 3.6 kW	2 × 403 (14.232)	454 (850)
SILENCE	2 × LHS 41S, 2.0 kW	2 × 385 (13.596)	277 (530)
SILENCE	4 × LHS 41S, 2.0 kW	4 × 369 (13.031)	288 (550)
SILENCE	1 × LHS 41S, 3.6 kW	1 × 326 (11.513)	551 (1024)
SILENCE	2 × LHS 41S, 3.6 kW	2 × 325 (11.477)	553 (1028)
SILENCE	4 × LHS 41S, 3.6 kW	4 × 316 (11.159)	569 (1055)
ASO	4 × LHS 41S, 2.0 kW	4 × 438 (15.468)	246 (475)
ASO	4 × LHS 41S, 3.6 kW	4 × 422 (14.903)	435 (816)
ROBUST	2 × LHS 41L, 2.0 kW	2 × 407 (14.373)	263 (506)
ROBUST	4 × LHS 41L, 2.0 kW	4 × 227 (8.016)	449 (840)
ROBUST	1 × LHS 41L, 4.4 kW	1 × 558 (19.706)	405 (761)
ROBUST	2 × LHS 41L, 4.4 kW	2 × 372 (13.137)	588 (1090)
SILENCE	2 × LHS 41L, 2.0 kW	2 × 338 (11.936)	311 (592)
SILENCE	4 × LHS 41L, 2.0 kW	4 × 327 (11.548)	321 (609)
ASO	4 × LHS 41L, 2.0 kW	4 × 438 (15.468)	246 (475)

Blower combined with LHS 410

Blower Type	Number of LHS 410, Power in kW	Airflow I/min (cfm)	Temperature °C (°F)
MONO	1 × LHS 410, 2.0 kW	1 × 439 (15.503)	246 (474)
ROBUST	1 × LHS 410, 2.0 kW	1 × 632 (22.319)	178 (352)
ROBUST	2 × LHS 410, 2.0 kW	2 × 403 (14.232)	266 (510)
ROBUST	1 × LHS 410, 4.4 kW	1 × 553 (19.529)	409 (767)
ROBUST	2 × LHS 410, 4.4 kW	2 × 371 (13.102)	589 (1092)
SILENCE	1 × LHS 410, 2.0 kW	1 × 327 (11.548)	321 (611)
SILENCE	2 × LHS 410, 2.0 kW	2 × 325 (11.477)	323 (613)
SILENCE	4 × LHS 410, 2.0 kW	4 × 316 (11.159)	331 (629)
ASO	4 × LHS 410, 2.0 kW	4 × 420 (14.832)	256 (493)

Blower combined with LHS 61

Blower Type	Number of LHS 61, Power in kW	Airflow I/min (cfm)	Temperature °C (°F)
ROBUST	2 × LHS 61S, 4.0 kW	2 × 455 (16.068)	448 (838)
ROBUST	1 × LHS 61S, 6.0 kW	1 × 802 (28.322)	386 (727)
SILENCE	1 × LHS 61S, 4.0 kW	1 × 704 (24.862)	299 (571)
SILENCE	1 × LHS 61S, 6.0 kW	1 × 635 (22.425)	478 (893)
SILENCE	2 × LHS 61S, 4.0 kW	2×680 (24.014)	310 (590)
SILENCE	2 × LHS 61S, 6.0 kW	2×617 (21.789)	491 (916)
ASO	2 × LHS 61S, 4.0 kW	2×922 (32.560)	235 (455)
ASO	2 × LHS 61S, 6.0 kW	2×826 (29.170)	376 (708)
ASO	4 × LHS 61S, 6.0 kW	4×824 (29.099)	377 (710)
RBR	1 × LHS 61S, 9.0 kW	1 × 809 (28.570)	556 (1032)
AIRPACK	1 × LHS 61S, 4.0 kW	1 × 2725 (96.232)	94 (200)
AIRPACK	2 × LHS 61S, 4.0 kW	2 × 1625 (57.386)	143 (289)
AIRPACK	4 × LHS 61S, 4.0 kW	4×880 (31.077)	245 (473)
AIRPACK	1 × LHS 61S, 6.0 kW	1 × 2654 (93.725)	133 (271)
AIRPACK	2 × LHS 61S, 6.0 kW	2 × 1598 (56.433)	207 (404)
AIRPACK	4×LHS 61S, 6.0 kW	4 × 872 (30.794)	358 (676)
		4 005 (04 0 (0)	150 (0.10)
ROBUST	1 × LHS 61L, 8.0 kW	1 × 905 (31.960)	450 (842)
SILENCE	2 × LHS 61L, 8.0 kW	2 × 1133 (40.012)	366 (691)
SILENCE	1 × LHS 61L, 11.0 kW	1 × 1224 (43.225)	457 (855)
SILENCE	2 × LHS 61L, 11.0 kW	2 × 1087 (38.387)	510 (950)
AIRPACK	1 × LHS 61L, 8.0 kW	1 × 3197 (112.901)	145 (293)
AIRPACK	2 × LHS 61L, 8.0 kW	2 × 1750 (61.801)	246 (475)
AIRPACK	4 × LHS 61L, 8.0 kW	4×907 (32.030)	449 (840)
AIRPACK	1 × LHS 61L, 11.0 kW	1 × 3176 (112.159)	192 (378)
AIRPACK	2 × LHS 61L, 11.0 kW	2 × 1743 (61.553)	330 (627)
AIRPACK	4 × LHS 61L, 11.0 kW	4 × 906 (31.995)	602 (1116)
AIRPACK	1 × LHS 61L, 16.0 kW	1 × 3132 (110.606)	272 (522)
AIRPACK	2 × LHS 61L, 16.0 kW	2 × 1729 (61.059)	469 (877)
ASO	1 × LHS 61L, 11.0 kW	1 × 1637 (57.810)	350 (662)
ASO	2 × LHS 61L, 11.0 kW	2 × 1634 (57.704)	351 (663)
ASO	4 × LHS 61L, 11.0 kW	4×1539 (54.349)	370 (699)
ASO	1 × LHS 61L, 16.0 kW	1 × 1487 (52.513)	539 (1002)
RBR	1 × LHS 61L, 11.0 kW	1 × 1770 (62.507)	326 (618)
RBR	2 × LHS 61L, 11.0 kW	2 × 1735 (61.271)	332 (629)
RBR	4 × LHS 61L, 11.0 kW	4×1549 (54.702)	368 (695)
RBR	1 × LHS 61L, 16.0 kW	1 × 1612 (56.927)	501 (933)
RBR	2 × LHS 61L, 16.0 kW	2 × 1589 (56.115)	507 (945)
RBR	4 × LHS 61L, 16.0 kW	4 × 1444 (50.994)	554 (1029)

