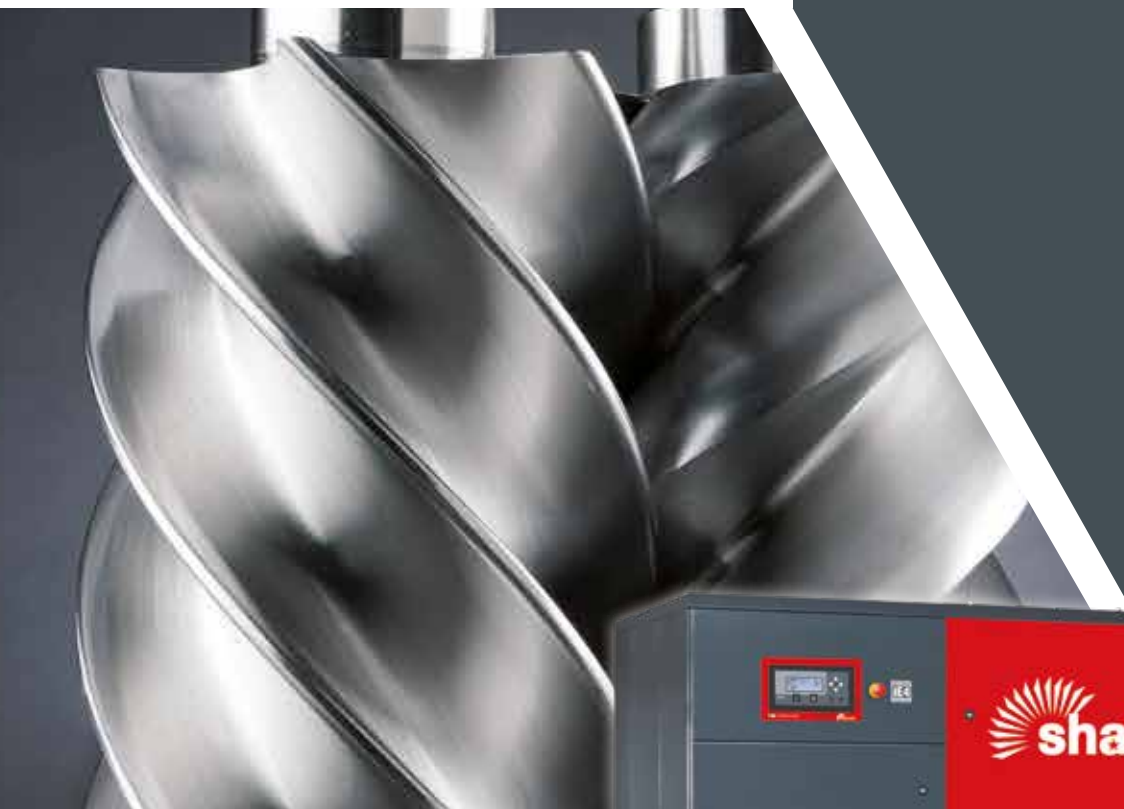




AIR COMPRESSORS

THE RELIABILITY OF COMPRESSORS.



MADE IN ITALY



GHIBLI - STORM 2.2-75 kW

Belt-driven oil injected
rotary screw compressors

NEW



ROTARY SCREW COMPRESSORS FROM 2.2 TO 75 KW: A COMPLETE AND MODULAR RANGE.

Our rotary screw compressors are the answer to the needs of large, small and medium-sized enterprises where compressed air is one of the main energy sources.

HIGH ENERGY SAVINGS

The choice of high quality components combined with IE3 and IE4* high efficiency motors and our high-performance air-ends, ensures low consumptions, remarkable energy savings and exceptional efficiency performances.

Furthermore, the high efficiency motors also reduce CO₂ emissions: an important contribution to protecting the environment.

* The Storm 75 kW models are equipped with the new electric motors, even more performing, in energy efficiency class "IE4 Super Premium Efficiency".



