

AERZEN SCREW COMPRESSORS

Aerzen screw compressor packages DELTA SCREW as compact units,
available in two pressure ranges with optimized power consumption

Pressure range 1 up to 3.0 bar (a) VML 18 R to VML 250

Pressure range 2 up to 4.5 bar (a) VM 8 R to VM 140
with gearbox or belt drive



AERZEN

**AERZENER MASCHINENFABRIK
GMBH**

V1-018 | 07 | EN

1000 6.2010

Technical progression

The Aerzener Maschinenfabrik GmbH has been manufacturing Screw Compressors since 1943. As the Market Leader in Europe, the company is one of the oldest and largest manufacturers of Roots Blowers and Screw Compressors. Technical expertise, experienced staff and a permanent dialogue with the customers all help to maintain the lead in technology now and for the future.

The further development and introduction of the new DELTA SCREW Packages is an answer to the rising demands of our customers and the increasing demands of the future market.

Application fields and use

The units are specifically designed to match practical requirements in the field. They are the ideal solution for the dry, oil-free and clean compression of air and neutral gases as required e.g. in the following application fields:

- pneumatic conveying with air or nitrogen
- aeration of sewage basins
- homogenising of cement
- vacuum production in the glass industry
- prevention of ice build-up in harbours and lakes
- oil booms
- gas-air mixing plants
- oxidation air for power stations
- stationary unloading of silo vehicles
- vacuum production in the paper industry
- conveying and compression of neutral gases
- blast air for production of spunbonded web

All DELTA SCREW-units can be delivered with ATEX 100 A - certification on customers request.



General

Single-stage Aerzen screw compressors are manufactured as air-cooled units for intake volumes from 200 to 15.000 m³/h. Discharge pressures of up to $p_2 = 3.0$ bar and 4.5 bar abs., dry, oil-free compression, temperature limit t_2 maximum 250 °C. Vacuum operation is possible with the standard VML-compressors to a maximum of 70% (0.3 bar abs.) and as a modified unit to 85% (0.15 bar abs.).

Driving shaft

sealed by peak seals, working maintenance-free in combination with a well-aimed oil-chamber release.

Energy consumption

Depending on the maximum discharge pressure 3+4 or 4+6 screw profiles are used. This results in an optimum use of energy despite other influences such as tolerances, pressure losses at accessories and deflections of the volume flow.

Large or small performances

With all units of the DELTA SCREW series, rotor profile, internal compression ratio and accessories can be optimized to meet individual requirements.

Technology

DELTA SCREW units are delivered complete with internal installation, piping and wiring, and are ready for connection to the customer's system.

By using a frequency converter the volume can be regulated over a large range with a ratio of approximately 1:4. Relatively small rotor diameters and low risk of internal contamination preclude any additional imbalances that could increase vibration.

Even under difficult operating conditions the calculated bearing lifetime is > 40.000 hours

Adaptability

Depending on customer requirements the scope of supply can include for example:

- Driving motor
- Control - and power cabinet
- Acoustic hood
- Start-up unloading device
- Full load / idle running system.

Simple operation

All operation and maintenance elements are accessible from one side, this includes instrument panel, oil filter, oil level sight glasses, air - and oil filters and therefore enable a simple operation and maintenance.

Chassis

The base frame for the compressor stages with belt drive has several functions. It is base support for the compressor stage, suction-silencer and oil reservoir in one. That reduces costly installation surface.

Ranges of pressure

In overpressure two discharge pressure ranges are available.

VML up to 3,0 bar (a) VM up to 4,5 bar (a)

In vacuum pressure:

VML up to 0,3 bar (a)

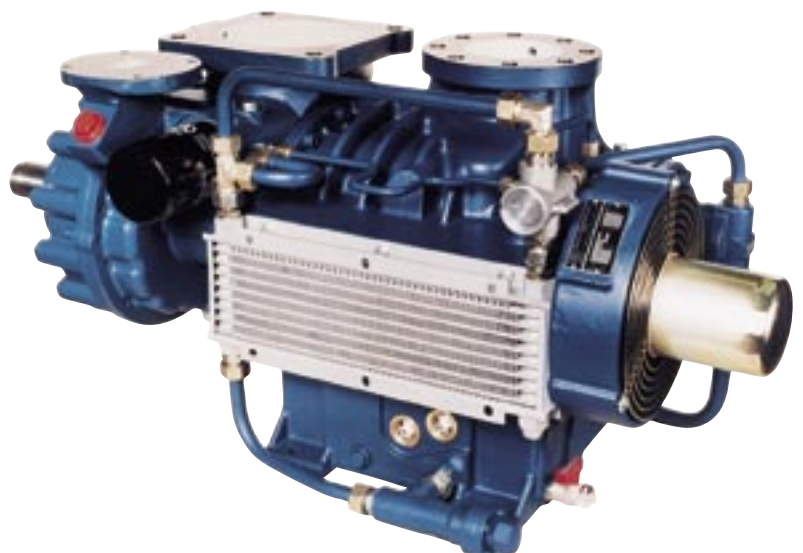
up to 0,15 bar (a) with pre-inlet

Efficiency

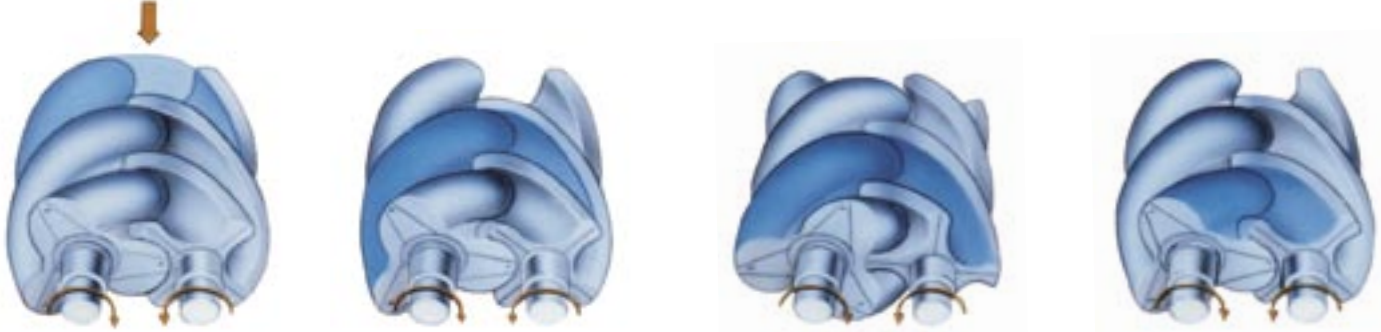
During the whole operating period of the compressor the efficiency remains virtually constant so that no reduction of the conveying capacity will occur.

With belt drive

The belt drive of DELTA SCREW - units is designed so that v-belt tension is constant in all operating conditions. The weight of the motor mounted on a hinged support ensures that the tension of the v-belts is always as it should be.



Compression process



Suction

The gas enters through the inlet opening into the open thread of the rotors.

Compression process

By progressing rotation of the rotors the inlet opening is closed, the volume reduced, the pressure increases.

Discharge

The compression is finished, the discharge pressure achieved, the discharge starts.

Installation

The packages are delivered completely assembled, allowing their prompt and trouble-free installation. Installation procedures at site are limited to the connection of the power supply and plant piping resp. filling-up of oil. The standard package designed for pressure mode operation sucks in ambient atmospheric air through a filter. In vacuum mode and nitrogen operation, the intake filter is substituted by a suction silencer or pipe connection. An additional expansion joint with tie-rods ensures stress-free intake connection to plant piping. The standard package is designed to accept motors having IP 55 type protection.

In the case of packages equipped with an acoustic hood, the electrical wiring as well as the motor starter and pushbuttons can be installed in the standard instrument panel. (only applies for machines with gearbox).

Drive

The compressor is normally driven via an electric motor of B 3 design. Other drive configurations (e.g. diesel motor, turbine) are available upon request. When installing an acoustic hood, the following must be considered: - The fan is designed to provide sufficient cooling to maintain a maximum temperature rise within the hood of 10 °C. - The amount of the heat radiated from the compressor package surfaces represents approx. 25 % of the drive power, depending on the particular operating conditions and compressor size. However, some higher heat radiation values can be reached where machines are equipped with an intake throttling regulation valve.

The internal pressure losses across the hood amount to max. 100 N/m². - The ventilation of the acoustic hood is carried out by a mechanically driven fan, which is mounted to an extension of the driving shaft (VML 150/250 electrically driven).



Unit

Concerning the Delta Screw units there is always a standardized concept for the package.

Two variants are possible:

1. Drive of the compressor stage directly via an integrated gearbox.

Arrangement of compressor stage and driving motor one behind the other, installed on a common base frame.

2. Drive of the compressor stage via belt drive.

Arrangement of compressor stage and driving motor side by side, hinged motor plate fixed laterally on the body of the compressor.

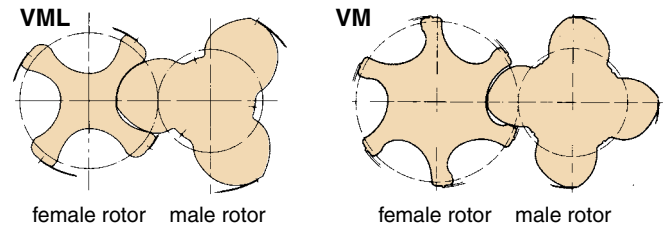
Start-up, regulation

As an option the VML-compressors can be provided with a self-controlled start-up unloading device. Upon request, VM-compressors can be supplied with an idling / full load regulation system, e.g. to unload the compressor in the case of star-delta starting, or to reduce energy consumption during intermittent operation (for star-delta starting, please consult the manufacturer first).

Construction and design (compressor stage)

Rotors:

Profile VML: 3 + 4, VM: 4 + 6, asymmetric dynamically balanced according to DIN ISO 1940 T1, quality G = 2.5



Sealings:

VM: conveying chamber: carbon ring labyrinth sealing at suction and discharge side with chamber rings and neutral chamber.

Driving shaft: peak seal

VML: conveying chamber: piston rings at suction side, carbon ring labyrinth sealing at discharge side, each with neutral chamber.

Driving shaft: peak seal

Materials:

housing: grey cast GG 25

rotors: steel C 45 N

sealings: Ek 305, steel / carbon

gear wheels: hardened steel

Bearings:

Roller bearings with integrated forced-feed lubrication.



Construction and design (Drive and oil system)

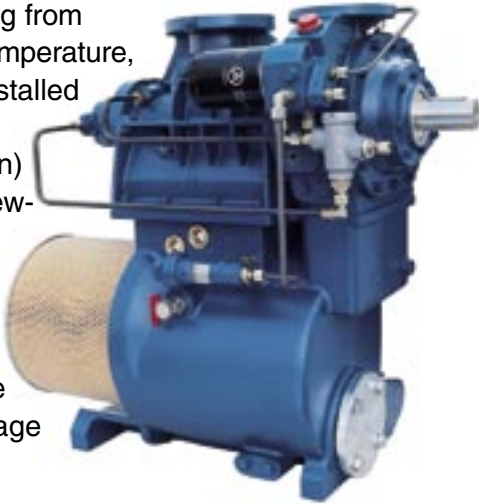
Belt drive:

Drive

Heavy-duty narrow V-belt, continuous belt tension due to motor weight

Oil system

- oil reservoir integrated in the base frame
- oil overflow valve
- oil pump driven by female rotor, accessible from the outside
- oil cooling as oil-/air cooler incl. oil temperature regulating valve (limited to 90 °C), aeration via mechanical fan on the driving shaft (applies starting from 40 °C intake temperature, cooler block installed on belt guard / hood ventilation)
- oil filter as screw-down filter
- oil chamber relief via oil demister, installed on the compressor stage



Gearbox:

Drive

Step-up gearbox integrated on the intake side with closely stepped gear ratios

Oil system

- oil reservoir integrated in the compressor housing
- oil overflow valve
- oil pump driven by female rotor, accessible from the outside
- oil cooling as oil-/air cooler incl. oil temperature regulating valve (limited to 90 °C), aeration via mechanical fan on the driving shaft (cooler block integrated in compressor stage)
- oil filter as screw-down filter
- oil chamber relief via oil demister, installed on the compressor stage



Instrumentation and controls

The instrumentation panel indicates and controls the following functions:



VML / VM

Visual maintenance indicator

in case of contamination of the air intake filter with additional protection by means of electrical pressure switches for suction pressure, discharge pressure and oil pressure discharge temperature and oil temperature.

The switches are wired internally on the terminal strip. Extension of instrumentation acc. to design VM is possible (option).

All sensing points are monitored by an electronic fault indication device featuring „first-out” indication. Instrumentation to meet special requirements (e.g. ex-proof) is available upon request.

Alternatively for VM and VML:

Aerzen Universal Control Unit including instrumentation in analog technique with pressure transmitter for suction-, discharge- and oil pressure. Resistance thermometer for discharge- and oil temperature.



Indications are optionally (multilingual) available in the display.

Control options for all possible cases of operation. Indication of the service intervals.

Limit value recording

as fault indication archives. Serial interface (RS 485) for data transmission (e.g. telediagnostic service, linkage of several machines among each other).

(Design not ex-proof).

Scope of supply and performances

The scope of supply of a DELTA SCREW compressor unit made by Aerzener for air operation (basic unit) includes the following items:

Belt drive

- Aerzen Screw compressor stage with reinforced bearing of the driving shaft (female rotor) suitable for belt drive. Forced-feed lubrication including oil pump, oil filter, oil return flow valve, turbo filter for oil chamber release.
- Base support as suction silencer with hinged motor plate (three-phase current motor)
- Intake filter (single-stage) integrated in the base frame
- Belt drive with guard

Gearbox

- Aerzen Screw compressor stage with integrated step-up gearbox, forced-feed lubrication including oil pump, oil filter, oil return flow valve, air/oil cooler, turbo filter for oil chamber release.
- Base support for compressor stage and driving motor (three-phase current motor)
- Intake filter (double-stage) with intake manifold
- Flexible coupling with guard

Items also belonging to the basic unit: (applies for belt drive and gearbox)

- Discharge silencer
- Safety relief valve (type-tested)
- Non-return valve
- Expansion joint with tie-rod, discharge side
- Flexible machinery mountings with anchor bolts
- Instrument panel for protection of the machine with indication and monitoring for suction-, discharge- and oil pressure, discharge- and oil temperature, single-fault indication and operating hour meter

Extended scope of instrumentation same as for VM possible even for VML against extra price.

Accessories: Options (belt drive and gearbox)

- Driving motor as three-phase current motor including assembly in Aerzen
- Acoustic hood for the complete compressor unit for indoor and outdoor installation
- Start-up unloading valve for VML-compressors (self-medium controlled)
- Constant-speed unloading device for VM-compressors including suction throttle, relief valve and pressure switch PSLH (self-medium controlled)
- switch cabinet with electrical interconnection (e.g. star-delta)
- Frequency converter, designed as separate cabinet (installation and external wiring at site)
- Overflow-regulating valve (self-medium controlled) for keeping the discharge pressure or vacuum constant, loose supply, for installation into the pipe provided at site
- separate after-cooler, loose supply, for installation into the pressure pipe provided at site, designed as air-/air cooler or air-/water cooler, in case of danger of condensation on request even with cyclone separator and automatic drain.

Modifications: Options (belt drive and gearbox)

- Nitrogen design including suction silencer, starting strainer, expansion joint suction side, suction pressure gauge
- Ex-proof design with intrinsically safe instrumentation, main- and aux. drives in EEx e or EEx de
- Special instrumentation in co-ordination with the customer's specification
- Deviating finish
- ANSI-flanges at battery limit
- Vacuum design (even with pre-inlet) incl. suction silencer, starting strainer, expansion joint suction side, suction pressure gauge, suction valve, vacuum filter as option

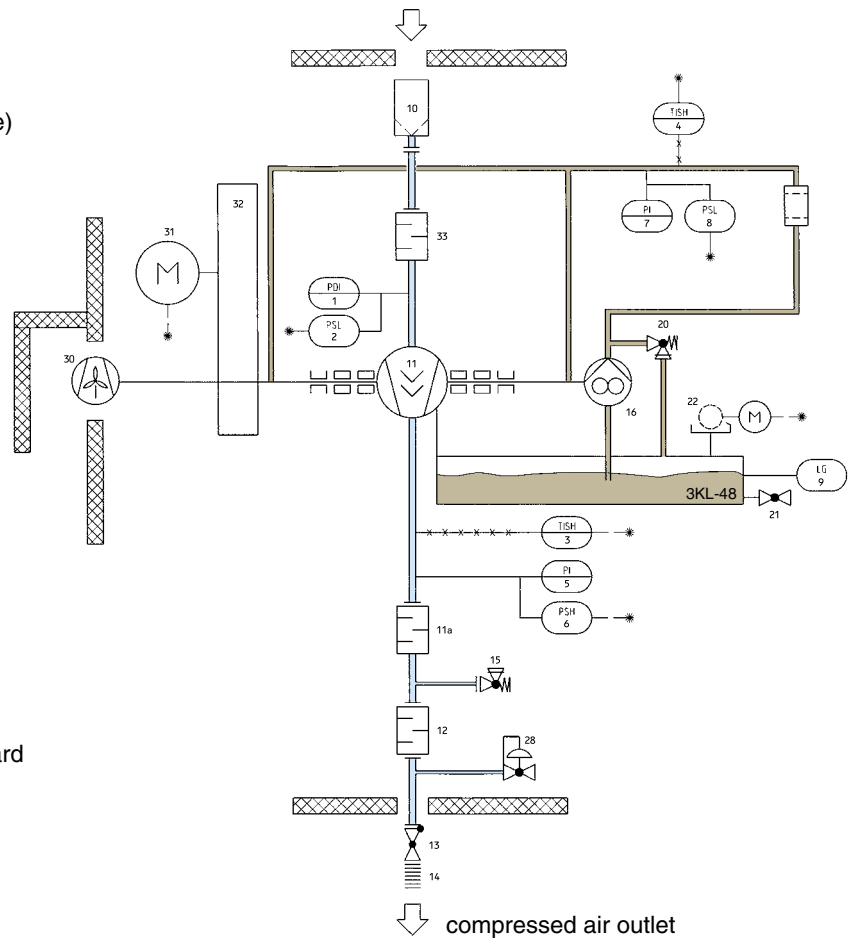


Flow diagram VML-R (belt drive)

1. air filter monitoring
2. intake pressure switch
3. contact thermometer (discharge temperature)
4. contact thermometer (oil temperature)
5. discharge pressure gauge
6. discharge pressure switch
7. oil pressure gauge
8. oil pressure switch
9. oil level sight glass
10. intake filter
11. compressor stage
- 11a. sound-absorbing connection chamber
12. discharge silencer
13. check valve
14. expansion joint
15. safety relief valve
16. oil pump
19. oil filter
20. oil overflow valve
21. oil drain valve
22. oil demister
32. belt drive
33. suction silencer

The following items are not included in the standard scope of supply and are available at extra costs:

28. relief valve
30. acoustic hood with fan
31. electric motor

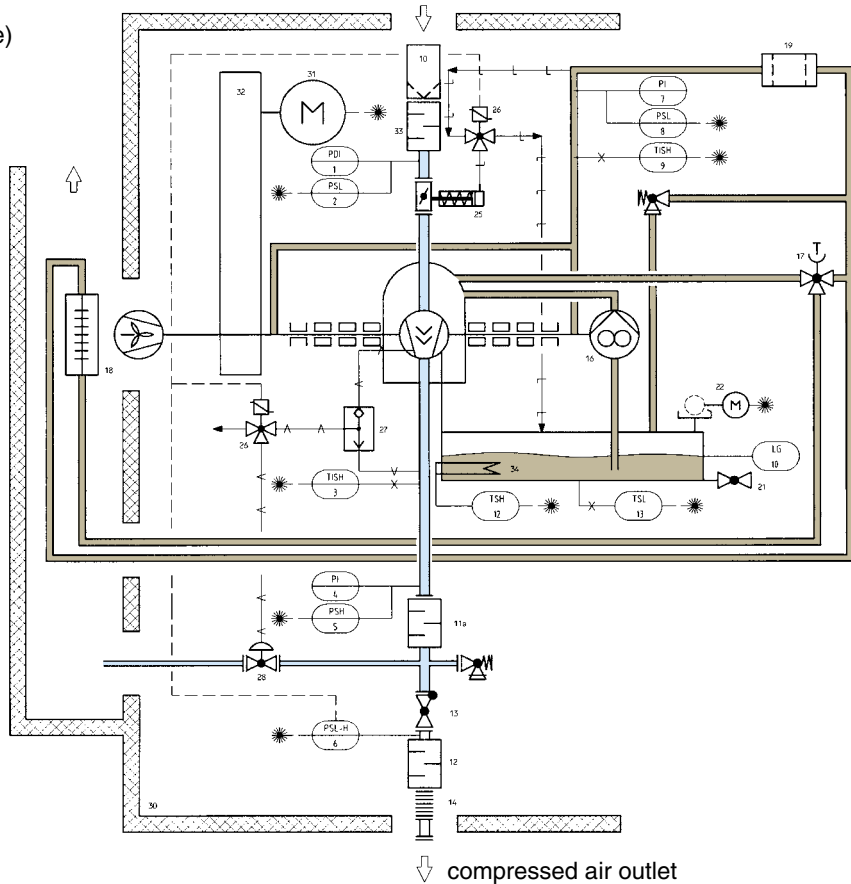


Flow diagram VM-R (belt drive)

1. air filter monitoring
2. intake pressure switch
3. contact thermometer (discharge temperature)
4. contact thermometer (oil temperature)
5. discharge pressure gauge
6. discharge pressure switch
7. oil pressure gauge
8. oil pressure switch
9. oil level sight glass
10. intake filter
11. compressor stage
12. discharge silencer
13. check valve
14. expansion joint
15. safety relief valve
16. oil pump
17. oil temperature regulator
18. oil air cooler
19. oil filter
20. oil overflow valve
21. oil drain valve
22. oil demister
32. belt drive
33. suction silencer

The following items are not included in the standard scope of supply and are available at extra costs:

23. intake pressure gauge
24. pressure switch
25. throttle flap regulation
26. 3-way solenoid valve
27. pressure selection relay
28. relief valve
30. acoustic hood with fan
31. electric motor



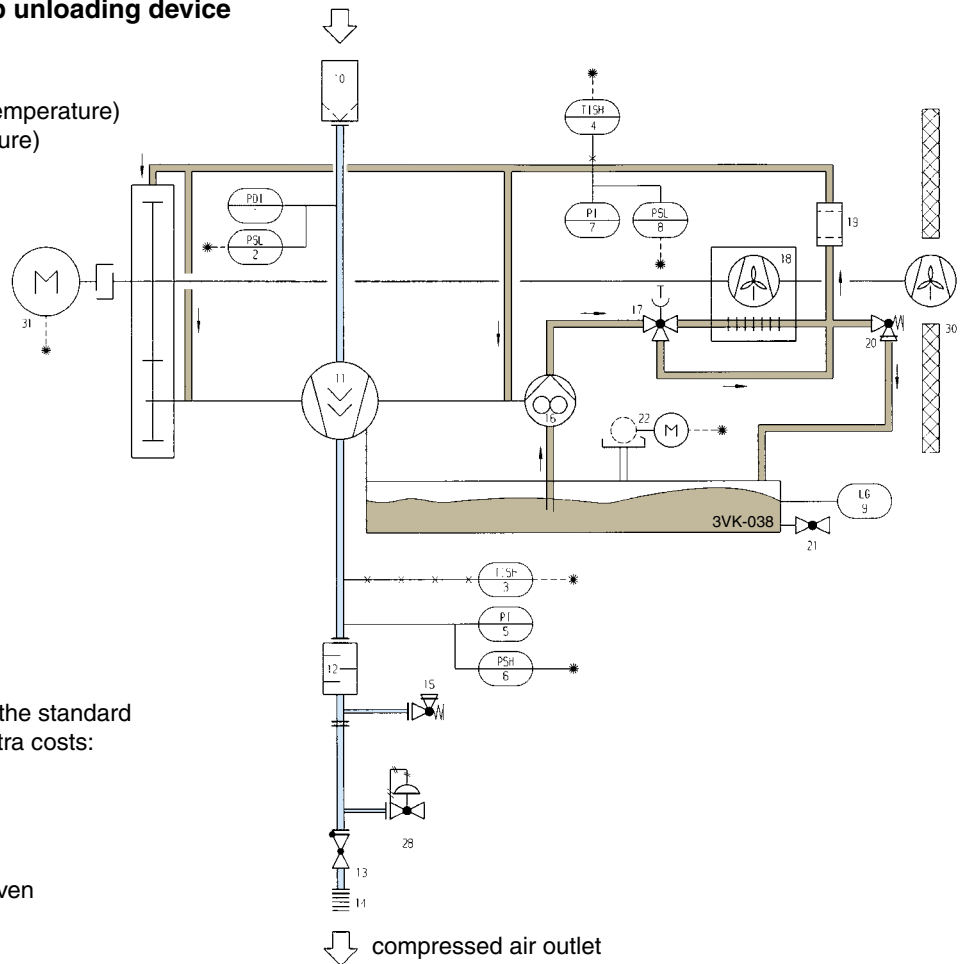
Flow diagram VML... with start-up unloading device

