Original Operating Instructions V-VTN

V-VTN 16 | 26 | 41



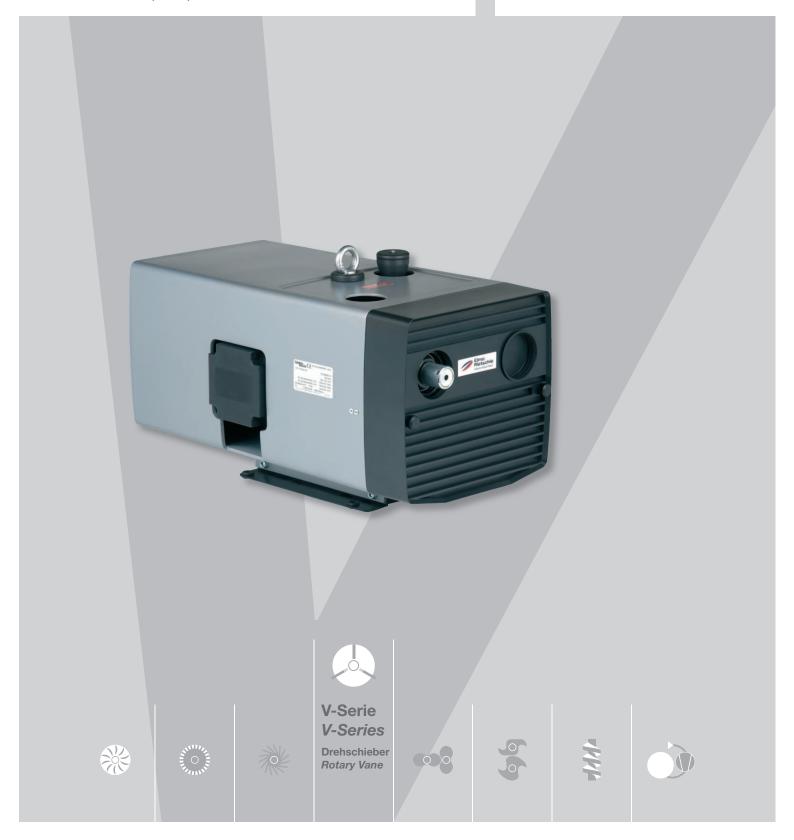


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1 Foreword

1.1 Principles

These operating instructions:

- are a part of the following dry running rotary vane vacuum pumps V-VTN 16, V-VTN 26 and V-VTN 41.
- describe how to use them safely and properly in all life phases.
- must be available where the equipment is used.

1.2 Target group

The target group for these instructions is technically trained specialists.

1.3 Supplier documentation and accompanying documents

| Document | Contents | No. |
|----------------------------|---------------------------------|---------------|
| | Operating Instructions | BA 281-EN |
| Supplier documentation | Declaration of Conformit | C 0083-EN |
| | Declaration of harmlessness | 7.7025.003.17 |
| Spare parts' list | Spare parts' document | E 281 |
| Data sheet | Technical data and graphs | D 281 |
| Info sheet | Storage guidelines for machines | I 150 |
| Manufacturer's declaration | EU Directive 2002/95/EG (RoHS) | _ |

1.4 Abbreviations

Fig. Figure

V-VTN Vacuum pump

m³/h Pumping capacity

mbar (abs.) Final vacuum, operating vacuum

1.5 Directives, standards, laws

See Conformity Declaration



1.6 Symbols and meaning

| Symbol | Explanation |
|------------------|---|
| \triangleright | Condition, pre-requisite |
| #### | Instructions, action |
| a), b), | Instructions in several steps |
| ⇒ | Results |
| <u>-> 14]</u> | Cross reference with page number |
| i | Information, note |
| \triangle | Safety symbol Warns of potential risk of injury Obey all the safety instructions with this symbol in order to avoid injury and death. |

1.7 Technical terms and meaning

| Term | Explanation |
|--|---|
| Machine | Pump and motor combination ready to be connected |
| Motor | Pump drive motor |
| Vacuum pump Machine to create a vacuum | |
| Rotary vane | Machine's design or active principle |
| Pumping capacity | Vacuum pump volume flow related to the condition in the suction connection |
| Final pressure (abs.) | The maximum vacuum that a pump reaches when the suction opening is closed. Given as absolute pressure. |
| Permanent vacuum | The vacuum or the suction range at which the pump operates permanently. The permanent vacuum or intake pressure is ≥ than the final vacuum and < than the atmospheric pressure |
| Noise emission | The noise emitted at a specific loading given as a figure, sound pressure level dB(A) as per EN ISO 3744. |

1.8 Copyright

Passing on or copying this document, using and providing information on its contents are prohibited unless expressly permitted.



