Instructions for Use
and
Servicing Manual

BAH 6/10 to BAH 40/60 blower sets
and
DI 6H to DI 40H blowers

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

1. Contents

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

2. Issued by:

Headquarters:
Atlas Copco s.r.o.
LUTOS Division
Průmyslová 10
102 00 Prague 10, Czech Republic

Main manufacturing plant:
Atlas Copco LtD.
division LUTOS
Prumyslova 10
102 00 Praha 10, Czech Republic
Phone: (+420) 225 434 000
Fax: (+420) 225 434 343

3. Machine unit

These Instructions for Use apply to:

Unit	Type
Blower sets – standard design	BAH 6/10 to BAH 40/60
Blower element	DI 6H to DI 40H

4. EC DECLARATION OF INCORPORATION OF PARTLY COMPLETED MACHINERY

The full text of the Declaration in paragraph 4.1 constitutes Annexe 1 of this manual.

4.1. Declaration of incorporation

We, Atlas Copco s.r.o., LUTOS Division, declare under sole responsibility that this product, [1. Machine name 2. Machine type 3. Serial number], must not be put into service until the final machinery in which it is intended to be incorporated into or assembled with complies with the relevant Essential Health and Safety Requirements of EC Directive 2006/42/ES on the approximation of the laws of the Member States relating to machinery, as amended.

5. General description of the machinery

5.1. Basic information

This Instructions for Use and Servicing Manual for BAH blower sets and DI-H blowers (the „Manual“) contain important guidelines which should be complied with from the moment of product acceptance throughout its entire service life. Although developed for complete LUTOS BAH blower sets, this Manual also applies to self-contained DI-H blowers. Read this Manual thoroughly prior to embarking on the installation, commissioning and start-up of the product, in order to ensure a failure-free and safe operation and long service life of the facility. This Manual refers to and cites safety regulations to be taken into account particularly when operating the facility. This Manual must be accessible to the operators and maintenance staff at any time. Any operation and maintenance should proceed in accordance with the instructions included in this Manual. Any repair/rebuilding should preferably be performed by LUTOS staff. During the warranty period, any dismounting should be performed by professional LUTOS staff or by persons authorised by LUTOS.

This Manual contains instructions for use of standard blowers and blower sets intended for conveying air. The manufacturer should be consulted regarding the use of non-standard blowers/blower sets for conveying other gases.

Instructions in this Manual apply to blower sets whose Quality Certificate forms an Annexe hereto.

In the event of failure of the unit, contact the Commercial/Technical Services Department of the LUTOS Division („LUTOS Service“) immediately. Always report the information displayed on the type plate, particularly the blower set / blower type and serial number.

5.2. Description of the blower

LUTOS BAH type blower sets include LUTOS blowers with DI-H triple toothed Roots type rotors.

LUTOS Roots type blowers work on the oil-free gas conveying principle. Such blowers constitute the most widespread type of double-rotor blowers. The rotors‘ rotation axes are parallel and their motion is coupled through a synchronising gear with identical numbers of teeth on the 2 wheels. This synchronisation gear provides contactless motion of the rotors, the rotors rotate against each other. The suction and delivery necks end between the rotor axes. The gas is conveyed by the blower without pressure increase and is compressed in the delivery neck due to the effect of the gas conveyed previously (external compression blowers).

Labyrinth seals, which are not subject to wear, are used in the standard rotor design, The overpressure and vacuum created in the various parts of the seal circuit are balanced in the middle of the seal, which, in addition is connected with ambient air through a hole. The blow-off of the air mass from the drilled openings is thus normal, its intensity depending on the clearance in the seals. If the blow-off contains oil, this may be due to a defective bearing or to an excessive amount of oil. Labyrinth seals do not guarantee the absolute leak tightness of the blower. Therefore, the oil level in the covers must not exceed the specified limit. **Lubricating oil should be filled into the facility only before its start-up, so that oil leakage during machine transport and handling is avoided.**

Blower drive

The blowers are largely driven by motors. The torque is normally transmitted from the motor shaft to the blower shaft by a belt. The blower shaft forms part of one of the rotors.

5.3. Description of the blower set

In the BAH blower set the blower with horizontal flow of the medium is fixed above the motor, between the suction silencer and delivery silencer, which constitute the blower set‘s load-bearing skeleton. This arrangement is rather compact, having small spatial demands. The blower set is depicted on a dimensional sketch, which is supplied with this Manual.

Main parts of the blower set

- Blower
- Suction silencer, which contains sieves to trap coarse impurities, and since the medium is conveyed at low velocities, its cross section makes for filtering of the medium by sedimentation. A sufficiently large volume is provided in the silencer‘s bottom for the forming sediment. The suction of the medium conveyed is located from the outside of the noise enclosure, viz. through a covered direct inlet.
- Delivery silencer, which is of a design similar to that of the suction silencer; a chamber with reductions to reduce pulsations is located inside the silencer.
- Motor rocker, which is suspended by means of pins between the two silencers under the blower and makes for tensioning the belts by tilting the motor.
- Check valve, which is located between the blower delivery flange and the delivery silencer.
- Relief valve, which protects the blower from overload and discharges air (gas) into the atmosphere when opened. Directly controlled spring-type HEROSE valves are used, with the opening pressure adjusted by pretensioning the spring.
- Pressure hose for attaching the delivery segment, including clamps.
- Motor, bottom type, single speed
- Belt drive using V-belts
- Noise enclosure for indoor installation, also serving as a protective cover of the belt transmission segment.

No belt drive cover is provided in the standard-design blower set equipped with a noise because this belt drive-covering task is taken over by the noise enclosure.

- A belt drive cover is normally supplied where no noise enclosure is provided.
- Options:
    - Motor. A single-speed, double speed, or variable speed motor with a frequency inverter can be chosen.
- Special accessories:
    - Noise enclosure for outdoor installation
    - Pressure gauge at the delivery piping
    - Compensator
    - Pressure and temperature sensors

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

◦ Electrical distribution board with a control unit including a pressure/temperature sensor at the outlet
◦ A fine filtration unit including a fouling indicator

5.4. Noise enclosure

Noise enclosures serve to reduce the blower set noise.

Noise enclosures are made of steel and contain a noise dampening material. The blower shaft end is fitted with a propeller for forced ventilation. The cooling air suction and delivery openings are fitted with silencers. During forced ventilation, the propeller sucks air from the enclosure and drives it to the outside. The enclosures allow the facility to be installed outdoors or in a machine hall. The outdoor enclosures differ from the indoor enclosures by the surface finish only.

WARNING:
Forced ventilation of the enclosure does not replace ventilation of the machine room!

5.5. Symbols used in this Manual

5.5.1. Mandatory symbols

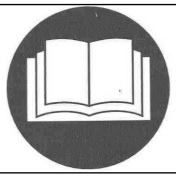
	
Mandatory: Read the Instruction Manual!	**Mandatory: Hearing protection must be worn!**

Table 1 Mandatory symbols

5.5.2. Warning symbols

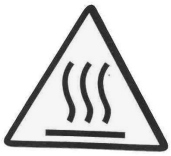
		
Warning: Omission of these instructions may cause damage to the device or minor injury	**Warning: Risk of high temperature**	**Warning: Injury hazard**

Table 2 Warnings

5.5.3. Prohibition

	
Prohibition: Do not start!	**Do not use a hammer!**

Table 3 Prohibition symbols

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

5.5.4. Informative symbols

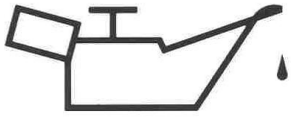
	
Oil filling	**Suspension**

Table 4 Informative symbols

5.6. Description of the intended use

The blowers serve to convey and compress or exhaust gas. Since the rotors are not in contact and no contact occurs between the rotors and the casing either, the medium being conveyed is not contaminated with particles formed by wear or with oil.

Process applications of the blowers/blower sets

- Wastewater treatment plants
  - Increasing the amount of oxygen in the water, maintaining bacteria floating
  - Ventilation of activation tanks or sand traps
- Pneumatic transport
  - Conveying of all types of loose material, granules, variable grain size materials
- Miscellaneous
  - Backflushing of filters in drinking water treatment plants
  - Release of silos (hoppers, bins)
  - Curling loose materials and mixtures
  - Supply of process air up to a maximum pressure of 80 kPa

WARNING!
The blowers must not be used in environments with a risk of explosion!

Working media

Standard blowers are designed to compress or exhaust air or other non-aggressive and non-explosive gases. Specially designed and manufactured blowers/blower sets must be used in environments with a risk of explosion or for handling humid or aggressive gases.

Suction and delivery temperatures

Both the suction and delivery temperatures depend on the degree of gas compression. The suction and delivery temperatures are included in the blower set parameter calculations. The calculation forms part of the blower set offer.. The maximum temperature of the medium at the delivery pipe of a standard blower is 140°C. The blower withdraws the medium from the same area from which the cooling air is withdrawn by the motor. With regard to the motor cooling and performance, ambient temperature must not exceed 40°C.

Machine hall ventilation

The machine room air is heated by radiant heat from the motors, blowers, delivery silencer and delivery piping. In order to decrease the temperature, heat must be removed from the machine hall by a suitable method – by ventilation.

The outlet piping should be insulated if the outlet temperature is appreciably high. Where the air is withdrawn by the blower set directly from the machine hall, forced ventilation of the machine hall must be mostly provided. The machine hall design should provide for additional openings to take in cooling air and exhaust heated air. Arrangement with fans at the exhaust is the preferred option. Cooling air suction for air suction by the blower from the machine hall area must be designed so as to provide a sufficient volume of cooling air as well as a sufficient volume of air to be sucked in by the blower set. The air flow velocity through the openings should be between 5 and 10 m.s-1. The suction and exhaust openings should be designed so as to avoid noise penetration out of the machine hall through them.

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

Data of the thermal power of the blower and the required amount of cooling air, calculated by the WinDIT code (available from the sales representative), are always included in the blower set offer.

WARNING!
The cooling air stream must never be directed against any part of the blower casing! Local cooling brings about thermal distortion which may result in total blower damage.

Operation at 0°C or lower temperatures

The lower limit of ambient temperatures at which the blower set can be operated steadily is -20°C. Short-time operation at temperatures as low as -30°C is admissible. This limitation applies primarily to the standard-design belts and motors. No water cooling is included in the blower set design. Condensate forming in minimal amounts in the delivery piping does not affect the blower set operation.

Suction and delivery pressures

The suction and delivery pressures are given on the blower set type plate and in the blower set parameter calculation. The type plate displays the maximum tolerable pressure difference to which the motor input power is dimensioned and the relief valve is set. The pressures at the blower delivery and suction flanges are denoted pv and ps, respectively, the pressure at the flange for attaching the blower set to the piping system is denoted p3.

Lubricants

The volumes of oil fills in the blowers are specified in the table below.

Oil fill volume			
	Oil fill		
Type	**Drive side [L]**	**Gear side [L]**	**Total [L]**
DI 6	0.04	0.08	0.12
DI 10, 20	0.03/0.07	0.05/0.11	0.08/0.18
DI 30, 40	0.07	0.1 0	0.17

Table 5 Oil fill volumes

Use fully synthetic engine (automobile) oil, SAE 5W-40, classification ACEA A3/B3 and API SJ/CF. Some suitable oil types are given in the table below:

Oil type		
Oil	Manufacturer (agent)	Distributor
MOBIL SPECIAL X SAE 5W-40 API SJ/CF, ACEA A3-96, B3-96	ExxonMobil Lubricants & Specialties Europe Division of ExxonMobil Petroleum & Chemical, Polderdijkweg 3 B-2030 Antwerpen, Belgium	

Table 6 Oil type

The blower manufacturer should be consulted if the use of any other oil (e.g. in the food industry) is planned. The motor lubrication procedure is described in the Instructions for Use of the motor, which constitute a separate supplied document. No other lubrication points exist on the blower set..

Maximum lubrication system temperatures

The maximum oil temperatures must not exceed 100°C, a level to which standard stabilisation of bearings in the blower are linked.

Belt pulley speed

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

The maximum pulley speed is identical with the maximum rotational speed of the blowers. The belt guard and noise enclosure are strong enough to withstand the impact of a ruptured belt.

Working medium velocity

- The velocity through the inlet and outlet openings for air in the machine hall is 5 to 10 m/s
- The recommended velocity through the piping: is 22 m/s
- The maximum velocity through the delivery piping is :35 m/s
- The maximum velocity through the suction piping is 30 m/s

Safety equipment required

If a pressure gauge at the blower delivery piping is not included in the product delivery, a pressure gauge must be installed for the delivery piping. This should be a glycerine pressure gauge or a pressure gauge with a dampener, in order to ensure a reliable function.

5.7. Delivery, shipment, storage

5.7.1. Delivery

The blower sets are delivered as complete units, including the noise enclosure. V-belts are supplied unassembled, the motor rocking frame (rocker) is secured in the bottom position with a screw. The blowers are delivered without any oil fill. Accessories specified in the purchase agreement are included in the delivery. The dimension and weight data are given in the dimensional sketch of the particular blower set supplied, attached to this Manual.

5.7.2. Shipment

The set must be transported in a sheltered cargo space.

The rocker must be secured with the appropriate screw during shipment! Otherwise the shaft and/or bearings may suffer damage.

5.7.3. Acceptance

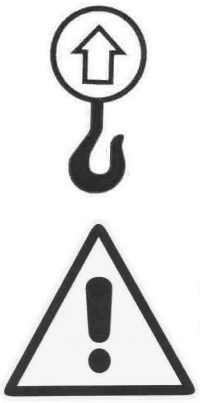
The consignment acceptance procedure must include a completeness check against the delivery notes. Any damage suffered by the consignment during shipment must be recorded in writing in the presence of the carrier, and the record, signed by the carrier, must be sent immediately to the supplier.

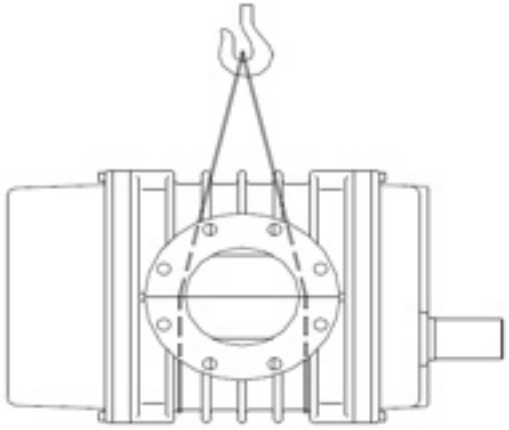
5.7.4. Handling

The unit must be handled by using a lifting carriage or crane as described herein later.

Blower

The blower should be handled as shown in the figure below. Use soft sling ropes. If steel ropes are to be used, make provisions to protect the surface coating from damage.