2.2 - 5.5 kW



7.5-15 kW



18.5-22 kW



| Power in KW | Model | Floor mounted | Floor mounted + dryer (ES) | Tank-mounted | Tank-mounted + dryer (ES) | Air-end | Fixed speed | Variable speed (VS) | Motor |
|----------------------|--|---------------|----------------------------|--------------|---------------------------|----------------|-------------|---------------------|-------|
| 2.2 - 3 - 4 | Ghibli SE 2.2-3.0-4.0 (2.2 also single-phase) | ● | – | 200 ℓ | 200 ℓ | FS14 | ● | – | IE3 |
| 4 | Ghibli 4.0 | ● | – | 200 ℓ | 200 ℓ | FS14 | ● | – | IE3 |
| 5.5 | Ghibli 5.5 | ● | – | 270 - 500 ℓ | 270 - 500 ℓ | FS14 | ● | – | IE3 |
| 7.5 - 11 - 15 | Storm 8-11-15 | ● | – | 270 - 500 ℓ | 270 - 500 ℓ | FS26 | ● | – | IE3 |
| 11 | Storm 11 VS | ● | ● | – | – | FS26 | – | ● | IE3 |
| 15 | Storm 16 | ● | – | 500 ℓ | 500 ℓ | FS50 | ● | – | IE3 |
| 18.5 - 22 | Storm 18.5-22 | ● | ● | – | – | FS50 | ● | 22 only | IE3 |
| 30 37 | Storm 31 Storm 38 | ● | ● | – | – | FS100 FS140 | ● | ● | IE3 |
| 45 - 55 | Storm 45-55 | ● | – | – | – | FS140 | ● | – | IE3 |
| 55 | Storm 56 | ● | – | – | – | FS270 | ● | ● | IE3 |
| 75 | Storm 75 | ● | – | – | – | FS270 | ● | ● | IE4 |

★ High performances

The special design of the screw profile ensures high performances of compressed air production; a key point of Shamal engineering project, entirely Made in Italy.

★ High reliability

Accurate quality control and the use of components of the worldwide leading manufacturers ensure a long service life and long maintenance intervals.

★ Low noise levels

Ghibli and Storm compressors are extremely quiet: suitable to be installed also near workstations thanks to the use of efficient soundproof materials.

★ Made in Italy

The entire production cycle takes place in-house and the air-ends are fully designed and manufactured in Italy.



• EFFICIENT COOLING SYSTEM

The cooling system is one of the most innovative in the market: the thermostatic-control centrifugal fan ensures the temperature inside the compressor remains within a specific tolerance and at a constant level, thus avoiding temperature peaks that may prevent the proper operation of the compressor. The action of the fan combined with the oversized radiator efficiency ensures the operation of the machine even in critical climatic conditions. The "silent" fans, the specifically designed labyrinth ventilation and the use of top quality soundproof materials ensure one of the lowest acoustic level of the market.

• RELIABLE TRANSMISSION

The Poly-V belt drive ensures significantly lower power losses and a three times longer life than standard "V" belts mounted on other compressors in the market. The belt is tensioned by means of a slide tensioner.

• SPIN-ON FILTERS

The oil filter and the oil separator filter (both spin-on type), ensure great efficiency and easy maintenance.



High efficiency and energy saving

Significant energy savings thanks to the “IE3 Premium Efficiency class” motors, reaching the “IE4” class in the Storm 75 kW models. Original Shamal design.



Air-ends of our design and production, ensuring high air yield and low energy consumption.

Air and oil circuits components optimization.

Latest generation inverters.



Silent operation

The low speed air-ends and radial fans allow Ghibli and Storm products to maintain the lowest noise values in their category, thus, ensuring the possibility for the installation close to the point-of-use.



Simplified maintenance

All machine parts subject to periodic maintenance are placed in a visible and easily accessible position. Maintenance costs are reduced thanks to the use of selected, top quality materials.



Compact design

The compact design is created to achieve the best performance and excellent reliability with the minimum footprint.

Thousands of installations around the world, make Ghibli and Storm long-lasting machines.



Remote monitoring and preventive maintenance

Our optional SMS system allows the remote control of the compressor and promptly informs the user or assistance center of the machine’s condition, reporting any failures or need to perform maintenance.



Refrigerated dryer (optional)

The models from 2.2 to 37 kW can be equipped with a refrigerated dryer powered and controlled separately by its own electronic controller.