2 Safety

The manufacturer is not responsible for damage if you do not follow all of this documentation.

2.1 Warning instruction markings

| Warning | Danger level | Consequences if not obeyed | |
|-----------------|------------------------------|-----------------------------|--|
| A DANGER | immediately imminent danger | Death, severe bodily injury | |
| WARNING | possible imminent danger | Death, severe bodily injury | |
| CAUTION | possible hazardous situation | Slight bodily injury | |
| NOTICE | possible hazardous situation | Material damage | |

2.2 General

These operating instructions contain basic instructions for installation, commissioning, maintenance and inspection work which must be obeyed to ensure the safe operation of the machine and prevent physical and material damage.

The safety instructions in all sections must be taken into consideration.

The operating instructions must be read by the responsible technical personnel/ operator before installing and commissioning and must be fully understood. The contents of the operating instructions must always be available on site for the technical personnel/operator. Instructions fixed directly onto the machine must be obeyed and must always remain legible. This applies for example to:

- Symbols for connections
- Data and motor data plate
- Instruction and warning plates

The operator is responsible for observing local regulations.



2.3 Designated use

The machine must only be operated in such areas as are described in the operating instructions:

- only operate the machine in a technically perfect condition
- do not operate the machine when it is only partially assembled
- the machine must only be operated at an ambient temperature and suction temperature of between 5 and 40°C. Please contact us for temperatures outside this range.
- the machine may convey, compress or extract the following media:
 - convey air with a relative humidity of 30 -90%
 - all non-explosive, non-inflammable, non-aggressive and non-poisonous dry gases and gas air mixtures

2.4 Unacceptable operating modes

- extracting, conveying and compressing explosive, inflammable, aggressive or poisonous media, e.g. dust as per ATEX zone 20-22, solvents as well as gaseous oxygen and other oxidants, extremely damp air, water vapour, traces of oil, oil vapour and grease
- using the machine in non-commercial plants if the necessary precautions and protective measures have not been taken in the plant
- installing in environments that are at risk of explosions
- using the machine in areas with ionising radiation
- back pressures on the outlet side of more than +0.1bars
- modifications to the machine and accessories.



2.5 Personal qualifications and training

- Ensure that people entrusted with working on the machine have read and understood these operating instructions before starting work, particularly the safety instructions for installation, commissioning, maintenance and inspection work.
- Manage the responsibilities, competence and monitoring of staff
- all work must only be carried out be technical specialists:
 - Installation, commissioning, maintenance and inspection work
 - · Working with electricity
- personnel being trained to work on the machine must be supervised by technical specialists only

2.6 Safety-conscious work

The following safety regulations apply in addition to the safety instructions and intended use listed in these instructions:

- Accident prevention regulations, safety and operating regulations
- the standards and laws in force

2.7 Safety notes for the operator

- hot parts of the machine must not be accessible during operation or must be fitted with a guard
- People must not be endangered by the free extraction or discharge of pumped media
- Risks arising from electrical energy must be eliminated.
- The machine must not be in touch with inflammable substances.
 Danger of fire by hot surfaces, discharge of pumped media or cooling air



2.8 Safety instructions for installing, commissioning and maintenance

- The operator will ensure that any installation, commissioning and maintenance work is carried out by authorised, qualified specialists who have gained sufficient information by an in-depth study of the operating instructions.
- Only work on the machine when it is idle and cannot be switched on again
- Ensure that you follow the procedure for decommissioning the machine described in the operating instructions.
- Fit or start up safety and protective devices again immediately after finishing work.
- Conversion work or modifications to the machine are only permissible with the manufacturer's consent.
- Only use original parts or parts approved by the manufacturer. The use of other parts may invalidate liability for any consequences arising.
- Keep unauthorised people away from the machine

2.9 Guarantee conditions

The manufacturer's guarantee or warranty will no longer apply in the following cases:

- Improper use
- Not complying with these instructions
- Operation by insufficiently qualified staff
- Using spare parts that have not been approved by Gardner Denver Schopfheim GmbH
- Unauthorised modifications to the machine or the accessories supplied by Gardner Denver Schopfheim GmbH



3 Transport, storage and disposal

3.1 Transportation

3.1.1 Unpack and check the delivery condition

3.1.2 Lifting and transporting

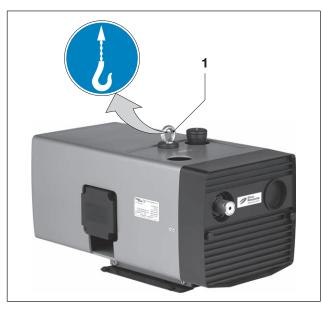


Fig. 1 Lifting and transporting

1 Eyebolt

- a) Unpack the machine on receipt and check for transport damage.
- Notify the manufacturer of transport damage immediately
- c) Dispose of the packaging in accordance with the local regulations in force.