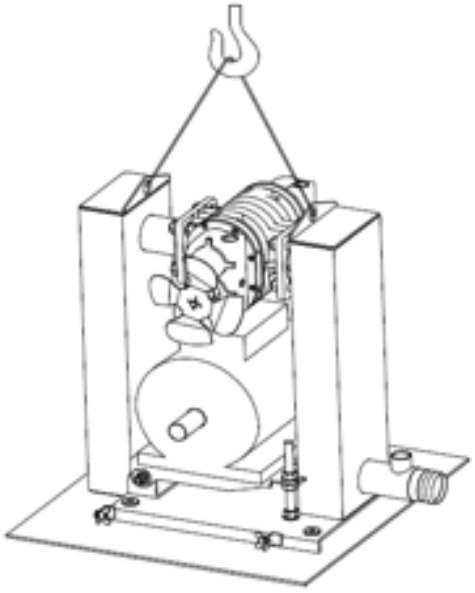
LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

WARNING
Never suspend the blower by the flanges!

Blower set

Remove the noise enclosure prior to any handling of the blower set. Handle the blower set by means of a crane. Use the openings in the suction silencer and delivery silencer plates at the highest points of the blower set to suspend the unit.



Noise enclosures

The noise enclosure parts can be handled manually.

Motors

The motor handling procedure is described in the Instructions for Use of the motor. Motors are largely provided with suspension lugs.

5.7.5. Storage

The blower set in the original packaging must be stored at a dry place and protected from dust. A blower set in an outdoor noise enclosure can be stored outdoors. A set (to be) stored longer than 6 months should be (re)treated with a preservative. Common preservation agents can be used for this purpose. Storage conditions:

Temperature: -30°C to 40°C
Relative humidity: up to 80%

6. Installation site, installation and assembly

6.1. Installation outdoors

Local conditions (snow, potential flooding, ...) should be taken into account (ČSN P ENV 1991-1) if the blower set (incl. enclosure) is to be installed outdoors.
The outdoor noise enclosures also provide weather protection.

6.2. Installation in a machine room

The machine hall area should be large enough to accommodate the blower set encased in the noise enclosure and leave a clearance of 1 m or, better still, 1.2 m at the sides and between the sets (enclosures) and 1.2 m between the wall opposite to the delivery at the noise enclosure and the wall. The machine hall height depends on the selected method of handling.

Installation holes should be taken into account when designing the machine hall. The noise enclosures are dismountable. It is recommended that the machine hall be equipped with a suspended track with a crane cab

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

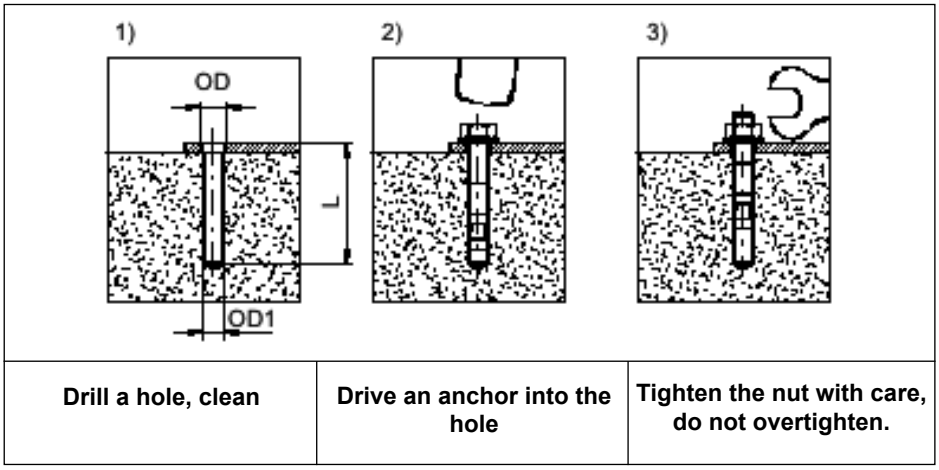
and/or space be left for a lifting carriage for blower set maintenance and repair (in case the blower and motor have to be dismounted due to failure). The area needed for the installation of the various types of the BAH blower set can be derived from the dimensions shown in the dimensional sketches.

The floor for installation must be flat and even, dimensioned to accommodate the weight of the unit and the length of the anchor. No special requirements are put on the floor from a load-bearing aspect, as the blowers and the motors are dynamically balanced. The magnitudes of mechanical vibrations of the blowers and motors are given in Table 9. The weight of the particular blower set is given in the appropriate dimensional sketch.

The blower set should be seated horizontally onto the rubber pad which is included in the delivery.

WARNING
Once seated, the blower set must be anchored to the floor. Otherwise the blower set may be unexpectedly set in motion and suffer damage.

Blower set anchoring procedure



Drill a hole, clean	Drive an anchor into the hole	Tighten the nut with care, do not overtighten.

Blower set	Anchor	OD [mm]	OD1 [mm]	L [mm]
BAH 6/10	Upat EXA 10/15	11	10	90
BAH 10/30 – BAH 20/30	Upat EXA 10/15	11	10	90
BAH 30/60 – BAH 40/60	Upat EXA 12/15	13	12	105

Table 7 Blower set anchoring

The noise enclosures have no bottom. An insulating plate must be put under the blower set with an enclosure if the blower set is to be seated onto a semi-grate.

6.3. Attachment of the piping

6.3.1. Attachment to the BAH blower set

The blower set delivery must be attached to the piping by means of a hose which is included in the delivery.

A pressure gauge for the blower set delivery piping is not included in the delivery. A pressure gauge must be installed onto the piping as near to the delivery as possible if a non-standard blower set is involved or if a blower alone is supplied. In view of the gas pulsation, pressure gauges resistant to cyclic pressure change in the piping, e.g. glycerine-based pressure gauges, should be used. A damping element must be inserted between the piping and the pressure gauge if an ordinary pressure gauge is used.

The deaeration plug must be removed from the glycerine-based pressure gauge after seating the blower set. Otherwise the pressure gauge will display incorrect data.

Connection:

- Install the piping in the outlet axis.
- The piping must be supported on fixed points and sliding points. The hose must not carry the weight of the piping. The first fixed point must be as near to the hose as possible.

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

- The piping diameters should not be smaller than the nominal inner diameters of the blower flanges.
- The recommended flow velocities in the piping are up to 22 m.s-1.
- Use large-radius pipe bends where possible in order to reduce losses.
- Install the stop valves tight to the branches in order to avoid deposition of impurities in blind pipe branches.
- Hot legs (delivery piping) should be provided with thermal insulation.
- Penetrations through walls should be elastic and with piping noise reduction (do not fix the pipes by firm embedding).
- Provide long and branched piping with compensators.
- Avoid abutted installation of the piping in the registers. Where standing waves may be generated in the registers, check the register lengths for excitation frequencies of sixfold the rotational speed of the blower (air mass pulsation frequency),

When designing systems for pneumatic transport, cement curling or similar applications where expansion of the polluted conveyed air (volume between the clack valve and the technological facility) may take place, the application must be analysed and, where appropriate, steps must be taken to trap the pollutants during the air mass back-flow (mechanical clack valves do not act quickly enough). Contact LUTOS in this respect.

6.3.2. Attachment to a self-contained DI blower

Provisions must be made to free the incoming medium from impurities.

The standard filterless design is not appropriate if the blower is to suck air in from the area. Such air needs purification, and the blower should be equipped with a LUTOS suction filter („fine filtration“).

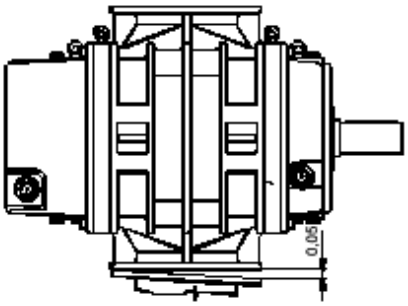
Consult the manufacturer if air is to be brought to the suction port through a pipe because the standard design is not dimensioned for this. If the air to be withdrawn is filtered centrally for more than one blower, the suction piping must be cleaned of foreign matter thoroughly. A compensator must be inserted between the blower and suction piping.

A suction sieve installed as close to the blower suction flange as possible is recommended for the first 500 hours of operation. The appropriate sieve mesh can be derived from the table below, specifying impurity particle sizes admissible for the various blower sizes.

Blower	DI 6	DI 10 DI 20 DI 30 DI 40
Admissible impurity size [mm]	0.01	0.05

Table 8 Admissible impurity particle size

The blower necks must not be loaded by the piping weight. The piping flange must be in tight contact with the blower flange before the two flanges are screwed together. A gap along the circumference of the seal must not exceed 0.05 mm, as shown in the figure below.



The blower must turn smoothly after tightening the flange connections.

Connection:

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

- The piping must be Installed in the axis of the hose or of the special design compensator.
- The piping must be supported on fixed points and sliding points. The hose/compensator must not carry the weight of the piping. The first fixed point must be as near to the hose/compensator as possible.
- The piping diameters should not be smaller than the nominal inner diameters of the blower flanges.
- The recommended flow velocities in the piping are up to 22 m.s-1.
- Use large-radius pipe bends where possible in order to reduce losses.
- Install the stop valves tight to the branches in order to avoid deposition of impurities in blind pipe branches.
- Hot legs (delivery piping) should be provided with thermal insulation.
- Penetrations through walls should be elastic and with piping noise reduction (do not fix the pipes by firm embedding).
- Provide long and branched piping with compensators.
- Avoid abutted installation of the piping in the registers. Where standing waves may be generated in the registers, check the register lengths for excitation frequencies of sixfold the rotational speed of the blower (air mass pulsation frequency),

When designing systems for pneumatic transport, cement curling or similar applications where expansion of the polluted conveyed air (volume inside the delivery silencer, between the clack valve and the technological facility) may take place, the application must be analysed and, where appropriate, steps must be taken to trap the pollutants during the air mass back-flow (mechanical clack valves do not act quickly enough). In such cases contact LUTOS (like above – see the paragraph describing the attachment to the BAH blower set).

6.4. Blower set connection to the power source

ATTENTION
Work on the electrical equipment may only be performed by authorised persons with appropriate qualification in electrical engineering.

The blowers, blower sets, noise enclosures and motors are fitted with grounding weldments. The enclosure of standard blower sets is determined by the enclosure of the motor, which is IP 55.

Electrical installation must comply with the requirements for machinery stipulated by Directive 98/37/EC and, in particular, by ČSN EN 60204-1, 2nd Ed. This is the electrical part supplier‘s responsibility. Electric motor terminals constitute the interface of the standard LUTOS blower sets. If a control system is included in the delivery, only a power cord must be provided unless the power cord is included in the delivery. Refer to the instructions for use of the control system for detailed instructions.

The power cord must not hinder the motion of the motor with the rocker!

The motors should be connected as recommended by the motor manufacturer. The wiring diagram is attached to the internal surface of the cover of the electric motor‘s terminal panel. The use of the Y/delta motor start-up (softstart, ...) is recommended also where the high-power motor can be connected directly (delta connection). The soft start saves the blower set lifetime.

WARNING
Motors whose power is 11 kW or higher must not be started up directly (in the delta connection) unless approved so by the blower manufacturer.

For transport/shipment, the rocker with the motor is fixed into position with nuts, which must be released prior to the start-up of the unit.

Electrical equipment

The blower sets are normally supplied without electrical connection or control. Basic information regarding the electric and electronic instruments are given on their type plates and in their accompanying documentation (instructions for use, circuitry layouts, ...) The electrical part supplier is obliged to ensure compliance with the requirements of the applicable standards, specifically ČSN EN 30 204-1 Safety of machines – Electrical

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

equipment of prime movers. Requirements for radiation pursuant to ČSN EN 50081-1 1992 and ČSN EN 50 081-2 1993 for facilities with a motor whose rated current is lower than 16A were not tested because the radiation of this facility depends on the installation and on the properties of the technological unit within which the facility will be used. If an electric switchboard with a control unit is included in the delivery, its basic data are given in the dedicated instructions for use.

7. Warnings against inadmissible uses

- **Standard blowers must not be run in the reverse rotation mode.**
- **Standard blowers must not be pressure overloaded, the compression ratio must not exceed 2.**
- **Standard blowers must not be thermally overloaded.**
- **Standard blowers must not be used in environments where the risk of explosion exists.**
- **The impurity particle size in the medium which is sucked in must not exceed the limits specified in Table 8**

8. Other hazards

8.1. Occupational health and safety

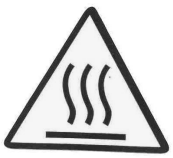
Although complying with European health protection standards, LUTOS blowers can pose health hazards. The following guidelines must be complied with by authorised staff in order to prevent injuries:

- Personnel must be adequately trained and instructed.
- Instructions in this Manual should be complied with during any activities.
- The suction area must be free from any solid, liquid or powder material.
- Contact LUTOS if you have any questions or you need any clarification.
- Do not handle the blowers while in operation.
- Do not run the blower with the suction pipe open, i.e. with the rotors freely accessible.
- Do not operate the unit if the noise enclosures or belt covers are damaged.
- Wear protective gloves: the unit is hot while in operation or while cooling down after operation.
- Wear an ear protection device if the noise enclosure is open or if the running unit is not equipped with a noise enclosure,
- Normally, the blower set is supplied with a noise enclosure, which also plays the role of a solid protective housing. No extra pulley cover is provided. Hence, residual hazard of injury exists (belt transmission, cooling propeller). Do not run the blower set unless the noise enclosure is shut!
- Be cautious when working in the area of the rocker with the motor: the rocker is held in the working position by belt(s) only. The rocker position may change suddenly if the belt ruptures.

- Disconnect the motor from the power supply and secure it against switching on prior to any maintenance or repair.
- If using cleaning agents, beware of the hazard of poisoning if inhaled, or corrosion
  if in contact with the body. Proceed as recommended in the cleaning agent.'s instructions for use.

8.2. Areas with extremely hot surfaces

Extremely hot surfaces



- **Blower**
- **Delivery silencer**
- **Delivery piping**
- **Relief valve**

8.3. Operator protection devices

- Hearing protection devices

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

- Protective goggles
- Protective gloves

8.4. Waste disposal

Packaging material

All materials serving to package the product are reasonably environmentally friendly and are recyclable. Carton parts are made of recycled paper and wooden parts are untreated. Pallets can be sold to a used pallet purchasing company. Plastics are labelled as follows:

>PE< polyethylene, e.g. packing sheet

Blower / blower set

Dismount the parts or the blower, clean them of oils, greases and impurities, and transfer them to an authorised company for professional disposal.

An operable blower can be offered to the manufacturing plant for back-purchase based on an agreement.

Oils and cleaning agents

The recommended oils do not contain polychlorinated biphenyls (PCBs). Refer to the appropriate oil safety data sheets (available from LUTOS on request) for details. The oil waste code is 130207 (Czech Act No. 383/2001).