Blower combined with LHS 91

Blower Type	Number of LHS 91, Power in kW	Airflow l/min (cfm)	Temperature °C (°F)
AIRPACK	1 × LHS 91, 32.0 kW	1 × 3615 (127.663)	451 (843)
SILENCE	1 × LHS 91, 32.0 kW	1 × 3104 (109.617)	518 (965)
ASO	1 × LHS 91, 32.0 kW	1 × 6131 (216.514)	278 (532)
ASO	2 × LHS 91, 32.0 kW	2 × 4884 (172.477)	342 (647)
RBR	1 × LHS 91, 32.0 kW	1 × 6176 (218.103)	276 (529)
RBR	2 × LHS 91, 32.0 kW	2 × 4506 (159.128)	368 (695)

Blower combined with LE 5000 DF

Blower Type	Number of LE 5000 DF, Power in kW	Airflow I/min (cfm)	Temperature °C (°F)
ROBUST	1 × LE 5000 DF, 4.5 kW	1 × 829 (29.276)	288 (550)
ROBUST	2 × LE 5000 DF, 4.5 kW	2 × 456 (16.103)	498 (928)
AIRPACK	1 × LE 5000 DF, 4.5 kW	1 × 2767 (97.716)	101 (215)
AIRPACK	2 × LE 5000 DF, 4.5 kW	2 × 1636 (57.775)	157 (315)
SILENCE	1 × LE 5000 DF, 4.5 kW	1 × 732 (25.850)	322 (612)
SILENCE	2 × LE 5000 DF, 4.5 kW	2×703 (24.826)	335 (635)
AIRPACK	1 × LE 5000 DF, 7.5 kW	1 × 2643 (93.337)	161 (323)
AIRPACK	2 × LE 5000 DF, 7.5 kW	2 × 1593 (56.254)	253 (488)
SILENCE	1 × LE 5000 DF, 7.5 kW	1 × 615 (21.719)	604 (1120)
SILENCE	2 × LE 5000 DF, 7.5 kW	2 × 598 (21.118)	619 (1147)
ASO	1 × LE 5000 DF, 7.5 kW	1 × 798 (28.181)	476 (889)
ASO	2 × LE 5000 DF, 7.5 kW	2×804 (28.393)	473 (883)

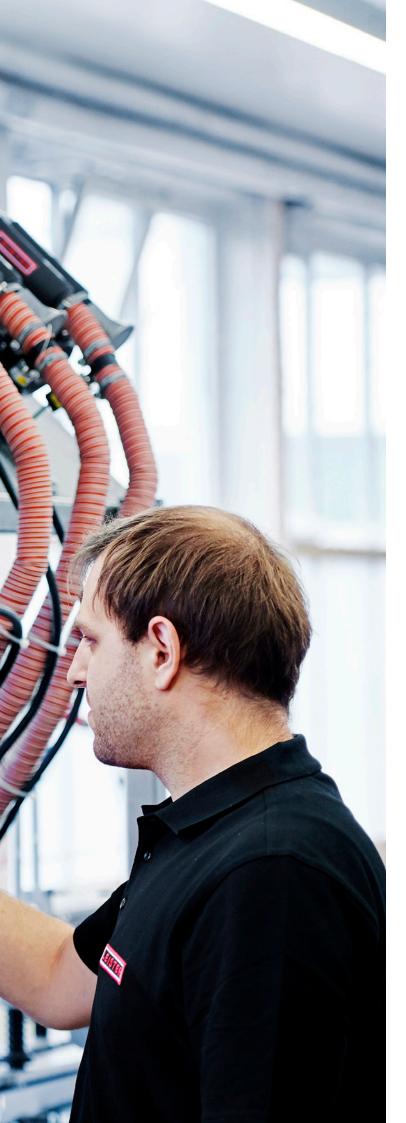
Blower combined with LE 10000 DF

Number of LE 10000 DF, Power in kW	Airflow I/min (cfm)	Temperature °C (°F)
1 × LE 10000 DF, 5.5 kW	1 × 3418 (120.706)	101 (213)
1 × LE 10000 DF, 11 kW	1 × 3330 (117.598)	184 (364)
1 × LE 10000 DF, 17 kW	1 × 3269 (115.444)	277 (530)
1 × LE 10000 DF, 5.5 kW	1 × 1883 (66.498)	166 (330)
2 × LE 10000 DF, 5.5 kW	2 × 1470 (51.913)	206 (403)
1 × LE 10000 DF, 11 kW	1 × 1562 (55.162)	365 (690)
2 × LE 10000 DF, 11 kW	2 × 1301 (45.944)	432 (810)
1 × LE 10000 DF, 5.5 kW	1 × 2700 (95.350)	122 (251)
2 × LE 10000 DF, 5.5 kW	2 × 2609 (92.136)	125 (258)
1 × LE 10000 DF, 11 kW	1 × 2170 (76.633)	271 (519)
2×LE 10000 DF, 11 kW	2 × 2135 (75.397)	275 (526)
1 × LE 10000 DF, 17 kW	1 × 1884 (66.533)	459 (858)
2 × LE 10000 DF, 17 kW	2 × 1809 (65.884)	462 (864)
	1 × LE 10000 DF, 5.5 kW 1 × LE 10000 DF, 11 kW 1 × LE 10000 DF, 17 kW 1 × LE 10000 DF, 5.5 kW 2 × LE 10000 DF, 5.5 kW 1 × LE 10000 DF, 11 kW 2 × LE 10000 DF, 11 kW 1 × LE 10000 DF, 5.5 kW 2 × LE 10000 DF, 5.5 kW 1 × LE 10000 DF, 11 kW	1 × LE 10000 DF, 5.5 kW 1 × 3418 (120.706) 1 × LE 10000 DF, 11 kW 1 × 3330 (117.598) 1 × LE 10000 DF, 17 kW 1 × 3269 (115.444) 1 × LE 10000 DF, 5.5 kW 1 × 1883 (66.498) 2 × LE 10000 DF, 5.5 kW 1 × 1883 (66.498) 2 × LE 10000 DF, 5.5 kW 2 × 1470 (51.913) 1 × LE 10000 DF, 11 kW 1 × 1562 (55.162) 2 × LE 10000 DF, 11 kW 2 × 1301 (45.944) 1 × LE 10000 DF, 5.5 kW 1 × 2700 (95.350) 2 × LE 10000 DF, 5.5 kW 1 × 2700 (95.350) 2 × LE 10000 DF, 5.5 kW 2 × 2609 (92.136) 1 × LE 10000 DF, 11 kW 1 × 2170 (76.633) 2 × LE 10000 DF, 11 kW 1 × 2170 (76.633) 2 × LE 10000 DF, 11 kW 1 × 2170 (76.633) 1 × LE 10000 DF, 11 kW 1 × 2170 (76.633) 2 × LE 10000 DF, 11 kW 1 × 2170 (76.633) 2 × LE 10000 DF, 11 kW 1 × 1884 (66.533)