WARNING

Death or limbs crushed as a result of the items being transported falling or tipping over.

- When transporting with the lifting device remember:
- a) Select the lifting device suitable for the total weight to be transported.
- b) Ensure that the machine cannot tip and fall.
- c) Do not stop under a suspended load.
- d) Put the goods to be conveyed on a horizontal base.

Lifting device/ Transporting with a crane



WARNING

Bodily injury resulting from improper operation

- a) Loads crosswise to the ring level are not permitted.
- b) Avoid impact stress.
- a) Tighten the eyebolts (Fig. 1/1) firmly.
- b) The machine must be suspended on the eyebolt using the lifting device for lifting and transporting.



3.2 Storage

NOTICE

Material damage caused by improper storage.

- Ensure that the storage area meets the following conditions:
- a) dust free
- b) vibration free

3.2.1 Ambient conditions for storage

| Ambient conditions | Value | |
|--------------------|----------------|--|
| Relative humidity | 0% to 80% | |
| Lagertemperatur | -10°C to +60°C | |



The machine must be stored in a dry environment with normal air humidity. It should not be stored for more than 6 months.

see Info "Machine storage guidelines", Page 4

3.3 Disposal



WARNING

Danger from inflammable, corrosive or poisonous substances.

Machines that come into contact with hazardous substances must be decontaminated before disposal.

- When disposing ensure the following:
- Collect oils and grease separately and dispose of in accordance with the local regulations in force.
- b) Do not mix solvents, limescale removers and paint residues
- c) Remove components and dispose of them in accordance with the local regulations in force.
- d) Dispose of the machine in accordance with the national and local regulations in force.
- e) Parts subject to wear and tear (marked as such in the spare parts list) are special waste and must be disposed of in accordance with the national and local waste laws.



4 Set up and operation

4.1 Setup

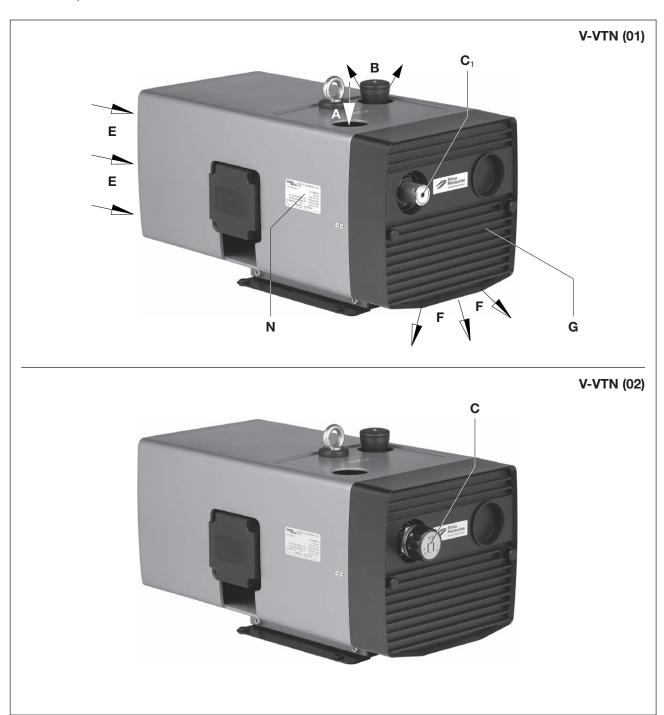


Fig. 2 Vacuum pump V-VTN (01) / V-VTN (02

- A Vacuum connection
- **B** Exhaust air outlet
- C Vacuum regulating valve
- C₁ Vacuum safety valve