9. Commissioning/start-up

Maintain a log for entering records of operational data, maintenance, inspections and repair, during the warranty period as a minimum. Maintaining this log during the warranty period is a precondition for validity of the warranty. This concerns, in particular, the inspections specified in Table 12

No belt drive cover is provided in the standard design blower set accommodated in a noise enclosure because this role is played by the noise enclosure. Procedures that are immediately related to the blower set commissioning/start-up and which need to be performed with the noise enclosure open while the blower set is running may only be performed by authorised persons who have been demonstrably made familiar with the hazard posed by contact with the moving parts.

9.1. Inspection prior to the first start of the blower set

Inspection prior to the first start of the blower set should be performed by a LUTOS authorised servicing engineer. The following procedures must be performed if a different inspection arrangement has been agreed.

Inspection of the installation

- Inspect the quality of installation, attachment with anchoring screws
- Inspect the installation of all parts that may have been dismounted during the installation process, with focus on operator safety
- Check the opening of all valves in the delivery piping

Fasteners

- Inspect all fasteners and their tightening

Oil

LUTOS

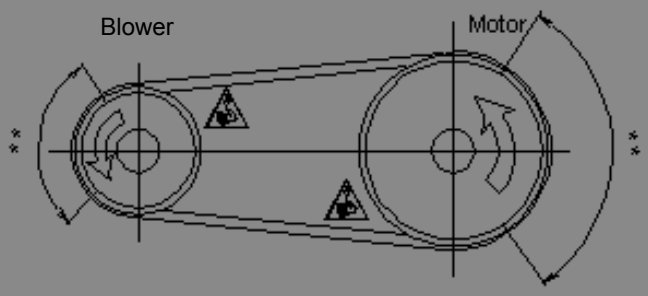
Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

Never mix different oils!

Inspection of the machine run

Check if the blower rotates freely (turn the pulley by hand)

WARNING!
Turning the pulley is a procedure posing an injury hazard. Grasp the pulley in the area where the belt embraces it.



Danger of injury

** Grasp the drive here

Be cautious, your fingers may be crushed!

Inspection of the piping

Inspect the suction and delivery segments for unobstructed flow

Check of the direction of rotation

Do not run the unit longer than 1 second. A longer run may damage the blower if, accidentally, the motor rotates in the reverse direction. The blower drive should rotate in the direction indicated by the arrow.

WARNING
Do not allow the unit to run in the reverse direction, the unit will be destroyed!

WARNING
Do not switch the blower on during the run-down! The unit may suffer major damage. Switch the blower on while at rest.

9.2. First start-up

The first start of the unit will be performed by an authorised LUTOS servicing engineer unless agreed otherwise. The following procedures must be performed if agreed otherwise:

- Check the relief valve action and setting while the unit is running.

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

- In roughly 1 minute, check the operating pressure. Switch off the motor after reaching the specified pressure.
- Monitor the blower run-down. The blower should run down freely, without impacts or abrupt stopping.
- Inspect the propeller rotation direction. Air should be flowing from the noise enclosure opening above the ground.

Safety valve

Check the performance of the relief valve and an unobstructed motion of the sealing cone as stipulated by ČSN 13 4309 – in-service check at a pressure of 80% of the opening pressure or higher. The free motion of the cone must be checked in the HEROSE valves. Relieve the cone load by relieving the knurled nut in the valve body cover. Turn the nut until it is hard to turn. Then turn it approximately another 180 degrees; the cone will be relieved and the relief valve starts „puffing“. Tighten the nut back cautiously.

9.3. Trial operation

- Check, monitor and record the operating pressure and temperature levels
- Monitor any noise and vibrations while the blower set is running
- Check the blower surface temperature for any local overheating
- Inspect the condition and amount of oil in the oil level gauges

Type **Blower speed [rpm]**					
	DI 6	DI 10	DI 20	DI 30	DI 40
	5,000	6,000	5,600	5,500	5,250
Working level (testing room) [mm.s-1]	< 2	< 4	< 4	< 5	< 5
Switch-off [mm.s-1]	> 3	> 5	> 5	> 6.5	> 6.5

Table 9 Mechanical vibration of the blower

MOTOR	
Size	56-160
Number of poles	2.4
Working level (testing room) [mm.s-1]	< 5
Switch-off [mm.s-1]	< 7.5

Table 10 Admissible motor vibrations

9.3.1. Check intervals for the trial operation

- 15-minute intervals during the first 2 hours. This will be performed by LUTOS staff; the values should be recorded. During the first 2 hours, the service engineer will train the operators and the values will be recorded by LUTOS staff.
- 30-minute intervals during the next 2 hours. The records will be entered in the log by the trained operator.
- One-hour intervals during the next 8hours. The records will be entered in the log by the trained operator.

9.4. Emergency stop control elements

Emergency stop control elements are not included in the standard LUTOS blower set delivery. Their installation is the responsibility of the electrical part supplier!

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

9.5. Setting and adjustment

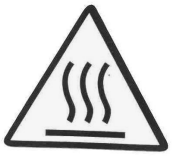
9.5.1 Oil filling/replacement

The blower has two oil compartments. Two filling openings on the top on the 2 covers serve the oil filling procedure. Screw off the plug and fill in the oil, best by mean of a funnel in order to prevent oil leak, staining of the belt transmission system, etc.

Openings in the bottom of the covers serve to drain the old oil. Spent oil should be drained into a pre-prepared container of a suitable size. In addition to the draining opening plug, the filling opening plug must also be removed to prevent a vacuum in the cover and to enable the oil to flow out freely into the container. Inspect the spent oil for any metallic fragments/dust, whose presence may point to damage beginning in the bearings or gear. Contact LUTOS if this is the case.

Let all oil drip out and screw in the draining opening plug before filling new oil into the blower.

The oil level should not reach above the centre of the oil level gauge. The lower limit for the oil level is 3 mm below the upper limit. The oil level, measured at rest, must always lie between the 2 limits. Refill oil immediately if the oil level lies below the lower limit, Refill the oil with caution so that the level should not lie higher than the middle of the gauge. Otherwise the oil will leak through the exhaust openings or into the blower.



The oil temperature in the blower can exceed 100°C in dependence on the operating conditions. Wait till the temperature has decreased reasonably before filling/draining oil! You may get burnt.

Lubricants (motor):

The bearings of standard small-size motors contain permanent grease fill. Larger-size motors require the periodical addition of grease. The lubrication procedure is described in the instructions for use of the motor.

9.5.2. Replacement of filter elements of the suction filter (if a suction silencer is included in the delivery)

Suction filter fouling brings about increased vacuum at the blower suction, which is indicated by a red strip on the filter fouling indicator. If a pressure gauge is used in place of the indicator, the working region is marked green on the pressure gauge whereas the increased vacuum region is marked red. The filter element needs to be replaced in this case. A new filter element can be ordered by specifying the number which you can find on its rim or in the Completeness and Quality Statement.

Following filter element replacement, unlock the mechanical lock of the filter fouling indicator by pressing it, so the red strip indicating increased vacuum disappears.

9.5.3. Belt pulley and belt tensioning

Standard blower sets are equipped with V-belt drives. The torque is transmitted from the pulleys to the shafts by Taper Lock bushings

Taper Lock – dismounting and mounting

Dismounting

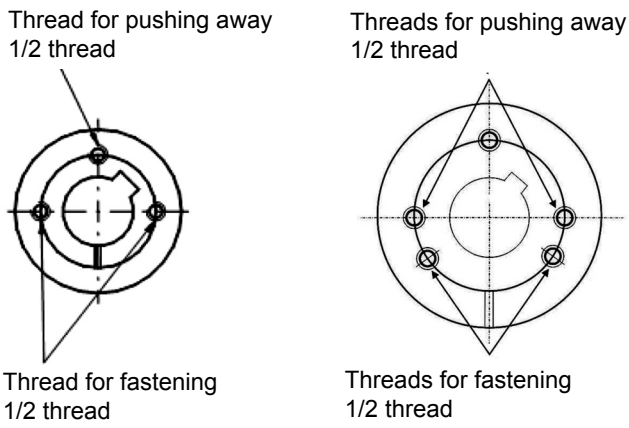
Release and remove all screws. Screw the screws into the push threads, tighten uniformly and crosswise until the bushing is released from the pulley.

Mounting

Degrease the shaft pins, bushing, and opening of the pulley. Slide the bushing into the pulley. Position the opening with the half-thread so that the openings in the bushing are aligned with the openings in the pulley. Lubricate the screws slightly with oil and screw them into the fastening holes. Do not tighten them yet! Slide the bushing together with the pulley onto the shaft, and now tighten the screws uniformly and stepwise by using a torque wrench and applying the torque Ms specified in Table 10. Start the facility shortly under load, then inspect the screws for correct tightening (to the torque). Fill the empty threaded holes with grease to prevent ingress of impurities.

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz



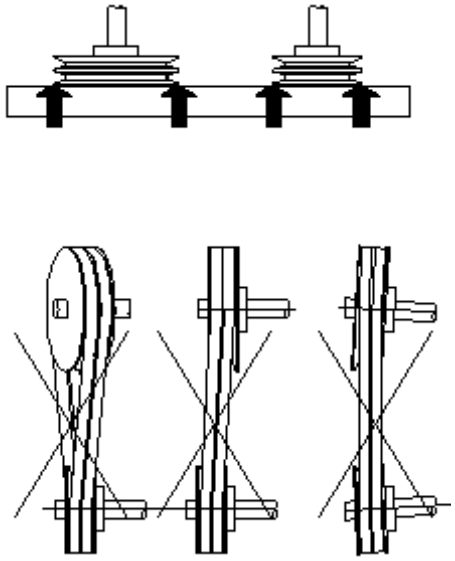
V-belt maintenance

The belts work with a pre-tension dependent on the power transmitted. The belts are optimally tensioned automatically during the run by the motor rocker tilt.

The belt transmission parameters, i.e. pulley size and type and number of belts, have been designed and optimised taking into account the required transmission ratio and transmitted power so that the belts are used to their maximum. **If the number of functioning belts in the drive is incomplete, a new set of belts of identical type and size must be installed. Use belts with a guaranteed peripheral speed of 50 m.s-1! The belt type and length can be found in the Quality and Completeness Certificate.**

The service life of the belt drive is guaranteed provided that periodical maintenance is performed and belts of the same type as originally supplied by LUTOS are used.

The unit is delivered with the blower and motor shafts arranged in parallel and the pulley grooves axially aligned. After dismounting the pulley, the pulley must be slid back onto the shaft so that the fronts of the two pulleys are in one plane. The deviation must not exceed 0.4% (the largest admissible gap between a ruler and the pulley is 4 mm at a distance of 1 m). After dismounting the motor, the shafts must be aligned in parallel again and the pulleys must be aligned in one plane, as shown in the figure below:



9.6. Operation behind closed doors

Normally, the blowers run in the unattended mode. This must be taken into account when making provisions against overload or sudden failures.

Current protection against overload is the electrical part supplier‘s responsibility.

The operator must make steps to ensure that the unit will not be overloaded by continual opening of the relief valve. This concerns, in particular, situations where more than one blower set is run in parallel (in wastewa-

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

ter treatment plants for instance) and a delivery branch is closed but the amount of air supplied is not reduced to the appropriate level by reducing the rotational speed or by stopping a blower set. A running set with frequent relief valve opening gives rise to pressure pulsations which reduce the service life of the bearings and clack valve appreciably and ultimately can destroy the blower.

Suitable provisions to protect the facility from overload include electrical monitoring of air temperature at the outlet and of ambient temperature, linked to alarms or emergency stop.

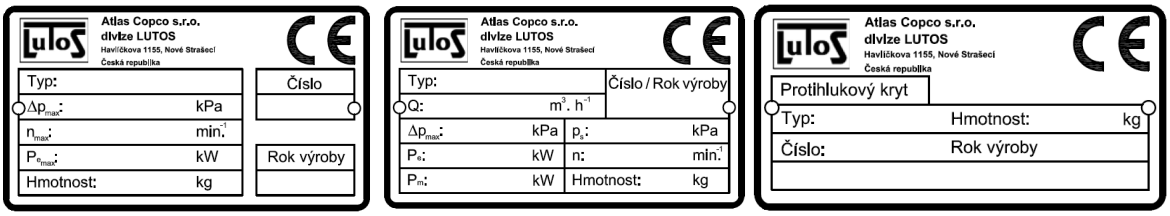
Torques for the various bushing types								
Type	1008	1108	1210	1215	1310	1610	1615	2012
Ms [N.m]	5.6	5.6	20	20	20	20	20	31
Type	2517	3020	3030	3535	4040	4545	5050	
Ms [N.m]	48	90	90	112	170	192	271	

Table 11 Torques for the various bushing types

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

9.7. Plates on the blowers/blower sets



Blower type plate | Blower set type plate | Noise enclosure type plate

The correct direction of rotation is shown by arrows on the blower cover at the shaft and on the belt cover.

TRANSPORTED
WITHOUT OIL

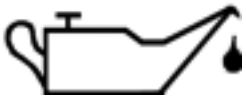
A carton tag is attached to the suction indicator or pressure gauge or to the blower if the blower alone is delivered.

Furthermore, plates as per ČSN EN 1012 are fixed to the blower and blower set (in dependence on the design):

C1 Mandatory: Read the Instruction Manual

C2 Mandatory action: Hearing protection must be worn

C7 Warning: Risk of high temperature



C19 Oil fill

C21 Lifting point

Label – Warning

Warning label on the suction silencer or noise enclosure

10. Description of and instructions for a safe adjustment and maintenance to be performed by the user

10.1. Operator training

The user‘s operators must be trained after the unit has been commissioned and handed over to the user.

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

1) Oil fills: inspection of the amount and condition, making up, replacement

The procedures should be performed on the blower set at rest only. The oil amount is determined by the blower type. The level of oil being made up must not reach higher than the centre of the oil gauge.

Only recommended oil types should be used. Explanation of the replacement procedure, replacement intervals.

2) Inspection of the condition of the belt transmission mechanism or coupling

3) Filter elements: inspection/replacement

Explain the importance of appropriate filter element replacement The replacement intervals depend on the dustiness of the environment and blower set use patterns.

4) Instruction regarding the correct start-up procedure

Make the trainees familiar with potential risks.

5) Instruction regarding the contents and importance of the accompanying documents

Instruction manual, Quality and Completeness Certificate.

6) Servicing interventions

Troubleshooting, service ordering procedure.

7) Hand-over record

The written hand-over record form should be filled in and signed by both sides.

- One copy for LUTOS
- Original for the customer

10.2. Routine maintenance, inspections

	Time of operation					
	Every 400 hrs	**Every 800 hrs**	**Every 4,000 hrs**	**Every 20,000 hrs**	**Every 30,000 hrs**	**Every 40,000 hrs**
Operating pressure and temperature inspection	X	X	X	X	X	X
Relief valve performance inspection (Section 5.3)	X	X	X	X	X	X
Oil inspection 1) 2)	X	X	X	X	X	X
Belt inspection		X	X	X		X
Motor current consumption check		X	X	X		X
Check and if necessary, replace the output shaft seal of the blower element.			X			
Motor bearings and blower inspection						X
Replacement of bearings in bipolar motors is appropriate				X		X
Replacement of bearings in4-, 6-, and 8-polar motors is appropriate					X	
Blower bearing replacement is appropriate						X

Notes:

1) The oil replacement interval depends on operating bath temperature (indirectly on the input and output temperatures of the air being conveyed). Oil can be replaced one annually (in 8.000 hours) if oil temperature does not exceed 50 deg. C. The intervals must be shortened to 4times a year (in 2.000 hours) if oil temperature exceeds 100 deg. C or to 12 times a year (i.e. monthly) if the oil temperature is 120 deg. C. The condition of the oil is ascertained by comparison with fresh oil. A dark or thick oil indicates contamination or initial carburization and should be replaced. Analysis of a sample is more reliable.

