

SCREW COMPRESSORS

DELTA SCREW

Direct Drive. Oil-free. Pressure range of up to 4.5 bar (a).

Delivers volume flows ranging from 350 m³/h to 15,000 m³/h.



AERZEN

DELTA SCREW.

A SINGLE SERIES FOR ALL VOLUME FLOWS.

- Unique range of applications
- High efficiency
- Low life-cycle costs
- High durability and long service life
- Low maintenance requirement
- Oil-free in accordance with ISO 8573-1, class 0
- 100% free of absorption materials*
- Made in Germany by AERZEN



Some of the world's best-selling compressors: Delta Screw direct-drive assemblies. Why? Because few compressors fulfil even the most demanding client requirements with greater consistency. Because a single machine covers a broad range

of volume flows. Because of their efficiency. Because they are legendary for their operational availability and longevity. And finally, because they enjoy a singular advantage: they are 'Made by AERZEN'.

* Delta Screw E-Compressor discharge silencer






COUNTLESS PROCESSES. NO COMPROMISE.

When it comes to versatility, the compressors in the Delta Screw series beat out every machine in their class. AERZEN's flexible and highly efficient assemblies offer the widest variety of models available today, capable of handling the largest number of modifications and the broadest range of accessories. To put it simply: they are the right compressors for all your process requirements. Right-sized, no compromises.

11 models. A world of possibilities.

AERZEN's screw compressors operate reliably in every temperature zone, indoors and out, in mobile or stationary deployment. What makes the Delta Screw so flexible? The answer is simple: 11 direct-drive machines, 2 compressor groups (VM and VML) with a specialised AERZEN rotor profile, a choice of discharge port sizes in the cylinder for ideal internal compression, and an almost unlimited spectrum of possible

adaptations and accessories. Designed for the compression of air, nitrogen, and other neutral gases, Delta Screw compressors are ideal for almost any possible application. The range of our extended Delta Screw series also includes 7 belt-driven compressor models for volume flows (actual delivery depends on intake parameters) ranging from 120m³/h to 2,650m³/h.

				
Flow control from 30% to 100%	Volume flows ranging from 350m ³ /h to 15,000m ³ /h	Pressure range: positive pressure to 4.5 bar (a), vacuum pressure to -850 mbar	Wind loads up to 210 km/h	Ambient temperatures -40 °C to +60 °C



Refining



Power generation

Compression under extreme conditions.

Regardless of where your production facilities are, Delta Screw will put the pressure on. Just as reliable at +60 °C as at -40 °C. In the desert, in the Arctic, in earthquake zones,

on ships, on trucks, or for just about any other stationary or mobile application. Any exceptions? None to date. We like a challenge.



Applications

- Conveying and compressing neutral and special gas types
- Pneumatic transport (using air or nitrogen) of powder, pellets, ashes, etc.
- Homogenisation, loading, and unloading of cement, lime, etc.
- Vacuum generation for the production of glass containers
- Gas/air mixing systems
- Flue gas desulphurisation and oxidation air for power plants
- Truck transport (e.g. stationary unloading, combined vacuum/pressure operations)
- Blast air for nonwoven fabric manufacture
- Fermentation
- Instrument-grade air
- Booster applications



Industries

- Chemical and petrochemical
- Cement
- Food and beverage
- Power plant technology
- Glass
- Paper
- Plastics
- Steel and iron
- Textiles
- Pharmaceutical and cosmetics
- Medical technology
- Mining and smelting technology
- Electronics and solar technology
- Oil and gas
- Biogas

Applications for shipping and ports.

- Loading and unloading of ships
- Anti-heeling systems
- Icebreaker operation ('duck walk')
- Reducing ship propeller noise (cavitation interruption)
- Waste water treatment (e.g. on-board sewage treatment, cleaning ballast water)
- Pre-compression for sound tests in seismic applications
- Supercharging or pre-compression for compressed air production in submarines
- Air lubrication of ship hulls (creation of surface air pockets (bubbles))
- Keeping lakes, ports and locks free of ice (air bubbling)
- Deploying oil booms
- Aerating lakes
- Pneumatic conveyance
- Creating air curtains while pile-driving foundations for the offshore industry

Class 0. Oil-free for sensitive processes.

Some processes have zero room for tolerance; those in the food or pharmaceutical industries, for example. In these cases, 100% oil-free processes are a necessity. The Delta Screw's sophisticated design can guarantee this on a long-

term basis. The Delta Screw features a closed loop oil circulation system, special rotor shaft seals, and a permanent vacuum in the oil chamber. Oil-free pressurised air delivery, certified ISO 8573-1, class 0 by TÜV Rheinland.

Guaranteed safety.

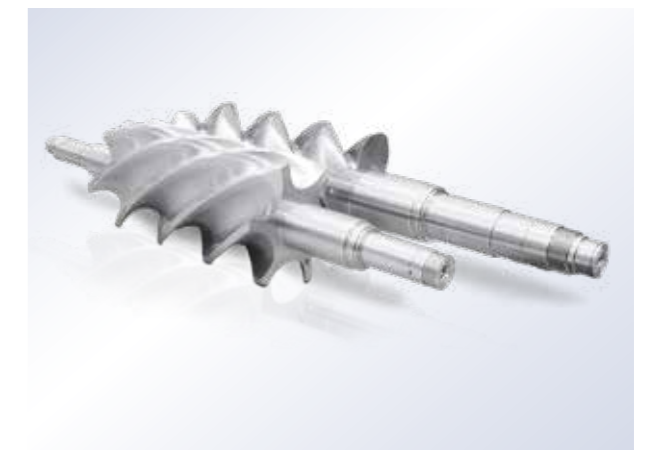
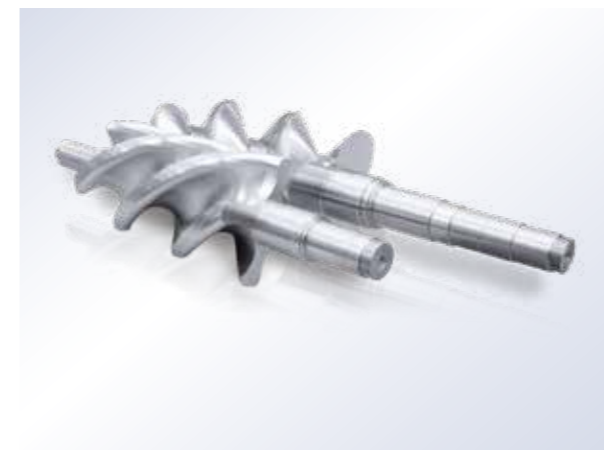
Abrasive absorption materials pose a risk in production processes. The best solution is to fully eliminate the use of absorption material. In all Delta Screw E-Compressor models, discharge side silencing takes place without the use of any absorption materials whatsoever.

AERZEN's innovative design (European patent No. 1857682) assures that downstream processes will not be contaminated; maintaining food safety during the pneumatic transport of bulk materials, for example. Our Delta series also features special filters (suction side) and food-grade lubricants.

Outstanding rotor geometries for added efficiency at both negative and positive pressures.

Relying on years of successful deployment and continual development, our special AERZEN rotor profile can save up to 15% energy compared to conventional screw compressor air-

end rotor profiles. Specially developed low-pressure profiles are used in every AERZEN screw compressor block. With either a 3+4 or 4+6 profile, your compressor will always be operating within its optimal range – and at optimal efficiency.



The compressor group is characterised by 3+4 rotors. VML for volume flows from 920 m³/h to 15,000 m³/h. Ideal for positive pressure applications up to compression ratio 3 (end to suction pressure), and superior performance for negative pressure operations up to a 70% vacuum (-700 mbar), or 85% vacuum (-850 mbar) in the pre-inlet version.*

4+6 rotors are used in the AERZEN VM compressor stages. Designed specifically for positive-pressure ranges (up to a compression ratio of 4.5) and for volume flows ranging from 350 m³/h to 9,220 m³/h.

* Volume flow (corresponds to the delivery volume flow measured according to ISO 1217 and converted to the reference suction conditions according to the (informative) Annex F of ISO 1217 [inlet pressure = 1.0 bar / inlet temperature = 20°C, RH = 0%])

ATEX APPLICATIONS. SAFETY IN EVERY ZONE.

AERZEN compressor packages have long been applied in critical areas. The AERZEN Delta Screw portfolio offers solutions for practically every ATEX zone that are unique in their breadth and efficacy.

Expertise. The AERZEN safety plus.

Do your processes operate under the special EU regulation known as ATEX Product Guideline 2014/34/EU? Well. Then you have come to the right place. Our experienced team of ATEX specialists are familiar with almost all potential problems. They will develop the optimal unit design for your process environment, including all necessary accessories and documentation.

Technology. Taking the lead.

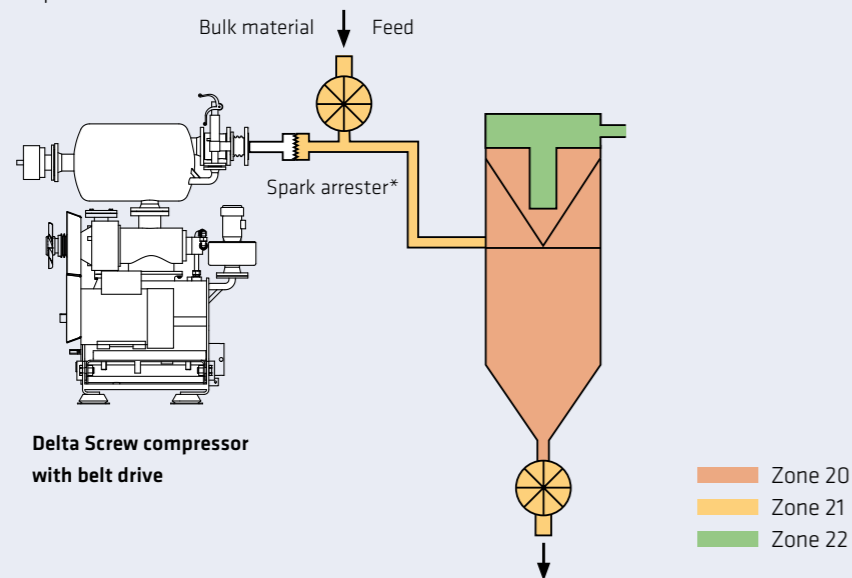
The AERZEN Delta Screw series offers the right solution for your ATEX zone. Custom built and, of course, TÜV-approved. Regardless of whether they will be used for positive or negative pressures. The technology will be designed on an individual basis, according to zone and customer specification. AERZEN's portfolio for configuring your facility in compliance with ATEX regulations.

A closer look.

- Special documentation
- Specialised materials for components coming into contact with media
- Ex-instrumentation
- Specialised coupling
- Vibration monitoring
- Spark arrester
- Specialised motors (depending on the zone)
- Certification of conformity based on 2014/34/EU
- Filter monitoring
- Special paint for II C gases

Pressure conveyance.

The AERZEN spark arrester



* Machine-side spark arrester can be omitted with certain AERZEN compressors



5 x E. DISCOVER THE PRINCIPLES BEHIND DELTA SCREW'S SUCCESS.

Efficiency. Essentials. Ecology. Elasticity. Evolution:

AERZEN's guiding principles for success are best expressed in the 5 'E's, which result in a number of intelligent details and a well-planned new generation of compressors: the Delta Screw.

Efficiency

Increased energy efficiency

- Motors operating in the latest energy efficiency class
- Efficient acoustic hood ventilation
- Reduced pressure losses in both assembly and accessories (e.g. aftercooler, cyclone separator)
- Internal compression selected according to system pressure, resulting in significant energy savings

Lower TCO

- Up to 6% energy savings
- Low maintenance costs
- Flexible on-site service

Cool external supply air (E-compressor)

- Compressor air intake from outside the acoustic hood
- Up to 10° Kelvin lower intake temperature
- Separate intakes for process and cooling air

Essentials

Plug & play

- Completely pre-installed assembly (all-in)
- Ready to run
- Includes initial Delta Lube 06 oil supply

User friendly

- Front-side access only
- Intelligent AERtronic controls
- Extensive interface options for communicating with the process monitoring system

Sophisticated oil system

- Extended oil change intervals of up to 16,000 operating hours
- No need for an oil change after 500 operating hours
- Oil instead of grease: oil-lubricated bearings for greater longevity

Extremely durable compressor unit

- High degree of reliability under all environmental conditions
- Exceptional longevity
- AERZEN bearings for increased service life (40,000 operating hours or more)

Simplified maintenance requirements

- Large service doors on both control side and rear
- Safe, rapid access to service components
- Intelligent acoustic hood design for rapid, problem-free motor exchange
- Optional vibration monitoring and analysis



Elasticity

AERZEN low pressure profiles

- Profile optimisation for significant energy savings
- Two profiles: 3+4 (for VML compressors) and 4+6 (for VM compressors)

Uniquely flexible.