- E Cooling air inlet
- F Cooling air outlet
- N Data plate

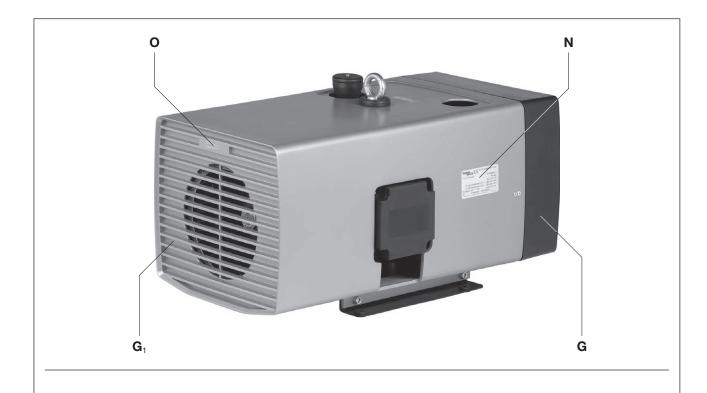




Fig. 3 Vacuum pump V-VTN

- G Outlet grid
- **G**₁ Inlet grating
- J Plug connection (optional)

- N Data plate
- O Rotation direction arrow

4.1.1 Data plate

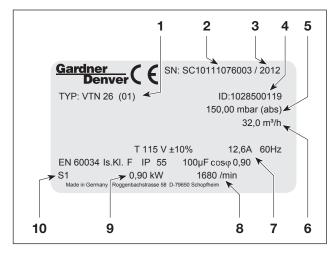


Fig. 4 Data plate

- Type/ Size (mechanical version)
- 2 Serial number
- 3 Year of construction
- 4 Item no.

1

- **5** Final pressure (abs.)
- 6 Pumping capacity
- 7 Motor data
- 8 Speed
- 9 Motor output
- 10 Operating mode

4.2 Description

The V-VTN model range has a connecting thread on the suction side and an exhaust silencer on the pressure side. The aspirated air is cleaned by an inbuilt fine micro filter.

The motor and the pump have a common shaft.

The vacuum pumps V-VTN are located in a plastic sound cover. Inside the sound cover is also a fan that provides cooling.

The V-VTN (02) has a vacuum regulating valve fitted as standard (Fig. 2/C) that enables the vacuum to be set to the required values which have an upper limit.

4.3 Areas of application

These dry running rotary vane vacuum pumps V-VTN 16 to V-VTN 41 are suitable for evacuating closed systems and for a permanent vacuum in the intake pressure range 150 - 1000 mbars (abs.).

The pumping capacity with unrestricted suction is 15, 25 and 40 m³/h at 50 Hz. Data sheet D 281 shows the dependency of the pumping capacity on the intake pressure

These dry running machines are suitable for conveying air with a relative humidity of 30 - 90%.



If the unit is switched on more frequently (at regular intervals of about 10 times an hour) or at higher ambient temperatures and intake temperatures, the excess temperature limit of the motor winding and the bearings may be exceeded.

Please contact the manufacturer should the unit be used under such conditions.



If it is installed in the open air the unit must be protected from environmental influences, (e.g. by a protective roof).



5 Installation

5.1 Preparing for installation

Check the following points:

- Machine freely accessible from all sides
- Do not close ventilation grids and holes
- Sufficient room for installing and removing pipes and for maintenance work, particularly for installing and dismantling the machine
- No external vibration effect
- Do not suck any hot exhaust air from other machines into the cooling system.



To remove the outlet grid (Fig. 3/G) and the inlet grating (Fig. 3/G₁) at least 30 cm of space must be available for maintenance work. You must also ensure that the cooling air inlets (Fig. 2/E) must be at least 10 cm away from the nearest wall (outgoing cooling air must not be sucked in again).

5.2 Installation

NOTICE

The machine may only be operated when it is set up horizontally.

Other installation on request.

Material damage resulting from the machine tipping over and falling.

When installed at more than 1000 m above sea level a reduction in power is noticeable. In this case we would ask you to contact us.

Ensure that the foundation complies with the following conditions:

- Level and straight
- The bearing surface must be able to bear the weight of the machine



It must be possible to install the machine on a firm foundation without anchoring. When installing on a substructure we recommend fixing with flexible buffers.



5.3 Connecting pipes

a) Vacuum connection at (Fig. 2/A).

NOTICE

Material damage resulting from the forces and torques of the pipes on the unit being too high. screw pipes in by hand.

The pumping capacity of the vacuum pump is reduced if the suction pipe is too narrow and/or too long.

b) Check to ensure the suction pipe is connected correctly.

NOTICE

Length of the connection pipes

With connection pipes that have the same pipe cross section as the machine connection and are more than 3m long, a non-return valve especially for the purpose must be installed in order to avoid reverse operation when the machine has stopped.