2) Oil level height must be inspected every 2 weeks or more frequently, independent of the time of operation.

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

2) Oil level height must be inspected every 2 weeks or more frequently, independent of the time of operation. 3) Check of the oil bath levels. First change of oil since the machine was put into operation.

Table 12 Inspections of blowers

WARNING!
The blower must be at rest and secured against starting during any servicing intervention. LUTOS does not provide warranty/guarantees if the technical conditions, requirements and/or warnings are not complied with. Contact LUTOS if you have atypical requirements for the operating mode(s).

Please report the following when contacting LUTOS:

- Serial number and type of the blower
- Serial number and type of the blower set
- Serial number and type of the motor
- Defect(s) observed
- Provisions made by you to eliminate the defect(s)

Please drain oil from the blower if the blower needs to be returned to the manufacturing plant. In addition, grease uncoated parts with anti-corrosion oil and close the suction and delivery pipes with caps. Do not send the pulley together with the motor.

Blower/blower set inspections as described in Section 10.2, Table 12, including diagnostic measurements of the bearings and of the blower and motor vibrations are procedures which can be ordered from LUTOS as a paid service. In this manner, large-scale failures may be prevented.

11. Overhaul by the manufacturer

Contact addresses

11.1.1. Service centres

Atlas Copco s.r.o., LUTOS Division
Průmyslová 10
102 00 Praha 10
Czech Republic
Contact person: Petr Svoboda
Tel.: (+420) 225 434 000
Cell phone: (+420) 604 245 613
e-mail: petr.svoboda@lutos.cz

12. Basic properties of tools with which the facility may be equipped

The facility is not equipped with any special tools.

13. What to do in the event of accident or emergency

13.1. Troubleshooting

Blower operation failures can be categorised in 2 major classes:

- Defects in the mechanical part (bearings, gear, rotors, ...)
- Defects in the electrical part (drive, power distribution system, contacts, fuses)

If a defect occurs in the electrical part, call a specialist who is competent to repair defects of this type.
Call the LUTOS Service Department if you are unsure about the correctness of your steps.

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

PROBLEM	POSSIBLE CAUSE	REMEDY
The facility cannot be started	Fault in the electrical part	Check the electrical distribution system, contacts, fuses, thermal or other protection, condition of the cables. Check the condition and performance of the motor.
Oil leak from the ventilation openings	Too high oil level, measured at rest	Drain the excess oil
Increased noise, „metallic“ sound of the blower	Blower rotor knocking, defective bearing, unsuitable clearances	Repair by LUTOS service
Too large power takeoff	Defective bearing, rotor seizing in the working area	Measure the pressure, eliminate the cause.
	Too high pressure in the outlet piping	Replace the filter elements.
Too high cover temperature on the blower pulley side	Lack of oil in the blower	Repair by LUTOS service
	Defective bearing	
Too high cover temperature on the gear side	Lack of oil in the blower	Repair by LUTOS service
	Defective bearing or gear	
Belt slipping	Belt greasy	Clean the belt and pulleys, degrease with technical petrol
The blower turns in the reverse direction after switching off	Defective clack valve	Inspect/replace the clack valve
		Dismount the piping, replace the sealing ring
Relief valve puffs while the blower is running	Too high pressure in the outlet piping	Measure the pressure in the outlet piping and eliminate the cause *) Relief valve set to max. +10% of the outlet overpressure
The relief valve does not open when the full blower load is exceeded	Relief valve choked	Disassemble and clean the valve
Blower overheated	Dirty filter element (if included in the delivery)	Replace the filter element
	Overload	Do not exceed permitted load
	Too large clearance of the pistons	Repair by LUTOS
No conveying	Clack valve mounted wrongly	Correct the mounting
	Belt slipped-out or ruptured	Belt defective, pulley wrongly aligned Defect in the blower
Amount delivered too low	Blower wrongly dimensioned	Check against the performance table
	Relief valve leaking	Check the valve setting and operational pressure
	Belt slipping	Inspect the running belt visually: no vibrations should be observed. Check the motor input power, inspect the condition of the belt, reduce the lower limit of the rocker motion by means of the stop screw.
Vibrations	Rotors coming into contact	Inspect the bearings, adjust the gear

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

PROBLEM	POSSIBLE CAUSE	REMEDY
	Bearings damaged	Replace the bearings, replace oil
	Pulley wrongly aligned	Adjust the running of the belt (Paragraph 9.5.3)
	S screws fastening the motor or blower are loose	Tighten and adjust the screws
	Rotors disbalanced by impurities	Clean the transport area and rotors
X	X	X

Table 13 Troubleshooting

*) The cause may lie, e.g., in the design. Resistances in the piping at the given flow rate exceed the overpressure required when setting the blower parameters. This is usually detected during the first blower start-up and when commissioning the design facility. Other potential causes include change in the resistance in a certain time of operation due to fouled piping, fouling of the aeration openings in the wastewater treatment plant tanks, etc., or operator‘s ignorance.

14. Consumables and spare parts

Consumables (filter elements if a suction filter is included in the delivery, belts, check valve, oil) are supplied to customer‘s order. They are not included in the standard delivery. Blower repairs are performed in the manufacturing plant. External servicing organisations can be supplied with spare part sets for the various blower types. Jigs are needed for smooth assembling and dismounting. Replacement of bearings is the most frequent type of repair. Contact LUTOS with any particular problems.

Parts and materials required for routine blower set service and simple repairs:

- Filter elements
- V-belts (specification can be found in the Product Quality and Completeness Certificate)
- Clack valves

15. Noise emissions propagating through air

15.1. General

Equivalent sound pressure levels A at the operator‘s site using a weighting filter A as per ČSN EN ISO 11200, ČSN ISO 7574, ČSN EN ISO 3740 **are given in the appropriate tables in the LUTOS Catalogue of Blower Sets.** The levels refer to the blower set noise with the noise enclosure installed or not installed.

15.2. Vacuum blower sets

Consult the manufacturer.

15.3. Piping noise

Noise emitted by the suction or delivery piping surface is not included in the equivalent sound noise level A. The piping should be designed so as to avoid resonance caused by the excitation frequency from the blower. The optimum diameter, wall thickness, material, and method of anchoring, including the spacing of supports of both the delivery and suction piping, should be used. The excitation frequency of triple-toothed LUTOS blowers lies within the region of 100 to 500 Hz. The excitation frequency is directly dependent on the blower speed, which lies within the range of 1,000 to 5,000 rpm.

An additional silencer matching the particular blower parameters can be supplied at customer‘s request. In this manner, problems with noise emissions from the piping, e.g. near residential houses, can be prevented.

15.4. Machine room

The piping in the machine hall also deserves particular attention. Elastic piping penetrations through the machine hall walls should be used to prevent transmission of pulsations from the piping to the walls. The machine hall wall material is an important parameter as well. This material should absorb the noise emitted. Avoid smooth concrete walls and steel structures if possible.

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

15.5. Pressure equipment

Pursuant to Directive 97/23/EC of the European Parliament and of the Council on the approximation of the laws of the Member States concerning pressure equipment, the blower set delivery silencer is categorised as part of the piping.

Pursuant to Annexe 2 to the Government Decree and Graph 7, the highest working point of the facility lies below the limit for Category I, and hence, this delivery silencer does not fall under the provisions of this Government Decree.

The facility is equipped with a relief valve manufactured by HEROSE GmbH and its conformity has been assessed pursuant to EC-Directive 97/23/EC; the products are labelled with the symbol CE 0045.

Retesting was performed by TÜV CERT- Zertifizierungsstelle für Druckgeräte der TÜV NORD GRUPPE.

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

I. Annexe 1 – Declaration of Incorporation of Partly Completed Machinery

Declaration of incorporation of partly completed machinery

We, Atlas Copco s.r.o., LUTOS Division, declare under our sole responsibility that this product,

1. Name of the machine: Blower and blower set

2. Machine type:

Blower: DI 4, DI 6, DI 10, DI 20, DI 30, DI 40, DI 50, DI 60,
DI 65, DI 66, DI 70, DI 90, DI 100, DI 110, DI 120

Blower set: DT 4, DT 4 – V, DT 4R, DT 4R-V, DT 6, DT 6/42,
DT 6/40-V, DT 10/42, DT 10/40-V, DT 20/42,
DT 20/40-V, DT 30/42, DT 30/40-V, DT 30/72,
DT 30/70-V, DT 40/72, DT 40/70-V, DT 50/72,
DT 50/70-V, DT 50/102, DT 50/100-V, DT 60/102,
DT 60/100-V, DT 65/102, DT 65/130-V, DT 66/202,
DT 66/301-V, DT70/202, DT 70/302, DT 70/301-V,
DT 90/302, DT 90/552, DT 90/550-V, DT 100/552,
DT 100/802, DT 100/550-V, DT 110/802,
DT 110/801-V, DT 120/1002, BAH 6/10, BAH 10/30,
BAH 20/30, BAH 30/60, BAH 40/60

Optional accessories: Auxiliary delivery silencers (for DT):
PTV DN 65, PTV DN 80, PTV DN 100, PTV DN 150, PTV DN 200, PTV DN 250, PTV DN 300

Auxiliary delivery silencers – vacuum types (for DT):
PTV - V DN 65, PTV - V DN 80, PTV - V DN 100, PTV - V DN 150, PTV - V DN 200, PTV - V DN 250, PTV - V DN 300

Central suction (for DT):
TS 42-CS / TS 42-V, TS 72-CS / TS 72-V, TS 102-CS, TS 202-CS / TS 202-V, TS 302-CS / TS 302-V, TS 802-CS

Noise enclosures (for BAH):
SB 10, SB 10 Solberg, SBE 10, SBE 10 Solberg, SB 30, SB 30 Solberg, SBE 30, SBE 30 Solberg, SB 60, SB 60 Solberg, SBE 60, SBE 60 Solberg

Compensator with a flange at the outlet (for BAH):
DN50 without Solberg, DN50 with Solberg, DN65 without Solberg, DN65 with Solberg, DN80 without Solberg, DN80 with Solberg

3. Serial No.:

...must not be put into service until the final machinery in which it is intended to be incorporated into or assembled with complies with the relevant Essential Health and Safety Requirements of EC-Directive 2006/42/ES on the approximation of the laws of the Member States relating to machinery, as amended.

We, Atlas Copco s.r.o., LUTOS Division, declare under our sole responsibility that this product, which falls under the provisions of Article 12.2 of EC-Directive 2006/42/EC, on the approximation of the laws of the Member States relating to machinery, complies with the relevant Essential Health and Safety Requirements of this Directive.

Atlas Copco s.r.o., LUTOS Division, undertakes, in response to a reasonable request by the governmental authorities, to transmit relevant information on the partly completed machinery. Information on the relevant parts can be obtained provided that the intellectual property rights of Atlas Copco s.r.o., LUTOS Division, are not infringed.

This machinery also complies with the requirements of the following Directives and their amendments.

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

4. **Directive on the approximation of the laws of the Member States:**

Directive on the approximation of legislation of the Member States relating to:

a.	Pressure equipment	97/23/EC
b.	Simple pressure vessels	2009/105/EC
c.	Electromagnetic compatibility	2004/108/EC
d.	Low-voltage equipment	2006/95/EC

5. **Harmonised and technical standards used:**

ČSN EN ISO 12100-1	ČSN EN 1012-1
ČSN EN ISO 12100-2	ČSN ISO 7000
ČSN EN ISO 13857	IEC 60417 – DB
ČSN EN 349 + A1	ČSN EN 60204-1
ČSN EN ISO 13732-1	ČSN EN 953
ČSN EN ISO 13850	ČSN EN ISO 5167-1
ČSN ISO 3864	ČSN EN ISO 5167-2
ČSN EN 626-1 + A1	ČSN EN ISO 5167-3
ČSN EN ISO 14121-1	ČSN EN ISO 5167-4
ČSN EN 547-1	ISO 5388
ČSN EN 547-2	ČSN EN ISO 3740
ČSN EN ISO 15667	ČSN ISO 3744
ČSN ISO 10816-3	ČSN ISO 3746

6. Atlas Copco s.r.o., LUTOS Division, is authorised to compile the technical file.

7. **Conformity of the specifications to the Directives:** **Conformity of the product to the specifications and, by implication, to the Directives:**

8. **Issued by:** Product design: Atlas Copco s.r.o., LUTOS Divisionm — Manufacture: ZPA Pečky a.s.

9. **Name:** Ing. Erik Hormandl; Ing. Aleš Jakoubi — Michal Pošík

10. **Signature** ……; ……

11. **Date**

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

bg

ДЕКЛАРАЦИЯ ЗА УЧРЕДЯВАНЕ НА НЕПЪЛЕН МАШИНИ

Ние, Atlas Copco LtD. division LUTOS, декларираме на наша собствена отговорност, че продуктът... 1 Име на машината 2 Тип на машината 3 Сериен номер ... не трябва да се въвежда в експлоатация, докато машината, която е предназначена той да се постави в нея или сглоби към нея, не отговаря на съответните Съществени изисквания за здравеопазване и безопасност на директивата на ЕО 2006/42/ЕС и нейните изменения и допълнения за сближаването на законодателствата на Страните-членки по отношение на машините.

Ние, Atlas Copco LtD. division LUTOS, декларираме на наша собствена отговорност, че продуктът Който попада под разпоредбите на член 12.2.на Директивата на ЕО 2006/42/ЕС за сближаването на законодателствата на Страните-членки по отношение на машините, отговаря на съответните Съществени изисквания за здравеопазване и безопасност на тази директива. Ние, Atlas Copco LtD. division LUTOS, се ангажираме в отговор на целесъобразна заявка от националните власти да предаваме нужната информация за частично завършени машини. Информацията за съответните детайли може да се получи при безусловни права върху интелектуална собственост на Atlas Copco LtD. division LUTOS. Машините съответстват и на изискванията на следните директиви и техните изменения и допълнения, както е посочено (когато е приложимо). 4. Директива за сближаването на законодателствата на Страните-членки по отношение на Съответстващо приложение № а 97/23/ЕС - Оборудване за налягане б. 2009/105/ЕС - Прост съд за налягане в. 2004/108/ЕС - Електромагнитна съвместимост г. 2006/95/ЕС - Оборудване за ниско напрежение 5. Хармонизираните стандарти и технически. 6. Atlas Copco LtD. division LUTOS е получило разрешение за съставяне на техническо досие. 7. Съответствие на спецификацията с директивите; Съответствие на продукта със спецификацията и по подразбиране с директивите 8. Издадено от: Инженеринг на продукти; Производство 9. Име 10. Подпис 11. Дата

cs

PROHLÁŠENÍ O ZABUDOVÁNÍ NEÚPLNÉHO STROJNÍHO ZAŘÍZENÍ

My, společnost Atlas Copco s.r.o., divize LUTOS, prohlašujeme na naší výhradní odpovědnost , že tento produkt… 1. .Název stroje 2. Typ stroje 3. Výrobní číslo….nesmí být uveden do provozu, pokud stroj, do kterého se má zakomponovat, a nebo se kterým se má sestavit, nebude vyhovovat příslušným základním zdravotním a bezpečnostním požadavkům směrnice Evropského společenství 2006/42/ES a jeho dodatkům o přiblížení práva členských států v souvislosti se strojním zařízením.