Blowers

82

(



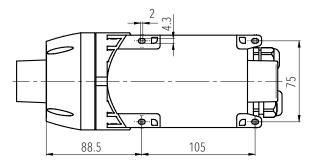
Content

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ASO	89
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Frequency converter	91

MONO 6 SYSTEM

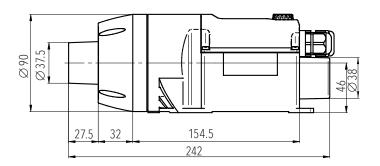


The MONO 6 SYSTEM blower is small yet, very powerful due to its high air volume of up to 575 l/min or 20.3 cfm. It has a low-maintenance, brushless motor, making it suitable for continuous operation.



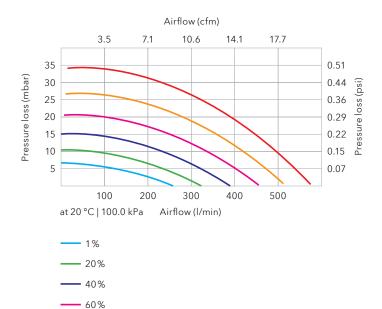
Technical data

Blower type	Side channel blower	
Phases	1x	
Voltage	120-230 V	
Frequency	50/60 Hz	
Airflow (20°C)	260-575 l/min	9.18-20.3 cfm
Static pressure	3400 Pa	0.49 psi
Max. ambient temperature	65 °C	149 °F
Max. air inlet temperature	60 °C	140 °F
Noise emission level	65 dB (A)	
Air inlet (outer diameter)	38 mm	1.49 in
Air outlet (outer diameter)	38 mm	1.49 in
Length	242 mm	9.52 in
Width	90 mm	3.54 in
Height	91 mm	3.58 in
Weight	1 kg	2.2 lb
Approvals	CE; S+	
Protection class	II	



MONO 6 SYSTEM installation dimensions in mm

80%



Product items	
MONO 6 SYSTEM, 230V/120W	146.702
MONO 6 SYSTEM, 120V/120W	149.638

国共活用 第5日日 二日 日本 の か product

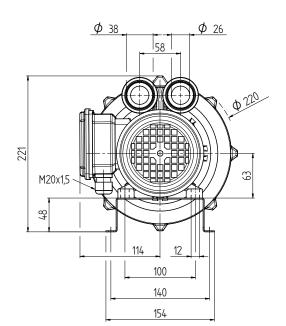
ROBUST

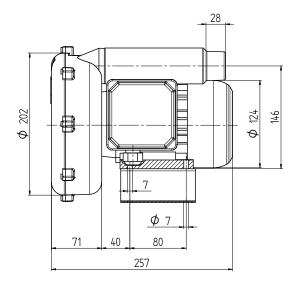


The ROBUST blower is built in a very compact design, and is quiet and versatile. It is suitable for installation in industrial production facilities and is durable, even in extreme operating conditions and in continuous use.

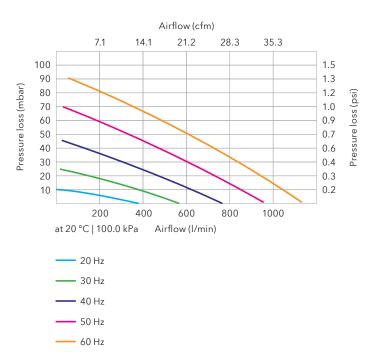
Technical data

Blower type	Side channel blower	
Phases	1x; 3x	
Voltage at 50 Hz	120 V; 230 V; 230/400 V	
Frequency	50 Hz; 50/60 Hz	
Airflow (20 °C) at 50 Hz	955 l/min	33.72 cfm
Airflow (20 °C) at 60 Hz	1140 l/min	40.25 cfm
Static pressure at 50 Hz	7000 Pa	1.01 psi
Static pressure at 60 Hz	9300 Pa	1.34 psi
Max. air inlet temperature	60 °C	140 °F
Max. ambient temperature	60 °C	140 °F
Noise emission level	62 dB (A)	
Air inlet (outer diameter)	38 mm	1.49 in
Air outlet (outer diameter)	38 mm	1.49 in
_ength	257 mm	10.11 in
Width	227 mm	8.93 in
Height	221 mm	8.7 in
Weight	8 kg	17.63 lb
Approvals	CE; UKCA	
Protection class (IEC 60529)	IP54	
Protection class		





ROBUST installation dimensions in mm



Product items	
ROBUST, 3 x 230/400V 50Hz, 3 x 265/460V 60Hz	103.429
ROBUST, 1 x 230V/250W, EU plug	103.432
ROBUST, 1 x 110V/250W, 50Hz	103.434



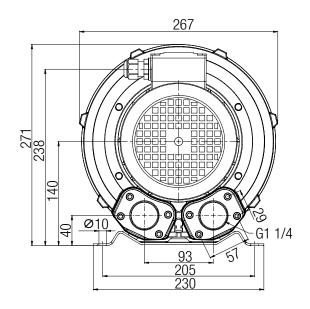
CHINOOK

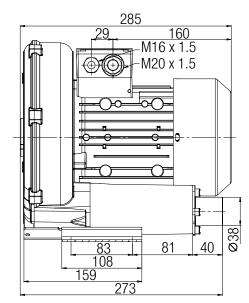


The CHINOOK high pressure blower is designed for air inlet temperatures up to 350 °C / 662 °F. Installed in hot air systems, it recirculates hot air, saving users energy and costs.