- First in its class: the largest volume flows in a single machine
- A broad range of applications with a flow control range between 30% and 100%
- Volume flows ranging from 350 m³/h to 15,000 m³/h
- Belt-driven models expandable in the 120 m³/h to 2,650 m³/h range
- Extensive array of modifications and accessories

Wide choice of models

- 11 direct-drive screw compressors to date (series currently under expansion)
- VM, VML, and E-compressors G5-E

Special acoustic hoods for difficult environmental conditions

- For stricter noise control requirements
- For installation in deserts (with sand separators)
- For deployment on trucks, aboard ships, or in earthquake zones
- Integrated heater and gravity louver blinds available for operation in polar regions
- For wind loads of up to 210 km/h (special structural design)

Evolution

Client-specific solutions

- Compressor, accessories and documentation developed in accordance with client requirements

Authorisation for use in compliance with current legal requirements

- Pressure Equipment Directive PED 2014/68/EU
- Alternatively, any preferred local certification for use around the world
- ASME-compliant safety valve and discharge-side silencer
- Customer acceptance or receipt certificate in accordance with Lloyd's Register, DET Norske Veritas, Germanischer Lloyd and ABS

ATEX-certified

- Machine design conforms to ATEX Product Guideline 2014/34/EU

Ecology

Oil-free in accordance with class 0

- Integrated vacuum generator to guarantee oil-free conditions
- 100% oil-free in accordance with ISO 8573-1, TÜV-certified

Intelligent reduction of noise levels

- Innovative, multifunctional acoustic hood design to keep machine noise low
- Groundbreaking 3-chamber reactive silencer, free of absorption materials (European patent No. 1857682)

Environmental awareness

- Low emission levels
- Delta Screw compressors are almost entirely recyclable

DELTA SCREW E-COMPRESSORS: WHERE THE SAVINGS PAY FOR THE MACHINE.

Using 6% less energy compared to conventional compressors, the AERZEN E-class represents a significant step towards meeting legal and company energy saving initiatives. And with almost 90% of total unit cost taken up by energy use, it also means releasing serious potential that can be devoted to environmental protection, improved company liquidity, and reduced life cycle costs.

E as in Energy Savings.

Up to 6% less energy usage: the Delta Screw E-class sets a new standard for modern compressor technology. Our success rests on a series of innovative ideas from our R&D department

that decisively lower energy and maintenance costs. They explain the difference between conventional compressors and E-compressors:

- Exclusive use of direct drives
- External process air intake
- Intelligent cooling design: use of an electric cooling fan instead of a mechanically driven fan inside the acoustic hood. The design provides ideal ventilation under the acoustic hood while ensuring minimal energy consumption. Outside cooling air for the oil cooler is also sent directly via an intake duct.
- Intelligent reduction of pressure loss in stages and accessories via:

1. Direct supply of outside air to the intake filter
2. Optimised flow channels
3. Specifically adapted flow cross-sections for accessory components
4. An innovative noise silencer that is flow-optimised and free of absorption materials. Mounted vertically directly on top of the compressor stage and 100% power decoupled (two expansion joints), it reduces noise pressure level in the piping by up to 35dB. The best thing: it does not rely on absorption materials, which tend to disintegrate and contaminate downstream processes.

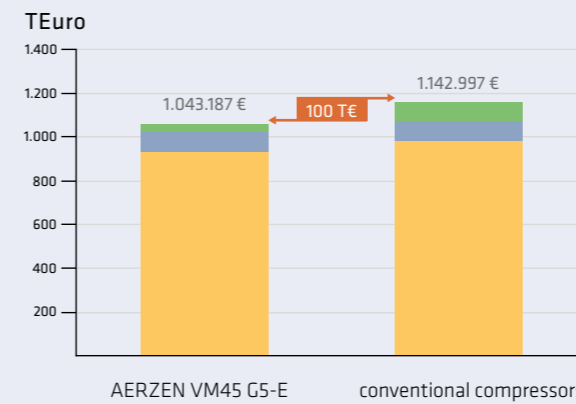


Silo loading and unloading

E-compressors vs. conventional compressors: comparing life cycle costs.

The calculations are for an operational lifespan of 10 years and are based on the following assumptions: operating hours per year: 6,000. Cost of electricity: 13 cents per kW/h. Differential pressure: 3.5 bar (g). Volume flow: 1,550 m³/h. Residual value of the machine after 10 years: 15%. Insurance, facility, and pipeline construction costs are not taken into account.

Life cycle costs.



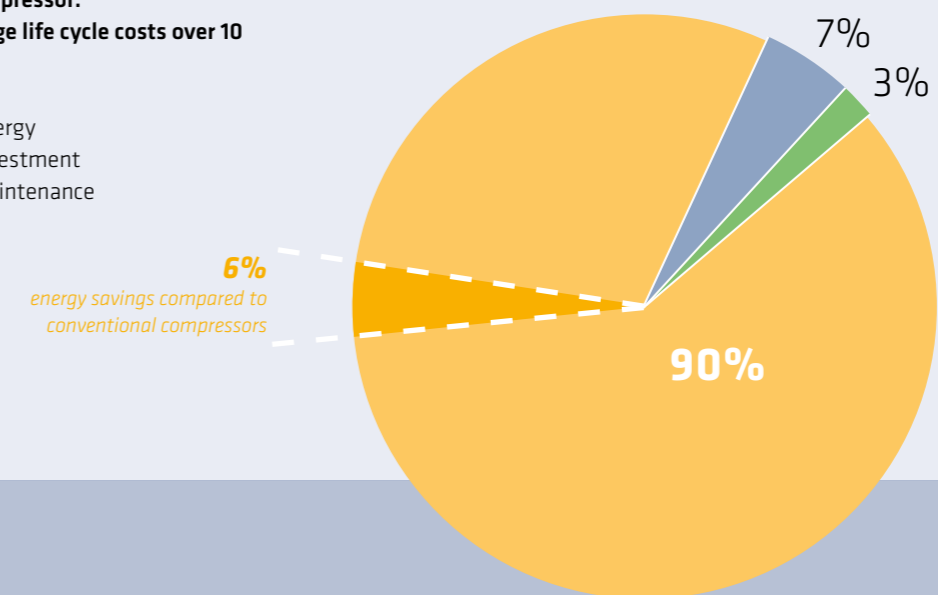
Results.

The calculations show that E-compressors hold a significant advantage over conventional (non-AERZEN) compressors. Over an operational life of 10 years, they save about €54,600 based on energy savings of around 6%. During the same period, they reduce maintenance costs by about 61%. Because they can be serviced on site, E-compressors perform much better when it comes to inspections. Unlike competing units, a complete replacement is not necessary. Savings in terms of total costs: about €100,000. The takeaway: at about 7% of investment costs, the savings will practically pay for the unit.

Efficiency Plus: the AERZEN E-compressor pays for itself.

E-compressor: Average life cycle costs over 10 years.

- Energy
- Investment
- Maintenance



A LEGEND IN ITS OWN RIGHT: EXTREME DURABILITY FROM A VERSATILE MACHINE.

Their longevity is legendary, as is their reliability under extreme load conditions. It's no surprise that the Delta Screw compressor delivers on the quality assurance of a 'Made in Germany' label. At AERZEN, top-notch technology is paired with an intelligent service and maintenance concept, as well as a seamless network of service teams the world over. These are just three of many deciding factors that will lead you to AERZEN's Delta Screw compressor series.



AERZEN compressors: compact units that include an oil cooler, oil pump, oil filter, oil circulation system, fan wheel, and transmission. AERZEN offers more than 20 stages for powerful high-performance assemblies.

'Made in Germany' quality.

The Delta Screw is a premium AERZEN product. This means that behind every compressor lies 150 years of experience in the research and design of high-performance compressed air machines. The know-how of a global market leader, paired with the traditional commitment to quality of a German

family-owned company. This commitment extends to the engineering of our machines and core components, just as it does to the materials, workmanship and selection of our partners. It provides the basis for our assemblies' exceptionally high value retention.

Intelligent design.

How do you stand to benefit from our assemblies' intelligent design? From the first minute you save on resources, beginning with transportation. Delta Screw compressors can be moved by pallet truck, fork lift, or crane to the exact spot where they will be used. You also save resources due

to Delta Screw's compact design, simple "plug and play" installation and startup, and easy access to all wearing parts, which dramatically simplifies maintenance. Best of all: Our all-inclusive service can be performed on site. Another advantage of AERZEN's premium quality products.

Maintenance made simple.

Let's start with the fact that AERZEN machines require less maintenance than any other compressor on the market today. This is due to the modular hood design and the large access panels on the service and back sides, allowing easy access to and removal of motor, electronics, and compressor stages, if need be. With E-compressors, you don't even have to dismantle the acoustic hood. Then come the numerous intelligent construction details. An example: the lubrication system. Relying on oil-lubricated bearings (which significantly increase longevity), the system requires no oil change after 500 operating hours, and guarantees extended oil change intervals of 16,000 operating hours. In the event that you indeed need a service team: all relevant parts are bundled into economical packages.



AERZEN service kits – always the right choice

Convenient to operate.

The operational concept of the Delta Screw is as simple as it is intelligent. It can be operated manually directly from the front of the machine where all control elements are located, for ease of access. The AERtronic control system allows for a digital, intuitive, and above all safe operation of the machine. The intelligent AERZEN control system guarantees that your facility will always run at its peak

operating point, increasing its efficiency and longevity. AERtronic's numerous interfaces and communication paths visualise and monitor all important parameters. Last but not least, AERtronic can be adapted to any external power module. Due to the additional module 'WebView', users can retrieve and monitor all operation and service data via smart device from anywhere in the world.

AERtronic is a standard component in all E-compressors



ANYTHING BUT ORDINARY. THE WORLD OF AERZEN SERVICES.

AERZEN machines are legendary for their durability. Why is service necessary at all, then? For us, it's about more than availability and original OEM parts. AERZEN services safeguard your investments and productivity, and ensure that you stay ahead of the competition. From anywhere on earth.

Benefit from AERZEN's OEM competence, anytime, anywhere.



A global network

AERZEN's team of 2,500 employees is active on every continent. With six sales offices in Germany alone, we are always nearby. And with 50 subsidiary companies spread across 100 different countries, we are never far away should you need us. Call us at:

+49 5154 81-0

Service Hotline

We are available even outside of our normal business hours. Connect directly with AERZEN via our regional service hotlines:

0700 49318551

Customer Net

Seeking to learn more about our company and about AERZEN's industry-leading compressor technology? It's easy: just visit our Customer Net or our home page. Everything you need to know in one location:

www.aerzen.com

AERZEN on-site service.

Our service teams work wherever our machines are, anywhere in the world, onshore or offshore, and frequently under extreme conditions. How do we manage? Because we are never far away. AERZEN has developed a wide network of service support centres and decentralised parts depots around the globe. At these centres, you will find over 200 well-trained service technicians ready to help, whenever and wherever you need them.

Equipment rental and other services.

The AERZEN service world has plenty to offer for customers. For example, we offer custom designed service kits, including replacement stages, machine diagnosis, acoustic optimisation. One of our most important services is the AERZEN Rental Division, which has a large stock of rental machines: AERZEN blowers, turbos and compressors in a wide range of performance classes, for all standard pressure ranges, for immediate use and delivered on request – turnkey ready. What does that mean for our customers? Even in the event of an unanticipated need, you will be well equipped.

ALL-IN, EVEN FOR BASIC ASSEMBLIES. DELTA SCREW DELIVERY PACKAGES.

'All-in' describes AERZEN's delivery concept. It means that even basic assemblies in the Delta Screw series include everything you need for error-free operation, from the minute you push the start button. Everything is pre-installed, fully parameterised, and ready to run. And – as required – complete with motor starter, an extensive range of accessories, and oil fill.

Just plug & play. Standard deliveries with all Delta Screw packages.