**EFFICIENCY CLASSES
ACCORDING TO IEC 60034-30-1 STANDARDS**



- IE4** Super Premium Efficiency
(STORM 75 kW only)
- IE3** Premium Efficiency
(GHIBLI 2.2÷5.5 and STORM 7.5÷55 kW)
- IE2** High Efficiency
- IE1** Standard Efficiency
- Non-standard**



QUALITY IS OUR PRIORITY

“In-house production” air-ends and intake regulators

What makes our Ghibli and Storm screw compressors unique is the guarantee of a product developed entirely in Italy: from the design to the packaging, each stage of production is closely followed by our engineers and aimed at developing a machine which fulfills the best requirements in terms of efficiency, quality, energy savings, performance, silent operation.

Each component is thoroughly selected from the best manufacturers in the world to perfectly integrate with our air-ends and intake regulators.

Each compressor, prior to its shipment to the clients, goes through functional tests, final testing and pre-shipment auditing, which certifies the compliance to our main 50 standards/requirements.

Moreover, our Quality System is UNI EN ISO 9001:2015 since 1996.



★ We have been producing air-ends for over 30 years

Shamal air-ends feature rotors with an optimised profile and outstanding performance. The production process is completely integrated thanks to avant-garde machine tools and sophisticated control instrumentation that guarantees the highest level of quality. A solid CAD modelling system optimises the set-up of the components. Each single rotor is cut in four well-defined manufacturing stages to achieve extremely high execution precision and repeatability. This level of construction accuracy means that each male rotor can be fitted with any female rotor. All of the air-ends are tested twice: individually after assembly later upon installation and on the complete machine.

★ Italian excellence

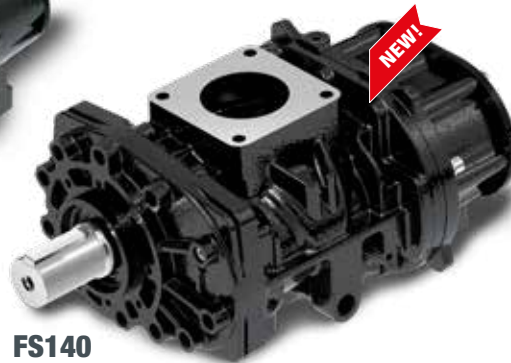
Shamal is a top Italian brand that combines craftsmanship with the most modern industrial technologies and highly specialised labour. The IN-HOUSE MANUFACTURED trademark is the expression of typical Italian quality and creativity, recognised and appreciated around the world, and which has always been the distinguishing element of our industrial production.

★ Intake regulators and separator blocks

In addition to the complete product and the air-ends, Shamal also produces in-house a vast range of intake regulators, thermostatic valves, separator blocks and accessories for the assembly of rotary screw compressors.



FS270



FS140



IR30DC

| | Power range [kW] | Max. operating pressure [bar] |
|--------------|---------------------|----------------------------------|
| FS14 | 2.2 - 5.5 | 15 |
| FS26 | 5.5 - 15 | 15 |
| FS50 | 15 - 22 | 15 |
| FS100 | 22 - 37 | 15 |
| FS140 | 38 - 55 | 13 |
| FS270 | 56 - 75 | 13 |

| | Power range [kW] | Max. operating pressure [bar] |
|---------------|---------------------|----------------------------------|
| IR8 | 2.2 - 4 | 15 |
| IR10DC | 4 - 7.5 | 15 |
| IR30DC | 11 - 22 | 15 |
| IR60 | 31 - 37 | 15 |
| IR70 | 38 - 45 - 55 | 13 |
| IR100 | 55 - 75 | 13 |

**STORM VS ROTARY SCREW COMPRESSORS:
DESIGNED FOR INDUSTRIAL USE
TO ACHIEVE THE HIGHEST ENERGY SAVINGS.**

Our rotary screw compressors are designed for continuous operation also in severe conditions of use, with special attention to energy consumption, low operation and maintenance costs and user-friendly installation and use.