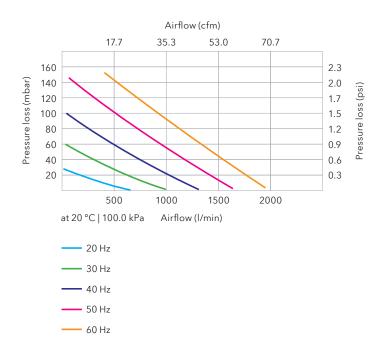
Technical data

Blower type	Side channel blower	
Phases	Зx	
Voltage at 50 Hz	230/400 V	
Frequency	50/60 Hz	
Airflow (20 °C) at 50 Hz	1600 l/min	56.5 cfm
Airflow (20 °C) at 60 Hz	1900 l/min	67.09 cfm
Static pressure at 50 Hz	14500 Pa	2.1 psi
Static pressure at 60 Hz	15000 Pa	2.17 psi
Min. air inlet temperature	60 °C	140 °F
Max. air inlet temperature	350 °C	662 °F
Max. ambient temperature	60 °C	140 °F
Noise emission level	58 dB (A)	
Air inlet (outer diameter)	38 mm	1.49 in
Air outlet (outer diameter)	38 mm	1.49 in
Length	285 mm	11.22 in
Width	267 mm	10.51 in
Height	271 mm	10.66 in
Weight	14.85 kg	32.73 lb
Approvals	CE; UKCA	
Protection class (IEC 60529)	IP55	
Protection class		









Product items

CHINOOK, 3 x 230/400V 50Hz, 3 x 265/460V 60Hz

177.073



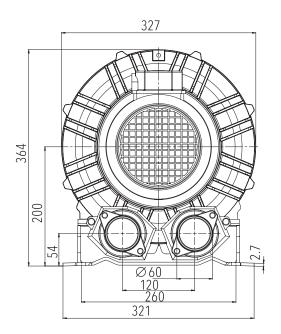
AIRPACK

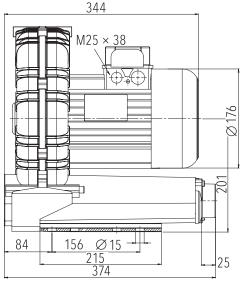


The AIRPACK blower is ideal for use in industrial assembly lines if large air quantities and high pressure are required. It is optimally suited to drying and blow-off processes.

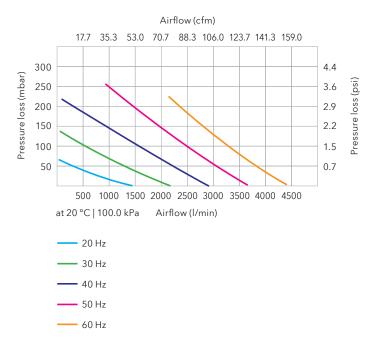
Technical data

Blower type	Side channel blower	
Phases	Зх	
Voltage at 50 Hz	230/400 V	
Frequency	50/60 Hz	
Airflow (20 °C) at 50 Hz	3700 l/min	130.66 cfm
Airflow (20 °C) at 60 Hz	4400 l/min	155.38 cfm
Static pressure at 50 Hz	25480 Pa	3.69 psi
Static pressure at 60 Hz	22560 Pa	3.27 psi
Max. air inlet temperature	40 °C	104 °F
Max. ambient temperature	40 °C	104 °F
Noise emission level	73 dB (A)	
Air inlet (outer diameter)	60 mm	2.36 in
Air outlet (outer diameter)	60 mm	2.36 in
Length	374 mm	14.72 in
Width	327 mm	12.87 in
Height	364 mm	14.33 in
Weight	26 kg	57.32 lb
Approvals	CE; EAC	
Protection class (IEC 60529)	IP54	
Protection class		





AIRPACK installation dimensions in mm



Product items AIRPACK, 3 x 230/400V 50Hz, 3 x 275/480V 60Hz

119.358



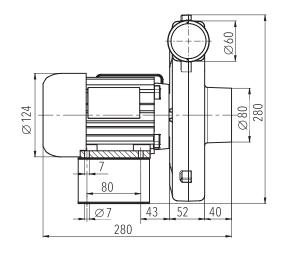
SILENCE

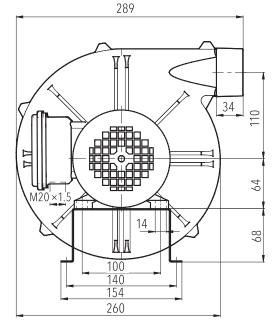


The compact, durable SILENCE blower is designed for use in production lines with air inlet temperatures of 100 °C to 200 °C / 212 °F to 392 °F. It operates smoothly at ambient temperatures up to max. 75 °C / 167 °F.

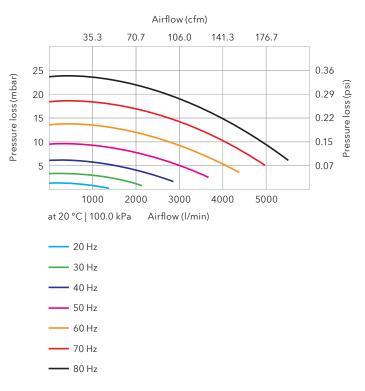
Technical data

	D	
Blower type	Radial blower	
Phases	1x; 3x	
Voltage at 50 Hz	230 V; 230/400	V
Frequency	50 Hz; 50/60 H	z
Airflow (20 °C) at 50 Hz	3670 l/min	129.6 cfm
Airflow (20 °C) at 60 Hz	4360 l/min	153.97 cfm
Static pressure at 50 Hz	960 Pa	0.13 psi
Static pressure at 60 Hz	1360 Pa	0.19 psi
Max. air inlet temperature	200 °C	392 °F
Max. ambient temperature	75 °C	167 °F
Noise emission level	61 dB (A)	
Air inlet (outer diameter)	80 mm	3.14 in
Air outlet (outer diameter)	60 mm	2.36 in
Length	289 mm	11.37 in
Width	280 mm	11.02 in
Height	280 mm	11.02 in
Weight	9 kg	19.84 lb
Approvals	CE; EAC; UKCA	A
Protection class (IEC 60529)	IP54	
Protection class		





SILENCE installation dimensions in mm



Floduct items	
SILENCE, 3 x 230/400V 50Hz, 3 x 265/460V 60Hz	103.507
SILENCE, 230V/250W 50Hz, EU plug	103.510

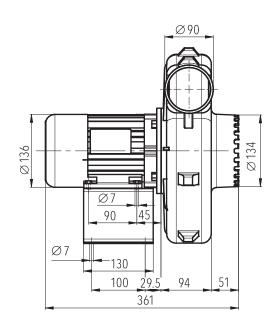
Configure

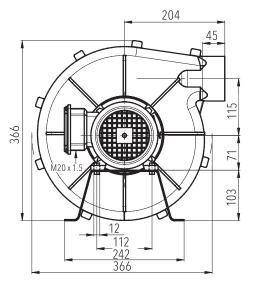


The ASO blower delivers up to 13800 l/min or 487.33 cfm of air at 60 Hz. With the appropriate accessories, the air volume giant supplies several air heaters and is therefore ideal for use in production lines, e.g. in drying processes.