VM and VML compressor stages

- Pressurised oil lubrication including shaft-driven oil pump, oil filter, oil pressure regulator valve, and air-flow oil cooler
- 100% piped oil circulation

Torsion-resistant frame

- For secure transport by forklift or crane
- For problem-free connections, even special three-phase motors

Ventilated acoustic hood

- For use indoors or out
- With integrated oil drip pan
- Electrical acoustic hood fan

Electrical vacuum generator

- For secure oil chamber venting
- Guaranteed 100% oil-free

Intake filter

- With integrated intake silencer

Brand name coupler for continuous operation

- High flexibility and low maintenance

Discharge-side silencer

- Significantly reduces pipe noise

Safety valve (type tested)

- Optional pipe connection

Expansion joint(s)

- PED or ASME design
- DIN or ANSI bolt pattern

Flexible machine mountings

- Vibration damped
- With negative restraint

Double check valve

- Minimal pressure required to open

Instrumentation or controls

- Pressure and temperature sensors fully wired

Initial oil fill

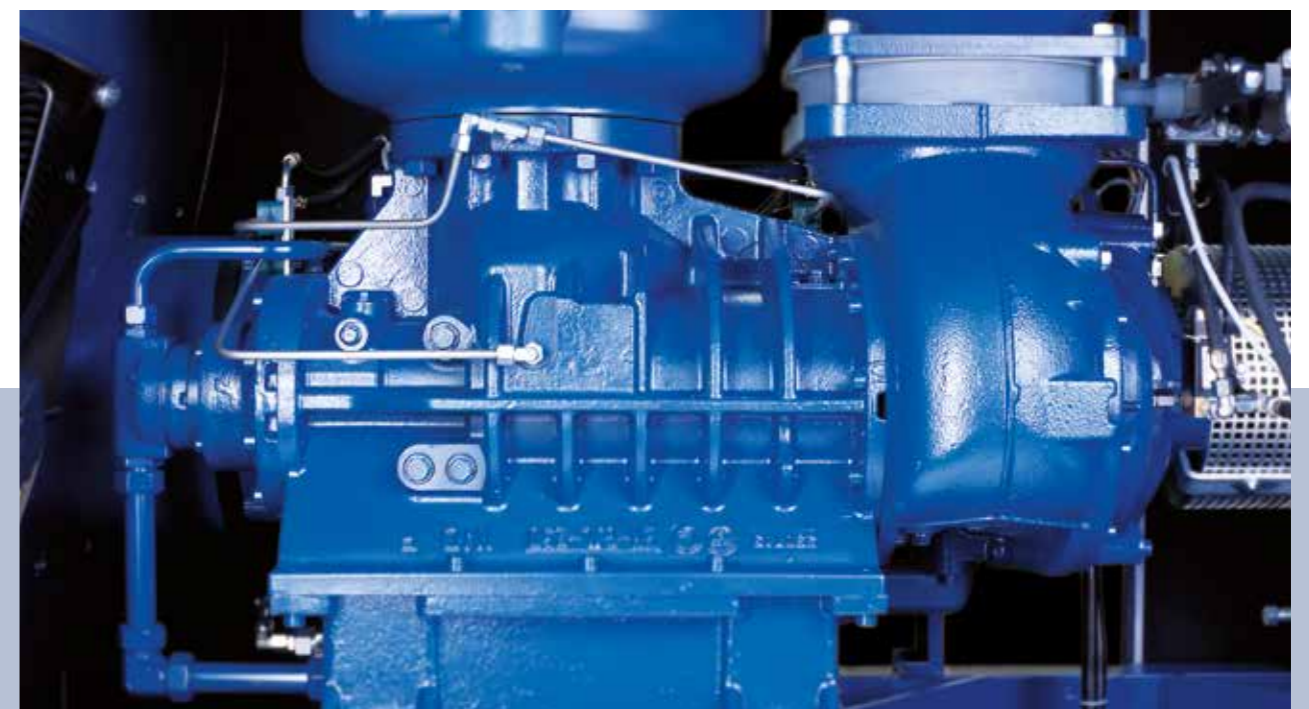
- AERZEN Delta Lube 06

Complete documentation

Modifications. For client-specific solutions.

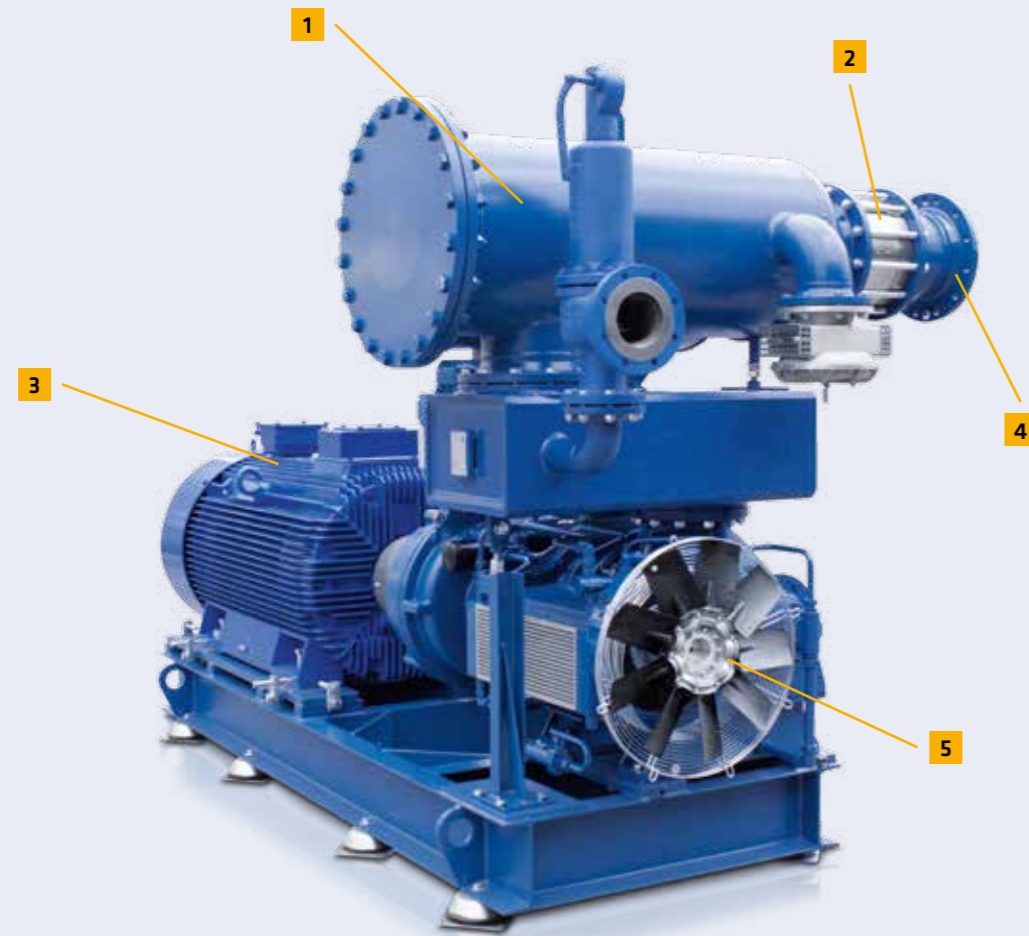
- Version available for nitrogen compression with suction silencer, startup strainer, and (suction-side) expansion joint
- Vacuum version for VML units, also available with pre-inlet for vacuum operation down to -850 mbar
- Special paints
- AERtronic with PROFIBUS or profinet connection, frequency converter modules, Modbus Gateway (Ethernet), WebView
- ANSI-compliant intake/discharge-side flange
- Compressor suitable for use on board ships or on trucks
- Acoustic hood for increased noise attenuation or for use in extreme environments
- Gas-purged version for use with special gases
- Coatings for all parts in contact with media, including stainless steel rotors for corrosive gases
- Stainless steel intake and discharge accessories
- Food-grade lubricants
- Water-cooled oil cooler
- Feature that allows oil/air filter to be changed while machine is running
- Piping connections modified to match individual client requirements
- Air outlet connection for safety valve and air exhaust when used as vacuum pump

- Specialised power supply parts and transformers in case of different voltages for electrical components
- ATEX certification, including motors specified by ATEX zone, intrinsically safe control panel, and ATEX documentation
- Special instrumentation or controls based on client specifications
- Unit design/certification for use in compliance with:
 - PED 2014/68/EU (AD2000 and EN13445)
 - ASME Code VIII
 - Div.1, SELO (Chinese License),
 - EAC (certification in Russia)
 - CRN (certification in Canada)
- API-compliant safety valves
- Customer acceptance or third party inspection in accordance with Lloyd's Register, Det Norske Veritas, Germanischer Lloyd, and ABS
- Diesel engine with special coupling
- Special documentation, including balancing report, materials certificates, leakage testing, trial runs
- Extended warranty
- AERZEN service agreements



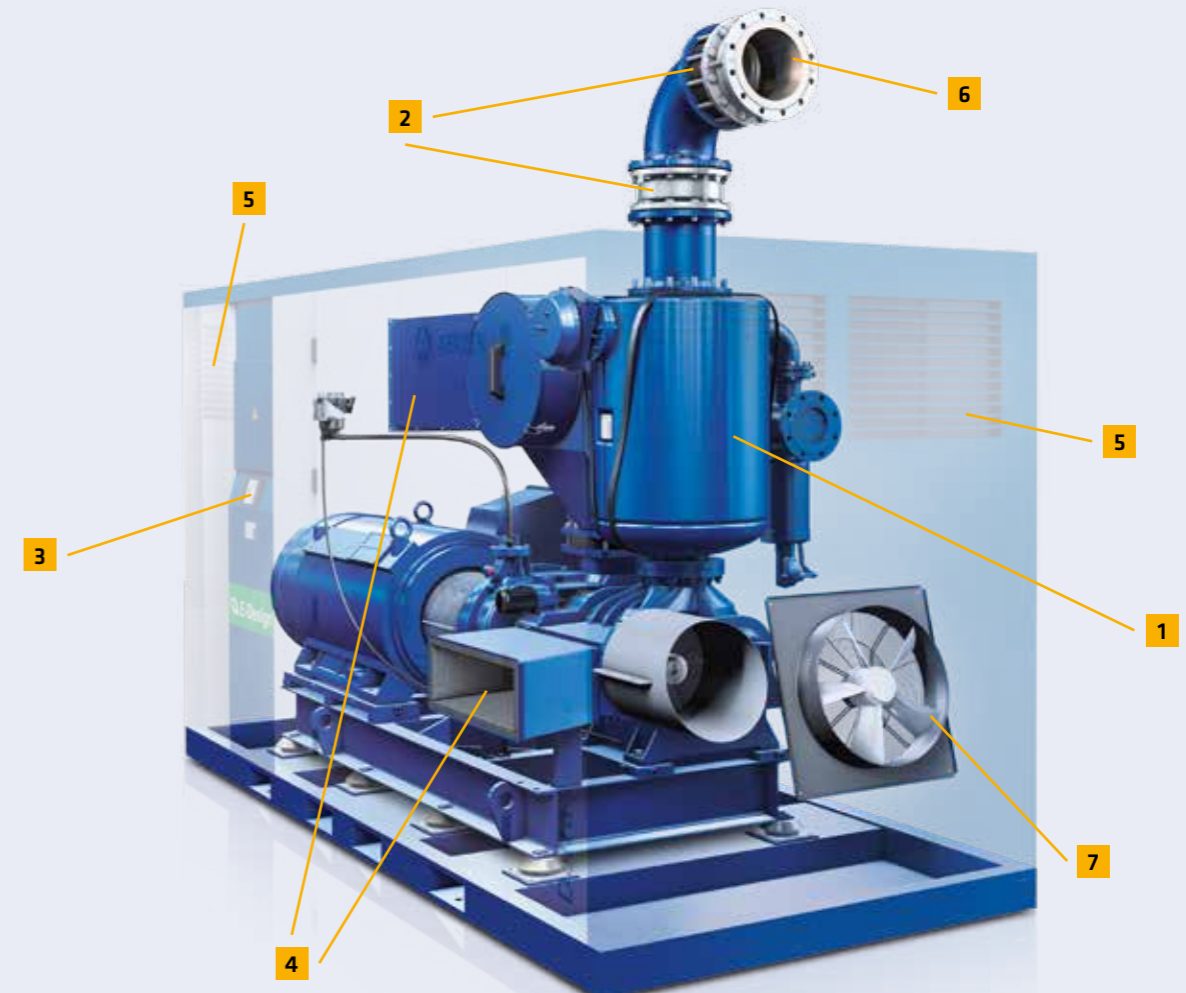
The AERZEN concept: flexible Delta Screw stages, tailored to your needs

THE CHOICE IS YOURS: THE STANDARD DELTA SCREW, OR THE E-COMPRESSOR.



The standard Delta Screw design.

- 1 Horizontally positioned discharge silencer**
 - With connection chamber for pulsation reduction
 - 2 Expansion joint**
 - Stress-free connection to the pressure line
 - 3 Accommodates almost all commercially available motors**
 - Frame and acoustic hood can be rapidly adjusted
 - 4 Discharge-side connection**
 - Can be positioned either vertically or horizontally
 - 5 Ventilation inside the acoustic hood**
 - With shaft-driven cooling fan
- Not shown:**
- Gauges
 - Air intake and outlet silencers for the acoustic hood



The Delta Screw E-compressor Design.

- 1 Vertically positioned discharge silencer**
 - 3-chamber reactive silencer
 - Free of absorption material
- 2 Two expansion joints**
 - Installed vertically and horizontally
 - Stress-free connection to the pressure line
- 3 AERtronic controls**
 - Transmitter technology
 - For safe and efficient operation
 - Displays and monitors intake pressure, discharge pressure, and oil pressure, as well as discharge temperature and oil temperature
 - Power module control
- 4 Flow-optimised intake ducts**
 - For process and cooling air
- 5 Air intake and outlet hood silencers**
 - Integrated into the acoustic hood to save space
- 6 Discharge-side connection**
 - Located above the acoustic hood
- 7 Ventilation inside the acoustic hood**
 - With electrically driven fan

INDIVIDUAL COMPONENTS OR TURNKEY UNIT? EITHER WAY, IT'S AERZEN

Delta Screw is the world's most comprehensive compressor, pairing a flexible stage design with an almost limitless range of options and accessories. Regardless of whether you plan them for the core of your system, or instead use a turnkey unit for perfect integration into your production processes.