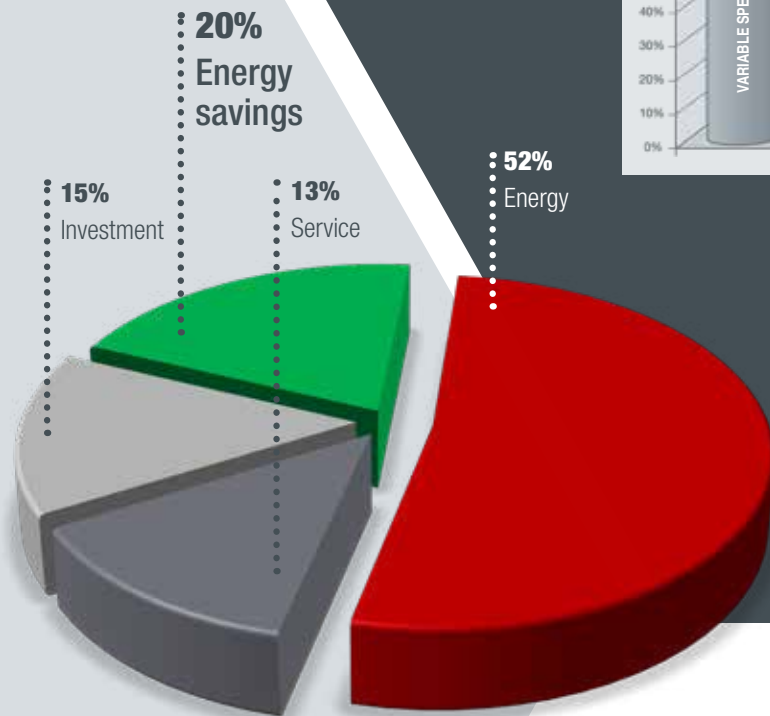
VARIABLE SPEED WITH INVERTER

Energy consumption reduction and environment protection are among the biggest global challenges today. STORM compressors, in the 11, 22, 37, 55 and 75 kW power range, are also available in the variable speed (VS) version which ensures high performances and energy efficient solutions.

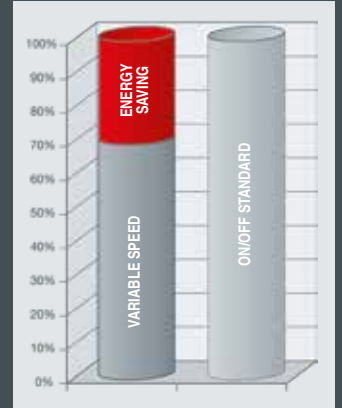
The frequency converter dynamically regulates frequency, voltage and current values supplied to the motor, constantly eliminating useless power drops and consequently adjusting the compressed air generation actually required.

The benefits of using the STORM VS with inverter are remarkable:

- continuous control of the compressed air generated by varying the speed of the electric motor from 40% up to 100% of the full speed;
- the compressed air generated is therefore constantly proportional to the requirements of the system;
- pressure control inside the system, in a range between 6 and 10 bar, depending on the chosen compressor model.



The graph shows the remarkable energy savings achieved with a variable speed compressor in a typical installation.



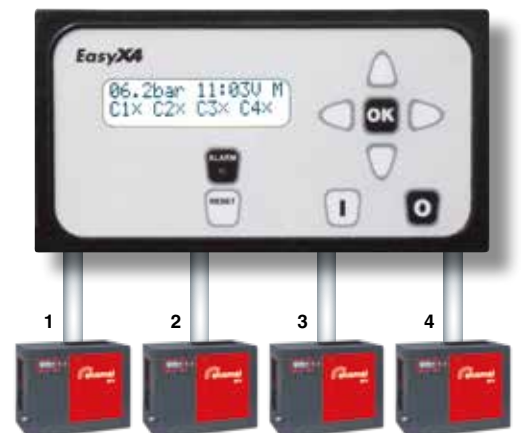
**EasyX4
Optimised control in the
compressor room**

Many compressed air stations include several compressors: EasyX4 is the easiest solution to manage complex compressor systems, with fixed speed, programmable on a weekly basis, capable of configuring up to 4 units, based on the amount of air actually required.

Three programming levels:

- **MANUAL:** compressors set on a given operating pressure range;
- **AUTOMATIC:** with pressure range exchange after a programmable time period;
- **GROUP PROGRAMMING:** the compressors can be switched within groups.

#405531604 EASY X4 CONTROLLER



ADVANCED ELECTRONIC CONTROLLERS FOR OPTIMAL MONITORING OF ALL MACHINE FUNCTIONS

The electronic controllers installed on our rotary screw compressors are specifically designed to ensure optimal monitoring and adjustment as well as flexibility and complete programming to guarantee the maximum efficiency and safety.