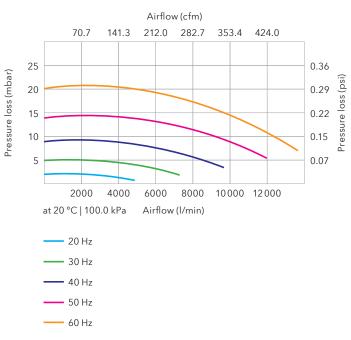
Technical data

Blower type	Radial blower		
Phases	1x; 3x		
Voltage at 50 Hz	230 V; 230/400	230 V; 230/400 V	
Frequency	50 Hz; 50/60 Hz	!	
Airflow (20 °C) at 50 Hz	12000 l/min	423.77 cfm	
Airflow (20 °C) at 60 Hz	13800 l/min	487.33 cfm	
Static pressure at 50 Hz	1450 Pa	0.21 psi	
Static pressure at 60 Hz	2070 Pa	0.3 psi	
Max. air inlet temperature	200 °C	392 °F	
Max. ambient temperature	60 °C	140 °F	
Noise emission level	70 dB (A)		
Air inlet (outer diameter)	134 mm	5.27 in	
Air outlet (outer diameter)	90 mm	3.54 in	
Length	366 mm	14.4 in	
Width	361 mm	14.21 in	
Height	366 mm	14.4 in	
Weight	15 kg	33.06 lb	
Approvals	CE; EAC; UKCA		
Protection class (IEC 60529)	IP54		
Protection class			





ASO installation dimensions in mm



Product items	
ASO, 3 x 230/400V 50Hz, 3 x 265/460V 60Hz	103.527
ASO, 1 x 230V/550W 50Hz, EU plug	103.530

303년 중국년 2 중 8년 Configure 회사가 product

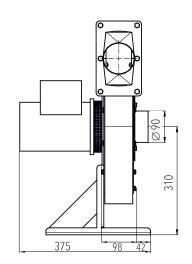
RBR

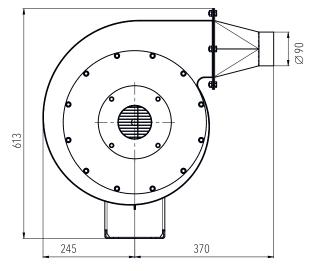


The RBR (Radial Blower Recirculation) fan is designed for air inlet temperatures of up to 350 °C / 662 °F. Installed in hot air systems, it recycles hot air, which saves energy and costs.

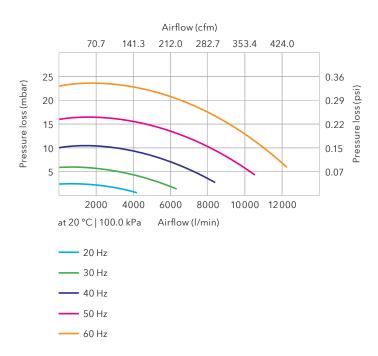
Technical data

Blower type	Radial blower	
Phases	Зx	
Voltage at 50 Hz	230/400 V	
Frequency	50/60 Hz	
Airflow (20 °C) at 50 Hz	10550 l/min	372.56 cfm
Airflow (20 °C) at 60 Hz	12300 l/min	434.36 cfm
Static pressure at 50 Hz	1630 Pa	0.23 psi
Static pressure at 60 Hz	2350 Pa	0.34 psi
Max. air inlet temperature	350 °C	662 °F
Max. ambient temperature	60 °C	140 °F
Noise emission level	61 dB (A)	
Air inlet (outer diameter)	90 mm	3.54 in
Air outlet (outer diameter)	90 mm	3.54 in
Length	615 mm	24.21 in
Width	375 mm	14.76 in
Height	613 mm	24.13 in
Weight	19 kg	41.88 lb
Approvals	CE	
Protection class (IEC 60529)	IP54	
Protection class	1	





RBR installation dimensions in mm



Product items	
RBR, 3 x 230/400V 50Hz, 3 x 277/480V 60Hz	

156.049



Frequency converter



The Freqency converters C200-012 and C200-034 optimize hot air processes, because they let the blowers rotate faster than the mains frequency, thus reducing system costs. They can be combined with various blowers and the VULCAN.

Technical data		
Phases	1x; 3x	
Voltage	200-480 V	
Current	10 A	
Frequency	50/60 Hz	
Length	160-226 mm	6.29-8.89 in
Width	75-160 mm	2.95-6.29 in
Height	90-130 mm	3.54-5.11 in
Weight	0.7-1.4 kg	1.54-3.08 lb
Approvals	CE; UKCA; UL	
Protection class	I	



Frequency converter C200-012, 230V Frequency converter C200-034, 3x380-480V 153.358 153.474