My, společnost Atlas Copco s.r.o., divize LUTOS, prohlašujeme na naší výhradní odpovědnost , že tento produkt, který spadá pod ustanovení článku 12.2 Směrnice Evropského společenství 2006/42/ES je v souladu s příslušnými základními bezpečnostními a zdravotními požadavky výše uvedené Směrnici Rady o přiblížení práva členských států v souvislosti se strojním zařízením. Společnost Atlas Copco s.r.o., divize LUTOS přistupuje na základě odůvodněného požadavku státních orgánů k předání příslušných informací o částečně dokončeném strojním zařízení. Informace o příslušných součástech lze získat, nebudou-li narušena práva duševního vlastnictví společnosti Atlas Copco s.r.o., divize LUTOS. Toto zařízení vyhovuje také požadavkům následujících směrnic a jejich dodatků (tam, kde je lze uplatnit). 4. Směrnice o přiblížení práva členských států: a. 97/23/ES - Tlakové zařízení b. 2009/105/ES - Jednoduché tlakové nádoby c. 2004/108/ES - Elektromagnetická kompatibilita d. 2006/95/ES - Nízkonapěťové zařízení 5. Použité harmonizované a technické normy 6. Atlas Copco s.r.o, divize LUTOS je oprávněn sestavit technickou dokumentaci. 7. Shoda specifikace s uvedenými směrnicemi; Shoda produktu se specifikací a tím také s uvedenými směrnicemi 8.Vydavatelé: Návrh produktu; Výroba 9.Název 10.Podpis 11.Datum

da

INKORPORERINGSERKLÆRING AF UFULDSTAENDIG MASKINER

Vi, , Atlas Copco LtD. division LUTOS, erklærer, under eget ansvar, at produktet.... 1. Maskinens navn 2. Maskinens type 3. Serienummer .... ikke må tages i brug, før maskinen, som den efter hensigten skal indføjes i eller monteres med, er i overensstemmelse med de relevante væsentlige sikkerheds- og sundhedskrav i direktiv 2006/42/EF om indbyrdes tilnærmelse af medlemsstaternes lovgivning vedrørende maskiner.

Vi, Atlas Copco LtD. division LUTOS, erklærer, under eget ansvar, at produktet som falder ind under bestemmelserne i artikel 12.2 i EF-direktivet 2006/42/EF om indbyrdes tilnærmelse af medlemsstaternes lovgivning vedrørende maskiner, er i overensstemmelse med de relevante væsentlige sikkerheds- og sundhedskrav i ovennævnte direktiv. Vi, Atlas Copco LtD. division LUTOS, påtager os, som reaktion på en anmodning fra de lokale myndigheder, at overføre de relevante oplysninger for den delvist færdiggjorte maskine. Oplysninger vedr. de relevante reservedele kan indhentes uden overtrædelse af de immatrielle rettigheder tilhørende Atlas Copco LtD. division LUTOS. Maskinen opfylder ligeledes kravene i direktiverne (evt.): 4. Direktiv om indbyrdes tilnærmelse af medlemsstaternes: a. 97/23/EF - Trykbærende udstyr b. 2009/105/EF - Simple trykbeholdere c. 2004/108/EF - Elektromagnetisk kompatibilitet d. 2006/95/EF - Lavspændingsdirektivet 5. De harmoniserede standarder og tekniske. 6 Atlas Copco LtD. division LUTOS bemyndiges til at udarbejde det tekniske dossier. 7. Specifikationens overensstemmelse med direktivet; Maskinens overensstemmelse med specifikationen og følgende direktiver 8. Udstedere: Produktkonstruktion; Produktion 9. Navn 10. Underskrift 11. Dato

de

ERKLÄRUNG ZUM EINBAU DER UVOLLSTÄTIGEN MACHINEN

Wir, Atlas Copco LtD. division LUTOS, erklären hiermit in alleiniger Verantwortung, dass das Produkt…. 1. Maschinenbezeichnung 2. Maschinentyp 3. Seriennummer…. nicht in Betrieb genommen werden darf bis die Maschine, in die es eingebaut oder mit der es montiert werden soll, den entsprechenden Gesundheits- und Sicherheitsanforderungen gemäß EU-Richtlinie 2006/42/EG und deren Änderungen des Europäischen Parlaments und des Rates zur Angleichung der Rechts- und Verwaltungsvorschriften der Mitgliedstaaten für Maschinen entspricht.

Wir, Atlas Copco LtD. division LUTOS, erklären hiermit in alleiniger Verantwortung, dass das Produkt den Gesundheits- und Sicherheitsanforderungen gemäß den Bestimmungen des Artikels 12.2 der EU-Richtlinie 2006/42/EG des Europäischen Parlaments und des Rates zur Angleichung der Rechts- und Verwaltungsvorschriften der Mitgliedstaaten für Maschinen entspricht. Wir von Atlas Copco LtD. division LUTOS verpflichten uns, auf begründeten Antrag der nationalen Behörden hin alle relevanten Informationen zu teilweise fertig gestellten Maschinen zu übermitteln. Informationen zu den betreffenden Teilen können unbeschadet des Rechts am geistigen Eigentum von Atlas Copco LtD. division LUTOS eingeholt werden. Die Maschinen entsprechen ebenfalls den folgenden Richtlinien und deren Änderungen (falls zutreffend). 4. Richtlinie zur Angleichung der Rechtsvorschriften der Mitgliedstaaten: a. 97/23/EG - Druckgeräte b. 2009/105/EG - einfache Druckbehälter c. 2004/108/EG - Elektromagnetische Verträglichkeit d. 2006/95/EG - Niederspannung 5. Die harmonisierten Normen und technischen 6. Atlas Copco LtD. division LUTOS ist berechtigt, die technischen Unterlagen zusammenzustellen. 7. Konformität der Spezifikation mit den Richtlinien; Konformität des Produkts mit der Spezifikation und als Folgerung mit den Richtlinien 8. Erstellt von: Fertigungstechnik; Fertigung 9. Name 10. Unterschrift 11. Datum

El

ΔΗΛΩΣΗ ΤΗΣ ΕΝΣΩΜΑΤΩΣΗΣ ΗΜΙΤΕΛΩΝ ΜΗΧΑΝΗΜΑΤΩΝ

Εμείς, η Atlas Copco LtD. division LUTOS, δηλώνουμε υπεύθυνα ότι το προϊόν.... 1. Ονομασία μηχανήματος 2. Τύπος μηχανήματος 3. Σειριακός αριθμός .... δεν πρέπει να τεθεί σε λειτουργία προτού το μηχάνημα στο οποίο προορίζεται να ενσωματωθεί ή με το οποίο προορίζεται να συναρμολογηθεί διαπιστωθεί ότι συμμορφούται τις σχετικές Ουσιώδεις απαιτήσεις της Οδηγίας 2006/42/ΕΚ του Ευρωπαϊκού Συμβουλίου για την υγεία και ασφάλειας, καθώς και των τροποποιήσεων αυτής, περί της σύγκλισης των νομοθεσιών των κρατών-μελών οι οποίες σχετίζονται με μηχανήματα.

Εμείς, η Atlas Copco LtD. division LUTOS, δηλώνουμε υπεύθυνα ότι το προϊόν το οποίο εμπίπτει στις διατάξεις του Άρθρου 12.2 της Οδηγίας 2006/42/ΕΚ του Ευρωπαϊκού Συμβουλίου περί σύγκλισης των νομοθεσιών των κρατών-μελών που σχετίζονται με μηχανήματα, συμμορφούται με τις σχετικές Ουσιώδεις απαιτήσεις της εν λόγω Οδηγίας για την υγεία και ασφάλεια. Εμείς, η Atlas Copco LtD. division LUTOS, αναλαμβάνουμε, εις απάντηση αιτιολογημένου αιτήματος από αρμόδιες εθνικές αρχές, να μεταδώσουμε τις σχετικές πληροφορίες για τα μερικώς ολοκληρωμένα μηχανήματα. Οι πληροφορίες για τα σχετικά εξαρτήματα μπορούν να αποκτηθούν με την επιφύλαξη των δικαιωμάτων πνευματικής ιδιοκτησίας της Atlas Copco LtD. division LUTOS. Το μηχάνημα συμμορφούται επίσης με τις απαιτήσεις των παρακάτω Οδηγιών και των τυχόν τροποποιήσεών τους, όπως αναφέρεται κατωτέρω (κατά περίπτωση). 4. Οδηγία για την προσέγγιση των νομοθεσιών των κρατών μελών: α. 97/23/ΕΚ - Εξοπλισμός πίεσης β. 2009/105/ΕΚ - Απλά δοχεία πίεσης γ. 2004/108/ΕΚ - Ηλεκτρομαγνητική συμβατότητα δ. 2006/95/ΕΚ - Εξοπλισμός χαμηλής τάσης 5. Τα εναρμονισμένα πρότυπα και τις τεχνικές. 6. Atlas Copco LtD. division LUTOS είναι εξουσιοδοτημένο να καταρτίσει τον τεχνικό φάκελο. 7. Συμμόρφωση της προδιαγραφής προς τις Οδηγίες; Συμμόρφωση του προϊόντος προς την προδιαγραφή και κατ' επέκταση προς τις Οδηγίες 8. Εκδόθηκε από: Τεχνικός σχεδιασμός προϊόντος; Κατασκευή 9. Όνομα 10. Υπογραφή 11. Ημερομηνία

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

en

DECLARATION OF INCORPORATION OF INCOMPLETE MACHINERY

We, Atlas Copco Ltd., division LUTOS, declare under our sole responsibility, that the product…..1. Machine name 2. Machine type 3. Serial number…...must not be put into service until the machine in which it is intended to be incorporated into or assembled with, is in conformity with the relevant Essential Health and Safety Requirements of the EC-Directive 2006/42/EC and its amendments on the approximation of the laws of the Members States relating to Machinery.

We Atlas Copco Ltd., division LUTOS, hereby declare that the product which falls under the provisions of article 12.2 of the EC-Directive 2006/42/EC on the approximation of the laws of the Member States relating to machinery, as a components/quasi machine is in conformity with the relevant Essential Health and Safety Requirements of this directive. Atlas Copco Ltd., division LUTOS, undertakes, in response to a reasoned request by the national authorities, to transmit the relevant information on the partly completed machinery. The information on the relevant parts can be obtained prejudice to the intellectual property rights of Atlas Copco Ltd., division LUTOS. This machinery complies also with the requirements of the following directives and their amendments as indicated (where applicable). 4. Directive on the approximation of laws of the Member States relating to: a. 97/23/EC – Pressure equipments b. 2009/105/EC – Simple pressure Vessel c. 2004/108/EC Electromagnetic compatibility d. 2006/95/EC – Low voltage equipment 5. The harmonized standards and technical 6. Atlas Copco Ltd., division LUTOS is authorized to compile the technical file 7. Conformity of the specification to the directives; Conformity of the product to the specification and by implication to the directives 8. Issued by: Product engineering; Manufacturing 9. Name 10. Signature 11. Date

es

DECLARACIÓN DE INCORPORACIÓN DE MAQUINARIA INCOMPLETA

Atlas Copco LtD. division LUTOS declara bajo su exclusiva responsabilidad que el producto .... 1. Nombre de máquina 2. Tipo de máquina 3. Número de serie ..... no debe ponerse en funcionamiento hasta que la máquina a la que se vaya a incorporar o en la que se vaya a ensamblar cumpla los requisitos de salud y seguridad esenciales de la Directiva de la CE 2006/42/CE y sus enmiendas sobre la aproximación de las legislaciones de los Estados miembros sobre máquinas.

Atlas Copco LtD. division LUTOS declara bajo su exclusiva responsabilidad que el producto sujeto a las disposiciones del artículo 12.2 de la Directiva 2006/42/CE de la CE relativa a la aproximación de legislaciones de los Estados miembros sobre máquinas, cumple los requisitos de salud y seguridad esenciales de esta directiva. Nosotros, Atlas Copco LtD. division LUTOS , nos comprometemos a divulgar la información relevante con respecto a la maquinaria parcialmente terminada en respuesta a una solicitud pertinente de las autoridades nacionales. La información de las piezas relevantes podrá obtenerse sin perjuicio de los derechos de propiedad intelectual de Atlas Atlas Copco LtD. division LUTOS . La maquinaria cumple también los requisitos de las siguientes directivas y sus enmiendas, como se indica (si procede). 4. La Directiva relativa a la aproximación de las legislaciones de los Estados miembros: a. 97/23/CE - Equipos a presión b. 2009/105/CE - Recipientes a presión simple c. 2000/14/CE - Compatibilidad electromagnética d. 2006/95/CE - Equipo de baja tensión 5. Las normas armonizadas y técnicas 6. Atlas Copco LtD. division LUTOS está autorizado para elaborar el expediente técnico 7. Conformidad de la especificación con las directivas; Conformidad del producto con la especificación y por implicación con las directivas 8. Elaborado por: Ingeniería del producto; Fabricación 9. Designación 10. Firma 11. Fecha

et

ÜHENDAMISDEKLARATSIOON OSALISELT KOMPLEKTEERITUD MASINA

Meie, Atlas Copco LtD. division LUTOS, teatame oma täielikul vastutusel, et toodet.... 1. Masina nimetus 2. Masina tüüp 3. Seerianumber .... ei tohi tööle rakendada enne, kui masin, millega seda ühendatakse, on vastavuses direktiivi 2006/42/EÜ ja selle paranduste alusel kehtestatud tervishoiu- ja ohutusnõuetega, mis kehtivad seadme kohta vastavalt liikmesriigi seadusandlusele.