1. air filter monitoring
2. intake pressure switch
3. contact thermometer (discharge temperature)
4. contact thermometer (oil temperature)
5. discharge pressure gauge
6. discharge pressure switch
7. oil pressure gauge
8. oil pressure switch
9. oil level sight glass
10. intake filter
11. compressor stage
12. discharge silencer
13. check valve
14. expansion joint
15. safety relief valve
16. oil pump
17. oil temperature regulator
18. oil air cooler *
19. oil filter
20. oil overflow valve
21. oil drain valve
22. oil demister

The following items are not included in the standard scope of supply and are available at extra costs:

25. electric motor
28. start-up unloading device
30. acoustic hood with fan *

* For VML 150/ 250 electrically driven

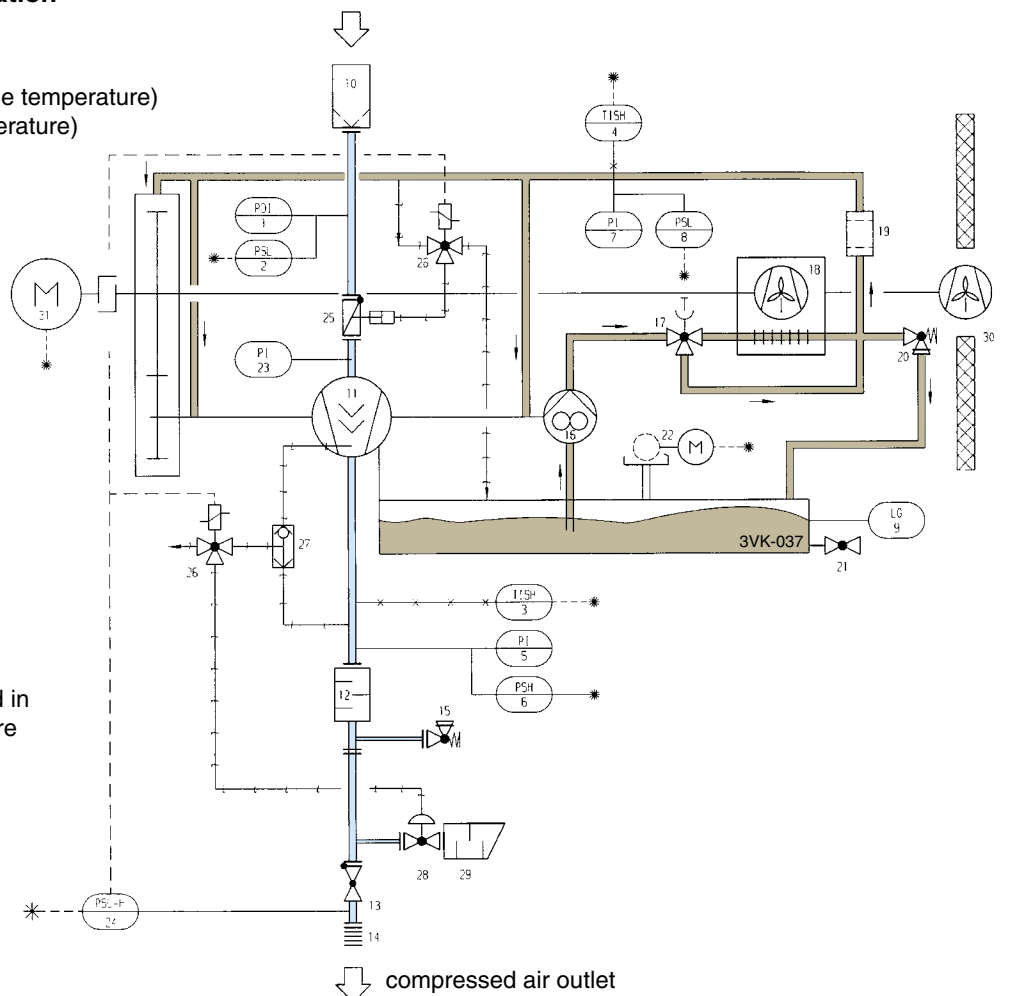


Flow diagram VM... with regulation

1. air filter monitoring
2. intake pressure switch
3. contact thermometer (discharge temperature)
4. contact thermometer (oil temperature)
5. discharge pressure gauge
6. discharge pressure switch
7. oil pressure gauge
8. oil pressure switch
9. oil level sight glass
10. intake filter
11. compressor stage
12. discharge silencer
13. check valve
14. expansion joint
15. safety relief valve
16. oil pump
17. oil temperature regulator
18. oil air cooler
19. oil filter
20. oil overflow valve
21. oil drain valve
22. oil demister

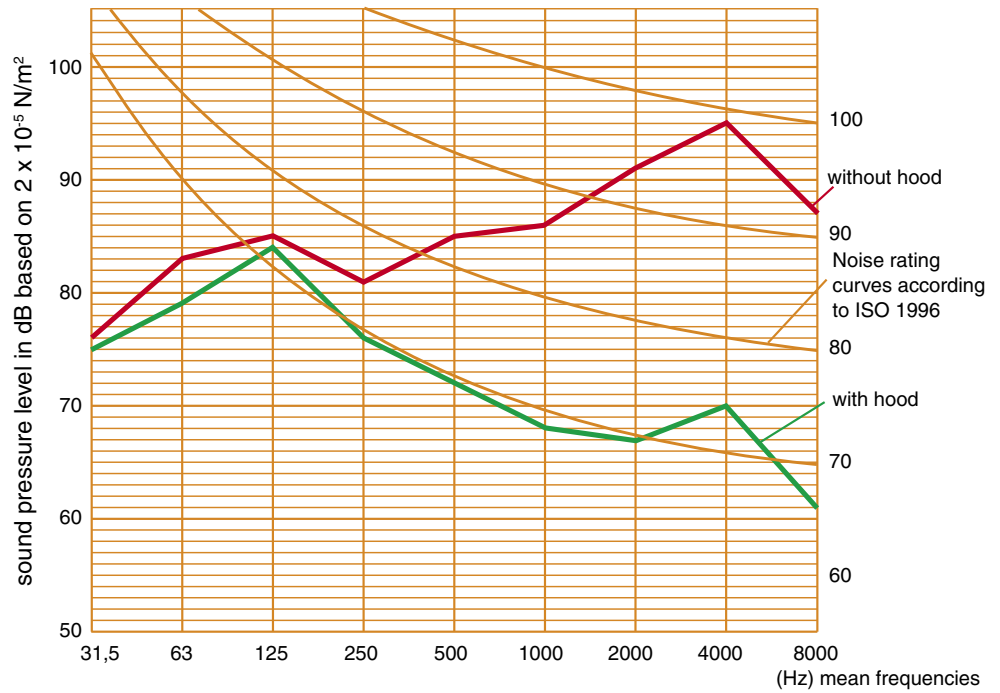
The following items are not included in the standard scope of supply and are available at extra costs:

23. intake pressure gauge
24. pressure switch
25. throttle flap regulation
26. 3-way solenoid valve
27. pressure selection relay
28. relief valve
29. blow-off silencer
30. acoustic hood with fan
31. electric motor



Noise data

The sound frequency analysis in 1/1 octave bands was carried out on a VM 21 R package.
 Measurements in free field, at a distance = 1.0 m.
 Measuring height = 1.5 m
 Discharge pressure $p_e = 3.5$ bar
 $n_{mot} = 2950$ rpm
 Step-up gear ratio B_7



Using the performance charts

We always distinguish

1. in drive mode belt drive or gearbox
2. in discharge pressure

For performance data up to 2 bar overpressure

⇒ VML-compressors

For performance data up to 3,5 bar overpressure

⇒ VM-compressors

The performance charts are in chronological order according to compressor sizes. First it has to be decided which drive mode is preferred.

To distinguish the type designations the belt driven machines end with an “R” concerning their designation.

The performance charts have the same structure.

Depending on compressor type the possible performance data were entered in the corresponding chart (in the upper section up to 2 bar applicable for compressor types VML, in the lower section up to 3,5 bar applicable for compressor types VM).

The volume flow increases from the left to the right side. We are always trying to use the smallest-possible machine.

The applicable performance data of the corresponding case of operation result from “column” (referring to the volume flow) and “line” (referring to the requested discharge pressure).

Explanations:

Sum of the individual moments of inertia of compressor, gearbox and coupling, based on the drive speed.

$$J_{\Delta} \frac{GD^2}{4}$$

p_1 intake pressure (abs.)

t_1 intake temperature

p_e discharge pressure, gauge

i_1 to i_{14} standard gear ratios

In order to meet the requested volume flow even more closely, intermediate gear ratios are available between each standard ratio, e.g. $i_{9/10}$ between i_9 and i_{10} .

L_p (A) o.H./m.H. sound pressure level as machine noise acc. to DIN 45635 - without hood / with hood.

The data applicable to intermediate step-up gear ratios can be interpolated, as in these ranges the operating data are of linear relationship and can be calculated proportionally.

The data shown are based on the compression of air at $p_1 = 1,0$ bar and $t_1 = 20$ °C. Data concerning deviating suction conditions, vacuum operation, compression of gas and multi-stage compression configurations are available on request.

The fan power for acoustic hood depends on the particular operating conditions.

Oil demister operating requirements: 0,37 kW

50 m³/h

3000 rpm.

Our sales department shall be at your disposal at any time concerning questions on the necessary equipment and possibilities of application.

Performance data based on the compression of air ($p_1 = 1.0 \text{ bar}$, $t_1 = 20 \text{ }^\circ\text{C}$)

| Discharge pressure p_2 [bar gauge] | Compressor size | VM 8 R | | | | | | | | | |
|---|---|---------------------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|
| | belt drive ratio | B [-] | B_6 | $B_{6/7}$ | B_7 | $B_{7/8}$ | B_8 | $B_{8/9}$ | B_9 | $B_{9/10}$ | B_{10} |
| 0,75 | flow at inlet | V_1 [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | |
| 1,00 | flow at inlet | V_1 [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | |
| 1,25 | flow at inlet | V_1 [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | |
| 1,50 | flow at inlet | V_1 [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | |
| 1,75 | flow at inlet | V_1 [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | |
| 2,00 | flow at inlet | V_1 [m ³ /h] | 287 | 312 | 338 | 366 | 392 | 415 | 441 | 468 | 497 |
| | compressor speed | nHR [1/min] | 14162 | 15002 | 15861 | 16802 | 17935 | 18999 | 20212 | 21448 | 22813 |
| | motor speed | nM [1/min] | 2930 | 2930 | 2930 | 2930 | 2945 | 2945 | 2945 | 2950 | 2950 |
| | discharge temperature | t_2 [°C] | 167 | 164 | 161 | 159 | 160 | 161 | 163 | 165 | 167 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 17,5 / 18,5 | 18,6 / 22 | 19,8 / 22 | 21,1 / 22 | 23,3 / 30 | 25,6 / 30 | 28,5 / 30 | 31,5 / 37 | 35,2 / 37 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 7,3 | 8,1 | 8,8 | 9,8 | 11,1 | 12,6 | 14,4 | 16,5 | 18,9 |
| | reduced moment of inertia | J [kgm ²] | 0,199 | 0,215 | 0,254 | 0,271 | 0,334 | 0,356 | 0,433 | 0,461 | 0,579 |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 89/73 | 89/73 | 91/75 | 93/77 | 94/78 | 95/80 | 95/81 | 95/82 | 97/84 |
| 2,25 | flow at inlet | V_1 [m ³ /h] | 282 | 307 | 333 | 364 | 387 | 410 | 436 | 462 | 490 |
| | compressor speed | nHR [1/min] | 14162 | 15002 | 15861 | 16888 | 17935 | 18999 | 20247 | 21448 | 22736 |
| | motor speed | nM [1/min] | 2930 | 2930 | 2930 | 2945 | 2945 | 2945 | 2950 | 2950 | 2940 |
| | discharge temperature | t_2 [°C] | 183 | 180 | 177 | 174 | 174 | 175 | 177 | 178 | 180 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 19,1 / 22 | 20,3 / 22 | 21,6 / 22 | 23,1 / 30 | 25,4 / 30 | 27,8 / 30 | 30,9 / 37 | 34,1 / 37 | 37,8 / 45 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 7,3 | 8,1 | 8,8 | 9,8 | 11,1 | 12,6 | 14,4 | 16,5 | 18,9 |
| | reduced moment of inertia | J [kgm ²] | 0,199 | 0,214 | 0,254 | 0,273 | 0,334 | 0,356 | 0,433 | 0,461 | 0,578 |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 89/73 | 89/73 | 91/75 | 93/78 | 94/80 | 95/80 | 95/81 | 95/82 | 97/84 |
| 2,50 | flow at inlet | V_1 [m ³ /h] | 280 | 307 | 333 | 361 | 382 | 405 | 431 | 456 | 485 |
| | compressor speed | nHR [1/min] | 14162 | 15078 | 15942 | 16888 | 17935 | 19031 | 20247 | 21375 | 22736 |
| | motor speed | nM [1/min] | 2930 | 2945 | 2945 | 2945 | 2945 | 2945 | 2950 | 2940 | 2940 |
| | discharge temperature | t_2 [°C] | 198 | 194 | 191 | 189 | 189 | 190 | 191 | 192 | 194 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 20,7 / 22 | 22,2 / 30 | 23,6 / 30 | 25,2 / 30 | 27,4 / 30 | 30,2 / 37 | 33,4 / 37 | 36,5 / 45 | 40,6 / 45 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 10,9 | 11,9 | 13 | 14,5 | 16,2 | 18,4 | 20,8 | 23,8 | 27,1 |
| | reduced moment of inertia | J [kgm ²] | 0,199 | 0,214 | 0,256 | 0,273 | 0,334 | 0,356 | 0,433 | 0,494 | 0,636 |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 89/73 | 89/73 | 91/76 | 93/79 | 94/81 | 95/81 | 95/81 | 95/82 | 97/84 |
| 2,75 | flow at inlet | V_1 [m ³ /h] | 277 | 303 | 329 | 357 | 380 | 404 | 430 | 451 | 480 |
| | compressor speed | nHR [1/min] | 14234 | 15078 | 15942 | 16888 | 17935 | 19031 | 20247 | 21375 | 22736 |
| | motor speed | nM [1/min] | 2945 | 2945 | 2945 | 2945 | 2945 | 2950 | 2940 | 2940 | 2940 |
| | discharge temperature | t_2 [°C] | 213 | 208 | 205 | 201 | 202 | 204 | 205 | 207 | 208 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 22,3 / 30 | 23,7 / 30 | 25,2 / 30 | 26,9 / 30 | 29,5 / 30 | 32,5 / 37 | 36,1 / 37 | 39,2 / 45 | 43,5 / 45 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 10,9 | 11,9 | 13 | 14,5 | 16,2 | 18,4 | 20,8 | 23,8 | 27,1 |
| | reduced moment of inertia | J [kgm ²] | 0,201 | 0,214 | 0,256 | 0,273 | 0,334 | 0,356 | 0,433 | 0,494 | 0,636 |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 91/74 | 91/74 | 92/76 | 93/79 | 94/81 | 95/81 | 95/81 | 96/82 | 97/84 |
| 3,00 | flow at inlet | V_1 [m ³ /h] | 273 | 298 | 324 | 353 | 377 | 399 | 424 | 450 | 482 |
| | compressor speed | nHR [1/min] | 14234 | 15078 | 15942 | 16888 | 17965 | 19031 | 20178 | 21375 | 22852 |
| | motor speed | nM [1/min] | 2945 | 2945 | 2945 | 2945 | 2950 | 2950 | 2940 | 2940 | 2955 |
| | discharge temperature | t_2 [°C] | 229 | 223 | 219 | 215 | 215 | 216 | 218 | 219 | 221 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 23,7 / 30 | 25,2 / 30 | 26,8 / 30 | 28,5 / 30 | 31,3 / 37 | 34,4 / 37 | 37,9 / 45 | 41,7 / 45 | 46,8 / 55 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 10,9 | 11,9 | 13 | 14,5 | 16,2 | 18,4 | 20,8 | 23,8 | 27,1 |
| | reduced moment of inertia | J [kgm ²] | 0,201 | 0,214 | 0,256 | 0,273 | 0,334 | 0,356 | 0,466 | 0,494 | 0,636 |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 92/75 | 93/75 | 93/77 | 93/79 | 94/81 | 95/81 | 95/81 | 96/82 | 97/84 |
| 3,25 | flow at inlet | V_1 [m ³ /h] | 269 | 294 | 320 | 349 | 372 | 395 | 420 | 446 | 478 |
| | compressor speed | nHR [1/min] | 14234 | 15078 | 15942 | 16917 | 17965 | 19031 | 20178 | 21375 | 22852 |
| | motor speed | nM [1/min] | 2945 | 2945 | 2945 | 2950 | 2950 | 2950 | 2940 | 2940 | 2955 |
| | discharge temperature | t_2 [°C] | 245 | 238 | 233 | 228 | 229 | 229 | 230 | 231 | 233 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 25,2 / 30 | 26,7 / 30 | 28,4 / 30 | 30,2 / 37 | 33,1 / 37 | 36,3 / 37 | 39,9 / 45 | 43,9 / 45 | 49,2 / 55 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 10,9 | 11,9 | 13 | 14,5 | 16,2 | 18,4 | 20,8 | 23,8 | 27,1 |
| | reduced moment of inertia | J [kgm ²] | 0,201 | 0,214 | 0,256 | 0,273 | 0,334 | 0,356 | 0,466 | 0,494 | 0,636 |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 94/78 | 94/79 | 95/80 | 95/81 | 96/82 | 97/83 | 97/83 | 98/84 | 98/85 |
| 3,50 | flow at inlet | V_1 [m ³ /h] | | | | 345 | 368 | 389 | 415 | 444 | 473 |
| | compressor speed | nHR [1/min] | | | | 16917 | 17965 | 18967 | 20178 | 21484 | 22852 |
| | motor speed | nM [1/min] | | | | 2950 | 2950 | 2940 | 2940 | 2955 | 2955 |
| | discharge temperature | t_2 [°C] | | | | 242 | 242 | 243 | 243 | 244 | 245 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | 31,9 / 37 | 34,9 / 37 | 38 / 45 | 42 / 45 | 46,5 / 55 | 52 / 55 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | 14,5 | 16,2 | 18,4 | 20,8 | 23,8 | 27,1 |
| | reduced moment of inertia | J [kgm ²] | | | | 0,273 | 0,334 | 0,375 | 0,466 | 0,494 | 0,662 |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | 97/82 | 98/83 | 99/84 | 99/84 | 100/85 | 100/85 |

Performance data based on the compression of air ($p_1= 1.0$ bar, $t_1= 20$ °C)

| Discharge pressure p_2 [bar gauge] | Compressor size belt drive ratio | VM 15 R | | | | | | | | | | |
|--------------------------------------|-------------------------------------|---------------------------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|-------------------|--------|
| | | B [-] | B _{5/6} | B ₆ | B _{6/7} | B ₇ | B _{7/8} | B ₈ | B _{8/9} | B ₉ | B _{9/10} | |
| 0,75 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1= p_2= 1,0$ bar | \dot{P}_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 1,00 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1= p_2= 1,0$ bar | \dot{P}_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 1,25 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1= p_2= 1,0$ bar | \dot{P}_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 1,50 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1= p_2= 1,0$ bar | \dot{P}_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 1,75 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1= p_2= 1,0$ bar | \dot{P}_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 2,00 | flow at inlet | \dot{V}_1 [m ³ /h] | 561 | 605 | 655 | 706 | 749 | 801 | 850 | 904 | 966 | |
| | compressor speed | nHR [1/min] | 12851 | 13570 | 14391 | 15215 | 16134 | 17236 | 18276 | 19418 | 20698 | |
| | motor speed | nM [1/min] | 2950 | 2950 | 2950 | 2940 | 2940 | 2955 | 2955 | 2955 | 2970 | |
| | discharge temperature | t_2 [°C] | 163 | 161 | 160 | 159 | 160 | 162 | 163 | 165 | 168 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 29,7 / 37 | 31,6 / 37 | 33,3 / 37 | 36,1 / 45 | 38,7 / 45 | 41,9 / 55 | 45,3 / 55 | 49,2 / 55 | 54 / 75 | |
| | power, idling $p_1= p_2= 1,0$ bar | \dot{P}_{Leer} [kW] | 12,6 | 13,9 | 15,4 | 17,2 | 19,1 | 21,5 | 23,9 | 26,8 | 29,9 | |
| | reduced moment of inertia | J [kgm ²] | 0,392 | 0,456 | 0,496 | 0,588 | 0,638 | 0,764 | 0,827 | 1,013 | 1,124 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 94/78 | 94/79 | 95/80 | 96/81 | 96/82 | 97/83 | 98/83 | 98/84 | 99/85 | |
| 2,25 | flow at inlet | \dot{V}_1 [m ³ /h] | 553 | 597 | 644 | 698 | 745 | 793 | 842 | 901 | 958 | |
| | compressor speed | nHR [1/min] | 12807 | 13570 | 14342 | 15215 | 16216 | 17236 | 18276 | 19516 | 20698 | |
| | motor speed | nM [1/min] | 2950 | 2950 | 2940 | 2940 | 2955 | 2955 | 2970 | 2970 | 2970 | |
| | discharge temperature | t_2 [°C] | 179 | 176 | 174 | 172 | 173 | 175 | 176 | 178 | 180 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 32,5 / 37 | 34,4 / 37 | 36,6 / 45 | 39,2 / 45 | 42,2 / 55 | 45,3 / 55 | 48,9 / 55 | 54 / 75 | 58 / 75 | |
| | power, idling $p_1= p_2= 1,0$ bar | \dot{P}_{Leer} [kW] | 12,6 | 13,9 | 15,4 | 17,2 | 19,1 | 21,5 | 23,9 | 26,8 | 29,9 | |
| | reduced moment of inertia | J [kgm ²] | 0,392 | 0,456 | 0,496 | 0,588 | 0,668 | 0,764 | 0,827 | 1,044 | 1,124 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 94/78 | 94/79 | 95/80 | 96/81 | 96/82 | 97/83 | 98/83 | 98/84 | 99/85 | |
| 2,50 | flow at inlet | \dot{V}_1 [m ³ /h] | 546 | 586 | 636 | 693 | 736 | 784 | 838 | 893 | 949 | |
| | compressor speed | nHR [1/min] | 12807 | 13524 | 14342 | 15292 | 16216 | 17236 | 18369 | 19516 | 20698 | |
| | motor speed | nM [1/min] | 2940 | 2940 | 2940 | 2955 | 2955 | 2970 | 2970 | 2970 | 2970 | |
| | discharge temperature | t_2 [°C] | 194 | 192 | 189 | 186 | 187 | 188 | 190 | 191 | 193 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 35,3 / 45 | 37,2 / 45 | 38,6 / 45 | 42,5 / 55 | 45,5 / 55 | 48,8 / 55 | 53 / 75 | 58 / 75 | 62 / 75 | |
| | power, idling $p_1= p_2= 1,0$ bar | \dot{P}_{Leer} [kW] | 18,4 | 13,9 | 15,4 | 17,2 | 19,1 | 21,5 | 23,9 | 26,8 | 29,9 | |
| | reduced moment of inertia | J [kgm ²] | 0,392 | 0,456 | 0,496 | 0,619 | 0,668 | 0,764 | 0,862 | 1,044 | 1,124 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 94/79 | 95/79 | 95/80 | 96/81 | 96/82 | 97/83 | 98/84 | 99/84 | 100/85 | |
| 2,75 | flow at inlet | \dot{V}_1 [m ³ /h] | 540 | 583 | 638 | 691 | 734 | 780 | 830 | 884 | 941 | |
| | compressor speed | nHR [1/min] | 12807 | 13524 | 14415 | 15292 | 16216 | 17323 | 18369 | 19516 | 20698 | |
| | motor speed | nM [1/min] | 2940 | 2940 | 2955 | 2955 | 2970 | 2970 | 2970 | 2970 | 2970 | |
| | discharge temperature | t_2 [°C] | 208 | 205 | 202 | 200 | 201 | 202 | 203 | 204 | 206 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 37,6 / 45 | 39,9 / 45 | 42,9 / 55 | 45,9 / 55 | 49,2 / 55 | 53 / 75 | 57 / 75 | 62 / 75 | 66 / 75 | |
| | power, idling $p_1= p_2= 1,0$ bar | \dot{P}_{Leer} [kW] | 18,4 | 20,2 | 22,3 | 24,9 | 27,6 | 30,7 | 34,1 | 37,9 | 42,1 | |
| | reduced moment of inertia | J [kgm ²] | 0,392 | 0,456 | 0,515 | 0,619 | 0,668 | 0,8 | 0,862 | 1,044 | 1,198 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 94/79 | 95/79 | 95/80 | 96/81 | 96/82 | 97/83 | 98/84 | 99/84 | 100/85 | |
| 3,00 | flow at inlet | \dot{V}_1 [m ³ /h] | 533 | 577 | 631 | 684 | 731 | 779 | 829 | 884 | 933 | |
| | compressor speed | nHR [1/min] | 12807 | 13524 | 14415 | 15292 | 16299 | 17323 | 18369 | 19516 | 20698 | |
| | motor speed | nM [1/min] | 2940 | 2940 | 2955 | 2955 | 2970 | 2970 | 2970 | 2970 | 2970 | |
| | discharge temperature | t_2 [°C] | 222 | 218 | 215 | 212 | 213 | 214 | 216 | 218 | 219 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 39,9 / 45 | 42,3 / 45 | 45,4 / 55 | 48,5 / 55 | 53 / 75 | 57 / 75 | 61 / 75 | 66 / 75 | 70 / 90 | |
| | power, idling $p_1= p_2= 1,0$ bar | \dot{P}_{Leer} [kW] | 18,4 | 20,2 | 22,3 | 24,9 | 27,6 | 30,7 | 34,1 | 37,9 | 42,1 | |
| | reduced moment of inertia | J [kgm ²] | 0,392 | 0,456 | 0,515 | 0,619 | 0,668 | 0,8 | 0,862 | 1,044 | 1,198 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 94/79 | 95/79 | 95/80 | 96/81 | 96/82 | 97/84 | 98/84 | 99/84 | 100/85 | |
| 3,25 | flow at inlet | \dot{V}_1 [m ³ /h] | 526 | 574 | 624 | 681 | 724 | 772 | 822 | 877 | 933 | |
| | compressor speed | nHR [1/min] | 12807 | 13593 | 14415 | 15370 | 16299 | 17323 | 18369 | 19516 | 20698 | |
| | motor speed | nM [1/min] | 2940 | 2955 | 2955 | 2970 | 2970 | 2970 | 2970 | 2970 | 2970 | |
| | discharge temperature | t_2 [°C] | 236 | 232 | 228 | 225 | 225 | 226 | 227 | 229 | 230 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 42,2 / 45 | 45 / 55 | 48 / 55 | 52 / 75 | 55 / 75 | 60 / 75 | 64 / 75 | 69 / 90 | 74 / 90 | |
| | power, idling $p_1= p_2= 1,0$ bar | \dot{P}_{Leer} [kW] | 18,4 | 20,2 | 22,3 | 24,9 | 27,6 | 30,7 | 34,1 | 37,9 | 42,1 | |
| | reduced moment of inertia | J [kgm ²] | 0,392 | 0,456 | 0,515 | 0,619 | 0,668 | 0,8 | 0,862 | 1,123 | 1,198 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 94/79 | 95/79 | 95/80 | 96/81 | 97/82 | 97/84 | 98/84 | 99/84 | 100/85 | |
| 3,50 | flow at inlet | \dot{V}_1 [m ³ /h] | | | 617 | 674 | 717 | 766 | 815 | 870 | 926 | |
| | compressor speed | nHR [1/min] | | | 14415 | 15370 | 16299 | 17323 | 18369 | 19516 | 20698 | |
| | motor speed | nM [1/min] | | | 2955 | 2970 | 2970 | 2970 | 2970 | 2970 | 2970 | |
| | discharge temperature | t_2 [°C] | | | 241 | 238 | 238 | 238 | 239 | 240 | 241 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | 51 / 55 | 54 / 75 | 58 / 75 | 62 / 75 | 67 / 75 | 72 / 90 | 78 / 90 | |
| | power, idling $p_1= p_2= 1,0$ bar | \dot{P}_{Leer} [kW] | | | 22,3 | 24,9 | 27,6 | 30,7 | 34,1 | 37,9 | 42,1 | |
| | reduced moment of inertia | J [kgm ²] | | | 0,515 | 0,619 | 0,668 | 0,8 | 0,917 | 1,123 | 1,198 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | 95/80 | 96/81 | 96/83 | 98/83 | 98/84 | 99/85 | 99/85 | 100/86 |