Nozzles Hot Air Blowers

ø 36.5 - MISTRAL



107.251 Tubular nozzle (ø 36.5) ø 35 mm, 210 mm



105.454 Tubular nozzle (ø 36.5) ø 9 mm, 50 mm



107.003 Tubular nozzle (ø 36.5) ø 12 mm, 25 x 50 mm



105.446 Tubular nozzle (ø 36.5) ø 25 mm, 25 x 95 mm



107.309 Sieve reflector (ø 36.5) 35 x 20 mm



107.308 Sieve reflector (ø 36.5) 50 x 34 mm



107.319 Sieve reflector (ø 36.5) ø 65 mm



107.314 Spoon reflector (ø 36.5) 33 x 27 mm



106.132 Shell reflector (ø 36.5) 150 x 26 x 44 mm



107.340 Shell reflector (ø 50.0) 250 x 45 x 58 mm



107.331 Folding reflector (ø 50.0) ø 72 x 70 mm



107.261 Wide slot nozzle (ø 36.5) 70 x 4 mm

Wide slot nozzle (ø 36.5) 20 x 2 mm

105.435



107.330 Folding reflector (ø 50.0) ø 125 x 22 mm



ø 50.0 - MISTRAL

107.256 Tubular nozzle (ø 50.0) ø 48 mm, 73 x 170 mm

Tubular nozzle (ø 50.0) ø 35 mm, 160 mm



107.327 Sieve reflector (ø 50.0) 75 x 70 x 90 mm



107.333 Sieve reflector (ø 50.0) 152 x 110 x 137 mm

106.127 Sieve reflector (ø 50.0) ø 65 mm

108.078

105.982

107.255

Wide slot nozzle (ø 36.5) 100 x 4 mm

Wide slot nozzle (ø 36.5) 150 x 4 mm

Sieve



0.0 - MIST	105.961		407.047
THE A	Wide slot nozzle (ø 50.0) 42 x 11 mm	1	107.247 Tubular nozzle (ø 62.0) ø 43 mm, 200 mm
ST.	107.258 Wide slot nozzle (ø 50.0) 70 x 10 mm		107.265 Tubular nozzle (ø 62.0) ø 60 mm, 73 x 116 r
	106.057 Wide slot nozzle (ø 50.0) 100 x 4 mm		110.582 Turbo nozzle (ø 62.0) ø 35 mm
, T	106.060 Wide slot nozzle (ø 50.0) 150 x 6 mm		106.143 Sieve reflector (ø 62.0) 75 x 45 x 91 mm
T.	107.270 Wide slot nozzle (ø 50.0) 150 x 12 mm		107.329 Sieve reflector (ø 62.0) 75 x 70 x 91 mm
	106.061 Wide slot nozzle (ø 50.0) 300 x 6 mm		107.336 Sieve reflector (ø 62.0) 152 x 110 x 137 mm
			107.335 Sieve reflector (ø 62.0) ø 152 mm
	NIND/VULCAN 6 kW 107.245 Round nozzle (ø 62.0) ø 40 mm	- Fi	107.342 Shell reflector (ø 62.0) 400 x 56 x 64 mm
a contraction of the second se	111.745 Tubular nozzle (ø 62.0) ø 40 mm, 25 mm	P	106.174 Shell reflector (ø 62.0) 400 x 65 x 78 mm
	113.351 Tubular nozzle (ø 62.0) ø 62 mm, 245 mm		106.175 Shell reflector (ø 62.0) 400 x 80 x 64 mm
	105.876 Tubular nozzle (ø 62.0) ø 50 mm, 100 mm		107.260 Wide slot nozzle (ø 62.0) 85 x 14 mm

V	107.259 Wide slot nozzle (ø 62.0) 150 x 12 mm	T	107.341 Shell reflector (ø 92.0) 370 x 160 x 185mm
1	105.977 Wide slot nozzle (ø 62.0) 200 x 8 mm		107.274 Wide slot nozzle (ø 92.0) 130 x 16 mm
	107.263 Wide slot nozzle (ø 62.0) 250 x 12 mm		106.028 Wide slot nozzle (ø 92.0) 220 x 12 mm
	107.262 Wide slot nozzle (ø 62.0) 300 x 4 mm		107.272 Wide slot nozzle (ø 92.0) 300 x 12 mm
,	105.992 Wide slot nozzle (ø 62.0) 400 x 4 mm		106.018 Wide slot nozzle (ø 92.0) 400 x 10 mm
	105.991 Wide slot nozzle (ø 62.0) 500 x 4 mm		106.024 Wide slot nozzle (ø 92.0) 500 x 7 mm
			107.267 Wide slot nozzle (ø 92.0) 500 x 15 mm
	107.244 Round nozzle (ø 92.0) ø 50 mm		106.023 Wide slot nozzle (ø 92.0) 600 x 4 mm
1	107.273 Tubular nozzle (ø 92.0) ø 60 mm, 500 mm		106.026 Wide slot nozzle (ø 92.0) 600 x 9 mm





107.269 Tubular nozzle (ø 92.0) ø 90 mm, 102 x 178 mm



107.276 Sieve reflector (ø 92.0) ø 260 mm

94

Machine Specific Accessories Hot Air Blowers

IGNITER MISTRAL 122.332 156.095 Nozzle adapter (ø 50.0) to ø 62 mm Heater tube ø 31.5 mm, G3/8" 122.924 156.094 Nozzle adapter (ø 50.0) to ø 36.5 mm Heater tube ø 31.5 mm, M14 153.245 142.967 Stainless steel filter, slidable to the suction side Power cable 3 m (Wago), rubber, w/o plug 143.131 Power cable 3 m (Wago), silicone, w/o plug **MISTRAL PREMIUM** 148.812 142.976 External potentiometer box, analog, 10 kOhm, with Plug (WAGO) with strain relief for IGNITER 3 m signal cable 148.429 Plug (WAGO) with strain relief for IGNITER (only BR4) HOTWIND 107.248 Stainless steel filter, slidable to the suction side