ETIV (18.5÷75 kW)

Controller with backlit multi-function and multi-language LCD display with drop-down menu. Main data displayed are:

- operating pressure (load, idle pressure);
- oil temperature;
- compressor status (stand-by, idle, load);
- fan status (on/off);
- date and time;
- remaining hours to maintenance;
- total operation hours;
- load operation hours;
- inverter percentage of use (VS models only).



ETMII (4÷15 kW)

Controller with multi-function display and alphanumeric menu.

The main screen displays:

- operating pressure;
- oil temperature;
- total operation hours;
- load operation hours;
- compressor status led (stand-by, idle, load);

The ETMII has also the following functions:

- four maintenance timers (air filter cartridge, oil, oil filter, separator filter);
- auto-restart after power failure;
- programmable cooling fan temperature;
- programmable remote control start of the compressor;
- integrated phases sequence control;
- display of hours remaining before maintenance.

Weekly programming

With the ETIV controller it is possible to set up to 9 separate compressor operating programs.

For each program it is possible to set the start and stop times, the days of the week it needs to operate and the relative pressure range.

With a multiple-compressor system, whether fixed or variable speed, it is possible to set various programs so as to create a "virtual network" (therefore without having to physically connect them).



9062744 ANTENNA KIT+SMS DEVICE

SMS DEVICE Service Management System

SMS is the innovative tool to remotely control and perform predictive maintenance on screw compressors equipped with a ETIV controller. If the device is configured on internet networks via Wi-Fi or Ethernet, it allows e-mails to be sent automatically in case of faults and/or automatic regular e-mails (hourly, daily or weekly) to monitor the proper operation of the compressor and the remaining hours for the main programmed maintenance.

Preventive and targeted maintenance:

- automatic sending of e-mails in case of alarms,
- option of sending e-mails reporting the status of the compressor at a set frequency (hourly, daily or weekly).

Compressor remote control:

- access to the various menu levels (user, service),
- on/off control,
- no software to be installed,
- compressor online status check.

STORM 16

15 kW

ETMI electronic controller

High performances FS50TF air-end 

Air-end, intake regulator, separator block and minimum pressure valve of our design and manufacturing, entirely Made in Italy.



Multi-function and multi-language

ETIV electronic controller

It manages and controls all functions of the compressor. It allows the installation of the SMS Device (optional).



Integrated filters and dryer

The STORM 11 ES VS model has a complete and fully integrated module that includes a refrigerated dryer and an inlet / outlet filtering system.

High-efficiency inverter

Easy to transport

The lifting holes placed at the base (both front and rear), facilitate its lifting and transport.



STORM 11 VS

VARIABLE SPEED

STORM 16

- ★ High performances FS50TF air-end
- ★ 3 available set-ups:
 - floor mounted,
 - tank-mounted
 - tank-mounted with dryer

The STORM 16 has the same features of the STORM 15 but with a larger air-end (FS50TF), to ensure the maximum performances in the same power range.

STORM 11 VS Variable speed

- ★ Extremely silent and compact
- ★ Energy savings
- ★ Plug&Play
- ★ All-in-one

Particularly suitable for companies that use compressed air with frequently varying flow rate: variable speed operation allows the machine to adjust the flow rate on the actual request.

The electronic controller monitors and adjusts the air-end speed, modulating the air generation to maintain a constant pressure inside the network and resulting in immediate benefits such as: constant pressure, optimised electricity consumption, appropriate generation of compressed air on the actual demand and minimal wear of mechanical parts.