Performance data based on the compression of air ($p_1 = 1.0 \text{ bar}$, $t_1 = 20 \text{ °C}$)

| Discharge pressure p_2 [bar gauge] | Compressor size | | VML 18 R | | | | | | | | | |
|---|---|---------------------------------|---------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------|
| | belt drive ratio | | B | B ₂ | B ₃ | B ₄ | B ₅ | B ₆ | B ₇ | B ₈ | B ₉ | B _{9/10} |
| 0,75 | flow at inlet | \dot{V}_1 [m ³ /h] | 389 | 466 | 544 | 639 | 742 | 868 | 1008 | 1169 | 1252 | |
| | compressor speed | nHR [1/min] | 5001 | 5626 | 6251 | 7001 | 7813 | 8796 | 9895 | 11171 | 11833 | |
| | motor speed | nM [1/min] | 2930 | 2930 | 2930 | 2930 | 2930 | 2930 | 2945 | 2945 | 2950 | 2950 |
| | discharge temperature | t_2 [°C] | 101 | 96 | 93 | 90 | 88 | 87 | 87 | 87 | 87 | 88 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 11 / 15 | 12,5 / 15 | 13,9 / 18,5 | 15,7 / 18,5 | 17,7 / 22 | 20,4 / 30 | 23,5 / 30 | 27,9 / 37 | 30,4 / 37 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 4,5 | 5,3 | 6,1 | 7,4 | 8,8 | 10,5 | 12,8 | 15,7 | 17,5 | |
| | reduced moment of inertia | J [kgm ²] | 0,118 | 0,156 | 0,203 | 0,27 | 0,34 | 0,48 | 0,67 | 0,8 | 0,93 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 89/69 | 90/71 | 91/71 | 92/72 | 92/73 | 92/74 | 93/75 | 94/76 | 94/76 | |
| | 1,00 | flow at inlet | \dot{V}_1 [m ³ /h] | 380 | 457 | 535 | 629 | 733 | 854 | 996 | 1150 | 1232 |
| | | compressor speed | nHR [1/min] | 5001 | 5626 | 6251 | 7037 | 7853 | 8796 | 9912 | 11133 | 11793 |
| motor speed | | nM [1/min] | 2930 | 2930 | 2930 | 2945 | 2945 | 2945 | 2950 | 2940 | 2940 | |
| discharge temperature | | t_2 [°C] | 125 | 119 | 115 | 112 | 108 | 106 | 104 | 103 | 104 | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | 13,9 / 18,5 | 15,8 / 18,5 | 17,8 / 22 | 20,2 / 30 | 22,6 / 30 | 25,6 / 30 | 29,3 / 37 | 33,9 / 45 | 36,6 / 45 | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | 6,6 | 7,9 | 9,3 | 7,4 | 8,8 | 10,5 | 12,8 | 15,7 | 17,5 | |
| reduced moment of inertia | | J [kgm ²] | 0,118 | 0,156 | 0,21 | 0,28 | 0,38 | 0,48 | 0,67 | 0,8 | 1,03 | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | 89/70 | 90/71 | 92/72 | 92/73 | 92/73 | 93/74 | 93/75 | 94/76 | 94/76 | |
| 1,25 | | flow at inlet | \dot{V}_1 [m ³ /h] | 370 | 446 | 528 | 623 | 729 | 849 | 977 | 1136 | 1225 |
| | | compressor speed | nHR [1/min] | 5001 | 5626 | 6283 | 7037 | 7867 | 8811 | 9878 | 11133 | 11853 |
| | motor speed | nM [1/min] | 2930 | 2930 | 2945 | 2945 | 2950 | 2950 | 2940 | 2940 | 2955 | |
| | discharge temperature | t_2 [°C] | 149 | 140 | 134 | 130 | 126 | 124 | 122 | 120 | 120 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 16,6 / 18,5 | 18,8 / 22 | 21,1 / 30 | 23,9 / 30 | 27,1 / 37 | 30,8 / 37 | 34,9 / 45 | 39,9 / 45 | 43,7 / 55 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 6,6 | 7,9 | 9,3 | 11,0 | 13,1 | 15,7 | 12,8 | 15,7 | 17,5 | |
| | reduced moment of inertia | J [kgm ²] | 0,123 | 0,164 | 0,21 | 0,28 | 0,38 | 0,48 | 0,72 | 0,87 | 1,13 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 89/70 | 91/71 | 92/73 | 93/74 | 93/75 | 93/76 | 93/77 | 94/78 | 95/78 | |
| | 1,50 | flow at inlet | \dot{V}_1 [m ³ /h] | 359 | 439 | 517 | 614 | 718 | 834 | 981 | 1140 | 1219 |
| | | compressor speed | nHR [1/min] | 5001 | 5654 | 6283 | 7049 | 7867 | 8781 | 9929 | 11190 | 11914 |
| motor speed | | nM [1/min] | 2930 | 2945 | 2945 | 2950 | 2950 | 2940 | 2955 | 2955 | 2970 | |
| discharge temperature | | t_2 [°C] | 174 | 163 | 155 | 148 | 143 | 140 | 137 | 136 | 150 | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | 19,3 / 22 | 21,9 / 30 | 24,4 / 30 | 27,5 / 37 | 30,9 / 37 | 34,9 / 45 | 40,2 / 45 | 46,3 / 55 | 51 / 75 | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | 6,6 | 7,9 | 9,3 | 11,0 | 13,1 | 15,7 | 19,2 | 23,7 | 26,1 | |
| reduced moment of inertia | | J [kgm ²] | 0,123 | 0,164 | 0,21 | 0,28 | 0,38 | 0,52 | 0,72 | 0,88 | 1,2 | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | 90/72 | 91/73 | 92/74 | 93/75 | 94/76 | 96/77 | 96/78 | 98/78 | 98/78 | |
| 1,75 | | flow at inlet | \dot{V}_1 [m ³ /h] | 351 | 428 | 508 | 603 | 703 | 823 | 969 | 1135 | 1218 |
| | | compressor speed | nHR [1/min] | 5026 | 5654 | 6293 | 7049 | 7840 | 8781 | 9929 | 11246 | 11914 |
| | motor speed | nM [1/min] | 2945 | 2945 | 2950 | 2950 | 2940 | 2940 | 2955 | 2970 | 2970 | |
| | discharge temperature | t_2 [°C] | 201 | 186 | 176 | 167 | 161 | 156 | 152 | 151 | 150 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 22,2 / 30 | 24,9 / 30 | 27,7 / 37 | 31,1 / 37 | 34,7 / 45 | 39,2 / 45 | 44,9 / 55 | 52 / 75 | 56 / 75 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 6,6 | 7,9 | 9,3 | 11,0 | 13,1 | 15,7 | 19,2 | 23,7 | 26,1 | |
| | reduced moment of inertia | J [kgm ²] | 0,123 | 0,164 | 0,22 | 0,3 | 0,4 | 0,52 | 0,72 | 0,88 | 1,2 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 90/72 | 92/73 | 92/74 | 94/75 | 96/76 | 97/78 | 97/78 | 99/79 | 99/79 | |
| | 2,00 | flow at inlet | \dot{V}_1 [m ³ /h] | | | 497 | 589 | 692 | 818 | 958 | 1124 | 1207 |
| | | compressor speed | nHR [1/min] | | | 6293 | 7025 | 7840 | 8826 | 9929 | 11246 | 11914 |
| motor speed | | nM [1/min] | | | 2950 | 2940 | 2940 | 2955 | 2955 | 2970 | 2970 | |
| discharge temperature | | t_2 [°C] | | | 198 | 188 | 180 | 173 | 168 | 165 | 164 | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | | | 31 / 37 | 34,5 / 45 | 38,6 / 45 | 43,7 / 55 | 49,6 / 55 | 57 / 75 | 61 / 75 | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | | | 9,3 | 11,0 | 13,1 | 15,7 | 19,2 | 23,7 | 26,1 | |
| reduced moment of inertia | | J [kgm ²] | | | 0,22 | 0,3 | 0,4 | 0,52 | 0,72 | 0,94 | 1,2 | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | | | 96/75 | 97/77 | 98/78 | 99/79 | 99/80 | 100/80 | 100/80 | |
| 2,25 | | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | |
| | | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| | 2,50 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | |
| | | compressor speed | nHR [1/min] | | | | | | | | | |
| motor speed | | nM [1/min] | | | | | | | | | | |
| discharge temperature | | t_2 [°C] | | | | | | | | | | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | | | | | | | | | | |
| reduced moment of inertia | | J [kgm ²] | | | | | | | | | | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | | | | | | | | | | |
| 2,75 | | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | |
| | | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| | 3,00 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | |
| | | compressor speed | nHR [1/min] | | | | | | | | | |
| motor speed | | nM [1/min] | | | | | | | | | | |
| discharge temperature | | t_2 [°C] | | | | | | | | | | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | | | | | | | | | | |
| reduced moment of inertia | | J [kgm ²] | | | | | | | | | | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | | | | | | | | | | |
| 3,25 | | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | |
| | | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| | 3,50 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | |
| | | compressor speed | nHR [1/min] | | | | | | | | | |
| motor speed | | nM [1/min] | | | | | | | | | | |
| discharge temperature | | t_2 [°C] | | | | | | | | | | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | | | | | | | | | | |
| reduced moment of inertia | | J [kgm ²] | | | | | | | | | | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | | | | | | | | | | |

Performance data based on the compression of air ($p_1= 1.0 \text{ bar}$, $t_1= 20 \text{ °C}$)

| Discharge pressure p_2 [bar gauge] | Compressor size belt drive ratio | VM 21 R | | | | | | | | | | |
|--------------------------------------|---|---------------------------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|-------------------|--|
| | | B | B _{5/6} | B ₆ | B _{6/7} | B ₇ | B _{7/8} | B ₈ | B _{8/9} | B ₉ | B _{9/10} | |
| 0,75 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 1,00 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 1,25 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 1,50 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 1,75 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 2,00 | flow at inlet | \dot{V}_1 [m ³ /h] | 879 | 943 | 1016 | 1098 | 1160 | 1229 | 1300 | 1379 | 1461 | |
| | compressor speed | nHR [1/min] | 12872 | 13593 | 14417 | 15370 | 16301 | 17321 | 18371 | 19517 | 20700 | |
| | motor speed | nM [1/min] | 2955 | 2955 | 2955 | 2970 | 2970 | 2970 | 2970 | 2970 | 2970 | |
| | discharge temperature | t_2 [°C] | 157 | 157 | 156 | 157 | 159 | 168 | 165 | 168 | 171 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 44,4 / 55 | 47,4 / 55 | 52 / 55 | 56 / 75 | 61 / 75 | 67 / 75 | 72 / 75 | 79 / 90 | 86 / 90 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 27,3 | 29,7 | 32,9 | 36,3 | 40,3 | 44,8 | 50 | 56 | 63 | |
| | reduced moment of inertia | J [kgm ²] | 0,561 | 0,675 | 0,721 | 0,864 | 0,925 | 1,118 | 1,195 | 1,454 | 1,637 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 95/73 | 95/73 | 96/74 | 96/76 | 98/78 | 99/83 | 101/84 | 101/84 | 102/85 | |
| 2,25 | flow at inlet | \dot{V}_1 [m ³ /h] | 870 | 934 | 1014 | 1089 | 1151 | 1220 | 1291 | 1370 | 1454 | |
| | compressor speed | nHR [1/min] | 12872 | 13593 | 14490 | 15370 | 16301 | 17321 | 18371 | 19517 | 20735 | |
| | motor speed | nM [1/min] | 2955 | 2955 | 2970 | 2970 | 2970 | 2970 | 2970 | 2970 | 2975 | |
| | discharge temperature | t_2 [°C] | 169 | 168 | 167 | 167 | 170 | 172 | 175 | 178 | 181 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 47,7 / 55 | 51 / 55 | 56 / 75 | 60 / 75 | 65 / 75 | 71 / 75 | 77 / 90 | 84 / 90 | 92 / 110 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 27,3 | 29,7 | 32,9 | 36,3 | 40,3 | 44,8 | 50 | 56 | 63 | |
| | reduced moment of inertia | J [kgm ²] | 0,561 | 0,675 | 0,722 | 0,864 | 0,925 | 1,118 | 1,195 | 1,454 | 1,636 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 96/73 | 96/73 | 98/74 | 99/77 | 100/78 | 100/84 | 100/84 | 102/85 | 102/85 | |
| 2,50 | flow at inlet | \dot{V}_1 [m ³ /h] | 861 | 931 | 1005 | 1080 | 1142 | 1211 | 1282 | 1363 | 1445 | |
| | compressor speed | nHR [1/min] | 12872 | 13662 | 14490 | 15370 | 16301 | 17321 | 18371 | 19550 | 20735 | |
| | motor speed | nM [1/min] | 2955 | 2970 | 2970 | 2970 | 2970 | 2970 | 2970 | 2975 | 2975 | |
| | discharge temperature | t_2 [°C] | 181 | 180 | 178 | 178 | 180 | 183 | 185 | 188 | 191 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 52 / 55 | 55 / 75 | 59 / 75 | 64 / 75 | 69 / 75 | 75 / 90 | 81 / 90 | 89 / 110 | 97 / 110 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 27,3 | 29,7 | 32,9 | 36,3 | 40,3 | 44,8 | 50 | 56 | 63 | |
| | reduced moment of inertia | J [kgm ²] | 0,561 | 0,675 | 0,722 | 0,864 | 0,925 | 1,119 | 1,257 | 1,539 | 1,637 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 96/74 | 97/74 | 98/75 | 99/77 | 100/78 | 101/84 | 101/84 | 102/85 | 102/85 | |
| 2,75 | flow at inlet | \dot{V}_1 [m ³ /h] | 858 | 922 | 996 | 1071 | 1133 | 1202 | 1273 | 1354 | 1436 | |
| | compressor speed | nHR [1/min] | 12938 | 13662 | 14490 | 15370 | 16301 | 17321 | 18371 | 19550 | 20735 | |
| | motor speed | nM [1/min] | 2970 | 2970 | 2970 | 2970 | 2970 | 2970 | 2970 | 2975 | 2975 | |
| | discharge temperature | t_2 [°C] | 193 | 192 | 190 | 189 | 191 | 194 | 196 | 199 | 202 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 55 / 75 | 59 / 75 | 63 / 75 | 68 / 75 | 73 / 75 | 80 / 90 | 86 / 90 | 94 / 110 | 102 / 110 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 27,3 | 29,7 | 32,9 | 36,3 | 40,3 | 44,8 | 50 | 56 | 63 | |
| | reduced moment of inertia | J [kgm ²] | 0,561 | 0,675 | 0,722 | 0,864 | 0,925 | 1,119 | 1,257 | 1,539 | 1,637 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 96/74 | 97/74 | 98/75 | 99/77 | 101/78 | 101/84 | 101/85 | 102/85 | 102/85 | |
| 3,00 | flow at inlet | \dot{V}_1 [m ³ /h] | 857 | 921 | 995 | 1070 | 1124 | 1193 | 1267 | 1345 | 1427 | |
| | compressor speed | nHR [1/min] | 12938 | 13662 | 14490 | 15370 | 16301 | 17321 | 18402 | 19550 | 20735 | |
| | motor speed | nM [1/min] | 2970 | 2970 | 2970 | 2970 | 2970 | 2970 | 2975 | 2975 | 2975 | |
| | discharge temperature | t_2 [°C] | 204 | 203 | 201 | 201 | 203 | 205 | 207 | 210 | 212 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 59 / 75 | 62 / 75 | 67 / 75 | 73 / 75 | 78 / 90 | 84 / 90 | 91 / 110 | 99 / 110 | 107 / 110 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 41,1 | 44,6 | 49 | 54,6 | 40,3 | 44,8 | 50 | 56 | 63 | |
| | reduced moment of inertia | J [kgm ²] | 0,561 | 0,675 | 0,722 | 0,865 | 0,925 | 1,119 | 1,257 | 1,539 | 1,637 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 96/74 | 97/75 | 98/75 | 99/77 | 101/78 | 101/84 | 101/85 | 102/85 | 102/85 | |
| 3,25 | flow at inlet | \dot{V}_1 [m ³ /h] | 849 | 913 | 987 | 1062 | 1125 | 1194 | 1267 | 1346 | 1428 | |
| | compressor speed | nHR [1/min] | 12938 | 13662 | 14490 | 15370 | 16301 | 17321 | 18402 | 19550 | 20735 | |
| | motor speed | nM [1/min] | 2970 | 2970 | 2970 | 2970 | 2970 | 2970 | 2975 | 2975 | 2975 | |
| | discharge temperature | t_2 [°C] | 214 | 212 | 210 | 209 | 212 | 214 | 217 | 219 | 222 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 61 / 75 | 65 / 75 | 70 / 75 | 76 / 90 | 81 / 90 | 88 / 90 | 96 / 110 | 104 / 110 | 112 / 132 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 41,1 | 44,6 | 49 | 54,6 | 59,6 | 65,5 | 72,9 | 79,6 | 87,7 | |
| | reduced moment of inertia | J [kgm ²] | 0,561 | 0,675 | 0,722 | 0,865 | 0,963 | 1,119 | 1,257 | 1,54 | 1,637 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 98/75 | 98/75 | 99/76 | 100/77 | 101/79 | 102/85 | 102/85 | 102/85 | 102/85 | |
| 3,50 | flow at inlet | \dot{V}_1 [m ³ /h] | 842 | 906 | 980 | 1055 | 1117 | 1188 | 1260 | 1338 | 1420 | |
| | compressor speed | nHR [1/min] | 12938 | 13662 | 14490 | 15370 | 16301 | 17351 | 18402 | 19550 | 20735 | |
| | motor speed | nM [1/min] | 2970 | 2970 | 2970 | 2970 | 2970 | 2975 | 2975 | 2975 | 2975 | |
| | discharge temperature | t_2 [°C] | 224 | 222 | 220 | 218 | 220 | 223 | 225 | 227 | 230 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 64 / 75 | 68 / 75 | 73 / 75 | 79 / 90 | 85 / 90 | 96 / 110 | 99 / 110 | 107 / 110 | 116 / 132 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 41,1 | 44,6 | 49 | 54,6 | 59,6 | 65,5 | 72,9 | 79,6 | 87,7 | |
| | reduced moment of inertia | J [kgm ²] | 0,561 | 0,675 | 0,722 | 0,865 | 0,963 | 1,18 | 1,257 | 1,54 | 1,637 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 98/75 | 99/75 | 99/76 | 100/77 | 101/79 | 102/85 | 102/86 | 102/86 | 102/86 | |