5.4 Control and relief valve

The vacuum can be set by turning the control knob (Fig. 2/C) as shown on the symbol fitted to the button.

NOTICE

Do not operate without the standard control and relief valve.

If the permissible vacuum is exceeded (see data plate) the machine may be damaged.



5.5 Connecting the motor



A

DANGER

Danger of death if the electrical installation has not been done professionally.

The electrical installation must only be done by a qualified electrician observing EN 60204. The operating company has to provide the main switch.

- a) The electrical motor data can be found on the data plate (Fig. 2/N) or the motor data plate. The motors comply with DIN EN 60034 and are in protection class IP 55 and insulation class F. The appropriate connection diagram is located in the motor's terminal box (not for the plug connection version). The motor data must be compared with the data of the existing mains network (current type, voltage, network frequency, permitted current value).
- b) Connect the motor via the plug connection (Fig. 3/J) or a motor protection switch (for safety reasons a motor protection switch is required and cable fitting must be provided to provide strain relief for the connection cable). We recommend using motor protection switches with delayed switch off, depending on possible excess current. Temporary excess current may occur when the machine is started cold.

NOTICE

Power supply

The conditions at the installation location must match the information on the motor data plate. Without derating the following is permissible:

- ± 5% voltage deviation
- ± 2% Frequency deviation



6 Commissioning and decommissioning

6.1 Commissioning



WARNING

Improper use

May lead to severe or fatal injuries. Therefore be sure to obey the safety instructions.



CAUTION



Noise emission

The highest noise pressure levels measured as per EN ISO 3744 are given in Section 9. When spending a long time in the vicinity of the running machine use ear protectors to avoid permanent damage to your hearing.

NOTICE

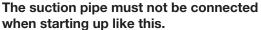
Wait until the machine stops

The machine must only be switched on again after it stops.



6.1.1 Checking the rotation direction

- The drive shaft direction of rotation is shown by the rotation direction arrow (Fig. 3/O).
- a) Start the motor briefly (max. two seconds) to check the direction of rotation. When looking at the motor fan, it must rotate clockwise.





NOTICE

Incorrect direction of rotation

Running the machine in reverse for a long time may cause damage to the blades which may lead to the blades breaking. Use a phase sequence indicator to check the direction of rotation (anti-clockwise rotating field).

6.2 Decommissioning/ storing

Stop the machine

- a) Switch the machine off.
- b) If available close the cut off device in the suction and pressure pipe.
- c) Disconnect the machine from the electricity source.
- d) Depressurise the machine: Open the pipes slowly.⇒ The pressure reduces slowly.
- e) Remove the pipes and hoses.
- Seal the connections for suction and discharge nozzles with adhesive foil.
- see also Section 3.2.1, Page 11

6.3 Re-commissioning

- a) Check the condition of the machine (cleanliness, cabling etc.).
- For installation see Section 5 Page 15
- For commissioning see Section 6.1 Page 18



7 Maintenance and repair





DANGER

Danger of death from touching live parts.

Before maintenance work disconnect the machine by pressing the main switch or unplugging it and ensure that it cannot be turned on again.





WARNING

Hot surfaces and equipment

During maintenance work there is the danger of getting burnt on hot components and by the machine lubricating oil.

Wait for the machine to cool down.

7.1 Ensuring operational safety

Regular maintenance work must be carried out in order to ensure operational safety.

Maintenance intervals also depend on the operational demands on the machine.

With any work observe the safety instructions described in Section 2.8 "Safety notes for installation, commissioning and maintenance".

The whole unit should always be kept in a clean condition.

7.2 Maintenance work

| Interval | Maintenance to be carried out | Section |
|---|---|---------|
| monthly | Check the pipes and screws for leaks and to ensure they are seated properly and if necessary seal again or tighten up. | |
| monthly | Check the terminal box and cable inlet holes for leaks and if necessary re-seal. | _ |
| monthly | Clean the regulating valve and ventilation slots on the machine and the motor cooling ribs. If there is a great deal of dust in the spaces on the cooling ribs clean them. | _ |
| _ | The machine's bearings are permanently lubricated and do not require re-lubricating. | _ |
| monthly / every 6 months | Clean or replace filter cartridges | 7.2.1 |
| V-VTN 16: 7,000 h / 1,000 h V-VTN 26: 5,000 h / 1,000 h V-VTN 41: 3,000 h / 1,000 h | Check blades ⇒ Replace blades | 7.2.2 |