STORM 16 WITH FS50 AIR-END

| Model | Code | Air receiver | | Power | | Air outflow rate | | | Max. pressure | | Air-end | Sound level dB(A) | Air outlet G | Net weight kg | Net dimensions LxWxH (mm) | Gross weight kg | Gross dimensions LxWxH (mm) |
|--------------------|---------------|--------------|--|-------|----|------------------|----------------------|--------|---------------|--------|---------|----------------------|-----------------|------------------|------------------------------|--------------------|--------------------------------|
| | | ℓ | | kW | HP | l./min. | m ³ /min. | c.f.m. | bar | p.s.i. | | | | | | | |
| 15 kW | | | | | | | | | | | | | | | | | |
| STORM 16-08 | V60NB92SHA772 | - | | 15 | 20 | 2350 | 2.35 | 83 | 8 | 116 | FS50 | 68 | 3/4" | 234 | 820x680x980 | 248 | 940x770x1150 |
| STORM 16-10 | V60NY92SHA772 | - | | 15 | 20 | 2050 | 2.05 | 72 | 10 | 145 | FS50 | 68 | 3/4" | 234 | 820x680x980 | 248 | 940x770x1150 |
| STORM 16-13 | V60NW92SHA772 | - | | 15 | 20 | 1750 | 1.75 | 62 | 13 | 189 | FS50 | 68 | 3/4" | 234 | 820x680x980 | 248 | 940x770x1150 |
| STORM 16-08-500 | V83NB92SHA772 | 500 | | 15 | 20 | 2350 | 2.35 | 83 | 8 | 116 | FS50 | 68 | 3/4" | 410 | 2000x680x1630 | 450 | 2070x800x1850 |
| STORM 16-10-500 | V83NY92SHA772 | 500 | | 15 | 20 | 2050 | 2.05 | 72 | 10 | 145 | FS50 | 68 | 3/4" | 410 | 2000x680x1630 | 450 | 2070x800x1850 |
| STORM 16-13-500 | V83NW92SHA772 | 500 | | 15 | 20 | 1750 | 1.75 | 62 | 13 | 189 | FS50 | 68 | 3/4" | 410 | 2000x680x1630 | 511 | 2070x800x1850 |
| STORM 16-08-500 ES | V83NB92SHA872 | 500 | | 15 | 20 | 2350 | 2.35 | 83 | 8 | 116 | FS50 | 68 | 1" | 439 | 2000x680x1630 | 479 | 2070x800x1850 |
| STORM 16-10-500 ES | V83NY92SHA872 | 500 | | 15 | 20 | 2050 | 2.05 | 72 | 10 | 145 | FS50 | 68 | 1" | 439 | 2000x680x1630 | 479 | 2070x800x1850 |
| STORM 16-13-500 ES | V83NW92SHA872 | 500 | | 15 | 20 | 1750 | 1.75 | 62 | 13 | 189 | FS50 | 68 | 1" | 439 | 2000x680x1630 | 511 | 2070x800x1850 |

Air flow was measured in the following operative pressures: 8 bar for "08" models - 10 bar for "10" models - 13 bar for "13" models.
The data and results were measured in accordance with standard ISO 1217.
The sound level was measured in accordance with standard ISO 2151, with a tolerance of ±3 dB(A).

| Model | Code | Power | | Air outflow rate (min. - max.) | | | Max. pressure | | Air-end | Sound level dB(A) | Air outlet G | Net weight kg | Net dimensions LxWxH (mm) | Gross weight kg | Gross dimensions LxWxH (mm) |
|-------------------|---------------|-------|----|-----------------------------------|----------------------|---------|---------------|--------|---------|----------------------|-----------------|------------------|------------------------------|--------------------|--------------------------------|
| | | kW | HP | l./min. | m ³ /min. | c.f.m. | bar | p.s.i. | | | | | | | |
| 11 kW | | | | | | | | | | | | | | | |
| STORM 11-08 VS | V60SN97SHA772 | 11 | 15 | 650 - 1650 | 0.65 - 1.65 | 23 - 58 | 8 | 116 | FS26 | 63 | 3/4" | 271 | 1200x700x1000 | 292 | 1330x800x1280 |
| STORM 11-10 VS | V60SP97SHA772 | 11 | 15 | 750 - 1500 | 0.75 - 1.50 | 26 - 53 | 10 | 145 | FS26 | 63 | 3/4" | 271 | 1200x700x1000 | 292 | 1330x800x1280 |
| STORM 11-08 ES VS | V60SN97SHA872 | 11 | 15 | 650 - 1650 | 0.65 - 1.65 | 23 - 58 | 8 | 116 | FS26 | 63 | 3/4" | 306 | 1200x700x1000 | 332 | 1330x800x1280 |
| STORM 11-10 ES VS | V60SP97SHA872 | 11 | 15 | 750 - 1500 | 0.75 - 1.50 | 26 - 53 | 10 | 145 | FS26 | 63 | 3/4" | 306 | 1200x700x1000 | 332 | 1330x800x1280 |

Air flow was measured in the following operative pressures: 7.5 bar for "08" models - 9.5 bar for "10" models.
The data and results were measured in accordance with standard ISO 1217.
The sound level was measured in accordance with standard ISO 2151, with a tolerance of ±3 dB(A).