Meie, Atlas Copco LtD. division LUTOS , teatame oma täielikul vastutusel, et toode mis langeb Nõukogu liikmesriikide masinate kohta kehtivate seaduste ühtlustamise direktiivi 2006/42/EÜ artikli 12.2 määruste alla, vastab asjakohastele ülalmainitud direktiivi Olulistele tervise- ja ohutusnõuetele. Vastusena riigisiseste asutuste põhjendatud nõudmisele võtab Atlas Copco LtD. division LUTOS kohustuse edastada asjakohast teavet osaliselt komplekteeritud masinate kohta. Asjakohaste osade kohta teabe saamine ei kahjusta Atlas Copco LtD. division LUTOS intellektuaalse omandi õigusi. Seade vastab ka järgnevate direktiivide ning nende paranduste nõuetele nagu näidatud (vajaduse korral). 4. Direktiivi õigusaktide ühtlustamise kohta liikmesriikides: a. 97/23/EÜ - Rõhuvarustus b. 2009/105/EÜ - Lihtne rõhumahuti c. 2004/108/EÜ - Elektromagneliline ühilduvus d. 2006/95/EÜ – Madalpingevarustus 5. Ühtlustatud standardid ja tehnilised 6. Atlas Copco LtD. division LUTOS on õigus koostada tehniline toimik 7. Spetsifikatsiooni vastavus direktiividele; Toote vastavus spetsifikatsioonidele ning kaudselt direktiividele 8. Välja andnud: Toote tehnika; Tootmine 9. Nimi 10. Allkiri 11. Kuupäev

fi

LIITTYMISILMOITUS KONEEN KALTAISTEN

Me, Atlas Copco LtD. division LUTOS ., vakuutamme omalla vastuullamme, että tuotetta.... 1. koneen nimi 2. konetyyppi 3. valmistusnumero .... ei saa ottaa käyttöön, ennen kuin kone, johon laite on tarkoitus sisällyttää tai liittää, vastaa EY-direktiivin 2006/42/EY ja sen muutosten terveys- ja työturvallisuusmääräyksiä, jotka liittyvät jäsenvaltioiden koneita koskevan lainsäädännön lähentämiseen.

Me, Atlas Copco LtD. division LUTOS , vakuutamme omalla vastuullamme, että tuote joka kuuluu jäsenvaltioiden koneita koskevan lainsäädännön lähentämisestä annetun EY-direktiivin 2006/42/EY 12 artiklan 2 kohdan a alakohdan alaisuuteen, täyttää direktiivin terveys- ja työturvallisuusmääräykset. Vastauksena kansallisten viranomaisten perusteltuun pyyntöön Atlas Copco Airpower N.V. sitoutuu toimittamaan puolivalmiin koneen asianmukaiset tiedot. Asianmukaisia osia koskevien tietojen toimittaminen ei vaikuta Atlas Copco Airpower n.v.:n immateriaalioikeuksiin. Kone vastaa myös seuraavien direktiivien ja niiden muutosten vaatimuksia osoitetulla tavalla (tarvittaessa). 4. Direktiiviksi lainsäädännön lähentämisestä jäsenvaltioiden: a. 97/23/EY - Painelaitteet b. 2009/105/EY - Yksinkertaiset paineastiat c. 2004/108/EY - Sähkömagneettinen yhteensopivuus d. 2006/95/EY - Tietyllä jännitealueella toimivat laitteet 5. Yhdenmukaistetut standardit ja tekniset. 6. Atlas Copco LtD. division LUTOS on valtuutettu kokoamaan teknisen tiedoston. 7. Direktiivien määräysten mukaisuus; Tuotteen spesifikaation ja direktiivien mukaisuus 8. Laatija: Tuotteen suunnittelu; Teollisuus 9. Nimi 10. Allekirjoitus 11. Päivämäärä

fr

DÉCLARATION D'INCORPORATION D´UNE QUASI-MACHINE

Nous, Atlas Copco LtD. division LUTOS, déclarons sous notre seule responsabilité, que le produit…. 1. Nom de la machine 2. Type de machine 3. Numéro de série …..ne doit pas être mis en service dans la machine sur laquelle il doit être monté tant que cette dernière ne sera pas déclarée conforme aux exigences de santé et de sécurité de la directive CE 2006/42/CE et de ses modifications concernant le rapprochement des législations des Etats membres relatives aux machines.

Nous, Atlas Copco LtD. division LUTOS, déclarons sous notre seule responsabilité, que le produit conformément aux dispositions prévues par l'article 12.2 de la directive CE 2006/42/CE concernant le rapprochement des législations des Etats membres relatives aux machines, est conforme aux exigences essentielles en matière de santé et de sécurité de cette directive. Nous, Atlas Copco LtD. division LUTOS, acceptons de transmettre les informations pertinentes relatives à la quasi-machine en réponse à une demande argumentée des autorités nationales. Les informations relatives aux pièces pertinentes seront transmises sans porter préjudice aux droits de propriété intellectuelle d'Atlas Copco LtD. division LUTOS. Cette machine est également conforme aux directives suivantes et à leurs modifications (le cas échéant). 4. Directive concernant le rapprochement des législations des États membres: a. 97/23/CE - Equipements sous pression b. 2009/105/CE - Récipients à pression simple c. 2004/108/CE - Compatibilité électromagnétique d. 2006/95/CE - Appareillage à basse tension 5. Les normes harmonisées et technique. 6. Atlas Copco LtD. division LUTOS est autorisé à constituer le dossier technique. 7. Conformité de la spécification aux directives; Conformité du produit aux spécifications et, par extension, aux directives 8. Emis par: Ingénierie du produit; Fabrication 9. Désignation 10. Signature 11. Date

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

hu

NYILATKOZAT BEÉPÍTÉSÉRE RÉSZBEN KÉSZ GÉP

Az alulírott Atlas Copco LtD. division LUTOS vállalat kizárólagos felelőssége tudatában kijelenti, hogy az alábbi terméket 3. Készülék neve 4. Készülék típusa 5. Gyári szám 6. mindaddig nem szabad üzembe helyezni, amíg a berendezés, amelybe beépítésre vagy amellyel összeszerelésre kerül, nem felel meg a gépekre vonatkozó tagállami jogszabályok közelítéséről szóló 2006/42/EK irányelv és módosításai vonatkozó alapvető biztonsági és egészségvédelmi követelményeinek.

Az alulírott Atlas Copco LtD. division LUTOS vállalat kizárólagos felelőssége tudatában kijelenti, hogy az alábbi termék amely a 2006/42/EK irányelv 12.2 bekezdése hatálya alá tartozik, megfelel a fenti, a gépekről szóló tagállami jogszabályok közelítéséről szóló irányelv vonatkozó alapvető egészségügyi és biztonsági követelményeinek. Az Atlas Copco LtD. division LUTOS a nemzeti hatóságok megalapozott kérelme alapján beleegyezik a félkész munkagépekről történő részleges információszolgáltatásba. Az alkatrészadatok felhasználása nem sértheti az Atlas Copco LtD. division LUTOS szellemi tulajdonjogát. A készülék ezen kívül megfelel az alábbi irányelveknek és azok módosításainak is (adott esetben). 4. Irányelv közelítéséről szóló tagállami jogszabályok: a. 97/23/EK - Nyomástartó berendezések b. 2009/88/EK - Egyszerű nyomástartó edények c. 2004/108/EK - Elektromágneses összeférhetőség d. 2006/95/EK - Kisfeszültségű berendezések 5. A harmonizált műszaki előírásokat. 6. Atlas Copco LtD. division LUTOS felhatalmazást kap, hogy a műszaki dokumentáció összeállítására 7.A specifikáció megfelelősége az irányelveknek; A termék megfelelősége a specifikációnak és következésképpen az irányelveknek is 8. Kiadta: Terméktervezés; Gyártás 9. Név 10. Aláírás 11. Dátum

it

DICHIARAZIONE DI INCORPORAMENTO DI QUASI-MACCHINE

Noi, Atlas Copco LtD. division LUTOS, dichiariamo sotto la nostra esclusiva responsabilità che il prodotto.... 1. Denominazione della macchina 2. Tipo della macchina 3. Numero di serie ....non deve essere messo in servizio fino a quando la macchina in cui deve essere incorporato o assemblato non è conforme alla Direttiva 2006/42/CE sui Requisiti Essenziali ai fini della Sicurezza e della tutela salute e i relativi emendamenti sul riavvicinamento delle legislazioni degli stati membri relative alle macchine.

Noi, Atlas Copco LtD. division LUTOS, dichiariamo quindi che il prodotto che è soggetto alle disposizioni dell'articolo 12.2 della Direttiva 2006/42/CE sul riavvicinamento delle legislazioni degli stati membri relativa alle macchine, come componente/quasi-macchina è conforme ai relativi Requisiti Essenziali ai fini della Sicurezza e della tutela salute della suddetta Direttiva. Atlas Copco LtD. division LUTOS., si assume l'incarico, in risposta a una richiesta motivata dalle autorità nazionali, di trasmettere le informazioni relative al macchinario parzialmente completato. Le informazioni sulle parti interessate vengono messe a disposizione fatti salvi i diritti di proprietà intellettuale di Atlas Copco LtD. division LUTOS. Inoltre la macchina è conforme ai requisiti delle direttive indicate di seguito e dei relativi emendamenti (ove applicabile). 4. La direttiva concernente il ravvicinamento delle legislazioni degli Stati membri: a. 97/23/CE - Apparecchiatura a pressione b. 2009/105/CE - Serbatoio semplice a pressione c. 2004/108/CE - Compatibilità elettromagnetica d. 2006/95/CE - Apparecchiatura a bassa tensione 5. Le norme armonizzate e tecniche 6. Atlas Copco LtD. division LUTOS è autorizzato a costituire il fascicolo tecnico. 7. Conformità delle specifiche alle direttive; Conformità del prodotto alla specifica ed implicitamente alle direttive 8. Compilato da: Progettazione del prodotto; Produzione industriale 9. Nome 10. Firma 11. Data

lt

ĮMONTAVIMO DEKLARACIJA IŠ DALIES SUKOMPLEKTUOTOS MAŠINOS

Mes, Atlas Copco LtD. division LUTOS, prisiimdami visą atsakomybę, pareiškiame, jog gaminys.... 1. Mašinos pavadinimas 2. Mašinos tipas 3. Serijos numeris ....negali būti eksploatuojamas, kol mašina, su kuria jis turi būti sujungtas ar sumontuotas, neatitiks EB Direktyvoje 2006/42/EB dėl valstybių narių įstatymų, susijusių su mašinomis, suderinimo bei jos prieduose nurodytų svarbiausių sveikatos ir saugos reikalavimų.

Mes, Atlas Copco LtD. division LUTOS, prisiimdami visą atsakomybę, pareiškiame, jog gaminys, kuriam taikomos EB Direktyvos 2006/42/EB dėl valstybių narių įstatymų, susijusių su mašinomis, suderinimo 12.2 straipsnio nuostatos, atitinka svarbiausius minėtos direktyvos sveikatos ir saugos reikalavimus kaip komponentas/kvazi-mašina. Atsakydami į pagrįstą nacionalinių institucijų prašymą mes, „ Atlas Copco LtD. division LUTOS.“, įsipareigojame pristatyti iš dalies sukomplektuotos įrangos duomenis. Informacija apie atitinkamas dalis gali būti įgyjama nepažeidžiant „ Atlas Copco LtD. division LUTOS.“ intelektinės nuosavybės teisių. Jis taip pat atitinka toliau nurodytų direktyvų ir jų pakeitimų reikalavimus (jei taikoma). 4. Direktyva dėl valstybių narių teisės aktuose, suderinimo: a. 97/23/EB – Slėgine įranga b. 2009/105/EB – Paprastaisiais slėginiais indais c. 2004/108/EB - Elektromagnetiniu suderinamumu d. 2006/95/EB – Žemos įtampos įranga 5. Darniuosius standartus ir techninius. 6. Atlas Copco LtD. division LUTOS. yra įgaliotas sudaryti atitinkamą techninę bylą 7. Specifikacijos atitikimas direktyvoms; Gaminio atitikimas specifikacijai ir, tuo pačiu, direktyvoms 8. Išdavė: Gaminių konstravimas; Gamyba 9. Pavardė 10. Parašas 11. Data

lv

Iekļaušanas deklarācija Daļēji komplektētas mašīnas

Mēs, Atlas Copco LtD. division LUTOS, uzņemoties pilnu atbildību, paziņojam, ka izstrādājumu,.... 1. Iekārtas nosaukums 2. Iekārtas tips 3. Sērijas numurs ....nedrīkst nodot ekspluatācijā, līdz iekārta, kurā to ir paredzēts uzstādīt vai iemontēt, neatbildīs attiecīgajām EK Direktīvas 2006/42/EK par to dalībvalstu tiesību aktu tuvināšanu, kas attiecas uz mehānismiem, un tās grozījumu svarīgākajām veselības un drošības aizsardzības prasībām.

Mēs, Atlas Copco LtD. division LUTOS, ar šo paziņojam, ka izstrādājums, uz kuru attiecas EK Direktīvas 2006/42/EK par to dalībvalstu tiesību aktu tuvināšanu, kas attiecas uz mehānismiem kā uz citas iekārtas komponentiem, 8. panta 2. a punkta noteikumi, atbilst šīs direktīvas svarīgākajām veselības un drošības aizsardzības prasībām. Mēs, Atlas Copco LtD. division LUTOS, pēc valsts iestāžu pamatota pieprasījuma apņemamies pārsūtīt attiecīgo informāciju par daļēji komplektētām mašīnām. Informāciju par attiecīgajām daļām var iegūt neskarot uzņēmuma Atlas Copco LtD. division LUTOS intelektuālā īpašuma tiesības. Iekārtās atbilst arī šādu direktīvu un to grozījumu prasībām, ja tā ir norādīts (ja piemērojams). 4. Direktīva par tiesību aktu tuvināšanu dalībvalstīs: a. 97/23/EK - Spiediena iekārtas b. 2009/105/EK - Vienkārši spiedtrauki c. 2004/108/EK - Elektromagnētiskā savietojamība d. 2006/95/EK - Zemsprieguma iekārtas 5. Saskaņotos standartus un tehniskos. 6. Atlas Copco LtD. division LUTOS ir pilnvarota sastādīt tehnisko lietu 7. Specifikācijas atbilstība direktīvām; Izstrādājuma atbilstība specifikācijai un reizē arī direktīvām 8. Izdevēji: Izstrādājuma tehnoloģija; Ražošana 9. Vārds, uzvārds 10. Paraksts 11. Datums

mt

DIKJARAZZJONI GĦALL-INKORPORAZZJONI TAL-MAKKINARJU PARZJALMENT KOMPLUT

Aħna, Atlas Copco LtD. division LUTOS, niddikjaraw b'responsabbiltà unika tagħna, li l-prodott.... 1. Isem tal-magna 2. Tip tal-magna 3. Numru tas-serje ....m'għandux jintuża qabel mal-magna li fiha hu intiż li jkun inkluż jew imwaħħal magħha, tkun konformi mal-Ħtiġijiet Essenzjali tas-Saħħa u s-Sigurtà tad-Direttiva tal-KE 2006/42/KE u l-emendi tagħha dwar l-approssimazzjoni tal-liġijiet ta' l-Istati Membri marbuta mal-Makkinarju.