7.2.1 Air filtering

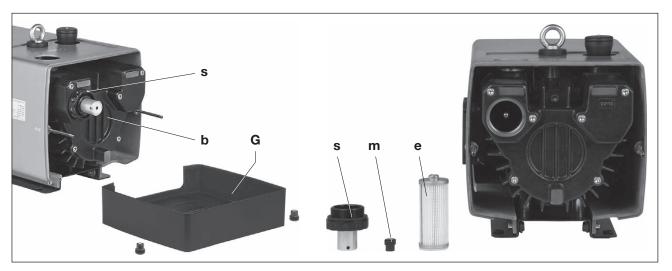


Fig. 5 Air filtering

- G Outlet grid
- **b** Housing lid
- e Filterpatrone
- m Knurled knob
- s Screw cap

Fig. 6 Purging filter cartridge

- 1 Filter cartridge
- 2 Compressed air

NOTICE

Insufficient maintenance on the air filter

The power of the machine lessens and damage may occur to the machine.

The filter cartridge (Fig. 5/e) for suction air must be cleaned by blowing through from the inside out once a month or more often depending on the level of contamination. In spite of cleaning the filters their separation efficiency will continue to deteriorate. Therefore the filters should be replaced every six months.

Changing filters:

Unscrew the outlet grid (Fig. 5/G).

Undo the screw cap (Fig. 5/s) and the knurled knob (Fig. 5/m). Remove and clean or replace filter cartridges (Fig. 5/e). Reassemble in reverse order.



WARNING

Danger of injury when dealing with compressed air.

When blowing through with compressed air, solid particles may be carried along or powder dust swirling around may cause injury to the eyes. Therefore, when cleaning with compressed air always wear goggles and a dust mask.



7.2.2 Replacing blades

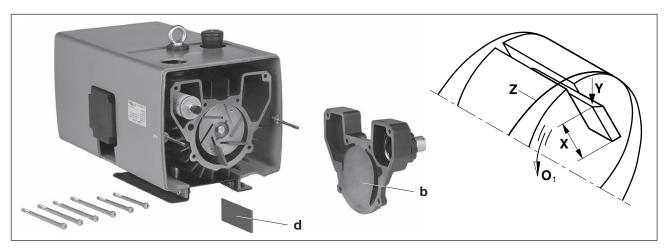


Fig. 7 Changing blades

O₁ Direction of rotation

X Minimum height

Y Slanting side of the blade

Z Drilled holes in the housing

b Housing lid

d Blade

Checking blades:

V-VTN 16 / 26 have 6 carbon blades and V-VTN 41 has 7 carbon blades that wear out gradually during operation.

V-VTN16: First check after 7,000 operating hours, then every 1,000 operating hours.

V-VTN26: First check after 5,000 operating hours, then every 1,000 operating hours.

V-VTN41: First check after 3,000 operating hours, then every 1,000 operating hours.

Unscrew the outlet grid (Fig. 5/G). Unscrew the housing cover (Fig. 7/b) from the housing. Remove the blades (Fig. 7/d) to be checked. All blades must have a minimum height (Fig. 7/X):

Type X (minimum height) V-VTN 16, 26 24 mm V-VTN 41 35 mm



The blades must only be changed as a set.

Changing blades: If you detect during the blade check that the minimum height has been reached or it has fallen below the minimum height, the blade set must be changed. Blow out the housing and the rotor slot. Insert the blades into the rotor slot. When doing this you must ensure that the blades with the sloping side (Fig. 7/Y) point outwards and the direction of rotation of these sloping sides (Fig. 7/O₁) matches that of the drilled holes for the housing (Fig. 7/Z). Screw on the housing lidFig. 7/b) and outlet grid (Fig. 6/G). Before starting up check that the blades run freely by moving the fan round, for it unscrew the inlet grating (Fig. 2/G₁).



7.3 Reparatur/ Service

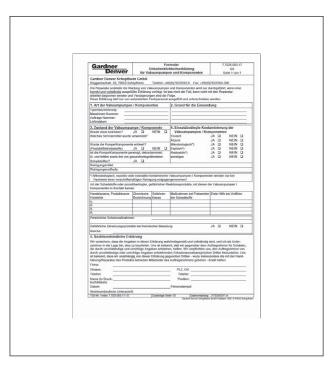


Fig. 8 Clearance certificate 7.7025.003.17

a) For on site repair work the motor must be disconnected from the mains by a qualified electrician so that it cannot be started up again accidentally. For repairs use the manufacturer, its branch offices or authorised dealers. Please contact the manufacturer for the address of the service centre responsible for you (see Manufacturer's address).