First class: AERZEN and its partners.

AERZEN engineers all core components in its machines. For the rest, we have selected partners who share in our quest for excellence, are regarded as specialists in their field, and are renowned for their products. This is how we ensure a consistently high level of quality – a fact you can rely on at AERZEN.

Always a good fit: connections.

The large number of accessory components available for AERZEN assemblies is anything but ordinary. The design of our Delta Screw connectors is effectively unique, and holds real advantages over other compressors, allowing almost any external component to be integrated without any large pressure loss and attendant loss in efficiency. You will have to look somewhere else to find section diameters that are too small, or poorly defined drive trains.

Vibration sensors. Machine monitoring and vibration analysis.

Identify possible defects early and take the appropriate measures at the right time. AERZEN provides you with the tools you need. Whether it is permanent on-site vibration monitoring and analysis, or performed remotely by AERZEN specialists – we have the solution.

Power elements for the perfect start.

External or integrated performance parts for the machine startup:

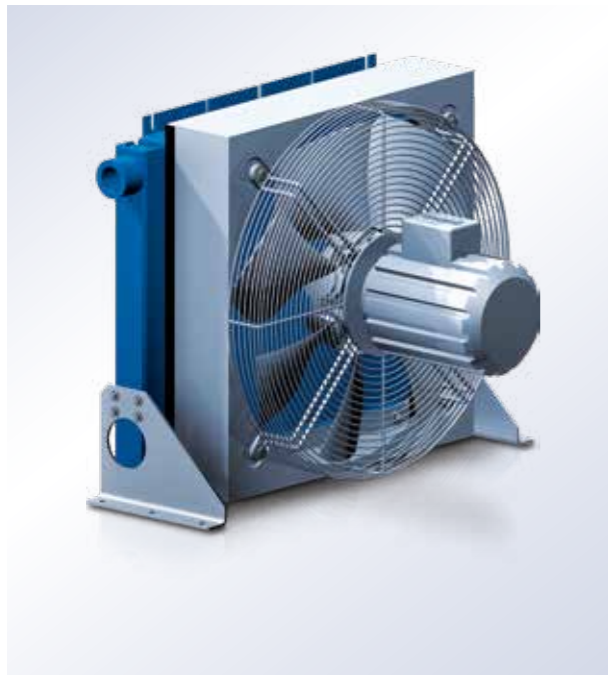
- Star-Delta startup
- Frequency converter
- Soft start
- Directly online

Each element comes fully preparameterised and tuned to its respective Delta Screw package.



Power elements from AERZEN – for the perfect motor start. Both standard and client-specific designs.





The perfectly sized air/air aftercooler

Aftercooler. Tested at extreme discharge temperatures of up to 280 °C.

When it comes to minimising pressure loss, the aftercoolers for the Delta Screw are setting new standards. Our portfolio offers a broad spectrum of choices, including air/air aftercoolers that feature cyclone separator and condensation drains. Always the most efficient solution for temperature-critical downstream processes.

- Independent series of air/air aftercoolers especially designed for the Delta Screw compressor series
- AERZEN advantage: Optional ventilator speed control depending on preset final air temperature
- Numerous options for the air/air aftercoolers: special paints and coatings, special fan motors, etc.
- Included in our standard model: aluminium cooler, motor, motor mount, fan housing, protective screen, fan
- Above 250 °C with integrated stainless steel pre-cooler
- Delta Screw aftercoolers also available in a water/air version



AERZEN uses the IE4 motor

Motors. Class IE3 energy efficiency and more.

Premium motors from renowned manufacturers come standard in all Delta Screw packages. This series is open to practically all models and brands that run compression processes:

- Three-phase motors that conform to IEC, NEMA or China GB 18613-2012
 - Either efficiency class IE3 (“premium efficiency”) or IE4 (“super premium efficiency”)
 - Motors for 50/60 Hz networks and other voltage levels
 - Medium and high voltage motors
 - ATEX-compliant motors
 - Motors produced locally or supplied by the client
- Diesel engines, etc.

P.S. AERZEN delivers all motors with the appropriate coupling as a matter of course.

A spectrum as unique as the motor options. Take for example the relubrication device, frequency converter drive, temperature monitoring in the coils and bearings, standstill heating, SPM nipples (vibration detectors), or special protection classes. As you would expect, this includes full assembly by AERZEN.



Overflow regulators and pressure control valves ensure stable conditions

Minimal back pressure and pressure control valves to maintain constant pressures.

AERZEN provides premium pressure valves for its Delta Screw series. They provide the necessary countermeasures when pressure within the machine begins to fluctuate. This helps protect your system, and significantly lengthens your compressor's service life.

Are there times when you need less pressurised air? Any excess can be easily discharged with a pressure control valve – without having to constantly stop the compressor .



AERZEN start unloading device

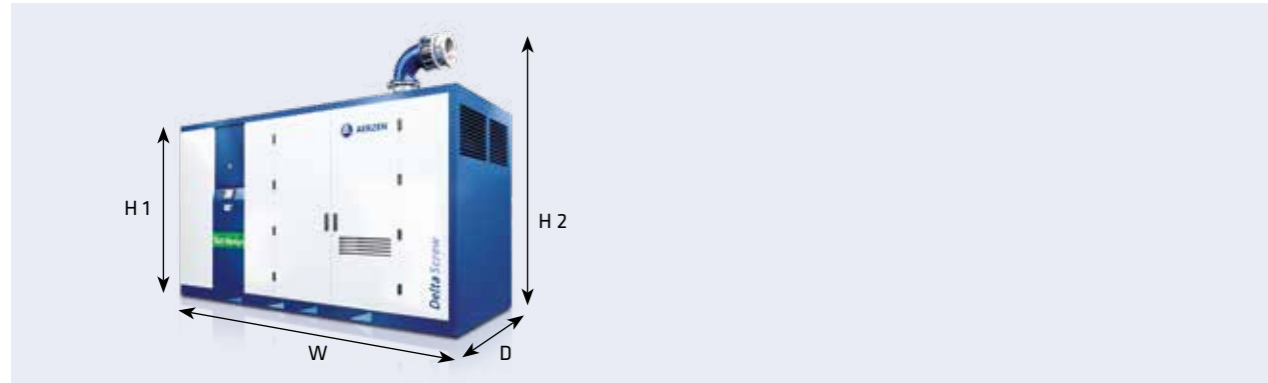
Additional accessories. Start unloading devices.

Depending on the compressor model, start unloading valve for VML compressors (self-controlled), or idle/full load regulation for VM compressors. Includes balance suction throttling, relief valve, and pressure switch.

Maintenance and inspection kits.

1, 2, or 5-year plans. The maintenance and services kits include all necessary service and wearing parts so as to facilitate later maintenance or inspection work on the compressor.

COMPACT LINE. DELTA SCREW IN MM AND KG.



Dimensions and weights of assemblies with acoustic hood.

Compressor model	W mm	D mm	H 1 mm	H 2 mm	Pressure side DN	PN	Oil filling l	Position of pressure port	Weight (without motor, with acoustic hood) kg
VM 30 G5-E	2,900	1,450	1,900	2,357	150	16	12	top	1,950
VML 35 G5-E	2,900	1,450	1,900	2,357	150	16	12	top	2,000
VM 45 G5-E	3,200	1,650	2,200	2,681	150	16	28	top	3,000
VML 60 G5-E	3,200	1,650	2,200	2,741	200	10	28	top	3,100
VM 75 G5-E	4,100	1,780	2,375	2,944	200	10	30	top	4,300
VM 85	4,500	1,800	2,320	2,750	200	10	50	at the side or top	6,000
VML 95 G5-E	4,100	1,780	2,375	3,051	250	10	30	top	4,400
VM 100 G5-E	5,400	2,240	2,466	3,114	250	10	70	top	7,000
VM 140	5,250	2,200	2,870	3,400	250	10	65	at the side or top	8,500
VML 150	5,300	2,300	2,500	3,000	300	10	50	at the side or top	9,000
VML 250	5,500	2,600	3,000	3,500	400	10	90	at the side or top	11,600

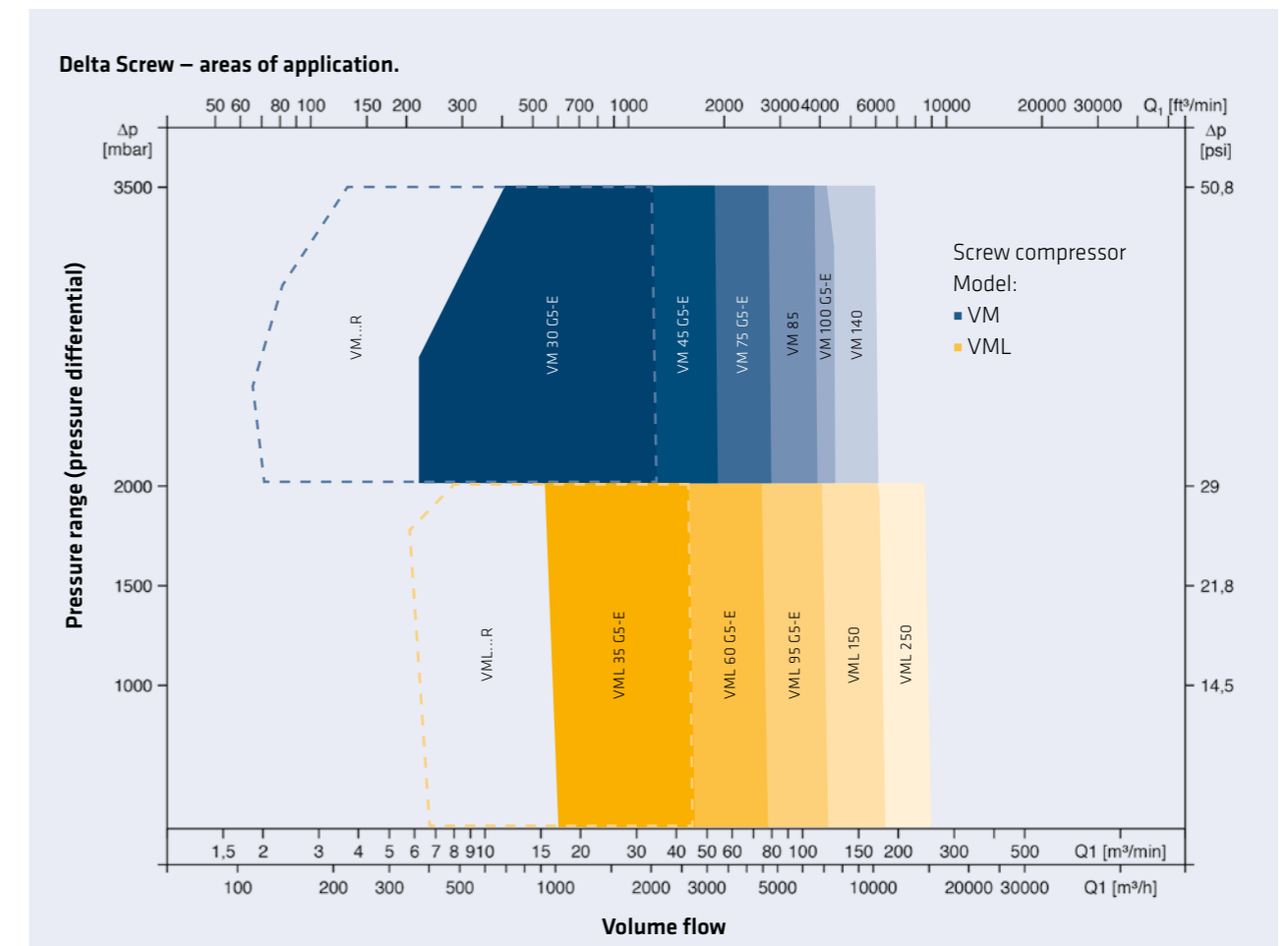
Dimensions and weights of assemblies without acoustic hood.

Compressor model	W mm	D mm	H 2 mm	Weight (without motor, without acoustic hood) kg
VM 30 G5-E	2,700	696	1921	1,000
VML 35 G5-E	2,700	696	1921	1,100
VM 45 G5-E	2,412	1,508	2,223	1,870
VML 60 G5-E	2,412	1,508	2,273	1,970
VM 75 G5-E	2,778	1,734	2,476	2,500
VM 85	3,000	1,550	2,530	3,220
VML 95 G5-E	2,778	1,734	2,583	2,600
VM 100 G5-E	4,100	2,150	2,968	4,850
VM 140	4,000	1,800	3,200	5,250
VML 150	4,900	1,800	3,000	5,000
VML 250	5,100	2,100	3,500	7,100

Subject to technical modifications – products subject to technical changes.

THE RIGHT SIZE. FOR EVERY PRESSURE AND VOLUME FLOW.

Delta Screw compressors from AERZEN are the most multi-faceted machines in pressure technology today, making them highly customisable for a broad range of process requirements. The flexible modular design of the direct drive assemblies already includes 9 models – and 7 more if you include belt-driven models (VM...R / VML...R). Can it get any more flexible?



Explanation of model names.