Aħna, Atlas Copco LtD. division LUTOS, niddikjaraw b'responsabbiltà unika tagħna, li l-prodott li jaqa' taħt id-dispożizzjonijiet ta' l-Artikolu 12.2 tad-Direttiva tal-KE 2006/42/KE, dwar l-approssimazzjoni tal-liġijiet ta' l-Istati Membri marbuta mal-Makkinarju, bħala komponent/kważi magna hu konformi mal-Ħtiġijiet Essenzjali tas-Saħħa u s-Sigurtà ta' din id-Direttiva. Aħna, Atlas Copco LtD. division LUTOS, fuq talba raġonata mill-awtoritajiet nazzjonali, ser nimpenjaw rwieħna, li nittrasmettu l-informazzjoni rilevanti dwar il-makkinarju parzjalment lest. L-informazzjoni fuq il-partijiet rilevanti tista' tinkiseb suġetta għad-drittijiet tal-proprjetà intelletwali ta' Atlas Copco LtD. division LUTOS. Il-makkinarju hu konformi wkoll mal-ħtiġijiet tad-Direttivi segwenti u l-emendi tagħhom (fejn applikabbli). 4. Id-Direttiva dwar l-approssimazzjoni tal-liġijiet ta ,l-Istati Membri: a. 97/23/KE - Tagħmir ta' pressjoni b. 2009/105/KE - Strumenti sempliċi ta' pressjoni c. 2004/108/KE - Kompatibilità elettromanjetika d. 2006/95/KE – Tagħmir b' vultaġġ baxx 5. L-istandards armonizzati u tekniċi 6. Atlas Copco LtD. division LUTOS huwa awtorizzat li tagħmel il-fajl tekniku 7. Konformità ma' l-ispeċifikazzjoni tad-Direttivi; Konformità tal-prodott għall-ispeċifikazzjoni u b'implikazzjoni għad-Direttivi 8. Maħruġ minn: Inġinerija tal-prodott; Manifattura 9. Isem 10. Firma 11. Data

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

nl

VERKLARING VAN INTEGRATIE VAN NIET VOLTOOIDE MACHINES

Ondergetekende, Atlas Copco LtD. division LUTOS, verklaart op eigen verantwoordelijkheid dat het product.... 1. Naam van de machine 2. Machinetype 3. Serienummer ....pas in bedrijf mag worden gesteld wanneer de machine waarin het moet worden ingebouwd, of waarmee het moet worden samengebouwd, in overeenstemming is met de toepasselijke noodzakelijke gezondheids- en veiligheidseisen van Richtlijn 2006/42/EG en de wijzigingen daarop inzake de harmonisatie van de wetgevingen der lidstaten ten aanzien van machines.

Ondergetekende, Atlas Copco LtD. division LUTOS, verklaart hierbij dat het product vallende onder de bepalingen van artikel 12.2 van de Machinerichtlijn 2006/42/EG inzake de harmonisatie van de wetgevingen der lidstaten ten aanzien van machines, als onderdeel/quasi-machine in overeenstemming is met de toepasselijke noodzakelijke gezondheids- en veiligheidseisen van deze richtlijn. Ondergetekende, Atlas Copco LtD. division LUTOS, stelt naar aanleiding van een gemotiveerd verzoek van de nationale overheid, de relevante informatie over de gedeeltelijk voltooide machine ter beschikking. De informatie over de desbetreffende onderdelen kan worden verkregen onverminderd de intellectuele eigendomsrechten van Atlas Copco LtD. division LUTOS. De machine voldoet tevens aan de eisen die gesteld worden in de volgende richtlijnen en wijzigingen daarop zoals aangegeven (indien van toepassing). 4. Richtlijn betreffende de onderlinge aanpassing van de wetgevingen van de lidstaten: a. 97/23/EG - Drukapparatuur b. 2009/105/EG - Drukvaten van eenvoudige vorm c. 2004/108/EG - Elektromagnetische compatibiliteit d. 2006/95/EG - Laagspanningsproducten en elektrisch materieel 5. De geharmoniseerde normen en technische. 6. Atlas Copco LtD. division LUTOS is gemachtigd om het technisch dossier samen te stellen 7. Overeenstemming van de specificatie met de richtlijn; Overeenstemming van het product met de specificatie en als voortvloeisel van de richtlijnen 8. Afgegeven door: Product engineering; Productie 9. Naam 10. Handtekening 11. Datum

no

ufullstendig erklæring om innlemmelse maskiner

Vi, Atlas Copco LtD. division LUTOS, erklærer på eget ansvar at produktet.... 1. Maskinens navn 2. Maskintype 3. Serienummer ....ikke må tas i bruk før maskinen det skal bygges inn eller monteres i, oppfyller de gjeldende grunnleggende krav vedrørende helse og sikkerhet i direktiv 2006/42/EF, med tilhørende endringer, om tilnærming av medlemsstatenes lovgivning om maskiner.

Vi, Atlas Copco LtD. division LUTOS, erklærer herved at produktet som omfattes av bestemmelsene i artikkel 12.2 i direktiv 2006/42/EF om tilnærming av medlemsstatenes lovgivning om maskiner, som en del/nesten-maskin, er i samsvar med gjeldende grunnleggende krav vedrørende helse og sikkerhet i dette direktivet. Vi, Atlas Copco LtD. division LUTOS, påtar oss, i samsvar med en rimelig forespørsel fra de nasjonale myndighetene, å overføre den relevante informasjonene om det delvis ferdigstilte maskineriet. Informasjon om de relevante delene kan fås i overensstemmelse med den intellektuelle eiendomsretten til Atlas Copco LtD. division LUTOS. Maskinen oppfyller også kravene i følgende direktiver med endringer som angitt (hvor gjeldende). 4. Direktiv om tilnærming av lover medlemsstatene: a. 97/23/EF – trykkutstyr b. 2009/105/EF – enkle trykkbeholdere c. 2004/108/EF – elektromagnetisk kompatibilitet d. 2006/95/EF – lavspenningsutstyr 5. Den harmoniserte standarder og tekniske. 6. Atlas Copco LtD. division LUTOS er autorisert til å kompilere den tekniske arkiv 7. Spesifikasjonens samsvar med direktivene; Produktets samsvar med spesifikasjonen og følgelig med direktivene 8. Utsteder: Produktutvikling; Fabrikasjon 9. Navn 10. Signatur 11. Dato

pl

DEKLARACJA WŁĄCZENIA MASZYNY NIEUKOŃCZONEJ

My, Atlas Copco LtD. division LUTOS, oświadczamy z pełną odpowiedzialnością, że produkt.... 1. Nazwa maszyny 2. Typ maszyny 3. Numer seryjny .....nie może być wprowadzony do użytku, dopóki maszyna, w którą ma być wbudowany lub z którą ma zostać zmontowany, nie będzie zgodna z zasadniczymi wymaganiami ochrony zdrowia i bezpieczeństwa dyrektywy 2006/42/WE wraz z późniejszymi zmianami w sprawie zbliżenia ustawodawstw Państw Członkowskich odnoszących się do maszyn.

My, Atlas Copco LtD. division LUTOS, niniejszym oświadczamy, że produkt objęty przepisami artykułu 12.2 dyrektywy 2006/42/WE w sprawie zbliżenia ustawodawstw Państw Członkowskich odnoszących się do maszyn jest, jako podzespół/pseudomaszyna zgodny z odpowiednimi zasadniczymi wymaganiami ochrony zdrowia i bezpieczeństwa wyznaczonymi w tej dyrektywie. My, Atlas Copco LtD. division LUTOS, w odpowiedzi na uzasadnione żądanie władz państwowych przekazujemy odpowiednie informacje dotyczące niekompletnych maszyn. Informacje dotyczące odpowiednich części można uzyskać bez szkody dla praw własności intelektualnej firmy Atlas Copco LtD. division LUTOS. Maszyna spełnia również wymagania następujących dyrektyw wraz z późniejszymi zmianami (jeśli dotyczy). 4. Dyrektywa w sprawie zbliżenia ustawodawstw Państw Członkowskich: a. 97/23/WE — Urządzenia ciśnieniowe b. 2009/105/WE — Proste zbiorniki ciśnieniowe c. 2004/108/WE — Kompatybilność elektromagnetyczna d. 2006/95/WE — Urządzenia niskiego napięcia 5. Zharmonizowanymi normami i techniczne. 6.Atlas Copco LtD. division LUTOS upoważniony jest do przygotowania dokumentacji technicznej 7. Zgodność specyfikacji z dyrektywami; Zgodność produktu ze specyfikacją, a tym samym z dyrektywami 8. Wystawca: Inżynier produktu; Producent 9. Nazwa 10. Podpis 11. Data

pt

DECLARAÇÃO DE INCORPORAÇÃO DE UMA QUASE-MÁQUINA

Nós, Atlas Copco LtD. division LUTOS, declaramos, sob nossa exclusiva responsibilidade, que o produto.... 1. Nome da máquina 2. Tipo de máquina 3. Número de série ....não deve ser colocado em serviço até que a máquina na qual se destina a ser incorporado ou montado esteja em conformidade com os Requisitos Básicos de Saúde e Segurança da Directiva 2006/42/CE e respectivos aditamentos, respeitante à aproximação das legislações dos Estados-Membros sobre Maquinaria.

Nós, Atlas Copco LtD. division LUTOS, declaramos por este meio que o produto abrangido pelas disposições do artigo 12.2 da Directiva 2006/42/CE, enquanto componente/quase-máquina, se encontra em conformidade com os Requisitos Básicos de Saúde e Segurança da referida Directiva, respeitante à aproximação das legislações dos Estados-Membros sobre maquinaria. Nós, Atlas Copco LtD. division LUTOS, aceitamos, em resposta a um pedido fundamentado das autoridades nacionais, transmitir a informação relevante relativa à maquinaria parcialmente completa. A informação sobre as peças em questão pode ser obtida sem prejuízo dos direitos de propriedade intelectual da Atlas Copco LtD. division LUTOS. A máquina obedece também aos requisitos das directivas abaixo indicadas e seus aditamentos (quando aplicável). 4 Directiva relativa à aproximação das legislações dos Estados-Membros: a. 97/23/CE - Equipamentos sob pressão b. 2009/105/CE - Recipientes sob pressão simples c. 2004/108/CE - Compatibilidade electromagnética d. 2006/95/CE - Equipamento de baixa tensão 5. As As normas harmonizadas e técnico. 6. Atlas Copco LtD. division LUTOS está autorizada a compilar o processo técnico 7. Conformidade da especificação com as directivas; Conformidade do produto com a especificação e, por implicação, com as directivas 8. Entidade emissora: Engenharia de produtos; Fabrico 9. Nome 10. Assinatura 11. Data

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

ro

Declaraţia de încorporare echipamentelor tehnice parţial finalizate

Noi, Atlas Copco LtD. division LUTOS, declarăm pe proprie răspundere că produsul.... 1 Nume echipament 2 Tip echipament 3 Număr de serie .....nu trebuie pus în funcţiune până când maşina în care se intenţionează a fi încorporat sau asamblat nu este în conformitate cu cerinţele esenţiale în materie de sănătate şi siguranţă din directiva CE 2006/42/EC şi modificările acesteia privind armonizarea legislaţiilor statelor membre referitoare la maşini industriale.

Noi, Atlas Copco LtD. division LUTOS, declarăm pe proprie răspundere că produsul, care face obiectul prevederilor articolului 8.2., litera (a) din directiva CE 2006/42/EC privind armonizarea legislaţiilor statelor membre referitoare la maşini industriale şi care reprezintă o componentă/piesă de maşină, este în conformitate cu cerinţele esenţiale în materie de sănătate şi siguranţă din această directivă. Noi, Atlas Copco LtD. division LUTOS, ne obligăm să transmitem informaţiile relevante despre maşina parţial finalizată, ca răspuns la o solicitare rezonabilă a autorităţilor naţionale. Informaţiile despre componentele relevante pot fi obţinute fără a prejudicia drepturile de proprietate intelectuală ale Atlas Copco LtD. division LUTOS. Acest echipament este, de asemenea, în conformitate cu cerinţele următoarelor directive şi ale modificărilor acestora (dacă este cazul). 4 Directiva privind apropierea legislaţiilor statelor membre: a 97/23/EC - Echipamentele sub presiune b. 2009/105/EC - Recipientele simple sub presiune c 2004/108/EC - Compatibilitatea electromagnetică d 2006/95/EC - Echipamentele de joasă tensiune 5. Standardele armonizate şi tehnice. 6. Atlas Copco LtD. division LUTOS. este autorizat să compileze dosarului tehnic 7. Conformitatea specificaţiilor cu directivele; Conformitatea produsului cu specificaţiile şi, implicit, cu directivele 8. Emitent: Proiectant; Fabricant 9 Nume 10. Semnătură 11 Dată

ru

неполное заявление регистрации машин

Мы, ООО Атлас Копко, департамент Лутос, заявляем, под свою исключительную ответственность, что изделие… 1. Название продукта 2. Тип оборудования 3. Серийный номер … не должно вводиться в эксплуатацию до тех пор, пока конечное оборудование, частью, которого должен быть наш агрегат, либо оборудование, с которым наш агрегат должен быть собран в одно целое, не будет приведено в соответствие с базовыми требованиями директивы ЕС-2006 / 42/ЕС о Безопасности и Здоровье, а так же приложениям к данной директивы об объединении законодательств государств-членов, касающихся машиностроения и техники.

Мы, ООО Атлас Копко, департамент Лутос, заявляем, что продукт, который подпадает под действие положений статьи 12.2. Директивы ЕС 2006/42/ES о сближении законодательств государств-членов, касающийся механизмов и машиностроения, в качестве компонента / квази машины, соответствует базовым медицинским и требованиям безопасности этой директивы. Мы, ООО Атлас Копко, департамент Лутос, обязуемся в ответ на обоснованные просьбы со стороны национальных властей, передать соответствующую информацию о частично произведенном оборудовании. Информация о соответствующих частях оборудования, чье производство было выполнено в полной мере, может быть нанести ущерб интеллектуальной собственности ООО Атлас Копко, департамент Лутос. Помимо этого, механизм также соответствует требованиям следующих директив и поправок к ним (там, где это применимо). 4 Директивы о сближении законодательств государств-членов: a. 97/23/ES - Давление оборудование b. 2009/105/ES - Простые давлением суда d. 2006/95/ES - Низкий оборудование 5. Гармонизированных стандартов и технических. 6. Atlas Copco LtD. division LUTOS имеет право составить техническую документацию. 7. Соответствие этим директивам Спецификации; Соблюдение спецификации продукта и, следовательно, с Директивами 8. Партнеры: Разработка продукции; Производство 9. Название 10. Подпись 11. Дата

sk

VYHLÁSENIE O ZAČLENENIE ČIASTOČNE SKOMPLETIZOVANÝCH STROJOVÝCH ZARIADENÍ

My, spoločnosť Atlas Copco LtD. division LUTOS, vyhlasujeme na našu výhradnú zodpovednosť, že tento produkt.... 1. Názov stroja 2. Typ stroja 3. Výrobné číslo ....nesmie byť uvedený do prevádzky, kým stroj, do ktorého sa má zakomponovať, alebo s ktorým sa má zostaviť, nebude vyhovovať príslušným základným zdravotným a bezpečnostným požiadavkám Smernice Európskeho spoločenstva 2006/42/ES a jej dodatkom o aproximácii práva členských štátov v súvislosti so strojnými zariadeniami.