NOTICE

For each machine that is sent to an Elmo Rietschle Service centre for inspection, maintenance or repair, a fully completed, signed declaration of harmlessness must be enclosed.

The declaration of harmlessness is part of the supplier's documentation.

 After a repair or re-commissioning, the actions listed under "Installation" and "Commissioning" must be carried out as for initial commissioning.

7.4 Spare parts

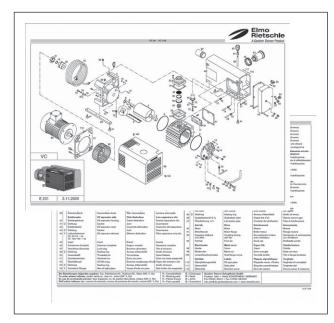


Fig. 9 Spare parts list (example)



Fig. 10 Web site http://www.service-er.de

Order spare parts in accordance with the:

Spare parts list:

E 281 → V-VTN 16 - V-VTN 41

• Download the PDF file:

http://www.gd-elmorietschle.com

- → Downloads
- → Product Documents
- → V-Series → Spare Parts
- Parts subject to wear and gaskets are indicated separately on the list.

• Web site:

http://www.service-er.de

• Select the type, size and design.

NOTICE

Only use original spare parts or parts approved by the manufacturer. The use of other parts may lead to malfunctions and invalidate liability or the guarantee for any consequences arising.



Malfunctions: Causes and elimination 8

| Fault | Cause | Troubleshooting | Important |
|--|---|--|------------------------------|
| Machine is switched off by the motor protection switch | Mains voltage/ Frequency does not correspond with the motor data | Check by qualified electrician | Section 5.5 |
| | Connection to motor terminal board is not correct | | |
| | Motor protection switch is not set correctly | | |
| | Motor protection switch is triggered too quickly | Use a motor protection switch with an overload-dependent delayed switch off that takes into consideration the short term excess current at start up (version with short circuit and overload trigger as per VDE 0660 Part 2 orIEC 947-4) | |
| | The regulating valve is dirty so that the permissible vacuum value is exceeded. | Clean or replace the regulating valve | Section 7.2 Section 7.4 |
| Pumping capacity is insufficient | The intake filter is dirty | Clean or replace the intake filter | Section 7.2.1 Section 7.4 |
| | The suction pipe is too long or too narrow | Check the hose or the pipe | Section 5.3 |
| | Machine or system leaking | Check the pipework and screw connections for leaks and to ensure that they are firmly seated. | Section 7.2 |
| | Blades are damaged | Replace blades | Section 7.2.2 Section 7.4 |



Malfunctions: Causes and elimination

| Check the pipework and screw connections for leaks and to ensure that they are firmly seated. Replace blades Ensure it is being used properly Check environmental condi- | Section 7.2.2 Section 7.4 Section 2.3 Section 5.1 |
|---|---|
| Ensure it is being used properly | Section 7.4 Section 2.3 |
| erly | |
| Check environmental condi- | Section 5.1 |
| tions | 230 |
| Clean ventilation slots | Section 7.2 |
| Clean or replace the regulating valve | Section 7.2 Section 7.4 |
| Repair by manufacturer or authorised workshop | Elmo Rietschle Service |
| | Section 7.4 |
| Replace the valve | Section 7.2.2 |
| | · |



9 Technical Data

| V-VTN | | | 16 | 26 | 41 |
|--|-------|-------|-------------------------------|-------|-------------------|
| Sound pressure level (max.) EN ISO 3744 | dD(A) | 50 Hz | 66 | 65 | 70 |
| Tolerance±3 dB(A) | dB(A) | 60 Hz | 70 | 67 | 72 |
| Weight (max.) | ka | 3 ~ | 26.8 | 30.7 | 46.7 |
| weight (max.) | kg | 1 ~ | 27.2 | 31.9 | 47.0 |
| Longth | mm | (01) | 459 | 489 | 554 |
| Length | mm | (02) | 477 | 507 | 593 |
| Width | mm | | 245 | 245 | 275 |
| Height | mm | | 286 | 286 | 319 |
| Vacuum connection | | | G ¹ / ₂ | G 1/2 | G 3/ ₄ |

- (01) Standard version with vacuum safety valve
- (02) Version with vacuum regulating valve

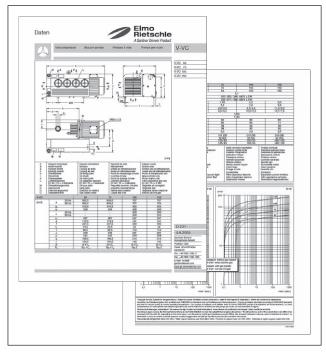


Fig. 11 Data sheet (example)

You will find more technical data on the data sheet **D 281**

- Download the PDF file
 - **D 281** → V-VTN 16 V-VTN 41
 - Download the PDF:

http://www.gd-elmorietschle.com

- → Downloads
- → Product Documents
- → V-Series → Data Sheets

NOTICE

Subject to technical changes.