VM 45 G5-E

- E-compressor (= energy efficient assembly design)
- 5th generation
- Volume flow in m³/min
- Compressor groups:
 - VM compressors with max. differential pressure $\Delta p=3.5$ bar
 - VML compressors with max. differential pressure $\Delta p=2.0$ bar

PERFORMANCE DATA.

Performance data.

The tables on the following pages will provide an overview of the performance data for all 9 direct drive VM and VML compressors in the Delta Screw series. The following operating conditions were used to determine the data:

- Compression medium: air
- Relative humidity: 0%
- Air intake temperature: 20 °C
- Intake pressure: 1 bar (absolute)

Noise levels.

The sound pressure levels of machine noise shown here (Lp (A)) are based on a single assembly with acoustic hood, insulated piping, and free field installation (tolerance +/- 2 dB). Measurements were taken 1 m from the perimeter of the machine. Noise levels were measured in accordance with DIN ISO 3744 and DIN EN ISO 2151.

Model names:

VM compressors with short 4+6 rotor profile; differential pressure to max. $\Delta p=3.5$ bar
 VML compressors with long 3+4 rotor profiles; differential pressure to max. $\Delta p=2.0$ bar

Positive pressure					
Compressor size	Max. allowable intake pressure bar a	Differential pressure Δp bar	Volume flow m ³ /h***	Motor performance kW	Noise level dB (A)*
VM 30 G5-E	1.5	up to 3.5	350 to 2,040	30 to 160	74
VML 35 G5-E	1.2	up to 2.0	920 to 2,600	30 to 160	73
VM 45 G5-E	1.5	up to 3.5	770 to 3,250	55 to 250	75
VML 60 G5-E	1.2	up to 2	1,140 to 4,550	45 to 250	79
VM 75 G5-E	1.5	up to 3.5	1,070 to 4,780	110 to 400	76
VM 85	4.5	up to 3.5	1,150 to 6,760	90 to 560	82
VML 95 G5-E	1.2	up to 2	1,770 to 7,000	75 to 355	79
VM 100 G5-E	1.5	up to 3.5	1,500 to 7,620	200 to 630	87
VM 140	1.5	up to 3.5	2,080 to 10,700	160 to 800	83
VML 150	1.2	up to 2	2,300 to 10,630	90 to 560	84
VML 250	1.2	up to 2	5,300 to 15,000	160 to 800	83

Negative pressure		
Compressor size	Max. negative pressure bar	Max. Volume flow m ³ /h
VML 35 G5-E	-0.7	2,520
	-0.85	1,710
VML 60 G5-E	-0.7	4,410
	-0.85**	3,690
VML 95 G5-E	-0.7	6,800
	-0.85**	6,000
VML 150	-0.7	10,320
	-0.85**	8,220
VML 250	-0.7	14,360
	-0.85**	12,000

Performance data not binding! Products subject to technical changes!

* Machine noise with acoustic hood and attached, insulated piping.

Tolerance +/- 2 dB(A) at mid-range speeds and pressures

** With pre-inlet

*** Intake conditions: 20 °C and minimum differential pressure of 1 bar (VML) or 2 bar (VM)

VM 30 G5-E											
Discharge pressure p ₂ [bar]			Transmission ratio designations								
			6	7	8	9	10	11	12	13	14
2	Intake volume flow	[m ³ /h]	623	737	855	998	1161	1332	1530	1766	2025
	Coupling power	[kW]	33.3	37.8	42.4	48.3	55.2	62.8	72	84.5	99.4
	Discharge temperature	[°C]	175	169	164	161	159	158	157	158	160
	Motor speed	[rpm]	2965	2970	2965	2965	2980	2980	2980	2980	2980
	Motor power rating	[kW]	37	45	55	55	75	75	90	110	110
	Power, idling p ₁ =p ₂ =1.0 bar (abs)	[kW]	13.9	16.5	19.4	23.1	27.6	32.7	39.1	47.8	59
	Reduced moment of inertia	[kgm ²]	0.42	0.44	0.51	0.61	0.73	0.88	1.06	1.31	1.61
	Sound pressure level with hood	[dBA]	75	77	73	73	72	74	72	76	75
	Sound pressure level without hood	[dBA]	94	96	93	96	95	97	96	97	99
	2.25	Intake volume flow	[m ³ /h]	613	724	844	993	1150	1320	1519	1754
Coupling power		[kW]	36.4	41	46	52.5	59.5	67.4	77.1	90.1	105.5
Discharge temperature		[°C]	192	184	179	174	171	169	168	168	170
Motor speed		[rpm]	2970	2965	2965	2980	2980	2980	2980	2980	2980
Motor power rating		[kW]	45	55	55	75	75	90	110	132	132
Power, idling p ₁ =p ₂ =1.0 bar (abs)		[kW]	13.9	16.5	19.4	23.3	27.6	32.7	39.1	47.8	59
Reduced moment of inertia		[kgm ²]	0.42	0.44	0.51	0.61	0.73	0.88	1.06	1.31	1.61
Sound pressure level with hood		[dBA]	74	77	72	71	71	72	73	76	75
Sound pressure level without hood		[dBA]	93	95	92	93	94	95	96	97	99
2.5		Intake volume flow	[m ³ /h]	608	719	832	982	1138	1309	1507	1742
	Coupling power	[kW]	39.2	44.4	49.6	56.5	63.8	72.1	82.2	95.7	111.8
	Discharge temperature	[°C]	207	199	194	188	184	181	179	179	180
	Motor speed	[rpm]	2970	2965	2965	2980	2980	2980	2980	2980	2980
	Motor power rating	[kW]	45	55	55	75	75	90	110	132	132
	Power, idling p ₁ =p ₂ =1.0 bar (abs)	[kW]	21.7	25.6	19.4	23.3	27.6	32.7	39.1	47.8	59
	Reduced moment of inertia	[kgm ²]	0.42	0.44	0.51	0.61	0.73	0.88	1.06	1.31	1.61
	Sound pressure level with hood	[dBA]	74	77	71	70	72	71	73	76	75
	Sound pressure level without hood	[dBA]	93	95	91	90	93	95	97	97	99
	2.75	Intake volume flow	[m ³ /h]	597	709	835	979	1135	1297	1495	1731
Coupling power		[kW]	41.5	46.9	53.1	60.5	68.7	77	87.5	101.6	118.2
Discharge temperature		[°C]	221	212	205	200	196	193	191	190	190
Motor speed		[rpm]	2965	2965	2980	2980	2980	2980	2980	2980	2980
Motor power rating		[kW]	55	55	75	75	90	90	110	132	132
Power, idling p ₁ =p ₂ =1.0 bar (abs)		[kW]	21.7	25.6	30.2	35.7	42.1	32.7	39.1	47.8	59
Reduced moment of inertia		[kgm ²]	0.42	0.44	0.51	0.61	0.73	0.88	1.06	1.31	1.61
Sound pressure level with hood		[dBA]	74	76	71	70	71	71	74	75	76
Sound pressure level without hood		[dBA]	93	94	92	90	93	94	98	97	101
3		Intake volume flow	[m ³ /h]	587	700	825	968	1125	1296	1495	1719
	Coupling power	[kW]	43.9	49.5	56	63.5	72	81.6	93	107.4	124.6
	Discharge temperature	[°C]	236	225	217	211	207	204	202	200	200
	Motor speed	[rpm]	2965	2965	2980	2980	2980	2980	2980	2980	2980
	Motor power rating	[kW]	55	55	75	75	90	90	110	132	160
	Power, idling p ₁ =p ₂ =1.0 bar (abs)	[kW]	21.7	25.6	30.2	35.7	42.1	49.4	59	47.8	59
	Reduced moment of inertia	[kgm ²]	0.42	0.44	0.51	0.61	0.73	0.88	1.06	1.31	1.61
	Sound pressure level with hood	[dBA]	75	75	72	69	71	71	75	75	78
	Sound pressure level without hood	[dBA]	94	94	93	90	93	93	99	97	103
	3.25	Intake volume flow	[m ³ /h]	695	815	959	1115	1286	1485	1720	1979
Coupling power		[kW]	52.5	58.8	66.6	75.3	85.1	96.8	112.4	130.5	
Discharge temperature		[°C]	239	230	222	217	213	210	209	208	
Motor speed		[rpm]	2980	2980	2980	2980	2980	2980	2980	2980	
Motor power rating		[kW]	75	75	75	90	110	110	132	160	
Power, idling p ₁ =p ₂ =1.0 bar (abs)		[kW]	25.8	30.2	35.7	42.1	49.4	59	71	85	
Reduced moment of inertia		[kgm ²]	0.44	0.51	0.61	0.73	0.88	1.06	1.31	1.61	
Sound pressure level with hood		[dBA]	75	72	69	71	70	74	74	77	
Sound pressure level without hood		[dBA]	94	91	91	93	93	98	96	102	
3.5		Intake volume flow	[m ³ /h]			805		1106	1277	1475	1711
	Coupling power	[kW]			61.7		69.7	78.7	88.8	100.8	116.8
	Discharge temperature	[°C]			242		234	228	223	220	217
	Motor speed	[rpm]			2980		2980	2980	2980	2980	2980
	Motor power rating	[kW]			75		90	110	132	132	160
	Power, idling p ₁ =p ₂ =1.0 bar (abs)	[kW]			30.2		35.7	42.1	49.4	59	71
	Reduced moment of inertia	[kgm ²]			0.51		0.61	0.73	0.88	1.06	1.31
	Sound pressure level with hood	[dBA]			72		70	71	70	74	74
	Sound pressure level without hood	[dBA]			90		91	93	94	99	95

Performance data for intake pressure p₁=1.0 bar (a) and air intake temperature t₁=20 °C. Measured in accordance with ISO 1217. Volume flow corresponds to delivery volume flow based on intake conditions. (Performance data not binding. Products subject to technical changes.)

VM 45 G5-E											
Discharge pressure p _e [bar]			Transmission ratio designations								
			4	5	6	7	8	9	10	11	12
2	Intake volume flow	[m³/h]	1055	1228	1428	1662	1912	2188	2542	2848	3224
	Coupling power	[kW]	57	64	72	83	94	107	126	143	167
	Discharge temperature	[°C]	172	167	164	161	160	159	160	161	164
	Motor speed	[rpm]	2980	2980	2980	2980	2980	2980	2980	2980	2980
	Motor power rating	[kW]	75	75	90	110	110	132	160	160	200
	Power, idling p ₁ =p ₂ =1.0 bar (abs)	[kW]	25.3	29.8	35.3	42.2	51	60	73	86	105
	Reduced moment of inertia	[kgm ²]	0.86	1.004	1.19	1.424	1.704	2.034	2.501	2.95	3.57
	Sound pressure level with hood	[dBA]	74	76	81	76	75	76	77	79	80
	Sound pressure level without hood	[dBA]	93	99	100	95	100	100	102	103	103
	2.25	Intake volume flow	[m³/h]	1039	1211	1412	1646	1896	2172	2525	2832
Coupling power		[kW]	62	69	78	89	101	115	134	152	177
Discharge temperature		[°C]	188	182	177	174	172	170	170	171	174
Motor speed		[rpm]	2980	2980	2980	2980	2980	2980	2980	2980	2980
Motor power rating		[kW]	75	90	90	110	132	132	160	200	200
Power, idling p ₁ =p ₂ =1.0 bar (abs)		[kW]	25.3	29.8	35.3	42.2	51	60	73	86	105
Reduced moment of inertia		[kgm ²]	0.86	1.004	1.19	1.424	1.704	2.034	2.501	2.95	3.57
Sound pressure level with hood		[dBA]	73	76	81	74	75	76	77	78	79
Sound pressure level without hood		[dBA]	93	99	97	97	99	100	102	103	103
2.5		Intake volume flow	[m³/h]	1032	1205	1396	1630	1880	2156	2510	2816
	Coupling power	[kW]	67	75	84	96	108	123	143	162	188
	Discharge temperature	[°C]	202	197	191	187	184	182	181	181	184
	Motor speed	[rpm]	2980	2980	2980	2980	2980	2980	2980	2980	2980
	Motor power rating	[kW]	75	90	110	110	132	160	160	200	250
	Power, idling p ₁ =p ₂ =1.0 bar (abs)	[kW]	35.5	41.6	35.3	42.2	51	60	73	86	105
	Reduced moment of inertia	[kgm ²]	0.86	1.004	1.19	1.424	1.704	2.034	2.501	2.95	3.57
	Sound pressure level with hood	[dBA]	71	75	81	73	75	76	77	77	78
	Sound pressure level without hood	[dBA]	94	99	94	99	98	100	101	103	103
	2.75	Intake volume flow	[m³/h]	1018	1191	1391	1625	1864	2140	2494	2800
Coupling power		[kW]	70	79	90	103	116	131	152	171	198
Discharge temperature		[°C]	216	209	203	200	197	194	192	192	194
Motor speed		[rpm]	2980	2980	2980	2980	2980	2980	2980	2980	2980
Motor power rating		[kW]	90	90	110	132	132	160	200	200	250
Power, idling p ₁ =p ₂ =1.0 bar (abs)		[kW]	35.5	41.6	49.1	59	51	60	73	86	105
Reduced moment of inertia		[kgm ²]	0.86	1.004	1.19	1.424	1.704	2.034	2.501	2.95	3.57
Sound pressure level with hood		[dBA]	71	74	81	73	75	75	77	77	78
Sound pressure level without hood		[dBA]	94	99	94	96	96	99	102	103	103
3		Intake volume flow	[m³/h]	1005	1178	1378	1613	1862	2138	2477	2784
	Coupling power	[kW]	74	84	95	108	122	139	160	181	209
	Discharge temperature	[°C]	229	221	215	210	207	205	203	203	204
	Motor speed	[rpm]	2980	2980	2980	2980	2980	2980	2980	2980	2980
	Motor power rating	[kW]	90	110	110	132	160	160	200	200	250
	Power, idling p ₁ =p ₂ =1.0 bar (abs)	[kW]	35.5	41.6	49.1	59	69	81	73	86	105
	Reduced moment of inertia	[kgm ²]	0.86	1.004	1.19	1.424	1.704	2.034	2.501	2.95	3.57
	Sound pressure level with hood	[dBA]	70	73	81	73	75	75	76	77	78
	Sound pressure level without hood	[dBA]	94	99	95	94	95	99	103	103	103
	3.25	Intake volume flow	[m³/h]	992	1164	1364	1599	1849	2125	2479	2785
Coupling power		[kW]	79	88	99	113	128	145	168	190	219
Discharge temperature		[°C]	244	234	227	221	217	214	212	211	213
Motor speed		[rpm]	2980	2980	2980	2980	2980	2980	2980	2980	2980
Motor power rating		[kW]	90	110	110	132	160	160	200	250	250
Power, idling p ₁ =p ₂ =1.0 bar (abs)		[kW]	35.5	41.6	49.1	59	69	81	98	114	136
Reduced moment of inertia		[kgm ²]	0.86	1.004	1.19	1.424	1.704	2.034	2.501	2.95	3.57
Sound pressure level with hood		[dBA]	70	72	81	73	75	75	76	77	79
Sound pressure level without hood		[dBA]	94	97	96	93	95	99	100	103	103
3.5		Intake volume flow	[m³/h]	–	1151	1351	1585	1835	2112	2466	2772
	Coupling power	[kW]	–	92	104	118	133	151	175	197	227
	Discharge temperature	[°C]	–	247	238	232	227	223	221	220	221
	Motor speed	[rpm]	–	2980	2980	2980	2980	2980	2980	2980	2980
	Motor power rating	[kW]	–	110	132	132	160	200	200	250	250
	Power, idling p ₁ =p ₂ =1.0 bar (abs)	[kW]	–	41.6	49.1	59	69	81	98	114	136
	Reduced moment of inertia	[kgm ²]	–	1.004	1.19	1.424	1.704	2.034	2.501	2.95	3.57
	Sound pressure level with hood	[dBA]	–	71	81	73	75	76	75	77	80
	Sound pressure level without hood	[dBA]	–	97	96	92	95	98	99	103	103