141.723 Hand-held kit

VULCAN



107.277 Stainless steel filter, slidable to the suction side

133.517 Thermocouple holder for LHS 61

95

Nozzles Air Heaters

ø 21.3 - LE MINI, LHS 15



149.941 Round nozzle (ø 21.3) ø 13 mm



105.624 Tubular nozzle (ø 21.3) ø 4 mm, 45 mm



107.144 Tubular nozzle (ø 21.3) ø 5 mm, 41 mm



107.145 Tubular nozzle (ø 21.3) ø 10 mm, 45 mm



107.152 Tubular nozzle (ø 21.3) ø 12 mm, 25 x 50 mm



105.641 Tubular nozzle (ø 21.3) ø 21.3 mm, 33 x 45 mm



105.547 Wide slot nozzle (ø 21.3) 50 x 8 mm

ø 36.5 - LHS 21, LHS 210



149.942 Round nozzle (ø 36.5) ø 22 mm



107.003 Tubular nozzle (ø 36.5) ø 12 mm, 25 x 50 mm



107.251 Tubular nozzle (ø 36.5) ø 35 mm, 210 mm





105.454 Tubular nozzle (ø 36.5) ø 9 mm, 50 mm

Tubular nozzle (ø 36.5) ø 25 mm, 25 x 95 mm

105.446

107.308



107.310 Sieve reflector (ø 21.3) 35 x 20 mm



107.311 Sieve reflector (ø 21.3) 50 x 34 mm



105.549 Wide slot nozzle (ø 21.3) 10 x 2 mm



107.309 Sieve reflector (ø 36.5) 35 x 20 mm

Sieve reflector (ø 36.5) 50 x 34 mm



105.559 Wide slot nozzle (ø 21.3) 20 x 2 mm



107.319 Sieve reflector (ø 36.5) ø 65 mm



105.548 Wide slot nozzle (ø 21.3) 40 x 5 mm



107.314 Spoon reflector (ø 36.5) 33 x 27 mm

ø 36.5 - LHS 21	1, LHS 210	ø 50 - LHS 41, L	.HS 410
- Sek	106.132 Shell reflector (ø 36.5) 150 x 26 x 44 mm		106.127 Sieve reflector (ø 50.0) ø 65 mm
A.F.	105.435 Wide slot nozzle (ø 36.5) 20 x 2 mm		107.340 Shell reflector (ø 50.0) 250 x 45 x 58 mm
F	107.261 Wide slot nozzle (ø 36.5) 70 x 4 mm	6	107.331 Folding reflector (ø 50.0) ø 72 x 70 mm
	108.078 Wide slot nozzle (ø 36.5) 100 x 4 mm	Or	107.330 Folding reflector (ø 50.0) ø 125 x 22 mm
	105.982 Wide slot nozzle (ø 36.5) 150 x 4 mm	15 March 19	105.961 Wide slot nozzle (ø 50.0) 42 x 11 mm
ø 50 - LHS 41, I			107.258 Wide slot nozzle (ø 50.0) 70 x 10 mm
	149.943 Round nozzle (ø 50.0) ø 30 mm		106.057 Wide slot nozzle (ø 50.0) 100 x 4 mm
	107.255 Tubular nozzle (ø 50.0) ø 35 mm, 160 mm		106.060 Wide slot nozzle (ø 50.0) 150 x 6 mm
	107.256 Tubular nozzle (ø 50.0) ø 48 mm, 73 x 170 mm	V.	107.270 Wide slot nozzle (ø 50.0) 150 x 12 mm
	107.327 Sieve reflector (ø 50.0) 75 x 70 x 90 mm		106.061 Wide slot nozzle (ø 50.0) 300 x 6 mm
	107.333 Sieve reflector (ø 50.0) 152 x 110 x 137 mm		

ø 62 - LHS 61S, LE 5000 HT



107.245 Round nozzle (ø 62.0) ø 40 mm



111.745 Tubular nozzle (ø 62.0) ø 40 mm, 25 mm



113.351 Tubular nozzle (ø 62.0) ø 62 mm, 245 mm



106.175 Shell reflector (ø 62.0) 400 x 80 x 64 mm

Wide slot nozzle (ø 62.0) 85 x 14 mm

Wide slot nozzle (ø 62.0) 150 x 12 mm

Shell reflector (ø 62.0) 400 x 65 x 78 mm

Shell reflector (ø 62.0) 400 x 56 x 64 mm

107.342

106.174

107.260

107.259

107.263

107.262



105.876 Tubular nozzle (ø 62.0) ø 50 mm, 100 mm



107.247 Tubular nozzle (ø 62.0) ø 43 mm, 200 mm



107.265 Tubular nozzle (ø 62.0) ø 60 mm, 73 x 116 mm



105.977 Wide slot nozzle (ø 62.0) 200 x 8 mm

Wide slot nozzle (ø 62.0) 250 x 12 mm



110.582 Turbo nozzle (ø 62.0) ø 35 mm



106.143 Sieve reflector (ø 62.0) 75 x 45 x 91 mm



107.329 Sieve reflector (ø 62.0) 75 x 70 x 91 mm



105.991 Wide slot nozzle (ø 62.0) 500 x 4 mm

Wide slot nozzle (ø 62.0) 300 x 4 mm



107.336 Sieve reflector (ø 62.0) 152 x 110 x 137 mm



105.992 Wide slot nozzle (ø 62.0) 400 x 4 mm



107.335 Sieve reflector (ø 62.0) ø 152 mm

98

ø 92 - LHS 61L, LE 10000 HT



107.244 Round nozzle (ø 92.0) ø 50 mm



107.273 Tubular nozzle (ø 92.0) ø 60 mm, 500 mm



107.269 Tubular nozzle (ø 92.0) ø 90 mm, 102 x 178 mm



106.026 Wide slot nozzle (ø 92.0) 600 x 9 mm

Wide slot nozzle (ø 92.0) 600 x 4 mm

Wide slot nozzle (ø 92.0) 500 x 15 mm

107.267

106.023



110.581 Turbo nozzle (ø 92.0) ø 48 mm, 75 mm



107.276 Sieve reflector (ø 92.0) ø 260 mm



107.230 Round nozzle (ø 161.0) ø 96 mm



107.341 Shell reflector (ø 92.0) 370 x 160 x 185mm



107.233 Tubular nozzle (ø 161.0) ø 98 mm, 400 mm



107.274 Wide slot nozzle (ø 92.0) 130 x 16 mm



107.235 Wide slot nozzle (ø 161.0) 500 x 13 mm



106.028 Wide slot nozzle (ø 92.0) 220 x 12 mm



107.272 Wide slot nozzle (ø 92.0) 300 x 12 mm



106.018 Wide slot nozzle (ø 92.0) 400 x 10 mm



106.024 Wide slot nozzle (ø 92.0) 500 x 7 mm



107.234 Wide slot nozzle (ø 161.0) 1200 x 10 mm

Machine Specific Accessories Air Heaters

LHS 61S, LHS 61L **LE MINI** 117.955 133.517 Thermocouple holder for LHS 61 Nozzle adapter LE MINI (G1/4") to ø 21.3 mm 129.407 Extension cable LE MINI SENSOR, 2 m LHS 61S, LE 5000 HT 127.062 113.806 Extension cable LE MINI SENSOR, 5 m Nozzle adapter (ø 62.0) to ø 60 mm LHS 210 **LHS 21** 133.515 161.643 Thermocouple holder for LHS 21 Inlet flange kit, ø 38 mm (LHS 210) 161.646 Gasket housing LHS 210 **LHS 41** 133.516 161.832 Thermocouple holder for LHS 41 Thermocouple with holder 161.854 Thermocouple with holder LHS 41, LHS 410 122.332 Nozzle adapter (ø 50.0) to ø 62 mm 122.924 Nozzle adapter (ø 50.0) to ø 36.5 mm