Performance data based on the compression of air ($p_1 = 1.0 \text{ bar}$, $t_1 = 20 \text{ °C}$)

| Discharge pressure p_2 [bar gauge] | Compressor size belt drive ratio | VML 25 R | | | | | | | | | |
|---|---|---------------------------------|---------------------------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|------|
| | | B | B ₄ | B _{4/5} | B ₅ | B _{5/6} | B ₆ | B _{6/7} | B ₇ | B _{7/8} | |
| 0,75 | flow at inlet | \dot{V}_1 [m ³ /h] | 1091 | 1171 | 1247 | 1336 | 1425 | 1520 | 1629 | 1754 | |
| | compressor speed | nHR [1/min] | 10566 | 11207 | 11815 | 12529 | 13230 | 13983 | 14834 | 15811 | |
| | motor speed | nM [1/min] | 2945 | 2945 | 2950 | 2950 | 2950 | 2940 | 2940 | 2955 | |
| | discharge temperature | t_2 [°C] | 89 | 89 | 90 | 90 | 91 | 92 | 94 | 96 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 26,2 / 30 | 28,3 / 37 | 30,3 / 37 | 32,9 / 37 | 35,5 / 45 | 38,5 / 45 | 42,1 / 45 | 46,5 / 55 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 14,6 | 16,3 | 17,8 | 20,0 | 22,2 | 24,8 | 28,0 | 31,3 | |
| | reduced moment of inertia | J [kgm ²] | 0,481 | 0,527 | 0,602 | 0,686 | 0,806 | 0,876 | 1,03 | 1,115 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 93/76 | 93/76 | 93/77 | 94/77 | 94/77 | 94/78 | 95/78 | 95/79 | |
| | 1,00 | flow at inlet | \dot{V}_1 [m ³ /h] | 1079 | 1159 | 1227 | 1317 | 1405 | 1515 | 1624 | 1750 |
| compressor speed | | nHR [1/min] | 10584 | 11226 | 11775 | 12487 | 13185 | 14055 | 14909 | 15891 | |
| motor speed | | nM [1/min] | 2950 | 2950 | 2940 | 2940 | 2940 | 2955 | 2955 | 2970 | |
| discharge temperature | | t_2 [°C] | 106 | 106 | 106 | 106 | 107 | 108 | 109 | 110 | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | 32,4 / 37 | 34,8 / 45 | 36,9 / 45 | 39,7 / 45 | 42,6 / 45 | 46,5 / 55 | 51 / 55 | 56 / 75 | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | 14,6 | 16,3 | 17,8 | 20,0 | 22,2 | 24,8 | 28,0 | 31,3 | |
| reduced moment of inertia | | J [kgm ²] | 0,483 | 0,528 | 0,602 | 0,686 | 0,806 | 0,876 | 1,033 | 1,115 | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | 94/76 | 94/77 | 94/77 | 95/77 | 95/78 | 95/78 | 96/78 | 96/79 | |
| 1,25 | | flow at inlet | \dot{V}_1 [m ³ /h] | 1060 | 1162 | 1213 | 1310 | 1399 | 1510 | 1619 | 1735 |
| | compressor speed | nHR [1/min] | 10548 | 11268 | 11775 | 12550 | 13253 | 14126 | 14985 | 15891 | |
| | motor speed | nM [1/min] | 2940 | 2965 | 2940 | 2955 | 2955 | 2970 | 2970 | 2970 | |
| | discharge temperature | t_2 [°C] | 124 | 122 | 123 | 123 | 123 | 123 | 124 | 125 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 38,4 / 45 | 41,1 / 45 | 43,6 / 45 | 47,1 / 55 | 51 / 55 | 55 / 75 | 59 / 75 | 64 / 75 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 14,6 | 16,3 | 17,8 | 20,0 | 22,2 | 24,8 | 28,0 | 31,3 | |
| | reduced moment of inertia | J [kgm ²] | 0,483 | 0,528 | 0,602 | 0,688 | 0,809 | 0,876 | 1,03 | 1,115 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 94/77 | 95/78 | 95/78 | 95/78 | 96/79 | 96/79 | 97/79 | 97/79 | |
| | 1,50 | flow at inlet | \dot{V}_1 [m ³ /h] | 1063 | 1143 | 1217 | 1304 | 1393 | 1496 | 1605 | 1721 |
| compressor speed | | nHR [1/min] | 10602 | 11245 | 11835 | 12614 | 13320 | 14126 | 14985 | 15891 | |
| motor speed | | nM [1/min] | 2955 | 2955 | 2955 | 2970 | 2970 | 2970 | 2970 | 2970 | |
| discharge temperature | | t_2 [°C] | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 141 | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | 44,5 / 55 | 47,8 / 55 | 51 / 55 | 55 / 75 | 59 / 75 | 63 / 75 | 68 / 75 | 73 / 75 | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | 22,0 | 24,3 | 26,6 | 29,4 | 32,4 | 36,0 | 40,1 | 44,6 | |
| reduced moment of inertia | | J [kgm ²] | 0,483 | 0,53 | 0,604 | 0,688 | 0,809 | 0,876 | 1,03 | 1,118 | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | 96/78 | 96/79 | 97/79 | 97/79 | 97/79 | 97/80 | 98/80 | 98/80 | |
| 1,75 | | flow at inlet | \dot{V}_1 [m ³ /h] | 1052 | 1132 | 1214 | 1304 | 1393 | 1495 | 1605 | 1721 |
| | compressor speed | nHR [1/min] | 10602 | 11245 | 11895 | 12614 | 13320 | 14126 | 14985 | 15891 | |
| | motor speed | nM [1/min] | 2955 | 2955 | 2970 | 2970 | 2970 | 2970 | 2970 | 2970 | |
| | discharge temperature | t_2 [°C] | 155 | 154 | 154 | 154 | 154 | 154 | 155 | 156 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 49,6 / 55 | 54 / 55 | 57 / 75 | 61 / 75 | 66 / 75 | 71 / 75 | 76 / 90 | 82 / 90 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 22,0 | 24,3 | 26,6 | 29,4 | 32,4 | 36,0 | 40,1 | 44,6 | |
| | reduced moment of inertia | J [kgm ²] | 0,483 | 0,53 | 0,604 | 0,688 | 0,809 | 0,876 | 1,033 | 1,118 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 97/78 | 97/79 | 98/79 | 98/79 | 98/80 | 98/80 | 99/81 | 99/81 | |
| | 2,00 | flow at inlet | \dot{V}_1 [m ³ /h] | 1048 | 1128 | 1202 | 1293 | 1382 | 1484 | 1594 | 1713 |
| compressor speed | | nHR [1/min] | 10656 | 11302 | 11895 | 12614 | 13320 | 14126 | 14985 | 15918 | |
| motor speed | | nM [1/min] | 2970 | 2970 | 2970 | 2970 | 2970 | 2970 | 2970 | 2975 | |
| discharge temperature | | t_2 [°C] | 170 | 169 | 168 | 168 | 167 | 168 | 168 | 169 | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | 55 / 75 | 59 / 75 | 63 / 75 | 67 / 75 | 72 / 75 | 77 / 90 | 83 / 90 | 90 / 110 | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | 22,0 | 24,3 | 26,6 | 29,4 | 32,4 | 36,0 | 40,1 | 44,6 | |
| reduced moment of inertia | | J [kgm ²] | 0,483 | 0,53 | 0,604 | 0,688 | 0,809 | 0,876 | 1,033 | 1,164 | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | 99/80 | 99/81 | 100/81 | 100/81 | 100/81 | 100/81 | 100/82 | 101/82 | |
| 2,25 | | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | |
| | 2,50 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | |
| compressor speed | | nHR [1/min] | | | | | | | | | |
| motor speed | | nM [1/min] | | | | | | | | | |
| discharge temperature | | t_2 [°C] | | | | | | | | | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | | | | | | | | | |
| reduced moment of inertia | | J [kgm ²] | | | | | | | | | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | | | | | | | | | |
| 2,75 | | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | |
| | 3,00 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | |
| compressor speed | | nHR [1/min] | | | | | | | | | |
| motor speed | | nM [1/min] | | | | | | | | | |
| discharge temperature | | t_2 [°C] | | | | | | | | | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | | | | | | | | | |
| reduced moment of inertia | | J [kgm ²] | | | | | | | | | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | | | | | | | | | |
| 3,25 | | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | |
| | 3,50 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | |
| compressor speed | | nHR [1/min] | | | | | | | | | |
| motor speed | | nM [1/min] | | | | | | | | | |
| discharge temperature | | t_2 [°C] | | | | | | | | | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | | | | | | | | | |
| reduced moment of inertia | | J [kgm ²] | | | | | | | | | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | | | | | | | | | |

Performance data based on the compression of air ($p_1= 1.0 \text{ bar}$, $t_1= 20 \text{ °C}$)

| Discharge pressure p_2 [bar gauge] | Compressor size belt drive ratio | VM 37 R | | | | | | | | | | |
|--------------------------------------|---|---------------------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|--|
| | | B | B ₄ | B _{4/5} | B ₅ | B _{5/6} | B ₆ | B _{6/7} | B ₇ | B _{7/8} | B ₈ | |
| 0,75 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 1,00 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 1,25 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 1,50 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 1,75 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 2,00 | flow at inlet | \dot{V}_1 [m ³ /h] | 1334 | 1440 | 1529 | 1648 | 1756 | 1891 | 2006 | 2156 | 2292 | |
| | compressor speed | nHR [1/min] | 10496 | 11186 | 11788 | 12586 | 13307 | 14205 | 14969 | 15954 | 16840 | |
| | motor speed | nM [1/min] | 2975 | 2975 | 2970 | 2970 | 2975 | 2975 | 2970 | 2970 | 2970 | |
| | discharge temperature | t_2 [°C] | 159 | 159 | 160 | 161 | 162 | 163 | 164 | 166 | 168 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 68 / 75 | 73 / 75 | 78 / 90 | 85 / 90 | 91 / 110 | 100 / 110 | 108 / 132 | 120 / 132 | 130 / 160 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 39,7 | 43,9 | 47,7 | 53 | 58 | 66 | 72 | 81 | 90 | |
| | reduced moment of inertia | J [kgm ²] | 0,946 | 1,095 | 1,212 | 1,403 | 1,612 | 1,882 | 2,486 | 2,848 | 3,017 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 94 / 77 | 94 / 78 | 95 / 79 | 96 / 79 | 97 / 80 | 98 / 80 | 99 / 80 | 99 / 81 | 99 / 81 | |
| 2,25 | flow at inlet | \dot{V}_1 [m ³ /h] | 1323 | 1426 | 1518 | 1639 | 1744 | 1879 | 1995 | 2145 | 2281 | |
| | compressor speed | nHR [1/min] | 10496 | 11168 | 11788 | 12607 | 13307 | 14205 | 14969 | 15954 | 16840 | |
| | motor speed | nM [1/min] | 2975 | 2970 | 2970 | 2975 | 2975 | 2970 | 2970 | 2970 | 2970 | |
| | discharge temperature | t_2 [°C] | 170 | 170 | 170 | 171 | 172 | 173 | 174 | 176 | 178 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 73 / 75 | 78 / 90 | 84 / 90 | 91 / 110 | 97 / 110 | 106 / 110 | 115 / 132 | 127 / 132 | 138 / 160 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 39,7 | 43,8 | 47,7 | 54 | 58 | 66 | 72 | 81 | 90 | |
| | reduced moment of inertia | J [kgm ²] | 0,946 | 1,095 | 1,212 | 1,457 | 1,612 | 2,353 | 2,486 | 2,848 | 3,162 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 95 / 77 | 95 / 78 | 96 / 79 | 97 / 79 | 98 / 80 | 98 / 80 | 99 / 80 | 99 / 81 | 100 / 81 | |
| 2,50 | flow at inlet | \dot{V}_1 [m ³ /h] | 1308 | 1414 | 1509 | 1628 | 1733 | 1864 | 1984 | 2134 | 2270 | |
| | compressor speed | nHR [1/min] | 10478 | 11168 | 11808 | 12607 | 13307 | 14181 | 14969 | 15954 | 16840 | |
| | motor speed | nM [1/min] | 2970 | 2970 | 2975 | 2975 | 2970 | 2970 | 2970 | 2970 | 2970 | |
| | discharge temperature | t_2 [°C] | 182 | 182 | 182 | 182 | 182 | 183 | 184 | 186 | 187 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 78 / 90 | 84 / 90 | 89 / 110 | 97 / 110 | 103 / 110 | 112 / 132 | 122 / 132 | 134 / 160 | 145 / 160 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 39,6 | 43,8 | 47,9 | 54 | 58 | 65 | 72 | 81 | 90 | |
| | reduced moment of inertia | J [kgm ²] | 0,946 | 1,095 | 1,258 | 1,457 | 1,747 | 2,353 | 2,487 | 2,848 | 3,162 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 96 / 77 | 96 / 79 | 97 / 79 | 98 / 79 | 99 / 80 | 99 / 80 | 100 / 80 | 100 / 81 | 101 / 81 | |
| 2,75 | flow at inlet | \dot{V}_1 [m ³ /h] | 1297 | 1406 | 1498 | 1617 | 1718 | 1853 | 1972 | 2122 | 2258 | |
| | compressor speed | nHR [1/min] | 10478 | 11186 | 11808 | 12607 | 13285 | 14181 | 14969 | 15954 | 16840 | |
| | motor speed | nM [1/min] | 2970 | 2975 | 2975 | 2970 | 2970 | 2970 | 2970 | 2970 | 2970 | |
| | discharge temperature | t_2 [°C] | 194 | 193 | 193 | 193 | 193 | 194 | 195 | 196 | 197 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 83 / 90 | 89 / 110 | 95 / 110 | 102 / 110 | 109 / 132 | 119 / 132 | 128 / 132 | 141 / 160 | 153 / 160 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 39,6 | 43,9 | 47,9 | 54 | 58 | 65 | 72 | 81 | 90 | |
| | reduced moment of inertia | J [kgm ²] | 0,946 | 1,132 | 1,258 | 1,457 | 1,747 | 2,353 | 2,487 | 2,993 | 3,163 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 98 / 77 | 99 / 79 | 99 / 80 | 100 / 80 | 100 / 80 | 101 / 81 | 101 / 81 | 101 / 82 | 101 / 82 | |
| 3,00 | flow at inlet | \dot{V}_1 [m ³ /h] | 1286 | 1394 | 1486 | 1602 | 1707 | 1842 | 1961 | 2111 | 2256 | |
| | compressor speed | nHR [1/min] | 10478 | 11186 | 11808 | 12586 | 13285 | 14181 | 14969 | 15954 | 16897 | |
| | motor speed | nM [1/min] | 2970 | 2975 | 2975 | 2970 | 2970 | 2970 | 2970 | 2970 | 2980 | |
| | discharge temperature | t_2 [°C] | 207 | 205 | 205 | 204 | 204 | 205 | 205 | 206 | 207 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 88 / 90 | 95 / 110 | 101 / 110 | 108 / 132 | 115 / 132 | 125 / 132 | 135 / 160 | 148 / 160 | 161 / 200 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 39,6 | 43,9 | 47,9 | 53 | 58 | 65 | 72 | 81 | 91 | |
| | reduced moment of inertia | J [kgm ²] | 0,986 | 1,132 | 1,258 | 1,642 | 1,747 | 2,354 | 2,412 | 2,993 | 3,163 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 100 / 78 | 100 / 79 | 100 / 80 | 100 / 80 | 100 / 80 | 101 / 81 | 101 / 81 | 101 / 82 | 102 / 83 | |
| 3,25 | flow at inlet | \dot{V}_1 [m ³ /h] | 1289 | 1395 | 1487 | 1603 | 1695 | 1830 | 1950 | 2100 | 2244 | |
| | compressor speed | nHR [1/min] | 10496 | 11186 | 11808 | 12586 | 13285 | 14181 | 14969 | 15954 | 16897 | |
| | motor speed | nM [1/min] | 2975 | 2975 | 2975 | 2970 | 2970 | 2970 | 2970 | 2970 | 2980 | |
| | discharge temperature | t_2 [°C] | 215 | 214 | 214 | 214 | 216 | 216 | 216 | 216 | 217 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 93 / 110 | 100 / 110 | 107 / 110 | 115 / 132 | 121 / 132 | 132 / 160 | 142 / 160 | 156 / 160 | 169 / 200 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 61 | 67 | 72 | 79 | 86 | 96 | 105 | 117 | 129 | |
| | reduced moment of inertia | J [kgm ²] | 0,986 | 1,132 | 1,388 | 1,642 | 1,748 | 2,354 | 2,412 | 2,993 | 3,163 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 100 / 78 | 100 / 79 | 100 / 80 | 100 / 80 | 100 / 80 | 101 / 81 | 101 / 82 | 102 / 82 | 102 / 83 | |
| 3,50 | flow at inlet | \dot{V}_1 [m ³ /h] | 1280 | 1385 | 1475 | 1593 | 1698 | 1833 | 1952 | 2110 | 2247 | |
| | compressor speed | nHR [1/min] | 10496 | 11186 | 11788 | 12586 | 13285 | 14181 | 14969 | 16007 | 16897 | |
| | motor speed | nM [1/min] | 2975 | 2975 | 2970 | 2970 | 2970 | 2970 | 2970 | 2980 | 2980 | |
| | discharge temperature | t_2 [°C] | 225 | 223 | 223 | 223 | 222 | 223 | 223 | 224 | 224 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 97 / 110 | 104 / 110 | 111 / 132 | 119 / 132 | 127 / 132 | 138 / 160 | 149 / 160 | 164 / 200 | 177 / 200 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 61 | 67 | 72 | 79 | 86 | 96 | 105 | 117 | 129 | |
| | reduced moment of inertia | J [kgm ²] | 0,986 | 1,132 | 1,388 | 1,642 | 1,748 | 2,354 | 2,412 | 2,994 | 3,163 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 100 / 79 | 100 / 79 | 100 / 80 | 100 / 80 | 100 / 80 | 101 / 81 | 101 / 82 | 102 / 82 | 102 / 83 | |

Performance data based on the compression of air ($p_1 = 1.0 \text{ bar}$, $t_1 = 20 \text{ }^\circ\text{C}$)

| Discharge pressure p_2 [bar gauge] | Compressor size | | VML 40 R | | | | | | | | | |
|---|---|---------------------------------|-----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|
| | belt drive ratio | | B | B ₂ | B ₃ | B ₄ | B ₅ | B ₆ | B ₇ | B ₈ | B ₉ | B ₁₀ |
| 0,75 | flow at inlet | \dot{V}_1 [m ³ /h] | 891 | 1011 | 1167 | 1340 | 1531 | 1762 | 2011 | 2318 | 2592 | |
| | compressor speed | nHR [1/min] | 5050 | 5611 | 6283 | 7025 | 7840 | 8820 | 9992 | 11314 | 12727 | |
| | motor speed | nM [1/min] | 2945 | 2945 | 2945 | 2950 | 2940 | 2940 | 2955 | 2970 | 2970 | |
| | discharge temperature | t_2 [°C] | 90 | 88 | 87 | 87 | 87 | 87 | 89 | 93 | 98 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 21,8 / 30 | 24,5 / 30 | 27,9 / 30 | 31,9 / 37 | 36,7 / 45 | 43 / 45 | 52 / 55 | 63 / 75 | 77 / 90 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 9,4 | 11 | 13,2 | 15,8 | 19,5 | 24,2 | 30,7 | 39,9 | 53 | |
| | reduced moment of inertia | J [kgm ²] | 0,258 | 0,32 | 0,4 | 0,51 | 0,64 | 0,82 | 1,09 | 1,46 | 2,04 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 91/73 | 92/73 | 94/75 | 96/77 | 97/78 | 98/80 | 99/82 | 100/82 | 100/82 | |
| | | | | | | | | | | | | |
| 1,00 | flow at inlet | \dot{V}_1 [m ³ /h] | 868 | 993 | 1149 | 1324 | 1520 | 1753 | 2033 | 2298 | 2575 | |
| | compressor speed | nHR [1/min] | 5050 | 5621 | 6293 | 7001 | 7880 | 8865 | 10043 | 11314 | 12749 | |
| | motor speed | nM [1/min] | 2945 | 2950 | 2950 | 2940 | 2955 | 2970 | 2970 | 2970 | 2975 | |
| | discharge temperature | t_2 [°C] | 111 | 109 | 106 | 105 | 104 | 104 | 104 | 107 | 113 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 27,9 / 30 | 31,2 / 37 | 35,2 / 37 | 39,7 / 45 | 45,6 / 55 | 53 / 55 | 63 / 75 | 74 / 90 | 89 / 110 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 13,7 | 11 | 13,2 | 15,8 | 19,5 | 24,2 | 30,7 | 39,9 | 53 | |
| | reduced moment of inertia | J [kgm ²] | 0,258 | 0,32 | 0,4 | 0,52 | 0,66 | 0,84 | 1,12 | 1,53 | 2,38 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 93/73 | 93/73 | 96/75 | 98/77 | 99/79 | 100/80 | 101/81 | 101/82 | 101/82 | |
| | | | | | | | | | | | | |
| 1,25 | flow at inlet | \dot{V}_1 [m ³ /h] | 854 | 979 | 1135 | 1313 | 1509 | 1743 | 2013 | 2277 | 2555 | |
| | compressor speed | nHR [1/min] | 5058 | 5602 | 6272 | 7037 | 7920 | 8910 | 10043 | 11314 | 12749 | |
| | motor speed | nM [1/min] | 2950 | 2940 | 2940 | 2955 | 2970 | 2970 | 2970 | 2970 | 2975 | |
| | discharge temperature | t_2 [°C] | 129 | 127 | 124 | 123 | 122 | 120 | 120 | 123 | 128 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 32,9 / 37 | 36,8 / 45 | 41,9 / 45 | 48 / 55 | 55 / 75 | 63 / 75 | 73 / 75 | 86 / 90 | 102 / 110 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 13,7 | 16,3 | 19,5 | 23,6 | 28,7 | 35,7 | 45,1 | 58,2 | 75,4 | |
| | reduced moment of inertia | J [kgm ²] | 0,258 | 0,33 | 0,42 | 0,52 | 0,68 | 0,87 | 1,18 | 1,53 | 2,38 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 95/74 | 95/74 | 97/76 | 99/78 | 100/79 | 100/80 | 102/81 | 102/82 | 103/83 | |
| | | | | | | | | | | | | |
| 1,50 | flow at inlet | \dot{V}_1 [m ³ /h] | 834 | 963 | 1126 | 1305 | 1504 | 1738 | 1993 | 2261 | 2535 | |
| | compressor speed | nHR [1/min] | 5041 | 5602 | 6304 | 7073 | 7920 | 8910 | 10043 | 11333 | 12749 | |
| | motor speed | nM [1/min] | 2940 | 2940 | 2955 | 2970 | 2970 | 2970 | 2970 | 2975 | 2975 | |
| | discharge temperature | t_2 [°C] | 149 | 144 | 141 | 138 | 137 | 136 | 137 | 139 | 143 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 37,8 / 45 | 42,2 / 45 | 48,1 / 55 | 55 / 75 | 63 / 75 | 73 / 75 | 84 / 90 | 98 / 110 | 111 / 132 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 13,7 | 16,3 | 19,5 | 23,6 | 28,7 | 35,7 | 45,1 | 58,2 | 75,4 | |
| | reduced moment of inertia | J [kgm ²] | 0,265 | 0,33 | 0,42 | 0,53 | 0,68 | 0,92 | 1,18 | 1,99 | 2,54 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 95/74 | 96/74 | 98/76 | 100/78 | 101/79 | 101/80 | 102/81 | 103/82 | 105/83 | |
| | | | | | | | | | | | | |
| 1,75 | flow at inlet | \dot{V}_1 [m ³ /h] | 818 | 954 | 1118 | 1289 | 1488 | 1722 | 1996 | 2260 | 2515 | |
| | compressor speed | nHR [1/min] | 5041 | 5630 | 6336 | 7073 | 7920 | 8910 | 10059 | 11333 | 12749 | |
| | motor speed | nM [1/min] | 2940 | 2955 | 2970 | 2970 | 2970 | 2970 | 2975 | 2975 | 2975 | |
| | discharge temperature | t_2 [°C] | 170 | 163 | 159 | 155 | 153 | 151 | 151 | 154 | 160 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 43 / 45 | 48,2 / 55 | 55 / 75 | 62 / 75 | 71 / 75 | 81 / 90 | 94 / 110 | 110 / 132 | 129 / 132 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 13,7 | 16,3 | 19,5 | 23,6 | 28,7 | 35,7 | 45,1 | 58,2 | 75,4 | |
| | reduced moment of inertia | J [kgm ²] | 0,265 | 0,34 | 0,42 | 0,53 | 0,68 | 0,92 | 1,35 | 1,99 | 2,54 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 95/75 | 96/75 | 99/77 | 101/79 | 101/80 | 101/80 | 102/81 | 103/82 | 105/83 | |
| | | | | | | | | | | | | |
| 2,00 | flow at inlet | \dot{V}_1 [m ³ /h] | 808 | 945 | 1102 | 1273 | 1472 | 1710 | 1980 | 2244 | | |
| | compressor speed | nHR [1/min] | 5067 | 5659 | 6336 | 7073 | 7920 | 8925 | 10059 | 11333 | | |
| | motor speed | nM [1/min] | 2955 | 2970 | 2970 | 2970 | 2970 | 2975 | 2975 | 2975 | | |
| | discharge temperature | t_2 [°C] | 191 | 183 | 177 | 173 | 169 | 167 | 166 | 169 | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 48,6 / 55 | 55 / 75 | 62 / 75 | 69 / 75 | 78 / 90 | 90 / 110 | 104 / 110 | 120 / 132 | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 13,7 | 16,3 | 19,5 | 23,6 | 28,7 | 35,7 | 45,1 | 58,2 | | |
| | reduced moment of inertia | J [kgm ²] | 0,283 | 0,34 | 0,42 | 0,53 | 0,71 | 1,08 | 1,35 | 1,92 | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 96/75 | 97/75 | 99/78 | 101/80 | 102/81 | 102/81 | 103/81 | 104/82 | | |
| | | | | | | | | | | | | |
| 2,25 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| | | | | | | | | | | | | |
| 2,50 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| | | | | | | | | | | | | |
| 2,75 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| | | | | | | | | | | | | |
| 3,00 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| | | | | | | | | | | | | |
| 3,25 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| | | | | | | | | | | | | |
| 3,50 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| | | | | | | | | | | | | |