Performance data for intake pressure p₁=1.0 bar (a) and air intake temperature t₁=20 °C. Measured in accordance with ISO 1217. Volume flow corresponds to delivery volume flow based on intake conditions. (Performance data not binding. Products subject to technical changes.)

VM 75 G5-E											
Discharge pressure p _e [bar]			Transmission ratio designations								
			2	3	4	5	6	7	8	9	9/10
2	Intake volume flow	[m³/h]	1687	1970	2256	2606	2993	3400	3879	4495	4742
	Coupling power	[kW]	90	102	115	130	148	167	191	223	237
	Discharge temperature	[°C]	175	171	168	166	165	165	166	169	170
	Motor speed	[rpm]	2980	2980	2980	2980	2980	2980	2980	2980	2980
	Motor power rating	[kW]	110	132	132	160	200	200	250	250	315
	Power, idling p ₁ =p ₂ =1.0 bar (abs)	[kW]	35.9	42.8	51	60	71	83	98	120	130
	Reduced moment of inertia	[kgm ²]	2.32	2.66	3.05	3.57	4.18	4.88	5.76	7.01	7.7
	Sound pressure level with hood	[dBA]	73	76	76	75	76	79	81	82	81
	Sound pressure level without hood	[dBA]	101	102	101	102	103	105	105	105	105
	2.25	Intake volume flow	[m³/h]	1665	1949	2234	2585	2972	3378	3858	4474
Coupling power		[kW]	98	111	124	140	159	179	203	237	251
Discharge temperature		[°C]	191	185	182	179	177	176	177	179	180
Motor speed		[rpm]	2980	2980	2980	2980	2980	2980	2980	2980	2980
Motor power rating		[kW]	110	132	160	160	200	200	250	315	315
Power, idling p ₁ =p ₂ =1.0 bar (abs)		[kW]	35.9	42.8	51	60	71	83	98	120	130
Reduced moment of inertia		[kgm ²]	2.32	2.66	3.05	3.57	4.18	4.88	5.76	7.01	7.7
Sound pressure level with hood		[dBA]	74	76	76	75	76	79	80	82	81
Sound pressure level without hood		[dBA]	103	104	103	103	104	106	106	106	106
2.5		Intake volume flow	[m³/h]	1643	1928	2213	2564	2951	3357	3836	4453
	Coupling power	[kW]	106	120	134	151	170	191	216	251	266
	Discharge temperature	[°C]	208	201	196	192	189	188	188	189	190
	Motor speed	[rpm]	2980	2980	2980	2980	2980	2980	2980	2980	2980
	Motor power rating	[kW]	132	132	160	200	200	250	315	315	315
	Power, idling p ₁ =p ₂ =1.0 bar (abs)	[kW]	35.9	42.8	51	60	71	83	98	120	130
	Reduced moment of inertia	[kgm ²]	2.32	2.66	3.05	3.57	4.18	4.88	5.76	7.01	7.7
	Sound pressure level with hood	[dBA]	74	77	76	75	76	81	79	82	82
	Sound pressure level without hood	[dBA]	105	106	105	104	105	107	107	107	107
	2.75	Intake volume flow	[m³/h]	1629	1912	2192	2543	2930	3336	3815	4431
Coupling power		[kW]	113	128	144	161	182	203	230	266	281
Discharge temperature		[°C]	221	214	211	206	202	200	199	200	201
Motor speed		[rpm]	2980	2980	2980	2980	2980	2980	2980	2980	2980
Motor power rating		[kW]	132	160	160	200	200	250	315	315	315
Power, idling p ₁ =p ₂ =1.0 bar (abs)		[kW]	57	67	51	60	71	83	98	120	130
Reduced moment of inertia		[kgm ²]	2.32	2.66	3.05	3.57	4.18	4.88	5.76	7.01	7.7
Sound pressure level with hood		[dBA]	73	77	76	76	76	80	79	82	82
Sound pressure level without hood		[dBA]	105	106	105	104	105	107	107	107	107
3		Intake volume flow	[m³/h]	1612	1894	2178	2527	2908	3314	3794	4410
	Coupling power	[kW]	119	135	151	171	193	216	243		

VM 85											
Discharge pressure p_s [bar]			Transmission ratio designations								
			8	9	10	11	12	13	7/8	8	8/9
2	Intake volume flow	[m³/h]	2592	3044	3447	3922	4488	5129	5563	5891	6288
	Coupling power	[kW]	129	149	166	188	215	247	271	290	313
	Discharge temperature	[°C]	160	157	155	154	154	155	156	158	160
	Motor speed	[rpm]	1490	1490	1490	1490	1490	1490	2980	2980	2980
	Motor power rating	[kW]	160	200	200	250	250	315	315	355	355
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	55	67	79	94	113	137	155	170	189
	Reduced moment of inertia	[kgm ²]	10.6	13.1	15.7	18.9	23.2	28.6	9.9	10.6	11.9
	Sound pressure level with hood	[dBA]	79	81	81	82	82	85	85	86	87
	Sound pressure level without hood	[dBA]	109	110	110	111	112	113	114	114	115
	2.25	Intake volume flow	[m³/h]	2590	3018	3421	3896	4462	5103	5537	5865
Coupling power		[kW]	142	162	181	204	232	266	291	311	335
Discharge temperature		[°C]	175	171	168	167	166	166	167	169	170
Motor speed		[rpm]	1490	1490	1490	1490	1490	1490	2980	2980	2980
Motor power rating		[kW]	160	200	200	250	315	315	355	355	400
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	80	67	79	94	113	137	155	170	189
Reduced moment of inertia		[kgm ²]	10.6	13.1	15.7	18.9	23.2	28.6	9.9	10.6	11.9
Sound pressure level with hood		[dBA]	79	80	81	82	82	85	85	86	87
Sound pressure level without hood		[dBA]	110	111	111	112	113	114	115	115	115
2.5		Intake volume flow	[m³/h]	2568	3022	3428	3871	4437	5078	5512	5840
	Coupling power	[kW]	152	175	196	220	250	285	312	332	358
	Discharge temperature	[°C]	188	184	182	179	178	177	178	179	181
	Motor speed	[rpm]	1490	1490	1490	1490	1490	1490	2980	2980	2980
	Motor power rating	[kW]	200	200	250	250	315	315	355	400	400
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	80	98	115	94	113	137	155	170	189
	Reduced moment of inertia	[kgm ²]	10.6	13.1	15.7	18.9	23.2	28.6	9.9	10.6	11.9
	Sound pressure level with hood	[dBA]	79	80	81	82	83	85	86	87	88
	Sound pressure level without hood	[dBA]	111	112	112	112	114	115	116	116	116
	2.75	Intake volume flow	[m³/h]	2546	3001	3406	3883	4453	5052	5486	5814
Coupling power		[kW]	163	187	209	236	269	305	333	354	381
Discharge temperature		[°C]	201	196	194	192	191	189	190	191	192
Motor speed		[rpm]	1490	1490	1490	1490	1490	1490	2980	2980	2980
Motor power rating		[kW]	200	250	250	315	315	355	400	400	500
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	80	98	115	137	164	137	155	170	189
Reduced moment of inertia		[kgm ²]	10.6	13.1	15.7	18.9	23.2	28.6	9.9	10.6	11.9
Sound pressure level with hood		[dBA]	79	81	81	82	83	85	86	87	88
Sound pressure level without hood		[dBA]	112	112	112	113	115	116	116	116	117
3		Intake volume flow	[m³/h]	2525	2979	3384	3861	4431	5075	5512	5842
	Coupling power	[kW]	173	198	221	249	283	324	354	378	403
	Discharge temperature	[°C]	214	208	205	203	201	201	202	203	203
	Motor speed	[rpm]	1490	1490	1490	1490	1490	1490	2980	2980	2980
	Motor power rating	[kW]	200	250	250	315	315	400	400	500	500
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	80	98	115	137	164	197	222	242	189
	Reduced moment of inertia	[kgm ²]	10.6	13.1	15.7	18.9	23.2	28.6	9.9	10.6	11.9
	Sound pressure level with hood	[dBA]	80	81	82	84	84	85	86	87	88
	Sound pressure level without hood	[dBA]	112	113	113	114	115	116	117	117	117
	3.25	Intake volume flow	[m³/h]	2503	2957	3363	3840	4409	5053	5491	5820
Coupling power		[kW]	184	210	234	263	299	340	371	396	425
Discharge temperature		[°C]	229	221	217	214	212	211	212	213	214
Motor speed		[rpm]	1490	1490	1490	1490	1490	1490	2980	2980	2980
Motor power rating		[kW]	250	250	315	315	355	400	500	500	500
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	80	98	115	137	164	197	222	242	267
Reduced moment of inertia		[kgm ²]	10.6	13.1	15.7	18.9	23.2	28.6	9.9	10.6	11.9
Sound pressure level with hood		[dBA]	80	82	83	84	85	85	86	87	88
Sound pressure level without hood		[dBA]	113	113	114	114	116	117	117	118	118
3.5		Intake volume flow	[m³/h]	2482	2936	3341	3818	4388	5032	5470	5798
	Coupling power	[kW]	194	222	246	276	313	356	388	413	443
	Discharge temperature	[°C]	242	234	229	225	222	221	221	222	223
	Motor speed	[rpm]	1490	1490	1490	1490	1490	1490	2980	2980	2980
	Motor power rating	[kW]	250	250	315	315	355	400	500	500	500
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	80	98	115	137	164	197	222	242	267
	Reduced moment of inertia	[kgm ²]	10.6	13.1	15.7	18.9	23.2	28.6	9.9	10.6	11.9
	Sound pressure level with hood	[dBA]	81	82	84	84	85	85	86	87	88
	Sound pressure level without hood	[dBA]	113	114	114	115	116	117	118	118	119

Performance data for intake pressure $p_1=1.0$ bar (a) and air intake temperature $t_1=20$ °C. Measured in accordance with ISO 1217. Volume flow corresponds to delivery volume flow based on intake conditions. (Performance data not binding. Products subject to technical changes.)