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Elmo Rietschle is a brand of Gardner Denver's Industrial Products Division and part of Blower Operations.



EC - declaration of conformity 2006/42/EC

Hereby the manufacturer Gardner Denver Schopfheim GmbH

confirms: Postfach 1260

D-79642 Schopfheim

that the machine: Dry running vacuum pump

of the: Series: V-VTN

Type: V-VTN 6, V-VTN 10, V-VTN 15,

V-VTN 25, V-VTN 40, V-VTN 60 V-VTN 16, V-VTN 26, V-VTN 41

Is conform to the regulations of the guideline indicated above.

The following harmonized and national standards and specifications are applied:

EN 1012-1:2010 Compressors and vacuum pumps — Safety requirements — Part 1:

Compressors

EN 1012-2:1996+A1:2009 Compressors and vacuum pumps — Safety requirements — Part 2:

Vacuum pumps

These declarations of conformity are invalid when the machine has been modified without prior approval by us and the approval has been documented in writing.

Name and address of the EC person in

charge for documentation

Gardner Denver Schopfheim GmbH

Postfach 1260

D-79642 Schopfheim

Gardner Denver Schopfheim GmbH

Schopfheim, 01.8.2011

Dr. Friedrich Justen, Director Engineering

C_0083_EN

Gardner Denver

Safety declaration form for vacuum pumps and components

7.7025.003.17

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Roggenbachstr. 58, 79650 Schopfheim

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Repairs and/or maintenance of vacuum pumps and components will only be carried out if a declaration has been filled in <u>correctly and completely</u>.

| If not, the repair work cannot be This declaration must only be f | e started and | | | staff. | | | | |
|---|---|---|---|--|-------------------------------------|---------------------------|---------------------------------|--------------|
| 1. Type of vacuum pumps | 2. Reason for the submission | | | | | | | |
| Type description: Machine number Order number: Delivery date: | | | | | | | | |
| 3. Condition of vacuum pu | 4. Contamin | ation of the | vacuun | n pur | mps/ | | | |
| Was this being operated? Which lubrication was used? | YES 🗖 | NO 🗆 | Toxic Corrosive | nts when in u | YES YES | | NO NO | |
| Was the pump/ component em (Product/Consumables) Has the pump/ component bee | YES 🗆 | NO 🗖 I decontamina | | al*) | YES YES YES | | NO NO | |
| | YES 🗆 | | other | | YES | | NO | |
| Cleaning agent: Cleaning method: | | | | | | | | |
| *) Microbiological, explosive or with proof that they have bee | - | | vacuum pump | s/ components | will only | be a | ccepte | ed |
| Type of toxic substance or procomponents came into contact | | langerous rea | ction products | with which the | vacuum | pum | ps/ | |
| Trade name, manufacturer's product name | | | | aken if toxic e released | First aid in the event of accidents | | | |
| <u> </u> | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| Personal protection measures: | | - | | | | | | |
| Hazardous decomposition prod Which? | rmal load | | YES | | NO | | | |
| 5. Legally binding declarate | tion | | | | | | | |
| We swear that the information position to judge this. We are a inaccurate information. We und from incomplete or incorrect into third parties including in part | in this declara ware that we dertake to rele formation. We | are liable to thase the contra are aware tha | ne contractor for actor from any at, regardless o | or damage caus damage claims of this declaration | sed by ir from th on, we a | icomp ird pa re dir | olete a irties a ectly li | nd rising |
| Company: | | | | | | | | |
| treet: Post code/ Town: | | | | | | | | |
| Phone: | | | . Fax: | | | | | |
| Name (in capitals) | | | Position: | | | | | |
| Date: | Company stamp: | | | | | | | |
| Legally binding signature: | | | | | | | | |
| TOS no. / Index: 7.7025.003.17 / 03 | | Office responsib | le: GS | File management: | :\770250 | 00317. | d | |