Performance data based on the compression of air ($p_1= 1.0 \text{ bar}$, $t_1= 20 \text{ }^\circ\text{C}$)

| Discharge pressure p_2 [bar gauge] | Compressor size gear ratio | VM 45 | | | | | | | | | | |
|--------------------------------------|---|---------------------------------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| | | i [-] | i_4 | i_5 | i_6 | i_7 | i_8 | i_9 | i_{10} | i_{11} | i_{12} | |
| 0,75 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 1,00 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 1,25 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 1,50 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 1,75 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| 2,00 | flow at inlet | \dot{V}_1 [m ³ /h] | 1016 | 1183 | 1377 | 1605 | 1848 | 2117 | 2464 | 2766 | 3161 | |
| | compressor speed | nHR [1/min] | 4655 | 5198 | 5823 | 6555 | 7331 | 8183 | 9272 | 10213 | 11431 | |
| | motor speed | nM [1/min] | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | |
| | discharge temperature | t_2 [°C] | 176 | 172 | 168 | 165 | 163 | 162 | 163 | 164 | 160 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 57 / 75 | 64 / 90 | 73 / 90 | 83 / 110 | 94 / 132 | 107 / 132 | 125 / 160 | 141 / 200 | 164 / 200 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 28,5 | 31 | 35,6 | 42,2 | 49,6 | 57,7 | 68 | 78,2 | 115 | |
| | reduced moment of inertia | J [kgm ²] | 0,86 | 1,004 | 1,19 | 1,424 | 1,704 | 2,034 | 2,501 | 2,95 | 3,57 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 97 / 77 | 97 / 78 | 98 / 78 | 98 / 78 | 99 / 78 | 100 / 78 | 102 / 80 | 103 / 83 | 104 / 83 | |
| 2,25 | flow at inlet | \dot{V}_1 [m ³ /h] | 1000 | 1168 | 1361 | 1589 | 1832 | 2102 | 2448 | 2751 | 3146 | |
| | compressor speed | nHR [1/min] | 4655 | 5198 | 5823 | 6555 | 7331 | 8183 | 9272 | 10213 | 11431 | |
| | motor speed | nM [1/min] | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | |
| | discharge temperature | t_2 [°C] | 188 | 187 | 182 | 178 | 175 | 174 | 173 | 174 | 169 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 62 / 75 | 70 / 90 | 79 / 110 | 89 / 110 | 101 / 132 | 115 / 132 | 133 / 160 | 150 / 200 | 174 / 200 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 28,5 | 31 | 35,6 | 42,2 | 49,6 | 57,7 | 68 | 78,2 | 115 | |
| | reduced moment of inertia | J [kgm ²] | 0,86 | 1,004 | 1,19 | 1,424 | 1,704 | 2,034 | 2,501 | 2,95 | 3,57 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 97 / 77 | 97 / 78 | 98 / 78 | 98 / 78 | 99 / 78 | 100 / 78 | 102 / 80 | 103 / 84 | 104 / 84 | |
| 2,50 | flow at inlet | \dot{V}_1 [m ³ /h] | 994 | 1152 | 1345 | 1573 | 1817 | 2086 | 2432 | 2735 | 3107 | |
| | compressor speed | nHR [1/min] | 4655 | 5198 | 5823 | 6555 | 7331 | 8183 | 9272 | 10213 | 11431 | |
| | motor speed | nM [1/min] | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | |
| | discharge temperature | t_2 [°C] | 201 | 203 | 197 | 192 | 188 | 186 | 185 | 184 | 187 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 67 / 90 | 75 / 90 | 85 / 110 | 96 / 132 | 109 / 132 | 123 / 160 | 142 / 200 | 160 / 200 | 184 / 250 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 44,4 | 31 | 35,6 | 42,2 | 49,6 | 57,7 | 68 | 78,2 | 115 | |
| | reduced moment of inertia | J [kgm ²] | 0,86 | 1,004 | 1,19 | 1,424 | 1,704 | 2,034 | 2,501 | 2,95 | 3,57 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 97 / 77 | 97 / 78 | 98 / 78 | 99 / 78 | 99 / 78 | 100 / 78 | 100 / 78 | 102 / 80 | 103 / 84 | |
| 2,75 | flow at inlet | \dot{V}_1 [m ³ /h] | 980 | 1148 | 1341 | 1569 | 1801 | 2070 | 2417 | 2719 | 3091 | |
| | compressor speed | nHR [1/min] | 4655 | 5198 | 5823 | 6555 | 7331 | 8183 | 9272 | 10213 | 11431 | |
| | motor speed | nM [1/min] | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | |
| | discharge temperature | t_2 [°C] | 214 | 216 | 210 | 205 | 201 | 198 | 196 | 195 | 196 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 71 / 90 | 80 / 110 | 91 / 110 | 104 / 132 | 116 / 160 | 131 / 160 | 151 / 200 | 169 / 200 | 194 / 250 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 44,4 | 42,7 | 49,2 | 57,8 | 68 | 78,6 | 88 | 98,2 | 115 | |
| | reduced moment of inertia | J [kgm ²] | 0,86 | 1,004 | 1,19 | 1,424 | 1,704 | 2,034 | 2,501 | 2,95 | 3,57 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 97 / 77 | 97 / 78 | 98 / 78 | 99 / 78 | 100 / 78 | 102 / 80 | 102 / 80 | 104 / 84 | 105 / 85 | |
| 3,00 | flow at inlet | \dot{V}_1 [m ³ /h] | 967 | 1134 | 1328 | 1556 | 1799 | 2068 | 2401 | 2703 | 3075 | |
| | compressor speed | nHR [1/min] | 4655 | 5198 | 5823 | 6555 | 7331 | 8183 | 9272 | 10213 | 11431 | |
| | motor speed | nM [1/min] | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | |
| | discharge temperature | t_2 [°C] | 228 | 229 | 222 | 216 | 212 | 210 | 208 | 206 | 202 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 75 / 90 | 84 / 110 | 95 / 132 | 109 / 132 | 123 / 160 | 140 / 200 | 160 / 200 | 179 / 200 | 204 / 250 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 44,4 | 42,7 | 49,2 | 57,8 | 68 | 78,6 | 88 | 98,2 | 115 | |
| | reduced moment of inertia | J [kgm ²] | 0,86 | 1,004 | 1,19 | 1,424 | 1,704 | 2,034 | 2,501 | 2,95 | 3,57 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 98 / 78 | 98 / 78 | 98 / 78 | 99 / 78 | 101 / 78 | 103 / 80 | 103 / 80 | 105 / 84 | 106 / 85 | |
| 3,25 | flow at inlet | \dot{V}_1 [m ³ /h] | 954 | 1108 | 1315 | 1543 | 1786 | 2055 | 2402 | 2704 | 3059 | |
| | compressor speed | nHR [1/min] | 4655 | 5198 | 5823 | 6555 | 7331 | 8183 | 9272 | 10213 | 11431 | |
| | motor speed | nM [1/min] | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | |
| | discharge temperature | t_2 [°C] | 242 | 250 | 234 | 227 | 223 | 219 | 217 | 216 | 209 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 79 / 110 | 93 / 132 | 100 / 132 | 114 / 132 | 129 / 160 | 146 / 200 | 168 / 200 | 189 / 250 | 216 / 250 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 44,4 | 42,7 | 49,2 | 57,8 | 68 | 78,6 | 88 | 98,2 | 115 | |
| | reduced moment of inertia | J [kgm ²] | 0,86 | 1,004 | 1,19 | 1,424 | 1,704 | 2,034 | 2,501 | 2,95 | 3,57 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 98 / 78 | 99 / 78 | 98 / 78 | 100 / 78 | 101 / 78 | 103 / 80 | 103 / 80 | 106 / 84 | 107 / 85 | |
| 3,50 | flow at inlet | \dot{V}_1 [m ³ /h] | | | 1302 | 1529 | 1773 | 2042 | 2389 | 2691 | 3063 | |
| | compressor speed | nHR [1/min] | | | 5823 | 6555 | 7331 | 8183 | 9272 | 10213 | 11431 | |
| | motor speed | nM [1/min] | | | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | |
| | discharge temperature | t_2 [°C] | | | 246 | 239 | 233 | 229 | 226 | 225 | 217 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | 105 / 132 | 119 / 160 | 134 / 160 | 152 / 200 | 175 / 200 | 196 / 250 | 223 / 250 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | 49,2 | 57,8 | 68 | 78,6 | 88 | 98,2 | 115 | |
| | reduced moment of inertia | J [kgm ²] | | | 1,19 | 1,424 | 1,704 | 2,034 | 2,501 | 2,95 | 3,57 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | 99 / 78 | 100 / 78 | 101 / 78 | 103 / 80 | 103 / 80 | 107 / 84 | 108 / 85 | |

Performance data based on the compression of air ($p_1= 1.0 \text{ bar}$, $t_1= 20 \text{ }^\circ\text{C}$)

| Discharge pressure p_2 [bar gauge] | Compressor size gear ratio | VM 75 | | | | | | | | | |
|--------------------------------------|---|---------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | | i | i_3 | i_4 | i_5 | i_6 | i_7 | i_8 | i_9 | i_{10} | i_{11} |
| 0,75 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | |
| 1,00 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | |
| 1,25 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | |
| 1,50 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | |
| 1,75 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | |
| 2,00 | flow at inlet | \dot{V}_1 [m ³ /h] | 1950 | 2235 | 2585 | 2973 | 3381 | 3866 | 4497 | 5027 | 5655 |
| | compressor speed | nHR [1/min] | 4175 | 4643 | 5215 | 5844 | 6502 | 7277 | 8274 | 9161 | 10199 |
| | motor speed | nM [1/min] | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 [°C] | 161 | 159 | 157 | 156 | 156 | 156 | 158 | 161 | 165 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 102 / 132 | 115 / 132 | 131 / 160 | 149 / 200 | 169 / 200 | 194 / 250 | 229 / 315 | 262 / 315 | 303 / 355 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 39,8 | 46,6 | 56 | 67 | 78 | 94 | 115 | 136 | 163 |
| | reduced moment of inertia | J [kgm ²] | 2,66 | 3,05 | 3,57 | 4,18 | 4,88 | 5,76 | 7,01 | 8,41 | 9,89 |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 97 / 77 | 98 / 78 | 100 / 79 | 101 / 80 | 101 / 80 | 102 / 81 | 103 / 84 | 104 / 84 | 105 / 85 |
| 2,25 | flow at inlet | \dot{V}_1 [m ³ /h] | 1928 | 2213 | 2564 | 2951 | 3360 | 3845 | 4475 | 5005 | 5634 |
| | compressor speed | nHR [1/min] | 4175 | 4643 | 5215 | 5844 | 6502 | 7277 | 8274 | 9161 | 10199 |
| | motor speed | nM [1/min] | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 [°C] | 175 | 172 | 169 | 167 | 167 | 167 | 168 | 170 | 174 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 111 / 132 | 124 / 160 | 141 / 200 | 160 / 200 | 181 / 250 | 208 / 250 | 243 / 315 | 277 / 315 | 320 / 355 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 39,8 | 46,6 | 56 | 67 | 79 | 94 | 115 | 136 | 163 |
| | reduced moment of inertia | J [kgm ²] | 2,66 | 3,05 | 3,57 | 4,18 | 4,88 | 5,76 | 7,01 | 8,41 | 9,89 |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 97 / 77 | 98 / 78 | 100 / 79 | 101 / 80 | 101 / 80 | 102 / 81 | 103 / 84 | 104 / 84 | 105 / 85 |
| 2,50 | flow at inlet | \dot{V}_1 [m ³ /h] | 1907 | 2191 | 2542 | 2930 | 3338 | 3823 | 4453 | 4984 | 5612 |
| | compressor speed | nHR [1/min] | 4175 | 4643 | 5215 | 5844 | 6502 | 7277 | 8274 | 9161 | 10199 |
| | motor speed | nM [1/min] | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 [°C] | 189 | 185 | 181 | 179 | 178 | 177 | 177 | 180 | 183 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 120 / 160 | 134 / 160 | 151 / 200 | 172 / 200 | 194 / 250 | 221 / 250 | 258 / 315 | 293 / 315 | 337 / 355 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 39,8 | 46,6 | 56 | 67 | 79 | 94 | 115 | 136 | 163 |
| | reduced moment of inertia | J [kgm ²] | 2,66 | 3,05 | 3,57 | 4,18 | 4,88 | 5,76 | 7,01 | 8,41 | 9,89 |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 97 / 77 | 98 / 78 | 100 / 79 | 101 / 80 | 101 / 80 | 102 / 81 | 104 / 84 | 105 / 84 | 105 / 85 |
| 2,75 | flow at inlet | \dot{V}_1 [m ³ /h] | 1901 | 2185 | 2520 | 2908 | 3317 | 3801 | 4432 | 4962 | 5591 |
| | compressor speed | nHR [1/min] | 4175 | 4643 | 5215 | 5844 | 6502 | 7277 | 8274 | 9161 | 10199 |
| | motor speed | nM [1/min] | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 [°C] | 201 | 198 | 194 | 191 | 189 | 188 | 187 | 189 | 192 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 128 / 160 | 144 / 200 | 162 / 200 | 183 / 250 | 206 / 250 | 234 / 315 | 273 / 315 | 309 / 355 | 355 / 400 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 67 | 78 | 89 | 108 | 126 | 149 | 180 | 210 | 246 |
| | reduced moment of inertia | J [kgm ²] | 2,66 | 3,05 | 3,57 | 4,18 | 4,88 | 5,76 | 7,01 | 8,41 | 9,89 |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 97 / 77 | 98 / 78 | 100 / 79 | 102 / 81 | 102 / 81 | 103 / 82 | 103 / 82 | 105 / 84 | 106 / 86 |
| 3,00 | flow at inlet | \dot{V}_1 [m ³ /h] | 1883 | 2167 | 2518 | 2906 | 3295 | 3780 | 4410 | 4941 | 5569 |
| | compressor speed | nHR [1/min] | 4175 | 4643 | 5215 | 5844 | 6502 | 7277 | 8274 | 9161 | 10199 |
| | motor speed | nM [1/min] | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 [°C] | 213 | 208 | 205 | 202 | 200 | 198 | 198 | 199 | 202 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 134 / 160 | 151 / 200 | 172 / 200 | 195 / 250 | 219 / 250 | 248 / 315 | 288 / 315 | 326 / 355 | 372 / 500 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 67 | 78 | 92 | 108 | 126 | 149 | 180 | 210 | 246 |
| | reduced moment of inertia | J [kgm ²] | 2,66 | 3,05 | 3,57 | 4,18 | 4,88 | 5,76 | 7,01 | 8,41 | 9,89 |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 97 / 77 | 98 / 78 | 101 / 81 | 102 / 81 | 103 / 82 | 103 / 82 | 105 / 84 | 105 / 85 | 106 / 86 |
| 3,25 | flow at inlet | \dot{V}_1 [m ³ /h] | 1865 | 2149 | 2500 | 2888 | 3296 | 3781 | 4411 | 4919 | 5547 |
| | compressor speed | nHR [1/min] | 4175 | 4643 | 5215 | 5844 | 6502 | 7277 | 8274 | 9161 | 10199 |
| | motor speed | nM [1/min] | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 [°C] | 225 | 219 | 215 | 211 | 209 | 208 | 208 | 209 | 211 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 141 / 200 | 158 / 200 | 180 / 250 | 204 / 250 | 230 / 315 | 262 / 315 | 305 / 366 | 342 / 400 | 390 / 500 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 67 | 78 | 92 | 108 | 126 | 149 | 180 | 210 | 246 |
| | reduced moment of inertia | J [kgm ²] | 2,66 | 3,05 | 3,57 | 4,18 | 4,88 | 5,76 | 7,01 | 8,41 | 9,89 |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 98 / 78 | 99 / 79 | 102 / 81 | 102 / 81 | 103 / 82 | 104 / 82 | 105 / 84 | 106 / 85 | 106 / 86 |
| 3,50 | flow at inlet | \dot{V}_1 [m ³ /h] | 1847 | 2131 | 2482 | 2870 | 3278 | 3763 | 4393 | 4924 | 5552 |
| | compressor speed | nHR [1/min] | 4175 | 4643 | 5215 | 5844 | 6502 | 7277 | 8274 | 9161 | 10199 |
| | motor speed | nM [1/min] | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 [°C] | 237 | 230 | 225 | 221 | 218 | 216 | 216 | 217 | 219 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 148 / 200 | 166 / 200 | 188 / 250 | 213 / 250 | 239 / 315 | 272 / 315 | 316 / 355 | 357 / 400 | 407 / 500 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 67 | 78 | 92 | 108 | 126 | 149 | 180 | 210 | 246 |
| | reduced moment of inertia | J [kgm ²] | 2,66 | 3,05 | 3,57 | 4,18 | 4,88 | 5,76 | 7,01 | 8,41 | 9,89 |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 98 / 78 | 99 / 79 | 100 / 79 | 102 / 81 | 103 / 81 | 104 / 82 | 106 / 84 | 106 / 85 | 107 / 86 |

Performance data based on the compression of air ($p_1 = 1.0 \text{ bar}$, $t_1 = 20 \text{ }^\circ\text{C}$)

| Discharge pressure p_2 [bar gauge] | Compressor size | | VM 85 | | | | | | | | | |
|---|---|-------------------|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | gear ratio | | i | i_8 | i_9 | i_{10} | i_{11} | i_{12} | i_{13} | i_7 | i_8 | i_9 |
| 0,75 | flow at inlet | V_1 | [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR | [1/min] | | | | | | | | | |
| | motor speed | nM | [1/min] | | | | | | | | | |
| | discharge temperature | t_2 | [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | | | | | | | | | |
| | reduced moment of inertia | J | [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | | | | | | | | | |
| 1,00 | flow at inlet | V_1 | [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR | [1/min] | | | | | | | | | |
| | motor speed | nM | [1/min] | | | | | | | | | |
| | discharge temperature | t_2 | [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | | | | | | | | | |
| | reduced moment of inertia | J | [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | | | | | | | | | |
| 1,25 | flow at inlet | V_1 | [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR | [1/min] | | | | | | | | | |
| | motor speed | nM | [1/min] | | | | | | | | | |
| | discharge temperature | t_2 | [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | | | | | | | | | |
| | reduced moment of inertia | J | [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | | | | | | | | | |
| 1,50 | flow at inlet | V_1 | [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR | [1/min] | | | | | | | | | |
| | motor speed | nM | [1/min] | | | | | | | | | |
| | discharge temperature | t_2 | [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | | | | | | | | | |
| | reduced moment of inertia | J | [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | | | | | | | | | |
| 1,75 | flow at inlet | V_1 | [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR | [1/min] | | | | | | | | | |
| | motor speed | nM | [1/min] | | | | | | | | | |
| | discharge temperature | t_2 | [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | | | | | | | | | |
| | reduced moment of inertia | J | [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | | | | | | | | | |
| 2,00 | flow at inlet | V_1 | [m ³ /h] | 2498 | 2949 | 3352 | 3827 | 4395 | 5039 | 5145 | 5834 | 6729 |
| | compressor speed | nHR | [1/min] | 3626 | 4123 | 4564 | 5082 | 5696 | 6387 | 6502 | 7278 | 8275 |
| | motor speed | nM | [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 | [°C] | 159 | 155 | 153 | 152 | 151 | 151 | 151 | 153 | 157 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | 129 / 160 | 147 / 200 | 165 / 200 | 186 / 250 | 212 / 250 | 243 / 315 | 249 / 315 | 287 / 315 | 339 / 400 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | 54 | 62 | 71 | 83 | 95 | 111 | 115 | 138 | 171 |
| | reduced moment of inertia | J | [kgm ²] | 10,6 | 13,1 | 15,7 | 18,9 | 23,2 | 28,6 | 8,79 | 10,6 | 13,1 |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | 99 / 79 | 101 / 81 | 102 / 81 | 103 / 82 | 104 / 82 | 106 / 85 | 107 / 85 | 109 / 86 | 112 / 87 |
| 2,25 | flow at inlet | V_1 | [m ³ /h] | 2468 | 2920 | 3322 | 3798 | 4366 | 5010 | 5116 | 5805 | 6700 |
| | compressor speed | nHR | [1/min] | 3626 | 4123 | 4564 | 5082 | 5696 | 6387 | 6502 | 7278 | 8275 |
| | motor speed | nM | [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 | [°C] | 174 | 169 | 167 | 164 | 163 | 162 | 163 | 164 | 167 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | 141 / 200 | 161 / 200 | 180 / 250 | 202 / 250 | 230 / 315 | 263 / 315 | 268 / 315 | 308 / 355 | 363 / 400 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | 54 | 62 | 71 | 83 | 95 | 111 | 115 | 138 | 171 |
| | reduced moment of inertia | J | [kgm ²] | 10,6 | 13,1 | 15,7 | 18,9 | 23,2 | 28,6 | 8,79 | 10,6 | 13,1 |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | 99 / 79 | 101 / 80 | 102 / 81 | 103 / 82 | 104 / 82 | 106 / 85 | 107 / 85 | 109 / 86 | 112 / 87 |
| 2,50 | flow at inlet | V_1 | [m ³ /h] | 2456 | 2907 | 3293 | 3768 | 4336 | 4980 | 5086 | 5775 | 6671 |
| | compressor speed | nHR | [1/min] | 3626 | 4123 | 4564 | 5082 | 5696 | 6387 | 6502 | 7278 | 8275 |
| | motor speed | nM | [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 | [°C] | 188 | 183 | 180 | 177 | 175 | 174 | 174 | 175 | 177 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | 153 / 200 | 176 / 200 | 195 / 250 | 218 / 250 | 248 / 315 | 282 / 315 | 288 / 315 | 329 / 355 | 386 / 500 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | 68 | 80 | 93 | 108 | 127 | 151 | 115 | 138 | 171 |
| | reduced moment of inertia | J | [kgm ²] | 10,6 | 13,1 | 15,7 | 18,9 | 23,2 | 28,6 | 8,79 | 10,6 | 13,1 |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | 99 / 79 | 101 / 80 | 102 / 81 | 104 / 82 | 105 / 83 | 106 / 85 | 108 / 86 | 112 / 87 | 114 / 88 |
| 2,75 | flow at inlet | V_1 | [m ³ /h] | 2431 | 2882 | 3285 | 3760 | 4307 | 4951 | 5057 | 5746 | 6641 |
| | compressor speed | nHR | [1/min] | 3626 | 4123 | 4564 | 5082 | 5696 | 6387 | 6502 | 7278 | 8275 |
| | motor speed | nM | [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 | [°C] | 201 | 196 | 193 | 190 | 188 | 186 | 186 | 186 | 188 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | 163 / 200 | 187 / 250 | 209 / 250 | 236 / 315 | 266 / 315 | 302 / 355 | 308 / 355 | 351 / 400 | 411 / 500 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | 68 | 80 | 93 | 108 | 127 | 151 | 115 | 138 | 171 |
| | reduced moment of inertia | J | [kgm ²] | 10,6 | 13,1 | 15,7 | 18,9 | 23,2 | 28,6 | 8,79 | 10,6 | 13,1 |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | 98 / 79 | 101 / 81 | 102 / 81 | 104 / 82 | 105 / 83 | 106 / 85 | 108 / 86 | 112 / 87 | 114 / 88 |
| 3,00 | flow at inlet | V_1 | [m ³ /h] | 2407 | 2858 | 3261 | 3736 | 4304 | 4921 | 5028 | 5717 | 6612 |
| | compressor speed | nHR | [1/min] | 3626 | 4123 | 4564 | 5082 | 5696 | 6387 | 6502 | 7278 | 8275 |
| | motor speed | nM | [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 | [°C] | 215 | 208 | 204 | 201 | 199 | 198 | 197 | 197 | 199 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | 174 / 200 | 199 / 250 | 222 / 250 | 250 / 315 | 284 / 315 | 322 / 355 | 329 / 355 | 373 / 400 | 435 / 500 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | 68 | 80 | 93 | 108 | 127 | 151 | 115 | 138 | 171 |
| | reduced moment of inertia | J | [kgm ²] | 10,6 | 13,1 | 15,7 | 18,9 | 23,2 | 28,6 | 8,79 | 10,6 | 13,1 |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | 100 / 80 | 102 / 81 | 104 / 82 | 106 / 84 | 106 / 84 | 107 / 85 | 108 / 86 | 112 / 87 | 114 / 88 |
| 3,25 | flow at inlet | V_1 | [m ³ /h] | 2382 | 2833 | 3236 | 3711 | 4279 | 4923 | 5029 | 5687 | 6582 |
| | compressor speed | nHR | [1/min] | 3626 | 4123 | 4564 | 5082 | 5696 | 6387 | 6502 | 7278 | 8275 |
| | motor speed | nM | [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 | [°C] | 229 | 221 | 216 | 213 | 210 | 208 | 208 | 209 | 210 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | 185 / 250 | 211 / 250 | 235 / 315 | 264 / 315 | 299 / 355 | 341 / 400 | 348 / 400 | 396 / 500 | 460 / 500 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | 68 | 80 | 93 | 108 | 127 | 151 | 154 | 138 | 171 |
| | reduced moment of inertia | J | [kgm ²] | 10,6 | 13,1 | 15,7 | 18,9 | 23,2 | 28,6 | 8,79 | 10,6 | 13,1 |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | 100 / 80 | 103 / 82 | 105 / 83 | 106 / 84 | 107 / 85 | 107 / 85 | 108 / 86 | 110 / 87 | 113 / 88 |
| 3,50 | flow at inlet | V_1 | [m ³ /h] | 2357 | 2809 | 3211 | 3687 | 4255 | 4899 | 5005 | 5694 | 6589 |
| | compressor speed | nHR | [1/min] | 3626 | 4123 | 4564 | 5082 | 5696 | 6387 | 6502 | 7278 | 8275 |
| | motor speed | nM | [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 | [°C] | 244 | 235 | 229 | 224 | 220 | 218 | 218 | 218 | 220 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | 196 / 250 | 223 / 250 | 248 / 315 | 278 / 315 | 314 / 355 | 357 / 400 | 365 / 400 | 416 / 500 | 485 / 630 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | 68 | 80 | 93 | 108 | 127 | 151 | 154 | 184 | 227 |
| | reduced moment of inertia | J | [kgm ²] | 10,6 | 13,1 | 15,7 | 18,9 | 23,2 | 28,6 | 8,79 | 10,6 | 13,1 |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | 102 / 81 | 104 / 82 | 105 / 84 | 106 / 84 | 107 / 85 | 108 / 85 | 108 / 86 | 110 / 87 | 113 / 88 |