LHS 410



161.645 Inlet flange kit, ø 38 mm (LHS 410)



161.644 Inlet flange kit, ø 60 mm (LHS 410)



161.647 Gasket housing LHS 410



161.833 Thermocouple with holder



161.855 Thermocouple with holder



LE 5000 HT-U/HT-S

163.536

163.535

163.596

163.598

Fastening unit S-airflow (2 units)

Fastening unit U-airflow (2 units)

Fastening unit S-airflow (3 units)

Fastening unit U-airflow (3 units)

163.604 Fastening unit S-airflow (4 units)



161.857 Nozzle adapter (LHS 410 DF) to ø 50 mm



163.606 Fastening unit U-airflow (4 units)



163.644 Quick change mounting bracket complete

LE 5000 HT-U/HT-S, LE 5000 DF/DF-R/DF HT



152.371 Inlet flange, ø 60 mm



152.441 Gasket HT LE 5000 DF, inlet

flow (4 units)

LE 5000 DF/DF-R/DF HT



152.372 Outlet flange, ø 62 mm



152.905 Outlet flange, ø 92.5/60.7 x 3 mm



152.443 Gasket HT LE 5000 DF, outlet



Adapter ø 60 mm (inside) to ø 90 mm (outside)



152.522 Adapter ø 62 mm (inside) to ø 92 mm (outside)



152.444 Gasket HT LE 10000 DF, outlet

Gasket HT LE 10000 DF, inlet

Outlet flange, ø 121.5/89.5 x 3 mm

LE 10000 DF/DF HT/DF-C/DF-R/DF-R HT

152.373

152.374

152.906

152.442

Inlet flange, ø 90 mm

Outlet flange, ø 92 mm



152.521 Adapter ø 90 mm (inside) to ø 60 mm (outside)



152.523 Adapter ø 92 mm (inside) to ø 62 mm (outside)

Accessories Control Components

CSS EASY CSS EASY/CSS/E5CC Temperature Controller 144.030 106.956 Thermocouple type K, ø 1.5×160 mm, with System interfaces cable RJ45, 1 m connector 144.028 106.958 System interfaces cable RJ45, 3 m Thermocouple extension cable type K, 2 m 144.026 106.960 Thermocouple extension cable type K, 4 m System interfaces cable RJ45, 5 m 106.962 Thermocouple extension cable type K, 10 m

Machine Specific Accessories Blowers

10NO 6 SYS	ТЕМ	ROBUST	
•	153.245 Stainless steel filter, slidable to the suction side	25. (25)	107.290 Hose clip ø 19 mm
\bigcirc	107.286 Air hose ø 38 mm, PVC	6	107.242 Closing cap ø 19 mm
	107.287 Hose clip ø 38/60 mm		107.298 Hose connection adapter ø 38 mm, 2 outputs
			107.281 Hose connection adapter ø 38 mm, 3 outputs
	107.286 Air hose ø 38 mm, PVC		107.293 Hose connection adapter ø 38 mm, 2 outputs
	107.287 Hose clip ø 38/60 mm		166.237 Air hose ø 38 mm, silicone, temperature-resistar up to 250 ℃
	107.354 Stainless steel filter, slidable to the suction side		
~)	108.623 Motor capacitor, 12μF/240V (ROBUST 230V)		
	104.017 Motor capacitor, 60μF/450V (ROBUST 110V)		
	113.859 Air hose ø 14 mm, PVC		
	107.350 Air hose ø 19 mm, PVC		

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CHINOOK



107.287 Hose clip ø 38/60 mm



166.237 Air hose ø 38 mm, silicone, temperature-resistant up to 250 $^\circ\mathrm{C}$



177.081 Air hose ø 38 mm, temperature-resistant up to 350 °C, insulated, 2 m



177.082 Air hose ø 38 mm, temperature-resistant up to 350 °C, insulated, 5 m



177.080 Hose clip inside for air hose 177.081/177.082



125.908 Blow-off air nozzle (ø 58.0) 80 x 167 x 542 mm, 2 retaining clips



177.136 Hose clip outside for air hose 177.081/177.082

SILENCE



107.287 Hose clip ø 38/60 mm

Air hose ø 60 mm, PVC

AIRPACK



107.287 Hose clip ø 38/60 mm



107.288 Air hose ø 60 mm, PVC



107.240 Closing cap ø 60 mm

107.288



107.240 Closing cap ø 60 mm



107.291 Hose connection adapter ø 60 mm, 1 output



107.291 Hose connection adapter ø 60 mm, 1 output



107.292 Hose connection adapter ø 60 mm, 2 outputs

AIRPACK

-

107.292

125.907

107.278 Hose connection adapter ø 60 mm, 2 outputs

Hose connection adapter ø 60 mm, 2 outputs





Blow-off air nozzle (ø 58.0) 80 x 167 x 342 mm, 2 retaining clips

SILENCE



107.278 Hose connection adapter ø 60 mm, 2 outputs



107.294 Stainless steel filter, slidable to the suction side



110.887 Motor capacitor, $12\mu\text{F}/240\text{V}$ (SILENCE 230V)





152.439 Air hose ø 60 mm, temperature-resistant up to 350 °C, insulated, 2 m



152.440 Air hose ø 60 mm, temperature-resistant up to 350 °C, insulated, 5 m



152.518 Hose clip inside for air hose 155.439/152.440



152.519 Hose clip outside for air hose 152.439/152.440

ASO



107.236 Hose clip ø 90 mm



155.419 Air hose ø 90 mm, temperature-resistant up to 350°C, insulated, 2 m



107.237 Air hose ø 90 mm, PVC





155.420 Air hose ø 90 mm, temperature-resistant up to 350 °C, insulated, 5 m



107.238 Hose connection adapter ø 89 mm, 2 outputs



155.421 Hose clip inside for air hose 155.419/155.420



107.239 Stainless steel filter, slidable to the suction side



111.771 Motor capacitor, 25µF/450V (ASO 230V)



155.422

Hose clip outside for air hose 155.419/155.420

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