VM 100 G5-E											
Discharge pressure p_s [bar]			Transmission ratio designations								
			7	8	9	10	11	11/12	6	7	8
2	Intake volume flow	[m³/h]	2992	3446	4032	4553	5165	5529	6013	6742	7598
	Coupling power	[kW]	149	168	195	219	249	267	294	336	389
	Discharge temperature	[°C]	157	155	154	153	153	154	155	158	162
	Motor speed	[rpm]	1490	1490	1490	1490	1490	1490	2980	2980	2980
	Motor power rating	[kW]	160	200	250	250	315	315	315	400	500
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	68	80	97	113	134	146	165	196	236
	Reduced moment of inertia	[kgm ²]	8,9	11,0	14,0	16,9	20,8	23,2	7,3	8,9	11,0
	Sound pressure level with hood	[dBA]	78	79	81	75	77	80	81	81	82
	Sound pressure level without hood	[dBA]	100	101	104	106	107	108	108	108	108
	2.25	Intake volume flow	[m³/h]	2960	3415	4001	4523	5135	5498	5982	6711
Coupling power		[kW]	162	182	210	236	267	286	314	358	413
Discharge temperature		[°C]	171	168	165	164	164	164	165	167	171
Motor speed		[rpm]	1490	1490	1490	1490	1490	1490	2980	2980	2980
Motor power rating		[kW]	200	200	250	315	315	315	355	400	500
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	68	80	97	113	134	146	165	196	236
Reduced moment of inertia		[kgm ²]	8,9	11,0	14,0	16,9	20,8	23,2	7,3	8,9	11,0
Sound pressure level with hood		[dBA]	77	78	79	75	78	80	81	81	82
Sound pressure level without hood		[dBA]	100	102	105	106	107	108	108	108	108
2.5		Intake volume flow	[m³/h]	2929	3383	3970	4492	5104	5468	5951	6681
	Coupling power	[kW]	175	196	226	252	285	305	334	380	437
	Discharge temperature	[°C]	184	180	177	175	174	175	175	177	180
	Motor speed	[rpm]	1490	1490	1490	1490	1490	1490	2980	2980	2980
	Motor power rating	[kW]	200	250	250	315	315	355	400	500	500
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	68	80	97	113	134	146	165	196	236
	Reduced moment of inertia	[kgm ²]	8,9	11,0	14,0	16,9	20,8	23,2	7,3	8,9	11,0
	Sound pressure level with hood	[dBA]	77	77	78	75	78	79	82	81	82
	Sound pressure level without hood	[dBA]	100	102	106	106	107	108	108	108	108
	2.75	Intake volume flow	[m³/h]	2906	3358	3940	4462	5074	5437	5921	6651
Coupling power		[kW]	186	211	241	269	303	324	354	402	461
Discharge temperature		[°C]	197	193	189	187	185	185	186	187	190
Motor speed		[rpm]	1490	1490	1490	1490	1490	1490	2980	2980	2980
Motor power rating		[kW]	200	250	315	315	355	355	400	500	500
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	99	117	97	113	134	146	165	196	236
Reduced moment of inertia		[kgm ²]	8,9	11,0	14,0	16,9	20,8	23,2	7,3	8,9	11,0
Sound pressure level with hood		[dBA]	77	76	78	75	78	80	82	81	82
Sound pressure level without hood		[dBA]	100	102	106	106	107	108	108	108	108
3		Intake volume flow	[m³/h]	2880	3332	3916	4436	5042	5407	5891	6621
	Coupling power	[kW]	196	221	255	286	322	344	375		

VM 140											
Discharge pressure p_2 [bar]			Transmission ratio designations								
			6	7	8	9	10	11	5/6	6	6/7
2	Intake volume flow	[m ³ /h]	4207	4847	5542	6260	7230	8310	9058	9553	10284
	Coupling power	[kW]	205	231	262	294	340	394	432	458	498
	Discharge temperature	[°C]	161	158	157	156	156	157	158	160	161
	Motor speed	[rpm]	1490	1490	1490	1490	1490	1490	2980	2980	2980
	Motor power rating	[kW]	250	315	315	355	400	500	500	560	560
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	78	93	111	131	160	196	223	241	270
	Reduced moment of inertia	[kgm ²]	24.4	29.3	35.1	41.6	51.4	63.5	22.7	24.4	27.7
	Sound pressure level with hood	[dBA]	79	80	81	82	84	85	85	85	85
	Sound pressure level without hood	[dBA]	98	99	101	103	105	108	111	112	112
	2.25	Intake volume flow	[m ³ /h]	4167	4807	5501	6220	7190	8271	9019	9514
Coupling power		[kW]	224	253	285	319	367	424	464	491	532
Discharge temperature		[°C]	176	172	170	168	168	168	169	170	172
Motor speed		[rpm]	1490	1490	1490	1490	1490	1490	2980	2980	2980
Motor power rating		[kW]	250	315	315	355	500	500	560	560	630
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	78	93	111	131	160	196	223	241	270
Reduced moment of inertia		[kgm ²]	24.4	29.3	35.1	41.6	51.4	63.5	22.7	24.4	27.7
Sound pressure level with hood		[dBA]	79	80	81	82	84	85	85	85	85
Sound pressure level without hood		[dBA]	99	99	101	104	106	109	112	112	112
2.5		Intake volume flow	[m ³ /h]	4106	4740	5461	6179	7150	8231	8979	9475
	Coupling power	[kW]	239	271	308	344	395	455	497	525	567
	Discharge temperature	[°C]	198	195	183	181	180	180	181	181	182
	Motor speed	[rpm]	1490	1490	1490	1490	1490	1490	2980	2980	2980
	Motor power rating	[kW]	315	315	355	400	500	500	560	630	630
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	116	139	111	131	160	196	223	241	270
	Reduced moment of inertia	[kgm ²]	24.4	29.3	35.1	41.6	51.4	63.5	22.7	24.4	27.7
	Sound pressure level with hood	[dBA]	80	81	81	83	84	85	85	85	85
	Sound pressure level without hood	[dBA]	101	99	101	104	107	110	112	113	113
	2.75	Intake volume flow	[m ³ /h]	4073	4706	5395	6106	7110	8191	8940	9434
Coupling power		[kW]	256	289	327	367	424	487	530	560	604
Discharge temperature		[°C]	213	208	205	204	193	192	192	192	193
Motor speed		[rpm]	1490	1490	1490	1490	1490	1490	2980	2980	2980
Motor power rating		[kW]	315	355	400	500	500	560	630	630	710
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	116	139	165	194	160	196	223	241	270
Reduced moment of inertia		[kgm ²]	24.4	29.3	35.1	41.6	51.4	63.5	22.7	24.4	27.7
Sound pressure level with hood		[dBA]	80	81	82	83	84	85	85	85	85
Sound pressure level without hood		[dBA]	102	100	103	106	109	112	114	114	114
3		Intake volume flow	[m ³ /h]	4040	4673	5361	6073	7033	8104	8900	9395
	Coupling power	[kW]	272	307	346	387	446	514	563	593	639
	Discharge temperature	[°C]	227	221	217	215	214	214	203	204	204
	Motor speed	[rpm]	1490	1490	1490	1490	1490	1490	2980	2980	2980
	Motor power rating	[kW]	315	355	400	500	500	630	630	710	710
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	116	139	165	194	236	287	223	241	270
	Reduced moment of inertia	[kgm ²]	24.4	29.3	35.1	41.6	51.4	63.5	22.7	24.4	27.7
	Sound pressure level with hood	[dBA]	80	82	82	83	84	85	85	85	85
	Sound pressure level without hood	[dBA]	103	102	104	107	110	113	115	116	116
	3.25	Intake volume flow	[m ³ /h]	4006	4640	5328	6040	7001	8071	8813	9304
Coupling power		[kW]	290	326	366	409	469	539	590	624	677
Discharge temperature		[°C]	242	235	231	227	225	224	225	225	216
Motor speed		[rpm]	1490	1490	1490	1490	1490	1490	2980	2980	2980
Motor power rating		[kW]	355	400	500	500	560	630	710	710	800
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	116	139	165	194	236	287	324	350	270
Reduced moment of inertia		[kgm ²]	24.4	29.3	35.1	41.6	51.4	63.5	22.7	24.4	27.7
Sound pressure level with hood		[dBA]	80	82	83	83	84	85	86	86	86
Sound pressure level without hood		[dBA]	105	103	105	108	111	114	116	117	117
3.5		Intake volume flow	[m ³ /h]	–	4606	5294	6006	6967	8038	8780	9271
	Coupling power	[kW]	–	343	385	430	492	564	616	651	704
	Discharge temperature	[°C]	–	249	243	239	236	235	235	235	236
	Motor speed	[rpm]	–	1490	1490	1490	1490	1490	2980	2980	2980
	Motor power rating	[kW]	–	400	500	500	560	630	710	800	800
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	–	139	165	194	236	287	324	350	390
	Reduced moment of inertia	[kgm ²]	–	29.3	35.1	41.6	51.4	63.5	22.7	24.4	27.7
	Sound pressure level with hood	[dBA]	–	83	83	84	84	85	86	86	86
	Sound pressure level without hood	[dBA]	–	104	106	109	112	115	117	118	118

Performance data for intake pressure $p_1=1.0$ bar (a) and air intake temperature $t_1=20$ °C. Measured in accordance with ISO 1217. Volume flow corresponds to delivery volume flow based on intake conditions. (Performance data not binding. Products subject to technical changes.)

VML 35 G5-E												
Discharge pressure p_2 [bar]			Transmission ratio designations									
			5/6	6/7	7/8	8/9	9/10	10/11	11/12	12	12/13	
0.75	Intake volume flow	[m ³ /h]	1052	1198	1384	1577	1786	2021	2302	2435	2609	
	Coupling power	[kW]	23.2	26.1	30	34.5	39.9	47	56.6	61.7	68.8	
	Discharge temperature	[°C]	86	85	85	85	87	89	91	93	95	
	Motor speed	[rpm]	2965	2965	2965	2970	2970	2965	2980	2980	2980	
	Motor power rating	[kW]	30	30	37	45	45	55	75	75	90	
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	9.6	11.3	13.6	16.5	19.9	24.7	31.3	34.8	39.9	
	Reduced moment of inertia	[kgm ²]	0.57	0.66	0.73	0.87	1.18	1.74	2.57	3.05	3.7	
	Sound pressure level with hood	[dBA]	66	67	71	75	73	75	76	79	82	
	Sound pressure level without hood	[dBA]	90	92	94	100	99	100	102	105	108	
	1	Intake volume flow	[m ³ /h]	1030	1177	1364	1552	1762	2012	2281	2414	2589
Coupling power		[kW]	29.4	32.8	37.5	42.6	48.6	57.2	67.6	73.1	81	
Discharge temperature		[°C]	105	103	102	102	102	104	106	107	109	
Motor speed		[rpm]	2965	2965	2970	2965	2965	2980	2980	2980	2980	
Motor power rating		[kW]	37	37	45	55	55	75	75	90	90	
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	9.6	11.3	13.7	16.4	19.9	24.9	31.3	34.8	39.9	
Reduced moment of inertia		[kgm ²]	0.57	0.66	0.73	0.87	1.18	1.74	2.57	3.05	3.7	
Sound pressure level with hood		[dBA]	66	66	70	76	73	72	75	78	81	
Sound pressure level without hood		[dBA]	90	90	94	101	98	97	100	104	106	
1.25		Intake volume flow	[m ³ /h]	1024	1170	1353	1553	1750	1991	2260	2393	2568
	Coupling power	[kW]	34.8	39	44.7	51.5	57.9	67.2	78.6	84.8	93.3	
	Discharge temperature	[°C]	121	120	119	119	119	119	121	122	124	
	Motor speed	[rpm]	2970	2970	2965	2980	2980	2980	2980	2980	2980	
	Motor power rating	[kW]	45	45	55	75	75	90	110	110	110	
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	14.4	16.9	20.4	24.7	20.1	24.9	31.3	34.8	39.9	
	Reduced moment of inertia	[kgm ²]	0.57	0.66	0.73	0.87	1.18	1.74	2.57	3.05	3.7	
	Sound pressure level with hood	[dBA]	67	66	70	76	72	72	74	76	78	
	Sound pressure level without hood	[dBA]	91	90	93	100	97	98	99	101	103	
	1.5	Intake volume flow	[m ³ /h]	1007	1151	1345	1537	1747	1987	2240	2373	2548
Coupling power		[kW]	39.9	44.5	51.1	58.2	66.4	77.4	89.8	96.5	105.7	
Discharge temperature		[°C]	138	135	133	133	134	135	136	137	138	
Motor speed		[rpm]	2970	2965	2980	2980	2980	2980	2980	2980	2980	
Motor power rating		[kW]	45	55	75	75	90	110	110	110	132	
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	14.4	16.8	20.5	24.7	29.7	36.6	31.3	34.8	39.9	
Reduced moment of inertia		[kgm ²]	0.57	0.66	0.73	0.87	1.18	1.74	2.57	3.05	3.7	
Sound pressure level with hood		[dBA]	68	67	70	76	72	73	74	74	77	
Sound pressure level without hood		[dBA]	91	91	93	101	97	98	99	99	102	
1.75		Intake volume flow	[m ³ /h]	988	1142	1328	1520	1730	1970	2240	2374	2549
	Coupling power	[kW]	44.9	50.3	57.2	64.9	73.7	85.5	100</			