Performance data based on the compression of air ($p_1 = 1.0 \text{ bar}$, $t_1 = 20 \text{ }^\circ\text{C}$)

| Discharge pressure p_2 [bar gauge] | Compressor size gear ratio | VML 95 | | | | | | | | | | |
|---|---|---------------------------------|---------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------|
| | | i [-] | i_8 | i_9 | i_{10} | i_{11} | i_{12} | i_{13} | i_7 | i_8 | i_{89} | |
| 0,75 | flow at inlet | \dot{V}_1 [m ³ /h] | 2941 | 3440 | 3885 | 4411 | 5040 | 5752 | 5871 | 6679 | 7150 | |
| | compressor speed | nHR [1/min] | 3626 | 4123 | 4564 | 5082 | 5696 | 6387 | 6502 | 7278 | 7726 | |
| | motor speed | nM [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 | |
| | discharge temperature | t_2 [°C] | 83 | 83 | 83 | 83 | 84 | 86 | 86 | 88 | 90 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 65 / 90 | 76 / 110 | 85 / 110 | 97 / 132 | 113 / 132 | 132 / 160 | 136 / 160 | 160 / 200 | 176 / 200 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 33,8 | 40 | 46,4 | 55,6 | 66,3 | 79,6 | 81 | 106 | 119 | |
| | reduced moment of inertia | J [kgm ²] | 7,3 | 8,5 | 9,6 | 11 | 12,7 | 14,9 | 6,6 | 7,3 | 8,0 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 96 / 75 | 97 / 78 | 98 / 79 | 99 / 80 | 100 / 81 | 100 / 83 | 101 / 83 | 102 / 83 | 103 / 84 | |
| | flow at inlet | \dot{V}_1 [m ³ /h] | 2894 | 3393 | 3838 | 4364 | 4992 | 5705 | 5824 | 6632 | 7103 | |
| | compressor speed | nHR [1/min] | 3626 | 4123 | 4564 | 5082 | 5696 | 6387 | 6502 | 7278 | 7726 | |
| motor speed | nM [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 | | |
| discharge temperature | t_2 [°C] | 101 | 100 | 99 | 98 | 99 | 100 | 100 | 102 | 103 | | |
| power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 83 / 110 | 95 / 132 | 106 / 132 | 120 / 160 | 138 / 160 | 159 / 200 | 163 / 200 | 190 / 250 | 207 / 250 | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 33,8 | 40 | 46,4 | 55,6 | 66,3 | 79,6 | 81 | 106 | 119 | | |
| reduced moment of inertia | J [kgm ²] | 7,3 | 8,5 | 9,6 | 11 | 12,7 | 14,9 | 6,6 | 7,3 | 8,0 | | |
| Sound pressure level w/o.h./w.h. | Lp [dBA] | 97 / 76 | 97 / 78 | 98 / 79 | 100 / 80 | 101 / 81 | 102 / 84 | 102 / 84 | 103 / 84 | 104 / 84 | | |
| 1,25 | flow at inlet | \dot{V}_1 [m ³ /h] | 2873 | 3371 | 3790 | 4316 | 4945 | 5657 | 5776 | 6584 | 7055 | |
| | compressor speed | nHR [1/min] | 3626 | 4123 | 4564 | 5082 | 5696 | 6387 | 6502 | 7278 | 7726 | |
| | motor speed | nM [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 | |
| | discharge temperature | t_2 [°C] | 118 | 117 | 116 | 115 | 114 | 114 | 115 | 116 | 117 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 99 / 132 | 114 / 132 | 127 / 160 | 143 / 200 | 163 / 200 | 187 / 250 | 191 / 250 | 221 / 250 | 240 / 315 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 40,4 | 48,3 | 46,4 | 55,6 | 66,3 | 79,6 | 81 | 106 | 119 | |
| | reduced moment of inertia | J [kgm ²] | 7,3 | 8,5 | 9,6 | 11 | 12,7 | 14,9 | 6,6 | 7,3 | 8,0 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 98 / 76 | 99 / 79 | 100 / 80 | 101 / 80 | 102 / 81 | 103 / 84 | 103 / 84 | 104 / 84 | 105 / 85 | |
| | 1,50 | flow at inlet | \dot{V}_1 [m ³ /h] | 2835 | 3334 | 3779 | 4305 | 4934 | 5610 | 5729 | 6537 | 7008 |
| | | compressor speed | nHR [1/min] | 3626 | 4123 | 4564 | 5082 | 5696 | 6387 | 6502 | 7278 | 7726 |
| motor speed | | nM [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 | |
| discharge temperature | | t_2 [°C] | 134 | 131 | 130 | 129 | 130 | 129 | 129 | 130 | 131 | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | 113 / 132 | 130 / 160 | 146 / 200 | 165 / 200 | 189 / 250 | 215 / 250 | 220 / 250 | 252 / 315 | 272 / 315 | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | 40,4 | 48,3 | 57 | 67,3 | 80 | 79,6 | 81 | 106 | 119 | |
| reduced moment of inertia | | J [kgm ²] | 7,3 | 8,5 | 9,6 | 11 | 12,7 | 14,9 | 6,6 | 7,3 | 8,0 | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | 98 / 77 | 100 / 80 | 100 / 80 | 101 / 81 | 102 / 82 | 103 / 84 | 103 / 84 | 104 / 84 | 105 / 85 | |
| 1,75 | | flow at inlet | \dot{V}_1 [m ³ /h] | 2798 | 3297 | 3742 | 4268 | 4896 | 5609 | 5728 | 6536 | 6960 |
| | | compressor speed | nHR [1/min] | 3626 | 4123 | 4564 | 5082 | 5696 | 6387 | 6502 | 7278 | 7726 |
| | motor speed | nM [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 | |
| | discharge temperature | t_2 [°C] | 150 | 147 | 145 | 144 | 143 | 143 | 143 | 145 | 146 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 127 / 160 | 146 / 160 | 163 / 200 | 184 / 250 | 210 / 250 | 241 / 315 | 246 / 315 | 285 / 315 | 305 / 355 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | 40,4 | 48,3 | 57 | 67,3 | 80 | 96,3 | 98 | 152 | 119 | |
| | reduced moment of inertia | J [kgm ²] | 7,3 | 8,5 | 9,6 | 11 | 12,7 | 14,9 | 6,6 | 7,3 | 8,0 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 99 / 79 | 101 / 81 | 101 / 81 | 102 / 83 | 103 / 83 | 104 / 84 | 104 / 84 | 105 / 85 | 106 / 85 | |
| | 2,00 | flow at inlet | \dot{V}_1 [m ³ /h] | 2760 | 3259 | 3705 | 4230 | 4859 | 5571 | 5690 | 6499 | 6969 |
| | | compressor speed | nHR [1/min] | 3626 | 4123 | 4564 | 5082 | 5696 | 6387 | 6502 | 7278 | 7726 |
| motor speed | | nM [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 | |
| discharge temperature | | t_2 [°C] | 167 | 163 | 160 | 158 | 156 | 156 | 156 | 157 | 158 | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | 142 / 200 | 162 / 200 | 180 / 250 | 202 / 250 | 230 / 315 | 263 / 315 | 269 / 315 | 309 / 355 | 334 / 400 | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | 40,4 | 48,3 | 57 | 67,3 | 80,3 | 96,3 | 98 | 152 | 170 | |
| reduced moment of inertia | | J [kgm ²] | 7,3 | 8,5 | 9,6 | 11 | 12,7 | 14,9 | 6,6 | 7,3 | 8,0 | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | 99 / 79 | 101 / 81 | 102 / 82 | 102 / 83 | 103 / 83 | 104 / 84 | 105 / 84 | 106 / 85 | 107 / 85 | |
| 2,25 | | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | |
| | | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| | 2,50 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | |
| | | compressor speed | nHR [1/min] | | | | | | | | | |
| motor speed | | nM [1/min] | | | | | | | | | | |
| discharge temperature | | t_2 [°C] | | | | | | | | | | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | | | | | | | | | | |
| reduced moment of inertia | | J [kgm ²] | | | | | | | | | | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | | | | | | | | | | |
| 2,75 | | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | |
| | | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| | 3,00 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | |
| | | compressor speed | nHR [1/min] | | | | | | | | | |
| motor speed | | nM [1/min] | | | | | | | | | | |
| discharge temperature | | t_2 [°C] | | | | | | | | | | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | | | | | | | | | | |
| reduced moment of inertia | | J [kgm ²] | | | | | | | | | | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | | | | | | | | | | |
| 3,25 | | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | |
| | | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | |
| | 3,50 | flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | |
| | | compressor speed | nHR [1/min] | | | | | | | | | |
| motor speed | | nM [1/min] | | | | | | | | | | |
| discharge temperature | | t_2 [°C] | | | | | | | | | | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | | | | | | | | | | |
| reduced moment of inertia | | J [kgm ²] | | | | | | | | | | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | | | | | | | | | | |

Performance data based on the compression of air ($p_1 = 1.0 \text{ bar}$, $t_1 = 20 \text{ }^\circ\text{C}$)

| Discharge pressure p_2 [bar gauge] | Compressor size | VM 140 | | | | | | | | | | |
|---|---|-------------------|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | gear ratio | i | [-] | i_6 | i_7 | i_8 | i_9 | i_{10} | i_{11} | i_5 | i_6 | i_7 |
| 0,75 | flow at inlet | V_1 | [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR | [1/min] | | | | | | | | | |
| | motor speed | nM | [1/min] | | | | | | | | | |
| | discharge temperature | t_2 | [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | | | | | | | | | |
| | reduced moment of inertia | J | [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | | | | | | | | | |
| 1,00 | flow at inlet | V_1 | [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR | [1/min] | | | | | | | | | |
| | motor speed | nM | [1/min] | | | | | | | | | |
| | discharge temperature | t_2 | [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | | | | | | | | | |
| | reduced moment of inertia | J | [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | | | | | | | | | |
| 1,25 | flow at inlet | V_1 | [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR | [1/min] | | | | | | | | | |
| | motor speed | nM | [1/min] | | | | | | | | | |
| | discharge temperature | t_2 | [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | | | | | | | | | |
| | reduced moment of inertia | J | [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | | | | | | | | | |
| 1,50 | flow at inlet | V_1 | [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR | [1/min] | | | | | | | | | |
| | motor speed | nM | [1/min] | | | | | | | | | |
| | discharge temperature | t_2 | [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | | | | | | | | | |
| | reduced moment of inertia | J | [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | | | | | | | | | |
| 1,75 | flow at inlet | V_1 | [m ³ /h] | | | | | | | | | |
| | compressor speed | nHR | [1/min] | | | | | | | | | |
| | motor speed | nM | [1/min] | | | | | | | | | |
| | discharge temperature | t_2 | [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | | | | | | | | | |
| | reduced moment of inertia | J | [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | | | | | | | | | |
| 2,00 | flow at inlet | V_1 | [m ³ /h] | 4321 | 4984 | 5706 | 6452 | 7466 | 8593 | 8737 | 9754 | 10949 |
| | compressor speed | nHR | [1/min] | 2886 | 3234 | 3612 | 4000 | 4523 | 5104 | 5189 | 5791 | 6490 |
| | motor speed | nM | [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 | [°C] | 149 | 147 | 146 | 146 | 147 | 149 | 150 | 155 | 161 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | 205 / 250 | 233 / 315 | 265 / 315 | 299 / 355 | 349 / 400 | 408 / 500 | 418 / 500 | 485 / 560 | 572 / 630 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | 73 | 88 | 108 | 129 | 160 | 196 | 236 | 288 | 357 |
| | reduced moment of inertia | J | [kgm ²] | 24,4 | 29,3 | 35,1 | 41,6 | 51,4 | 63,5 | 20,7 | 24,4 | 29,3 |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | 98 / 79 | 100 / 80 | 101 / 81 | 102 / 82 | 104 / 84 | 106 / 85 | 106 / 85 | 107 / 85 | 108 / 85 |
| 2,25 | flow at inlet | V_1 | [m ³ /h] | 4279 | 4941 | 5664 | 6410 | 7423 | 8551 | 8694 | 9711 | 10906 |
| | compressor speed | nHR | [1/min] | 2886 | 3234 | 3612 | 4000 | 4523 | 5104 | 5189 | 5791 | 6490 |
| | motor speed | nM | [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 | [°C] | 162 | 160 | 159 | 158 | 158 | 160 | 161 | 166 | 172 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | 224 / 250 | 254 / 315 | 288 / 315 | 325 / 355 | 377 / 500 | 440 / 500 | 450 / 500 | 521 / 560 | 611 / 700 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | 73 | 88 | 108 | 129 | 160 | 196 | 236 | 288 | 357 |
| | reduced moment of inertia | J | [kgm ²] | 24,4 | 29,3 | 35,1 | 41,6 | 51,4 | 63,5 | 20,7 | 24,4 | 29,3 |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | 98 / 79 | 100 / 80 | 101 / 81 | 102 / 82 | 105 / 84 | 106 / 85 | 106 / 85 | 107 / 85 | 108 / 85 |
| 2,50 | flow at inlet | V_1 | [m ³ /h] | 4261 | 4923 | 5621 | 6368 | 7381 | 8509 | 8652 | 9669 | 10864 |
| | compressor speed | nHR | [1/min] | 2886 | 3234 | 3612 | 4000 | 4523 | 5104 | 5189 | 5791 | 6490 |
| | motor speed | nM | [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 | [°C] | 175 | 173 | 171 | 170 | 173 | 171 | 172 | 176 | 182 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | 243 / 315 | 278 / 315 | 312 / 355 | 351 / 400 | 406 / 500 | 472 / 560 | 482 / 560 | 556 / 630 | 650 / 700 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | 104 | 125 | 108 | 129 | 170 | 196 | 236 | 288 | 357 |
| | reduced moment of inertia | J | [kgm ²] | 24,4 | 29,3 | 35,1 | 41,6 | 51,4 | 63,5 | 20,7 | 24,4 | 29,3 |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | 99 / 80 | 101 / 81 | 101 / 81 | 103 / 83 | 106 / 84 | 107 / 85 | 107 / 85 | 108 / 85 | 109 / 85 |
| 2,75 | flow at inlet | V_1 | [m ³ /h] | 4225 | 4888 | 5610 | 6325 | 7339 | 8467 | 8610 | 9627 | 10822 |
| | compressor speed | nHR | [1/min] | 2886 | 3234 | 3612 | 4000 | 4523 | 5104 | 5189 | 5791 | 6490 |
| | motor speed | nM | [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 | [°C] | 187 | 184 | 183 | 182 | 182 | 182 | 183 | 187 | 193 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | 260 / 315 | 296 / 355 | 337 / 400 | 378 / 500 | 436 / 500 | 505 / 560 | 515 / 560 | 593 / 630 | 690 / 800 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | 104 | 125 | 150 | 129 | 160 | 196 | 236 | 288 | 357 |
| | reduced moment of inertia | J | [kgm ²] | 24,4 | 29,3 | 35,1 | 41,6 | 51,4 | 63,5 | 20,7 | 24,4 | 29,3 |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | 99 / 80 | 101 / 81 | 102 / 82 | 103 / 83 | 106 / 84 | 107 / 85 | 107 / 85 | 108 / 85 | 109 / 85 |
| 3,00 | flow at inlet | V_1 | [m ³ /h] | 4190 | 4852 | 5575 | 6321 | 7334 | 8424 | 8567 | 9584 | 10779 |
| | compressor speed | nHR | [1/min] | 2886 | 3234 | 3612 | 4000 | 4523 | 5104 | 5189 | 5791 | 6490 |
| | motor speed | nM | [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 | [°C] | 199 | 196 | 194 | 193 | 193 | 194 | 194 | 198 | 204 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | 277 / 315 | 314 / 355 | 357 / 400 | 402 / 500 | 467 / 560 | 538 / 630 | 549 / 630 | 630 / 700 | 731 / 800 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | 104 | 125 | 150 | 170 | 220 | 196 | 236 | 288 | 357 |
| | reduced moment of inertia | J | [kgm ²] | 24,4 | 29,3 | 35,1 | 41,6 | 51,4 | 63,5 | 20,7 | 24,4 | 29,3 |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | 100 / 80 | 101 / 82 | 102 / 82 | 103 / 83 | 106 / 84 | 107 / 85 | 107 / 85 | 108 / 85 | 109 / 86 |
| 3,25 | flow at inlet | V_1 | [m ³ /h] | 4154 | 4817 | 5539 | 6285 | 7299 | 8427 | 8570 | 9542 | 10737 |
| | compressor speed | nHR | [1/min] | 2886 | 3234 | 3612 | 4000 | 4523 | 5104 | 5189 | 5791 | 6490 |
| | motor speed | nM | [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 | [°C] | 212 | 208 | 205 | 204 | 203 | 204 | 205 | 210 | 215 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | 294 / 355 | 333 / 400 | 377 / 500 | 424 / 500 | 491 / 560 | 571 / 630 | 583 / 630 | 667 / 800 | 772 / 900 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | 104 | 125 | 150 | 170 | 220 | 270 | 343 | 288 | 357 |
| | reduced moment of inertia | J | [kgm ²] | 24,4 | 29,3 | 35,1 | 41,6 | 51,4 | 63,5 | 20,7 | 24,4 | 29,3 |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | 100 / 80 | 102 / 82 | 103 / 83 | 104 / 83 | 106 / 84 | 108 / 85 | 108 / 85 | 108 / 86 | 109 / 86 |
| 3,50 | flow at inlet | V_1 | [m ³ /h] | 4119 | 4781 | 5504 | 6250 | 7263 | 8391 | 8534 | 9551 | 10746 |
| | compressor speed | nHR | [1/min] | 2886 | 3234 | 3612 | 4000 | 4523 | 5104 | 5189 | 5791 | 6490 |
| | motor speed | nM | [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | 2950 | 2950 |
| | discharge temperature | t_2 | [°C] | 225 | 220 | 216 | 214 | 213 | 214 | 214 | 219 | 226 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ | [kW] | 311 / 355 | 352 / 400 | 398 / 500 | 446 / 500 | 516 / 630 | 598 / 630 | 610 / 700 | 702 / 800 | 816 / 900 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} | [kW] | 104 | 125 | 150 | 170 | 220 | 270 | 343 | 414 | 506 |
| | reduced moment of inertia | J | [kgm ²] | 24,4 | 29,3 | 35,1 | 41,6 | 51,4 | 63,5 | 20,7 | 24,4 | 29,3 |
| | Sound pressure level w/o.h./w.h. | Lp | [dBA] | 101 / 81 | 102 / 83 | 103 / 83 | 105 / 84 | 106 / 84 | 108 / 85 | 108 / 85 | 108 / 86 | 109 / 86 |

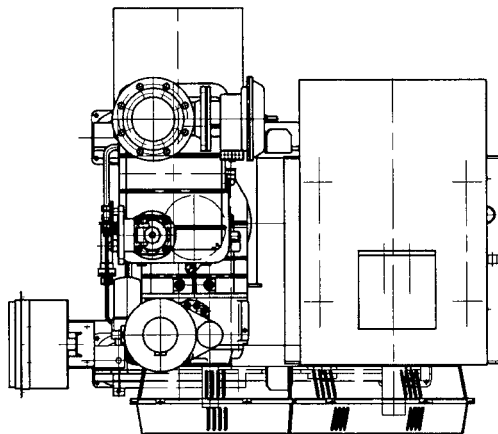
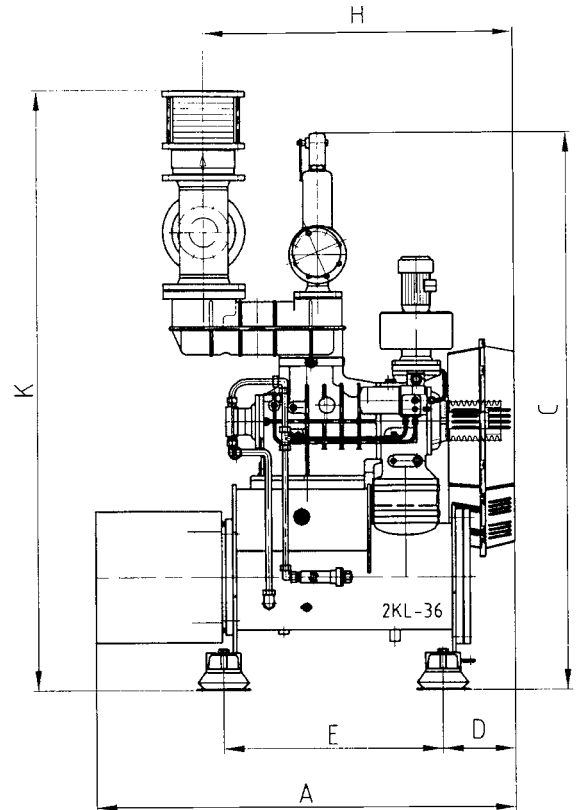
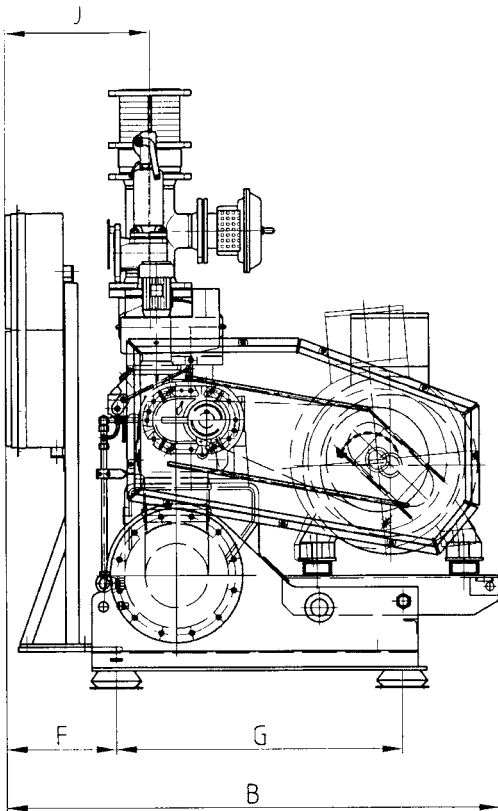
Performance data based on the compression of air ($p_1= 1.0 \text{ bar}$, $t_1= 20 \text{ }^\circ\text{C}$)