My, spoločnosť Atlas Copco LtD. division LUTOS, týmto prehlasujeme, že výrobok, ktorý spadá pod ustanovenia článku 12.2 Smernice Európskeho spoločenstva 2006/42/ES je v súlade s príslušnými základnými bezpečnostnými a zdravotnými požiadavkami horeuvedenej Smernice Rady o aproximácii práva členských štátov v súvislosti so strojnými zariadeniami. My, spoločnosť Atlas Copco LtD. division LUTOS, sme sa rozhodli, na základe odôvodnenej požiadavky národných orgánov, odovzdať relevantné informácie o čiastočne dokončených strojových zariadeniach. Informácie o relevantných častiach je možné získať s prihliadnutím na práva duševného vlastníctva spoločnosti Atlas Copco LtD. division LUTOS. Toto strojné zariadenie vyhovuje aj požiadavkám nasledovných smerníc a ich dodatkov (tam, kde je možné uplatniť). 4. Smernica o aproximácii práva členských štátov: a. 97/23/ES - Tlakové zariadenia b. 2009/105/ES - Jednoduché tlakové nádoby c. 2004/108/ES - Elektromagnetická kompatibilita d. 2006/95/ES - Nízkonapäťové zariadenia 5. Použité harmonizované a technické normy. 6. Atlas Copco LtD. division LUTOS je oprávnený zostaviť technickú dokumentáciu 7. Zhoda špecifikácie s uvedenými smernicami; Zhoda produktu so špecifikáciou a tým aj s uvedenými smernicami 8. Vydavatelia: Návrh produktu; Výroba 9. Názov 10. Podpis 11. Dátum

sl

IZJAVA O VGRADNJI DELNO DOKONČANIH STROJEV

Mi, Atlas Copco LtD. division LUTOS, s polno odgovornostjo izjavljamo, da izdelka.... 1. Ime stroja 2. Tip stroja 3. Serijska številka .....ne smete uporabljati, dokler stroj, v katerega bo vgrajen ali s katerim bo sestavljen, ni v skladu z ustreznimi bistvenimi zdravstvenimi in varnostnimi zahtevami Direktive 2006/42/ES in njenih dopolnil o približevanju zakonodaj držav članic v zvezi s stroji.

Mi, Atlas Copco LtD. division LUTOS, izjavljamo, da je izdelek, ki spada pod določbe člena 8.2.Direktive ES 2006/42/ES o približevanju zakonodaj držav članic v zvezi s stroji, kot sestavni del v skladu z ustreznimi bistvenimi zdravstvenimi in varnostnimi zahtevami te Direktive. Mi, Atlas Copco LtD. division LUTOS, se na osnovi utemeljene zahteve državnih oblasti zavezujemo, da bomo posredovali ustrezne informacije o delno dokončanih strojih. Informacije o ustreznih delih je mogoče pridobiti brez poseganja v pravice intelektualne lastnine družbe Atlas Copco LtD. division LUTOS. Stroj je skladen tudi z zahtevami naslednjih direktiv in njihovih dopolnil (po potrebi). 4. Direktiva o približevanju zakonodaje držav članic: a. 97/23/ES - Tlačna oprema b. 2009/105/ES - Enostavne tlačne posode c. 2004/108/ES - Elektromagnetna združljivost d. 2006/95/ES - Nizkonapetostna oprema 5. Usklajenih standardov in tehničnih. 6. Atlas Copco LtD. division LUTOS je pooblaščena za sestavljanje tehnične dokumentacije 7. Skladnost specifikacije z direktivami; Skladnost izdelka s specifikacijo in z direktivami 8. Izdal: Inženiring izdelka; Proizvodnja 9. Ime 10. Podpis 11. Datum

sv

TILLVERKARDEKLARATION AV HALVFABRIKAT

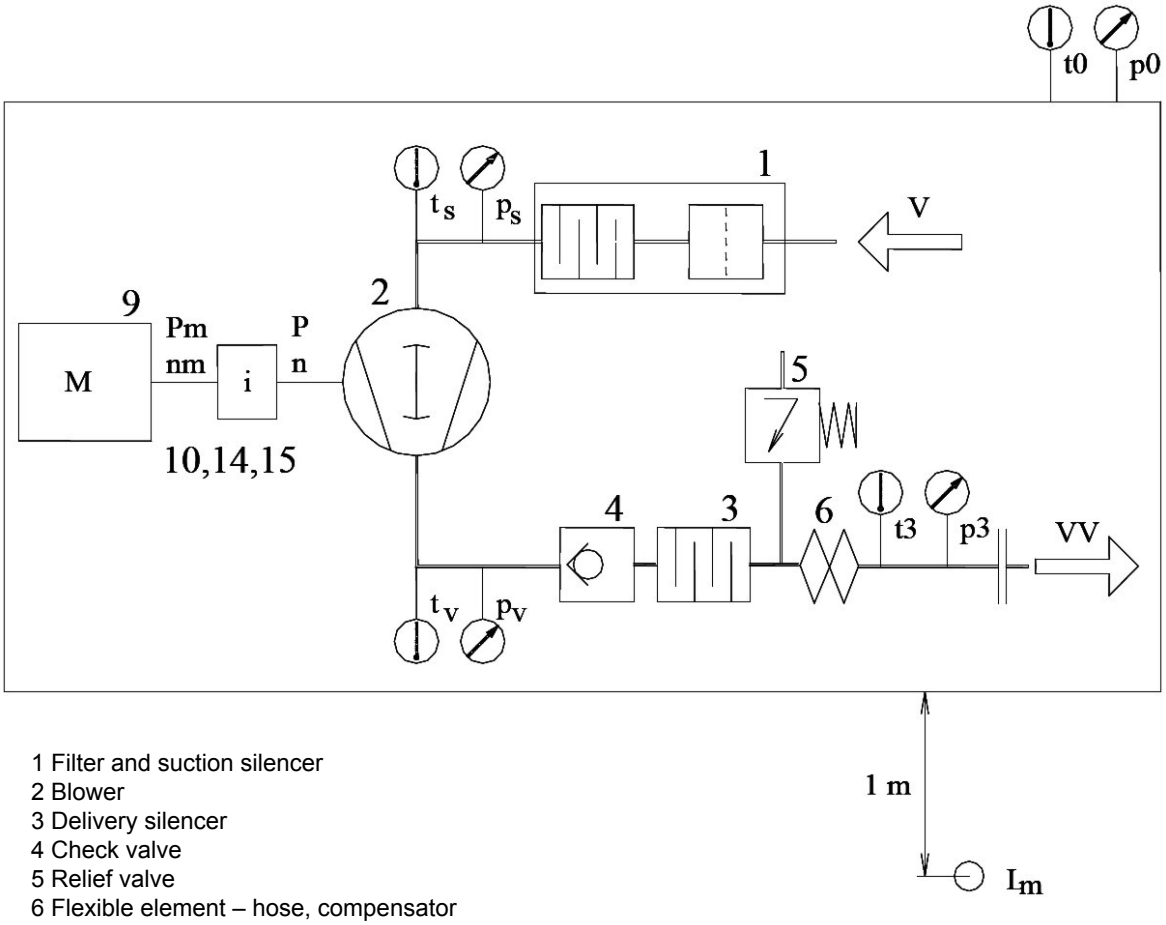
Vi, Atlas Copco LtD. division LUTOS, förklarar på eget ansvar att maskinen.... 1. Maskinens namn 2. Maskintyp 3. Serienummer ....inte får tas i bruk förrän den maskin som den avses att byggas in i, eller monteras med, uppfyller de relevanta grundläggande hälso- och säkerhetskraven i EG-direktivet 2006/42/EG, och dess tillägg, om tillnärmning av medlemsstaternas lagstiftning om maskiner.

Vi, Atlas Copco LtD. division LUTOS, förklarar härmed att den produkt som omfattas av bestämmelserna i artikel 12.2 i EG-direktiv 2006/42/EG om tillnärmning av medlemsstaternas lagstiftning om maskiner, som en komponent/"kvasimaskin" uppfyller de relevanta grundläggande hälso- och säkerhetskraven i detta direktiv. Vi, Atlas Copco LtD. division LUTOS, åtar oss att till följd av en motiverad begäran från de nationella myndigheterna skicka relevant information om de delvis slutförda maskinerna. Informationen om de relevanta delarna kan erhållas utan att detta påverkar tillämpningen av de immateriella rättigheter som innehas av Atlas Copco LtD. division LUTOS. Maskinen uppfyller även kraven i följande direktiv och deras tillägg (i förekommande fall). 4. Direktiv om tillnärmning av medlemsstaternas: a. 97/23/EG - Tryckutrustning b2009/105/EG - Enkla tryckkärl c. 2004/108/EG - Elektromagnetisk kompatibilitet d. 2006/95/EG - Lågspänningsutrustning 5. De De harmoniserade standarder och tekniska. 6.Atlas Copco LtD. division LUTOS bemyndigas att upprätta den tekniska dokumentationen 7. Specifikationens överensstämmelse med direktiven; Produktens överensstämmelse med specifikationen och indirekt med direktiven 8. Utfärdat av: Produktteknik; Tillverkning 9. Namn 10. Namnteckning 11. Date

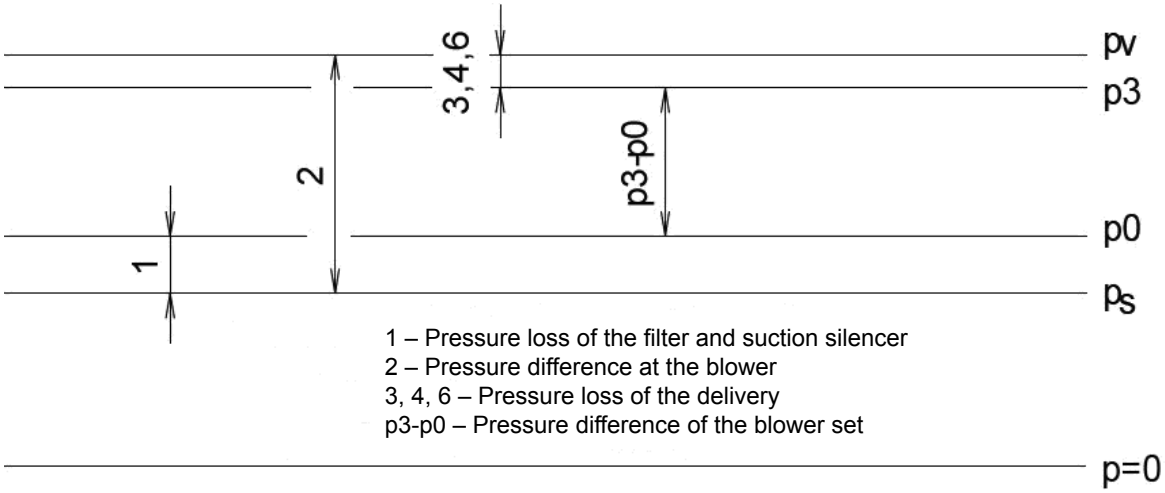
LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

II. Annexe 2 – STANDARD BLOWER SET LAYOUT WITH SYMBOLS OF THE PARAMETERS, PRESSURES IN A STANDARD BLOWER SET



1 Filter and suction silencer
2 Blower
3 Delivery silencer
4 Check valve
5 Relief valve
6 Flexible element – hose, compensator
10, 14, 15, Belt transmission



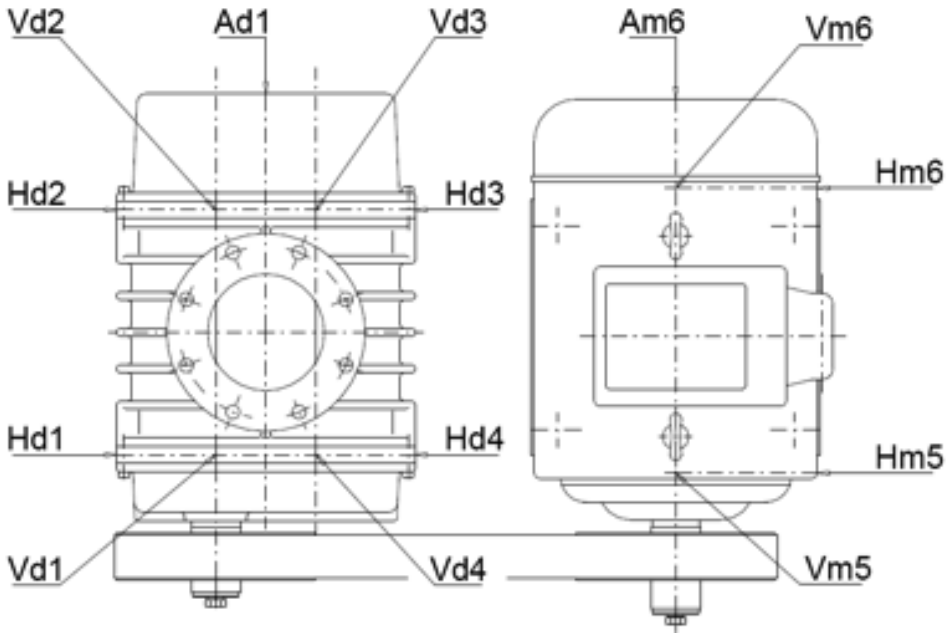
1 – Pressure loss of the filter and suction silencer
2 – Pressure difference at the blower
3, 4, 6 – Pressure loss of the delivery
p3-p0 – Pressure difference of the blower set

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

III. Annexe 3 – RECORD OF BLOWER SER VIBRATION MEASUREMENT

The layout shows the measuring points for the blower and motor. Adhere to this designation of the points in order to facilitate communication.



Measurement of vibrations									
Measuring point		Vibration values – total value / Frequency [Hz] – vibration value							
		C.V.	F	V.F.	F	V.F.	F	V.F.	F
		[mm / s]	[Hz]	[mm / s]	[Hz]	[mm / s]	[Hz]	[mm / s]	[Hz]
1	Vd								
	Hd								
	Ad								
2	Vd								
	Hd								
	-								
3	Vd								
	Hd								
	-								
4	Vd								
	Hd								
	-								
5	Vm								
	Hm								
	-								
6	Vm								
	Hm								
	Am								

Measurements on the blower sets should be performed twice a year.

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

IV. Annexe 4 – Comments

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz

LUTOS

Průmyslová 10, CZ-102 00 Praha 10, Czech Republic, Phone: +420 225 434 000, Fax: +420 225 434 343, E-mail: lutosl@lutos.cz