| Discharge pressure p_2 [bar gauge] | Compressor size gear ratio | VML 150 | | | | | | | | | | |
|---|---|---------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| | | i [-] | i_5 | i_6 | i_7 | i_8 | i_9 | i_{10} | i_{11} | i_5 | i_6 | |
| 0,75 | flow at inlet | \dot{V}_1 [m ³ /h] | 3980 | 4586 | 5224 | 5981 | 6960 | 7836 | 8870 | 9139 | 10408 | |
| | compressor speed | nHR [1/min] | 2599 | 2912 | 3240 | 3626 | 4123 | 4564 | 5082 | 5216 | 5844 | |
| | motor speed | nM [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | |
| | discharge temperature | t_2 [°C] | 84 | 83 | 83 | 82 | 83 | 84 | 85 | 86 | 88 | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 90 / 110 | 102 / 132 | 115 / 132 | 131 / 160 | 153 / 200 | 175 / 200 | 202 / 250 | 210 / 250 | 248 / 315 | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 37,9 | 44,8 | 53 | 63 | 78 | 93 | 112 | 131 | 163 | |
| | reduced moment of inertia | J [kgm ²] | 10,07 | 12,55 | 15,58 | 19,13 | 24 | 29,83 | 36,74 | 10,07 | 12,55 | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | 97 / 78 | 99 / 80 | 100 / 80 | 101 / 81 | 103 / 82 | 104 / 83 | 104 / 83 | 105 / 84 | 106 / 85 | |
| | flow at inlet | \dot{V}_1 [m ³ /h] | 3906 | 4513 | 5151 | 5907 | 6887 | 7762 | 8796 | 9065 | 10335 | |
| compressor speed | nHR [1/min] | 2599 | 2912 | 3240 | 3626 | 4123 | 4564 | 5082 | 5216 | 5844 | | |
| motor speed | nM [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | | |
| discharge temperature | t_2 [°C] | 104 | 101 | 100 | 99 | 99 | 99 | 99 | 100 | 102 | | |
| power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 115 / 132 | 129 / 160 | 144 / 200 | 163 / 200 | 189 / 250 | 214 / 250 | 245 / 315 | 253 / 315 | 295 / 355 | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 37,9 | 44,8 | 53 | 63 | 78 | 93 | 112 | 131 | 163 | | |
| reduced moment of inertia | J [kgm ²] | 10,07 | 12,55 | 15,58 | 19,13 | 24 | 29,83 | 36,74 | 10,07 | 12,55 | | |
| Sound pressure level w/o.h./w.h. | Lp [dBA] | 98 / 79 | 100 / 80 | 102 / 81 | 103 / 82 | 104 / 83 | 105 / 84 | 106 / 84 | 107 / 84 | 108 / 85 | | |
| flow at inlet | \dot{V}_1 [m ³ /h] | 3873 | 4480 | 5118 | 5834 | 6813 | 7688 | 8722 | 8991 | 10261 | | |
| compressor speed | nHR [1/min] | 2599 | 2912 | 3240 | 3626 | 4123 | 4564 | 5082 | 5216 | 5844 | | |
| motor speed | nM [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | | |
| discharge temperature | t_2 [°C] | 120 | 118 | 117 | 116 | 114 | 114 | 114 | 114 | 116 | | |
| power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 136 / 160 | 153 / 200 | 173 / 200 | 196 / 250 | 225 / 250 | 253 / 315 | 287 / 315 | 297 / 355 | 343 / 400 | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 59 | 70 | 82 | 98 | 120 | 142 | 170 | 192 | 235 | | |
| reduced moment of inertia | J [kgm ²] | 10,07 | 12,55 | 15,58 | 19,13 | 24 | 29,83 | 36,74 | 10,07 | 12,55 | | |
| Sound pressure level w/o.h./w.h. | Lp [dBA] | 99 / 80 | 101 / 81 | 103 / 82 | 104 / 83 | 105 / 84 | 106 / 85 | 106 / 85 | 107 / 85 | 108 / 86 | | |
| flow at inlet | \dot{V}_1 [m ³ /h] | 3815 | 4422 | 5060 | 5816 | 6796 | 7671 | 8649 | 8917 | 10187 | | |
| compressor speed | nHR [1/min] | 2599 | 2912 | 3240 | 3626 | 4123 | 4564 | 5082 | 5216 | 5844 | | |
| motor speed | nM [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | | |
| discharge temperature | t_2 [°C] | 137 | 133 | 131 | 130 | 129 | 129 | 129 | 129 | 130 | | |
| power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 156 / 200 | 176 / 200 | 197 / 250 | 224 / 250 | 260 / 315 | 293 / 355 | 331 / 400 | 341 / 400 | 392 / 500 | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 59 | 70 | 82 | 98 | 120 | 142 | 170 | 192 | 235 | | |
| reduced moment of inertia | J [kgm ²] | 10,07 | 12,55 | 15,58 | 19,13 | 24 | 29,83 | 36,74 | 10,07 | 12,55 | | |
| Sound pressure level w/o.h./w.h. | Lp [dBA] | 103 / 83 | 104 / 83 | 105 / 83 | 105 / 83 | 105 / 84 | 106 / 85 | 107 / 85 | 108 / 85 | 109 / 86 | | |
| flow at inlet | \dot{V}_1 [m ³ /h] | 3757 | 4364 | 5002 | 5758 | 6738 | 7613 | 8647 | 8916 | 10186 | | |
| compressor speed | nHR [1/min] | 2599 | 2912 | 3240 | 3626 | 4123 | 4564 | 5082 | 5216 | 5844 | | |
| motor speed | nM [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | | |
| discharge temperature | t_2 [°C] | 154 | 150 | 146 | 144 | 143 | 142 | 142 | 143 | 144 | | |
| power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 176 / 200 | 198 / 250 | 221 / 250 | 250 / 315 | 289 / 315 | 325 / 355 | 370 / 400 | 382 / 500 | 442 / 500 | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 59 | 70 | 82 | 98 | 120 | 142 | 170 | 192 | 235 | | |
| reduced moment of inertia | J [kgm ²] | 10,07 | 12,55 | 15,58 | 19,13 | 24 | 29,83 | 36,74 | 10,07 | 12,55 | | |
| Sound pressure level w/o.h./w.h. | Lp [dBA] | 103 / 82 | 104 / 83 | 105 / 83 | 106 / 85 | 106 / 85 | 107 / 85 | 107 / 85 | 108 / 86 | 109 / 87 | | |
| flow at inlet | \dot{V}_1 [m ³ /h] | 3699 | 4305 | 4944 | 5700 | 6679 | 7555 | 8589 | 8858 | 10127 | | |
| compressor speed | nHR [1/min] | 2599 | 2912 | 3240 | 3626 | 4123 | 4564 | 5082 | 5216 | 5844 | | |
| motor speed | nM [1/min] | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 2950 | 2950 | | |
| discharge temperature | t_2 [°C] | 172 | 166 | 162 | 159 | 156 | 155 | 155 | 155 | 156 | | |
| power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | 197 / 250 | 220 / 250 | 246 / 315 | 277 / 315 | 318 / 355 | 357 / 400 | 405 / 500 | 418 / 500 | 480 / 560 | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | 59 | 70 | 82 | 98 | 120 | 142 | 170 | 192 | 235 | | |
| reduced moment of inertia | J [kgm ²] | 10,07 | 12,55 | 15,58 | 19,13 | 24 | 29,83 | 36,74 | 10,07 | 12,55 | | |
| Sound pressure level w/o.h./w.h. | Lp [dBA] | 103 / 82 | 104 / 83 | 105 / 83 | 106 / 85 | 107 / 85 | 108 / 86 | 109 / 86 | 109 / 87 | 111 / 87 | | |
| flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | | |
| compressor speed | nHR [1/min] | | | | | | | | | | | |
| motor speed | nM [1/min] | | | | | | | | | | | |
| discharge temperature | t_2 [°C] | | | | | | | | | | | |
| power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | | | | | | | | | | | |
| reduced moment of inertia | J [kgm ²] | | | | | | | | | | | |
| Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | | |
| flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | | |
| compressor speed | nHR [1/min] | | | | | | | | | | | |
| motor speed | nM [1/min] | | | | | | | | | | | |
| discharge temperature | t_2 [°C] | | | | | | | | | | | |
| power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | | | | | | | | | | | |
| reduced moment of inertia | J [kgm ²] | | | | | | | | | | | |
| Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | | |
| flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | | |
| compressor speed | nHR [1/min] | | | | | | | | | | | |
| motor speed | nM [1/min] | | | | | | | | | | | |
| discharge temperature | t_2 [°C] | | | | | | | | | | | |
| power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | | | | | | | | | | | |
| reduced moment of inertia | J [kgm ²] | | | | | | | | | | | |
| Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | | |
| flow at inlet | \dot{V}_1 [m ³ /h] | | | | | | | | | | | |
| compressor speed | nHR [1/min] | | | | | | | | | | | |
| motor speed | nM [1/min] | | | | | | | | | | | |
| discharge temperature | t_2 [°C] | | | | | | | | | | | |
| power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | \dot{P}_{Leer} [kW] | | | | | | | | | | | |
| reduced moment of inertia | J [kgm ²] | | | | | | | | | | | |
| Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | | | |

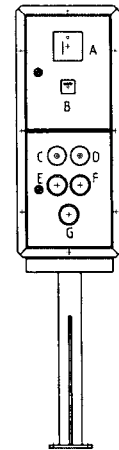
Performance data based on the compression of air ($p_1 = 1.0 \text{ bar}$, $t_1 = 20 \text{ }^\circ\text{C}$)

| Discharge pressure p_2 [bar gauge] | Compressor size | | VML 250 | | | | | | | | |
|---|---|---------------------------|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | gear ratio | | i_1 | i_2 | i_3 | i_4 | i_5 | i_6 | i_7 | i_8 | i_9 |
| 0,75 | flow at inlet | V_1 [m ³ /h] | | 5761 | 6677 | 7698 | 8761 | 9985 | 11417 | 12980 | 14598 |
| | compressor speed | nHR [1/min] | | 1843 | 2071 | 2324 | 2586 | 2886 | 3234 | 3612 | 4000 |
| | motor speed | nM [1/min] | | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 |
| | discharge temperature | t_2 [°C] | | 85 | 84 | 83 | 82 | 82 | 83 | 84 | 85 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | 132 / 160 | 149 / 200 | 169 / 200 | 191 / 250 | 217 / 250 | 250 / 315 | 289 / 315 | 333 / 400 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | 51 | 61 | 73 | 87 | 104 | 126 | 153 | 185 |
| | reduced moment of inertia | J [kgm ²] | | 15,61 | 19,27 | 23,68 | 29,02 | 35,84 | 44,69 | 54,96 | 68,75 |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | 97 / 79 | 98 / 80 | 100 / 82 | 102 / 83 | 104 / 84 | 105 / 85 | 106 / 85 | 107 / 85 |
| | 1,00 | flow at inlet | V_1 [m ³ /h] | | 5683 | 6559 | 7581 | 8643 | 9868 | 11299 | 12863 |
| compressor speed | | nHR [1/min] | | 1843 | 2071 | 2324 | 2586 | 2886 | 3234 | 3612 | 4000 |
| motor speed | | nM [1/min] | | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 |
| discharge temperature | | t_2 [°C] | | 105 | 103 | 101 | 99 | 98 | 98 | 98 | 99 |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | | 168 / 200 | 190 / 250 | 214 / 250 | 240 / 315 | 271 / 315 | 309 / 355 | 353 / 400 | 402 / 500 |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | | 80 | 61 | 73 | 87 | 104 | 126 | 153 | 185 |
| reduced moment of inertia | | J [kgm ²] | | 15,61 | 19,27 | 23,68 | 29,02 | 35,84 | 44,69 | 54,96 | 68,75 |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | | 98 / 80 | 99 / 80 | 100 / 82 | 103 / 83 | 105 / 84 | 106 / 85 | 108 / 86 | 109 / 86 |
| 1,25 | | flow at inlet | V_1 [m ³ /h] | | 5591 | 6507 | 7528 | 8591 | 9750 | 11182 | 12745 |
| | compressor speed | nHR [1/min] | | 1843 | 2071 | 2324 | 2586 | 2886 | 3234 | 3612 | 4000 |
| | motor speed | nM [1/min] | | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 |
| | discharge temperature | t_2 [°C] | | 121 | 119 | 117 | 116 | 115 | 114 | 114 | 114 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | 199 / 250 | 225 / 250 | 256 / 315 | 288 / 315 | 325 / 355 | 368 / 400 | 417 / 500 | 472 / 630 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | 80 | 96 | 115 | 137 | 163 | 196 | 235 | 280 |
| | reduced moment of inertia | J [kgm ²] | | 15,61 | 19,27 | 23,68 | 29,02 | 35,84 | 44,69 | 54,96 | 68,75 |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | 98 / 80 | 99 / 81 | 101 / 82 | 103 / 83 | 105 / 84 | 106 / 85 | 108 / 85 | 110 / 86 |
| | 1,50 | flow at inlet | V_1 [m ³ /h] | | 5498 | 6414 | 7436 | 8498 | 9723 | 11154 | 12718 |
| compressor speed | | nHR [1/min] | | 1843 | 2071 | 2324 | 2586 | 2886 | 3234 | 3612 | 4000 |
| motor speed | | nM [1/min] | | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 |
| discharge temperature | | t_2 [°C] | | 139 | 135 | 132 | 130 | 129 | 129 | 129 | 129 |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | | 229 / 315 | 259 / 315 | 292 / 315 | 328 / 355 | 371 / 500 | 424 / 500 | 485 / 630 | 542 / 630 |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | | 80 | 96 | 115 | 137 | 163 | 196 | 235 | 280 |
| reduced moment of inertia | | J [kgm ²] | | 15,61 | 19,27 | 23,68 | 29,02 | 35,84 | 44,69 | 54,96 | 68,75 |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | | 99 / 81 | 100 / 82 | 102 / 83 | 103 / 83 | 105 / 84 | 106 / 85 | 108 / 85 | 110 / 87 |
| 1,75 | | flow at inlet | V_1 [m ³ /h] | | 5405 | 6322 | 7343 | 8406 | 9630 | 11062 | 12625 |
| | compressor speed | nHR [1/min] | | 1843 | 2071 | 2324 | 2586 | 2886 | 3234 | 3612 | 4000 |
| | motor speed | nM [1/min] | | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 |
| | discharge temperature | t_2 [°C] | | 157 | 152 | 148 | 145 | 143 | 142 | 142 | 142 |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | 260 / 315 | 292 / 315 | 329 / 355 | 368 / 400 | 415 / 500 | 472 / 630 | 537 / 630 | 607 / 710 |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | 80 | 96 | 115 | 137 | 163 | 196 | 235 | 280 |
| | reduced moment of inertia | J [kgm ²] | | 15,61 | 19,27 | 23,68 | 29,02 | 35,84 | 44,69 | 54,96 | 68,75 |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | 100 / 82 | 101 / 83 | 102 / 84 | 104 / 84 | 106 / 85 | 107 / 85 | 109 / 87 | 110 / 87 |
| | 2,00 | flow at inlet | V_1 [m ³ /h] | | 5313 | 6229 | 7251 | 8313 | 9538 | 10969 | 12533 |
| compressor speed | | nHR [1/min] | | 1843 | 2071 | 2324 | 2586 | 2886 | 3234 | 3612 | 4000 |
| motor speed | | nM [1/min] | | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 | 1470 |
| discharge temperature | | t_2 [°C] | | 176 | 170 | 164 | 161 | 158 | 156 | 154 | 154 |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | | 291 / 315 | 326 / 355 | 366 / 400 | 409 / 500 | 459 / 500 | 520 / 630 | 589 / 630 | 664 / 710 |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | | 80 | 96 | 115 | 137 | 163 | 196 | 235 | 280 |
| reduced moment of inertia | | J [kgm ²] | | 15,61 | 19,27 | 23,68 | 29,02 | 35,84 | 44,69 | 54,96 | 68,75 |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | | 101 / 83 | 102 / 84 | 103 / 85 | 104 / 84 | 107 / 85 | 108 / 86 | 109 / 87 | 109 / 87 |
| 2,25 | | flow at inlet | V_1 [m ³ /h] | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | |
| | 2,50 | flow at inlet | V_1 [m ³ /h] | | | | | | | | |
| compressor speed | | nHR [1/min] | | | | | | | | | |
| motor speed | | nM [1/min] | | | | | | | | | |
| discharge temperature | | t_2 [°C] | | | | | | | | | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | | | | | | | | | |
| reduced moment of inertia | | J [kgm ²] | | | | | | | | | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | | | | | | | | | |
| 2,75 | | flow at inlet | V_1 [m ³ /h] | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | |
| | 3,00 | flow at inlet | V_1 [m ³ /h] | | | | | | | | |
| compressor speed | | nHR [1/min] | | | | | | | | | |
| motor speed | | nM [1/min] | | | | | | | | | |
| discharge temperature | | t_2 [°C] | | | | | | | | | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | | | | | | | | | |
| reduced moment of inertia | | J [kgm ²] | | | | | | | | | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | | | | | | | | | |
| 3,25 | | flow at inlet | V_1 [m ³ /h] | | | | | | | | |
| | compressor speed | nHR [1/min] | | | | | | | | | |
| | motor speed | nM [1/min] | | | | | | | | | |
| | discharge temperature | t_2 [°C] | | | | | | | | | |
| | power at shaft / motor rating | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| | power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | P_{Leer} [kW] | | | | | | | | | |
| | reduced moment of inertia | J [kgm ²] | | | | | | | | | |
| | Sound pressure level w/o.h./w.h. | Lp [dBA] | | | | | | | | | |
| | 3,50 | flow at inlet | V_1 [m ³ /h] | | | | | | | | |
| compressor speed | | nHR [1/min] | | | | | | | | | |
| motor speed | | nM [1/min] | | | | | | | | | |
| discharge temperature | | t_2 [°C] | | | | | | | | | |
| power at shaft / motor rating | | $\dot{P}_{K/Mot}$ [kW] | | | | | | | | | |
| power, idling $p_1 = p_2 = 1,0 \text{ bar}$ | | P_{Leer} [kW] | | | | | | | | | |
| reduced moment of inertia | | J [kgm ²] | | | | | | | | | |
| Sound pressure level w/o.h./w.h. | | Lp [dBA] | | | | | | | | | |

**Sizes - DELTA SCREW - VML 18 R - VML 40 R
VM 8 R - VM 37 R**



- Instrument panel VMR
 A fault indicator
 B operating hour meter
 C discharge temperature
 D oil temperature
 E discharge pressure
 F oil pressure
 G maintenance indicator
 air filter

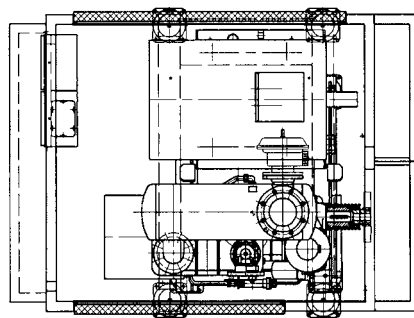
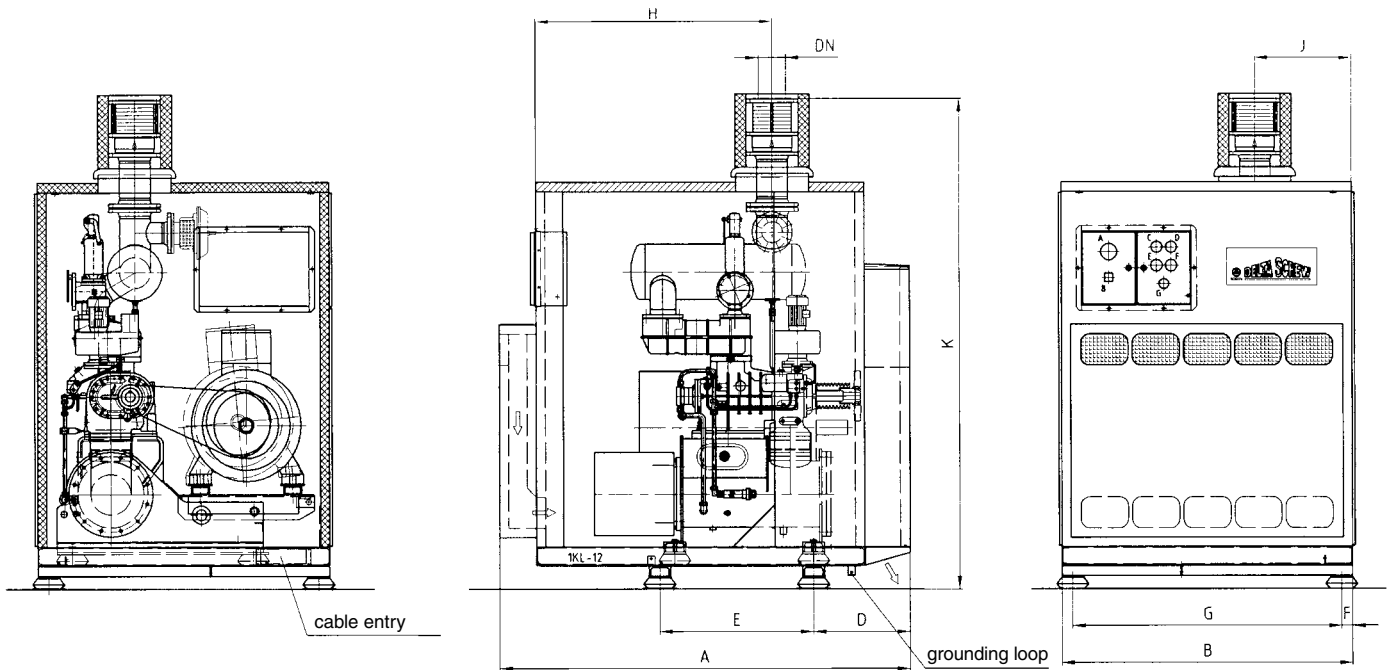


Dimensions without engagement !

| size | A | B | C | D | E | F | G | H | J | K | DN DS | PN | oil filling in litres | weight in kg without motor |
|----------|------|------|------|-----|-----|-----|-----|------|-----|---------------|----------|----|--------------------------|----------------------------------|
| VML 18 R | 990 | 1430 | 1542 | 320 | 500 | 382 | 750 | 679 | 863 | 1743 | 80 | 16 | 8 | 600 |
| VML 25 R | 1274 | 1610 | 1802 | 357 | 654 | 380 | 750 | 1086 | 392 | 2112 | 125 | 16 | 21 | 800 |
| VML 40 R | 1579 | 1756 | 2084 | 325 | 759 | 380 | 990 | 1170 | 572 | 2199 | 150 | 16 | 32 | 950 |
| VM 8 R | 1175 | 1375 | 1368 | 337 | 525 | 335 | 850 | 861 | 480 | 1242 | 65 | 16 | 20 | 620 |
| VM 15 R | 1222 | 1610 | 1678 | 375 | 584 | 380 | 750 | 950 | 412 | 1368 1659* | 65 | 16 | 26 | 650 |
| VM 21 R | 1292 | 1610 | 1678 | 375 | 654 | 380 | 750 | 1000 | 412 | 1403 1728* | 80 | 16 | 30 | 850 |
| VM 37 R | 1551 | 1705 | 1905 | 250 | 759 | 380 | 990 | 1170 | 572 | 1876 2335* | 150 | 16 | 38 | 1000 |

* with start-up unloading device

**Sizes - DELTA SCREW - VML 18 R - VML 40 R
VM 8 R - VM 37 R**



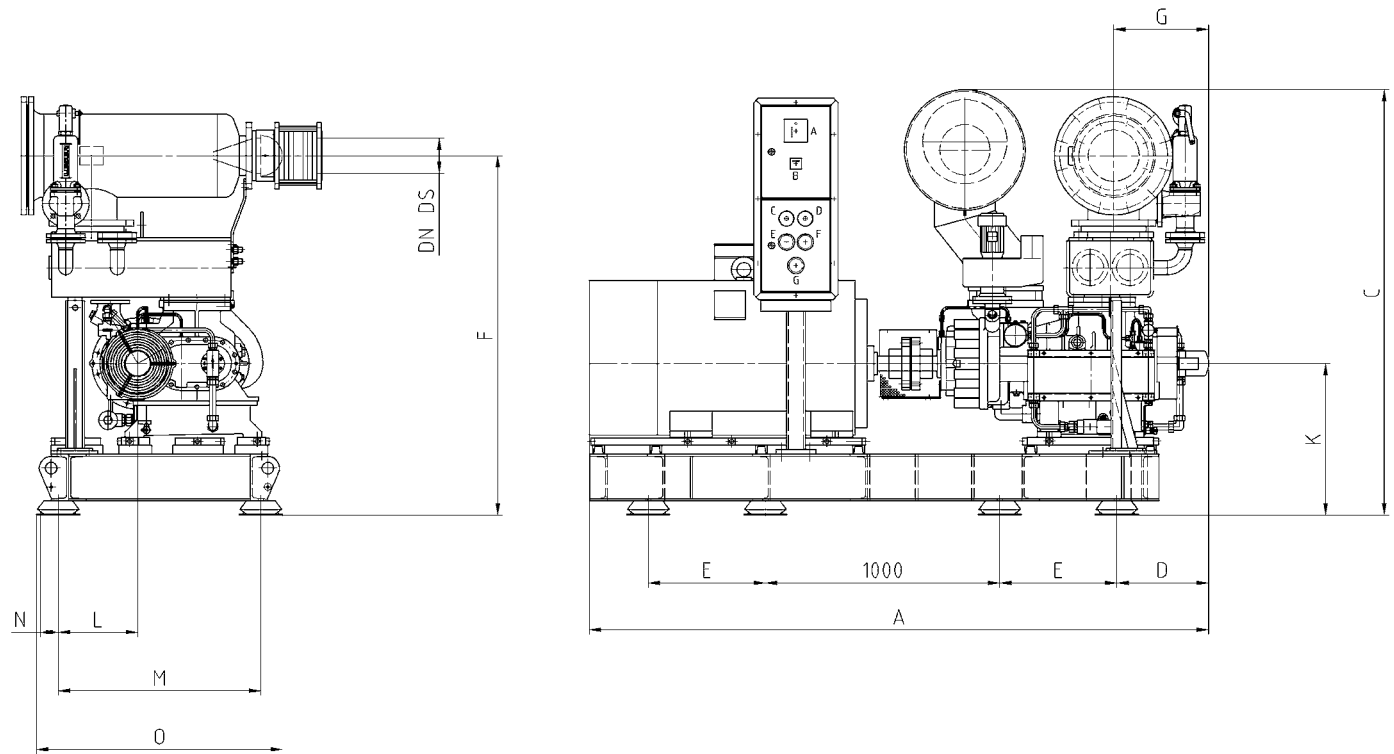
- Instrument panel VMR
 A fault indicator
 B operating hour meter
 C discharge temperature
 D oil temperature
 E discharge pressure
 F oil pressure
 G maintenance indicator air filter

Dimensions without engagement !

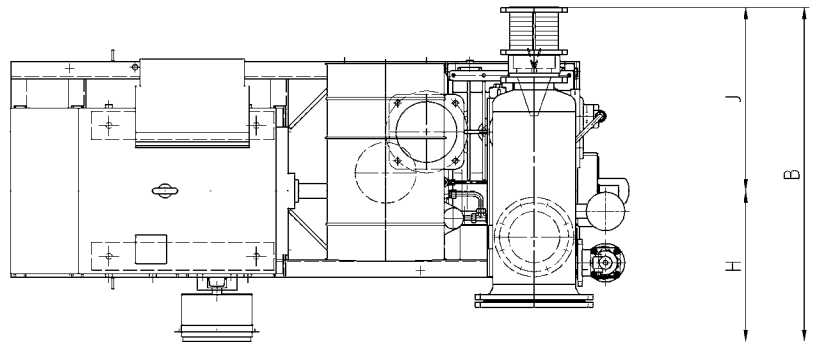
| size | A | B | C | D | E | F | G | H | J | K | DN DS | PN | oil filling in litres | weight in kg without motor |
|------------|------|------|------|-----|------|-----|------|------|-----|------|----------|----|--------------------------|----------------------------------|
| VML 18 R** | 1605 | 1250 | 1570 | 330 | 1090 | 130 | 845 | 531 | 661 | 1908 | 80 | 16 | 8 | 850 |
| VML 25 R | 1910 | 1600 | 2100 | 529 | 741 | 60 | 1480 | 430 | 320 | 2261 | 125 | 16 | 21 | 1300 |
| VML 40 R | 2350 | 1700 | 2350 | 579 | 841 | 60 | 1580 | 667 | 358 | 2516 | 150 | 16 | 32 | 1500 |
| VM 8 R | 1605 | 1250 | 1575 | 330 | 1090 | 200 | 850 | 746 | 483 | 1675 | 65 | 16 | 20 | 1120 |
| VM 15 R | 1825 | 1500 | 1900 | 537 | 700 | 60 | 1380 | 1019 | 523 | 2027 | 65 | 16 | 26 | 1150 |
| VM 21 R | 1910 | 1600 | 2100 | 529 | 741 | 60 | 1480 | 1055 | 540 | 2270 | 80 | 16 | 30 | 1350 |
| VM 37 R | 2350 | 1700 | 2350 | 579 | 841 | 60 | 1580 | 1297 | 663 | 2516 | 150 | 16 | 38 | 1550 |

** second silencer outside the acoustic hood

**Sizes - DELTA SCREW - VML 60 - VML 95
VM 45 - VM 75**



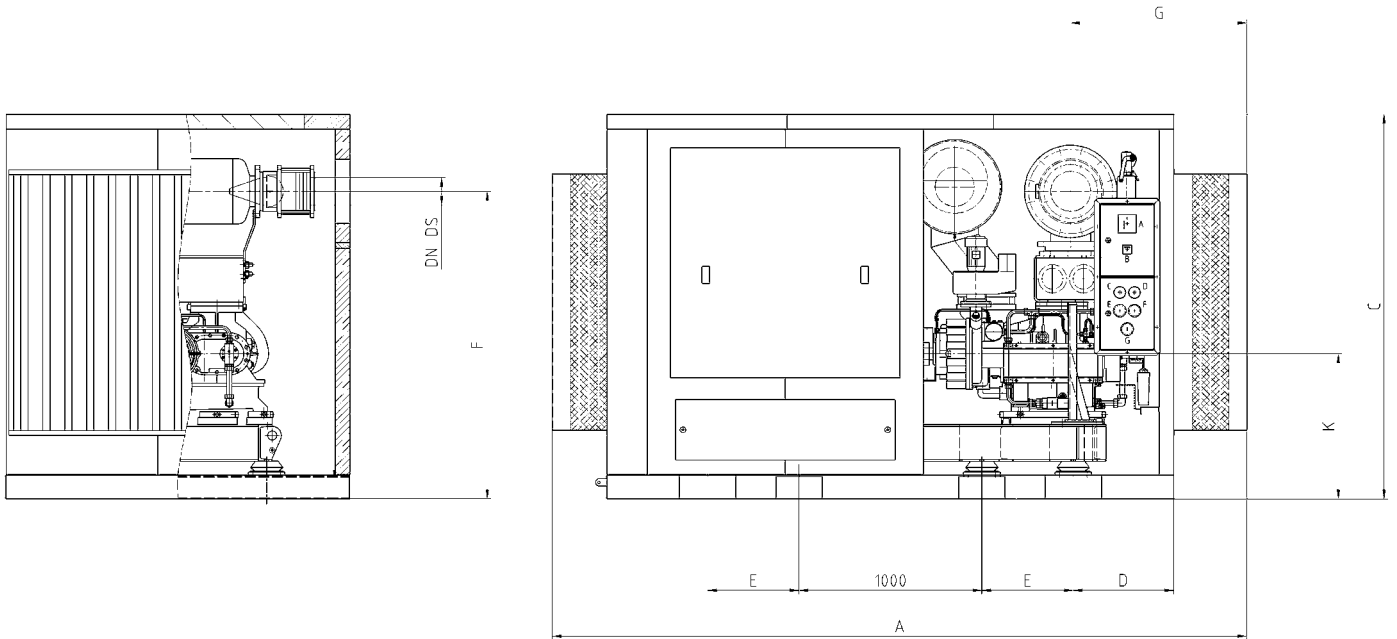
- Instrument panel VMR
 A fault indicator
 B operating hour meter
 C discharge temperature
 D oil temperature
 E discharge pressure
 F oil pressure
 G maintenance indicator air filter



Dimensions without engagement !

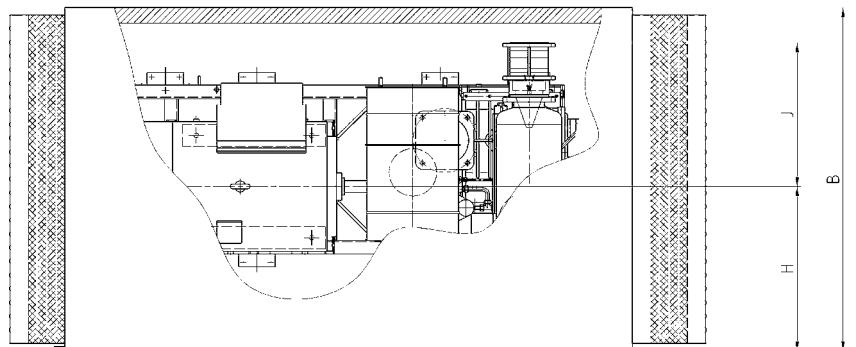
| size | A | B | C | D | E | F | G | H | J | K | L | M | N | O | DN DS | PN | weight in kg without motor |
|--------|------|------|------|-----|-----|------|-----|-----|------|-----|-----|------|----|------|----------|----|----------------------------------|
| VM 45 | 2643 | 1432 | 1817 | 391 | 500 | 1534 | 405 | 645 | 787 | 647 | 340 | 865 | 75 | 1049 | 150 | 16 | 1490 |
| VML 60 | 2643 | 1452 | 1817 | 391 | 500 | 1534 | 405 | 645 | 807 | 647 | 340 | 865 | 75 | 1049 | 200 | 10 | 1470 |
| VM 75 | 3098 | 1804 | 2130 | 433 | 700 | 1768 | 428 | 701 | 1103 | 730 | 391 | 1040 | 75 | 1224 | 200 | 10 | 2550 |
| VML 95 | 3098 | 1827 | 2130 | 433 | 700 | 1768 | 428 | 701 | 1126 | 730 | 391 | 1040 | 75 | 1224 | 250 | 10 | 2520 |

**Sizes - DELTA SCREW - VML 60 - VML 95
VM 45 - VM 75**



Instrument panel VMR

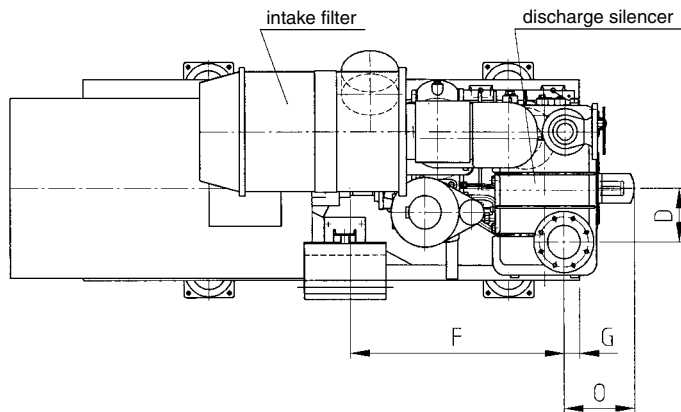
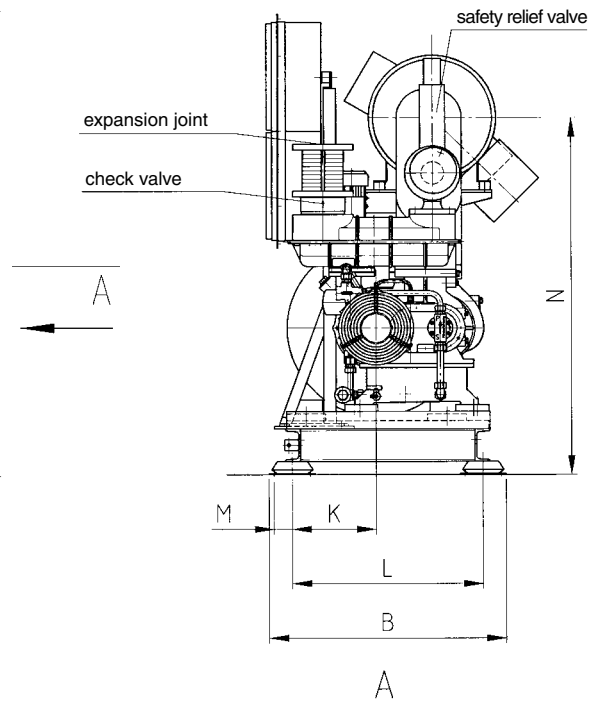
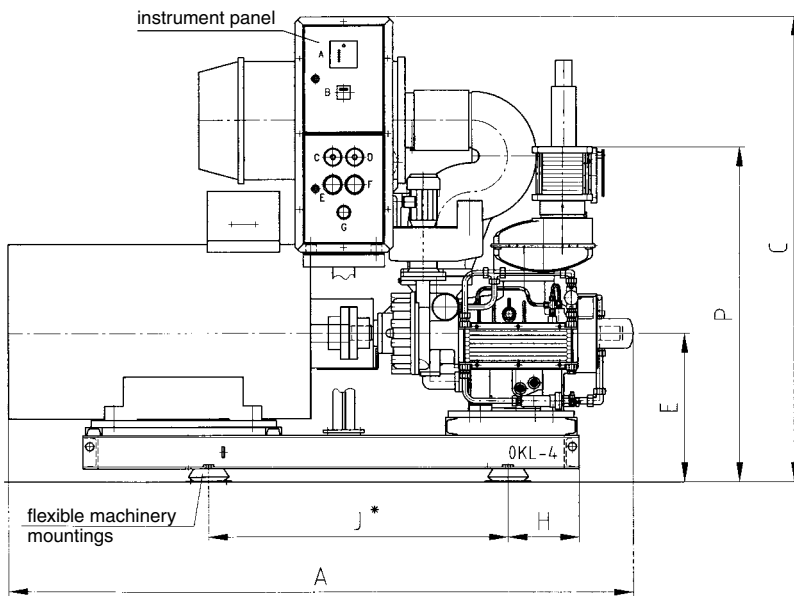
- A fault indicator
- B operating hour meter
- C discharge temperature
- D oil temperature
- E discharge pressure
- F oil pressure
- G maintenance indicator air filter



Dimensions without engagement !

| size | A | B | C | D | E | F | G | H | J | K | DN DS | PN | weight in kg without motor |
|--------|------|------|------|-----|-----|------|------|-----|------|-----|-------|----|----------------------------|
| VM 45 | 3800 | 1880 | 2100 | 550 | 500 | 1680 | 964 | 900 | 787 | 793 | 150 | 16 | 2820 |
| VML 60 | 3800 | 1880 | 2100 | 550 | 500 | 1680 | 964 | 900 | 807 | 793 | 200 | 10 | 2850 |
| VM 75 | 4350 | 1960 | 2375 | 720 | 700 | 1914 | 1117 | 891 | 1374 | 876 | 200 | 10 | 4020 |
| VML 95 | 4350 | 1960 | 2375 | 720 | 700 | 1914 | 1117 | 891 | 1367 | 876 | 250 | 10 | 4000 |

Sizes - DELTA SCREW - VM 85 and VM 140



- Instrument panel VMR
- A fault indicator
 - B operating hour meter
 - C discharge temperature
 - D oil temperature
 - E discharge pressure
 - F oil pressure
 - G maintenance indicator air filter

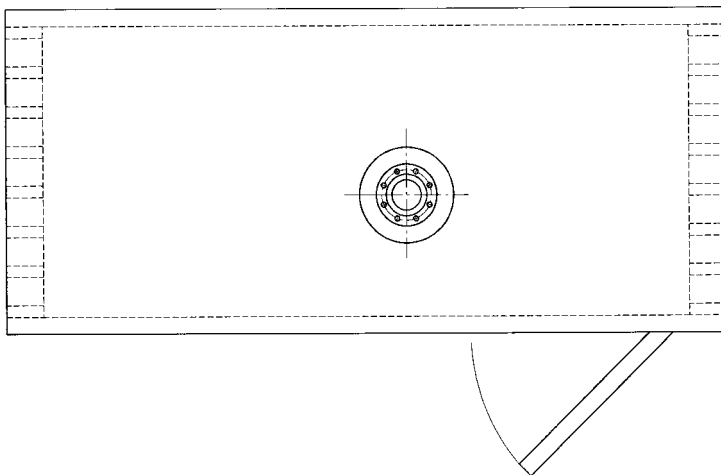
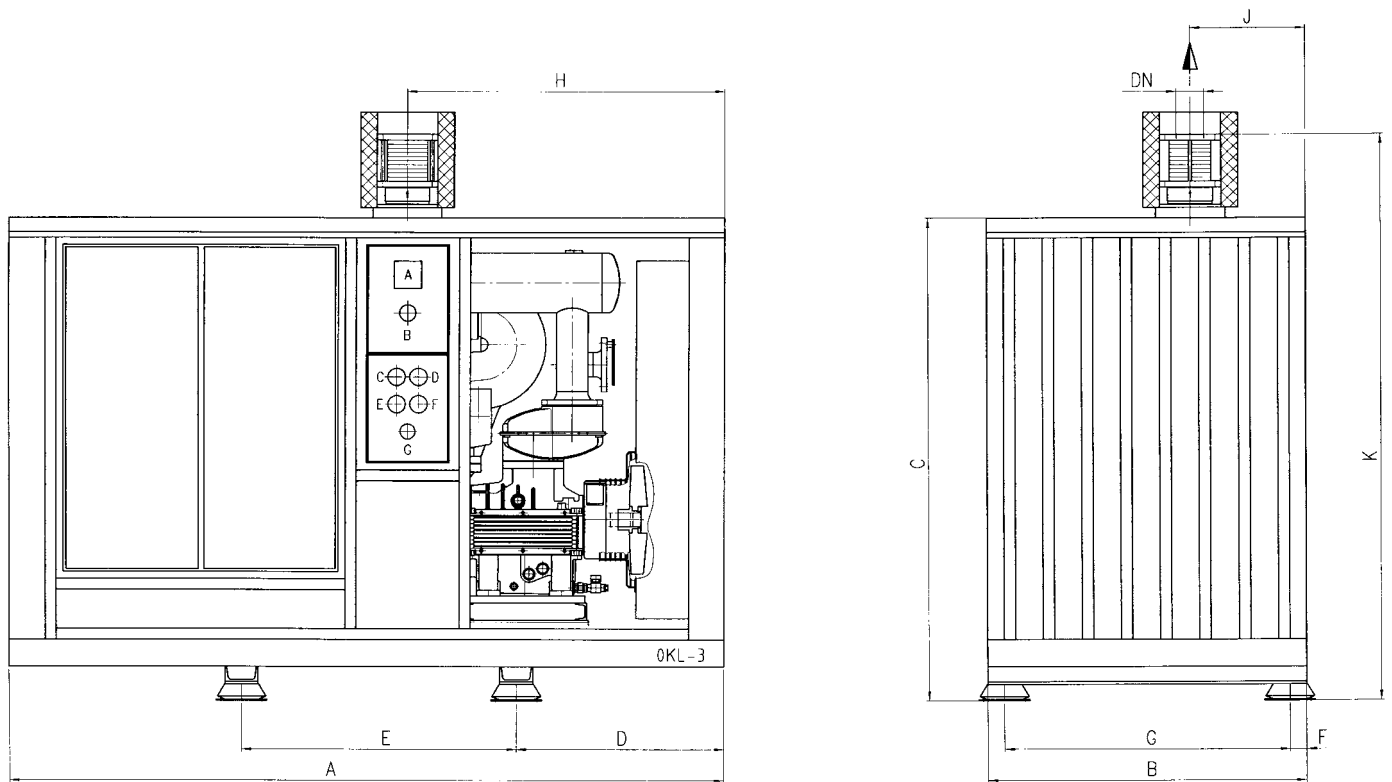
Dimensions without engagement !

| size | A* | B | C | D | E | F | G | H | J* | K | L | M | N | O | P | DN DS | PN | DN** DS | PN | weight in kg without motor |
|--------|------|------|------|-----|-----|------|-----|-----|--------|-----|------|----|------|-----|------|-------|----|---------|----|----------------------------|
| VM 85 | 3265 | 1485 | 2010 | 267 | 735 | 1203 | 86 | 150 | 2x1000 | 415 | 1130 | 75 | 1750 | 558 | 2123 | 200 | 10 | 300 | 10 | 3220 |
| VM 140 | 3720 | 1730 | 3050 | 195 | 950 | 1384 | 151 | 150 | 3x950 | 400 | 1300 | 75 | 1990 | 455 | 2802 | 250 | 10 | 350 | 10 | 5250 |

* size depending on driving motor (in chart: max. motor)

** nominal width of bare shaft compressor

Sizes - DELTA SCREW - VM 85 and VM 140



Instrument panel VMR

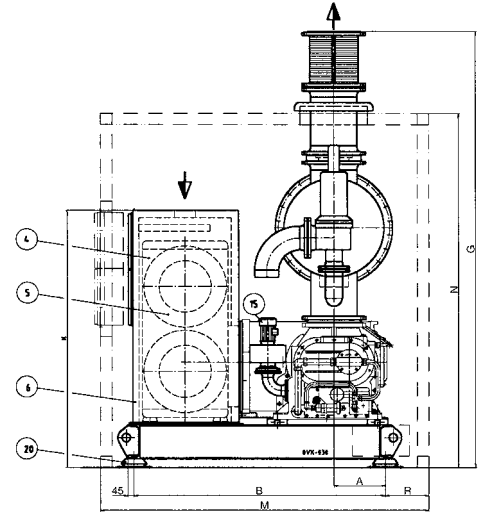
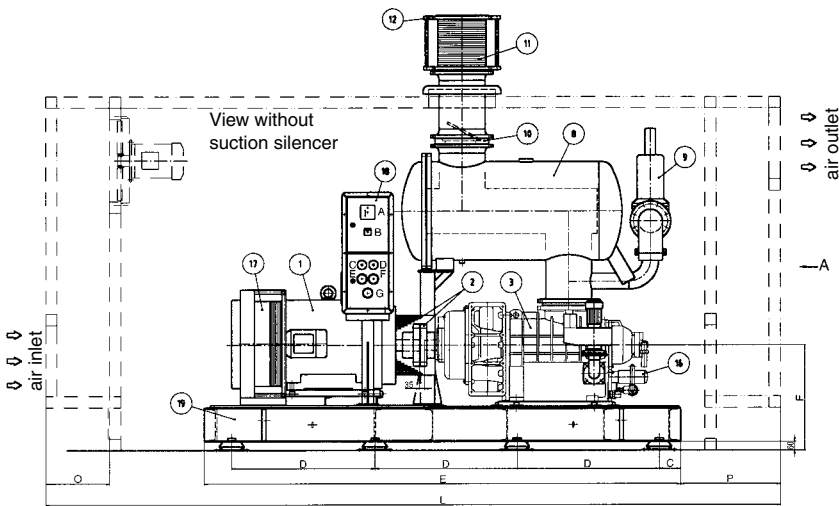
- A fault indicator
- B operating hour meter
- C discharge temperature
- D oil temperature
- E discharge pressure
- F oil pressure
- G maintenance indicator air filter

Dimensions without engagement !

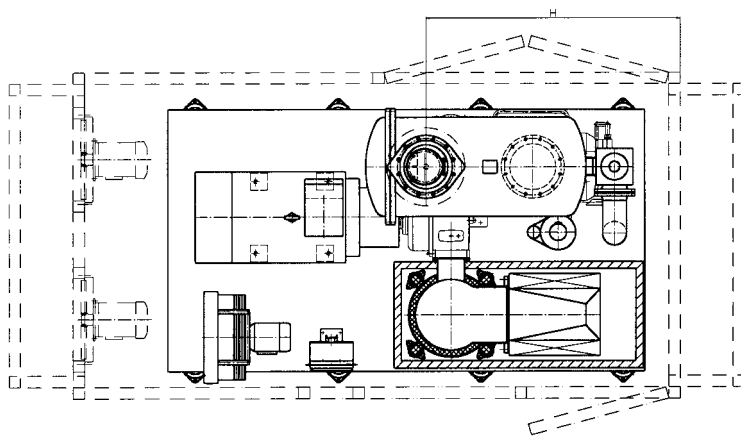
| size | A* | B | C | D | E | F | G | H | J | K | DN DS | PN | oil filling in litres | weight in kg without motor | swivelling range of the doors |
|--------|------|------|------|-----|---------|----|------|-----|-----|------|----------|----|--------------------------|----------------------------------|----------------------------------|
| VM 85 | 4000 | 1775 | 2310 | 875 | 2x1000* | 60 | 1655 | 981 | 534 | 2650 | 200 | 10 | 50 | 6000 | 1000 |
| VM 140 | 4350 | 2000 | 2650 | 900 | 3x850* | 70 | 1860 | 901 | 605 | 3500 | 250 | 10 | 65 | 8500 | 900 |

* size depending on driving motor (in chart: max. motor)

Sizes VML 150 - VML 250



view A



ATTENTION!
Overall dimensions
depending on size of motor

Instrument panel

- A fault indicator *
- B operating hour meter *
- C discharge temperature *
- D oil temperature *
- E discharge pressure
- F oil pressure
- G air intake filter maintenance

- 1. driving motor
- 2. coupling and coupling guard
- 3. compressor
- 4. intake silencer
- 5. air filter
- 6. sound dampening
- 8. discharge silencer
- 9. safety relief valve
- 10. non-return valve

- 11. axial compensator
- 12. connection flange discharge side
- 13. connection flange safety relief valve
- 15. oil mist separator
- 16. oil filter
- 17. oil cooler
- 18. instrument cabinet
- 19. base frame
- 20. flexible machinery mountings

* only upon request

Dimensions without engagement !

| size | A | B | C | D | E | F | G | H | K | L | M | N | O | P | R | DN | oil filling in litres | weight approx. kg without motor and acoustic hood |
|---------|-----|------|-----|------|------|-----|----------------|------|------|------|------|------|-----|-----|-----|-----|-----------------------|---|
| VML 150 | 360 | 1760 | 150 | 1000 | 3340 | 740 | x 2693 2923 | 1785 | 1815 | 5150 | 2300 | 2500 | 450 | 700 | 305 | 300 | 45 | 5000 |
| VML 250 | 455 | 2020 | 200 | 1000 | 4000 | 950 | x 3000 3500 | 1950 | 2500 | 5500 | 2600 | 3000 | 450 | 700 | 290 | 400 | 90 | 7100 |

x Dimensions without acoustic hood



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