VML 60 G5-E											
Discharge pressure p_2 [bar]			Transmission ratio designations								
			3	4	5	6	7	8	9	10	10/11
0.75	Intake volume flow	[m ³ /h]	1710	1953	2235	2577	2960	3366	3814	4337	4555
	Coupling power	[kW]	38.2	43.1	49	57	66	77	90	110	118
	Discharge temperature	[°C]	84	84	83	83	84	86	88	93	95
	Motor speed	[rpm]	2970	2965	2965	2980	2980	2980	2980	2980	2980
	Motor power rating	[kW]	45	55	55	75	75	90	110	132	132
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	17.3	20.4	24.2	29.4	36	43.9	54	69	76
	Reduced moment of inertia	[kgm ²]	1.0	1.2	1.4	1.8	2.2	2.6	3.2	3.9	4.4
	Sound pressure level with hood	[dBA]	69	67	73	76	79	78	77	77	77
	Sound pressure level without hood	[dBA]	95	94	97	97	103	108	107	108	107
	1	Intake volume flow	[m ³ /h]	1686	1932	2216	2544	2927	3334	3782	4306
Coupling power		[kW]	48.6	54	61	70	81	93	107	129	138
Discharge temperature		[°C]	103	101	100	99	99	100	102	106	108
Motor speed		[rpm]	2965	2980	2980	2980	2980	2980	2980	2980	2980
Motor power rating		[kW]	55	75	75	90	90	110	132	160	160
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	25.8	20.5	24.4	29.4	36	43.9	54	69	76
Reduced moment of inertia		[kgm ²]	1.0	1.2	1.4	1.8	2.2	2.6	3.2	3.9	4.4
Sound pressure level with hood		[dBA]	70	67	70	77	79	77	78	77	77
Sound pressure level without hood		[dBA]	96	94	98	97	102	106	107	107	108
1.25		Intake volume flow	[m ³ /h]	1670	1919	2203	2531	2895	3302	3750	4274
	Coupling power	[kW]	57	65	73	84	95	109	125	148	158
	Discharge temperature	[°C]	119	117	116	115	115	115	116	119	121
	Motor speed	[rpm]	2980	2980	2980	2980	2980	2980	2980	2980	2980
	Motor power rating	[kW]	75	75	90	110	110	132	160	200	200
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	26	30.8	36.6	44	36	43.9	54	69	76
	Reduced moment of inertia	[kgm ²]	1.0	1.2	1.4	1.8	2.2	2.6	3.2	3.9	4.4
	Sound pressure level with hood	[dBA]	70	67	71	75	79	78	79	77	78
	Sound pressure level without hood	[dBA]	96	95	98	99	103	105	104	108	107
	1.5	Intake volume flow	[m ³ /h]	1645	1893	2177	2505	2889	3296	3718	4243
Coupling power		[kW]	66	74	83	95	109	125	143	167	178
Discharge temperature		[°C]	135	132	130	129	129	129	130	133	135
Motor speed		[rpm]	2980	2980	2980	2980	2980	2980	2980	2980	2980
Motor power rating		[kW]	75	90	110	110	132	160	160	200	200
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	26	30.8	36.6	44	54	65	54	69	76
Reduced moment of inertia		[kgm ²]	1.0	1.2	1.4	1.8	2.2	2.6	3.2	3.9	4.4
Sound pressure level with hood		[dBA]	70	67	72	73	79	78	80	78	79
Sound pressure level without hood		[dBA]	97	96	98	102	104	106	104	109	107
1.75		Intake volume flow	[m ³ /h]	1619	1867	2151	2479	2863	3271	3719	4244
	Coupling power	[kW]	74	83	93	106	121	138	158	187	199
	Discharge temperature	[°C]	152	148	145	143	142	142	143	146	148
	Motor speed	[rpm]	2980	2980	2980	2980	2980	2980	2980	2980	2980
	Motor power rating	[kW]	90	110	110	132	160	160	200	250	250
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	26	30.8	36.6	44	54	65	79	99	108
	Reduced moment of inertia	[kgm ²]	1.0	1.2	1.4	1.8	2.2	2.6	3.2	3.9	4.4
	Sound pressure level with hood	[dBA]	71	70	74	73	79	79	80	78	79
	Sound pressure level without hood	[dBA]	98	99	99	104	104	106	106	110	108
	2	Intake volume flow	[m ³ /h]	1593	1841	2125	2453	2838	3245	3694	4219
Coupling power		[kW]	82	92	103	117	133	151	173	202	216
Discharge temperature		[°C]	169	164	160	157	155	154	155	158	159
Motor speed		[rpm]	2980	2980	2980	2980	2980	2980	2980	2980	2980
Motor power rating		[kW]	110	110	132	132	160	200	200	250	250
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	26	30.8	36.6	44	54	65	79	99	108
Reduced moment of inertia		[kgm ²]	1.0	1.2	1.4	1.8	2.2	2.6	3.2	3.9	4.4
Sound pressure level with hood		[dBA]	73	73	75	74	80	80	80	79	80
Sound pressure level without hood		[dBA]	99	102	101	106	105	105	108	111	109

Performance data for intake pressure $p_1=1.0$ bar (a) and air intake temperature $t_1=20$ °C. Measured in accordance with ISO 1217. Volume flow corresponds to delivery volume flow based on intake conditions. (Performance data not binding. Products subject to technical changes.)

VML 95 G5-E											
Discharge pressure p_2 [bar]			Transmission ratio designations								
			8	9	10	11	12	13	7	8	8/9
0.75	Intake volume flow	[m ³ /h]	3017	3523	3987	4514	5139	5840	5934	6603	6981
	Coupling power	[kW]	64	75	84	97	112	131	134	158	173
	Discharge temperature	[°C]	85	85	85	86	87	90	90	95	98
	Motor speed	[rpm]	1485	1485	1490	1490	1490	1490	2980	2980	2980
	Motor power rating	[kW]	75	90	110	110	132	160	160	200	200
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	31.3	38.1	45.3	55	66	80	82	100	112
	Reduced moment of inertia	[kgm ²]	7.3	8.5	9.6	11	12.7	14.9	6.6	7.3	8.0
	Sound pressure level with hood	[dBA]	72	71	73	81	78	79	78	79	82
	Sound pressure level without hood	[dBA]	99	100	102	103	106	106	106	107	107
	1	Intake volume flow	[m ³ /h]	2969	3489	3940	4467	5092	5794	5888	6557
Coupling power		[kW]	81	93	104	118	136	157	160	186	202
Discharge temperature		[°C]	103	102	101	102	102	104	104	109	111
Motor speed		[rpm]	1490	1490	1490	1490	1490	2980	2980	2980	2980
Motor power rating		[kW]	110	110	132	160	160	200	200	250	250
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	31.3	38.3	45.3	55	66	80	82	100	112
Reduced moment of inertia		[kgm ²]	7.3	8.5	9.6	11	12.7	14.9	6.6	7.3	8.0
Sound pressure level with hood		[dBA]	72	72	72	80	77	79	79	79	82
Sound pressure level without hood		[dBA]	99	100	102	103	106	106	106	107	107
1.25		Intake volume flow	[m ³ /h]	2962	3469	3920	4420	5046	5747	5842	6511
	Coupling power	[kW]	97	112	125	140	160	183	186	215	232
	Discharge temperature	[°C]	120	119	118	118	118	119	119	123	126
	Motor speed	[rpm]	1490	1490	1490	1490	1490	2980	2980	2980	2980
	Motor power rating	[kW]	110	132	160	160	200	250	250	315	315
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	47	58	68	55	66	80	82	100	112
	Reduced moment of inertia	[kgm ²]	7.3	8.5	9.6	11	12.7	14.9	6.6	7.3	8.0
	Sound pressure level with hood	[dBA]	72	72	72	79	78	79	79	79	82
	Sound pressure level without hood	[dBA]	100	101	102	103	104	106	106	107	108
	1.5	Intake volume flow	[m ³ /h]	2924	3431	3883	4411	5036	5701	5795	6466
Coupling power		[kW]	110	127	142	160	184	209	213	244	263
Discharge temperature		[°C]	135	133	132	132	133	134	134	138	140
Motor speed		[rpm]	1490	1490	1490	1490	1490	2980	2980	2980	2980
Motor power rating		[kW]	132	160	160	200	250	250	315	315	315
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	47	58	68	81	98	80	82	100	112
Reduced moment of inertia		[kgm ²]	7.3	8.5	9.6	11	12.7	14.9	6.6	7.3	8.0
Sound pressure level with hood		[dBA]	72	72	74	79	79	78	79	79	82
Sound pressure level without hood		[dBA]	102	102	102	103	104	107	107	108	108
1.75		Intake volume flow	[m ³ /h]	2887	3394	3845	4373	5000	5702	5797	6467
	Coupling power	[kW]	124	142	158	178	203	233	237	272	294
	Discharge temperature	[°C]	151	148	146	146	146	147	147	151	154
	Motor speed	[rpm]	1490	1490	1490	1490	1490	2980	2980	2980	2980
	Motor power rating	[kW]	160	160	200	250	250	315	315	315	355
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	47	58	68	81	98	118	120	144	160
	Reduced moment of inertia	[kgm ²]	7.3	8.5	9.6	11	12.7	14.9	6.6	7.3	8.0
	Sound pressure level with hood	[dBA]	72	73	74	79	79	79	79	80	84
	Sound pressure level without hood	[dBA]	103	102	103	104	106	105	106	109	111
	2	Intake volume flow	[m ³ /h]	2849	3356	3808	4336	4963	5666	5760	6431
Coupling power		[kW]	138	157	175	196	223	254	258	295	318
Discharge temperature		[°C]	168	163	161	159	159	159	159	164	166
Motor speed		[rpm]	1490	1490	1490	1490	1490	2980	2980	2980	2980
Motor power rating		[kW]									

VML 150											
Discharge pressure p_2 [bar]			Transmission ratio designations								
			6	7	8	9	10	4/5	5	5/6	6
0.75	Intake volume flow	[m ³ /h]	4737	5390	6162	7159	8045	8720	9319	9926	10582
	Coupling power	[kW]	103	116	133	156	179	197	215	233	255
	Discharge temperature	[°C]	84	83	83	84	85	86	87	89	90
	Motor speed	[rpm]	1490	1490	1490	1490	1490	2980	2980	2980	2980
	Motor power rating	[kW]	132	132	160	200	200	250	250	315	315
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	48.9	58	70	87	103	117	131	146	163
	Reduced moment of inertia	[kgm ²]	12.6	15.6	19.1	24.0	29.8	9.1	10.1	11.3	12.6
	Sound pressure level with hood	[dBA]	80	80	81	82	83	83	84	85	85
	Sound pressure level without hood	[dBA]	100	101	103	104	105	105	106	107	107
	1	Intake volume flow	[m ³ /h]	4663	5316	6088	7084	7972	8647	9246	9853
Coupling power		[kW]	130	145	165	192	217	238	257	278	301
Discharge temperature		[°C]	101	100	99	99	100	100	101	102	104
Motor speed		[rpm]	1490	1490	1490	1490	1490	2980	2980	2980	2980
Motor power rating		[kW]	160	160	200	250	250	315	315	315	355
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	48.9	58	70	87	103	117	131	146	163
Reduced moment of inertia		[kgm ²]	12.6	15.6	19.1	24.0	29.8	9.1	10.1	11.3	12.6
Sound pressure level with hood		[dBA]	80	81	82	83	84	84	84	85	85
Sound pressure level without hood		[dBA]	100	101	103	104	105	105	106	107	107
1.25		Intake volume flow	[m ³ /h]	4631	5285	6056	7010	7898	8573	9173	9780
	Coupling power	[kW]	154	174	198	227	256	279	300	322	348
	Discharge temperature	[°C]	117	116	116	115	115	115	116	116	117
	Motor speed	[rpm]	1490	1490	1490	1490	1490	2980	2980	2980	2980
	Motor power rating	[kW]	200	200	250	315	315	315	355	355	400
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	74	87	104	127	153	172	191	211	234
	Reduced moment of inertia	[kgm ²]	12.6	15.6	19.1	24.0	29.8	9.1	10.1	11.3	12.6
	Sound pressure level with hood	[dBA]	81	82	83	84	85	85	85	86	86
	Sound pressure level without hood	[dBA]	101	102	104	105	106	107	107	108	108
	1.5	Intake volume flow	[m ³ /h]	4571	5225	5998	6995	7883	8558	9100	9707
Coupling power		[kW]	176	198	224	261	295	322	343	368	395
Discharge temperature		[°C]	132	131	129	129	129	130	130	131	132
Motor speed		[rpm]	1490	1490	1490	1490	1490	2980	2980	2980	2980
Motor power rating		[kW]	200	250	250	315	355	355	400	500	500
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	74	87	104	129	153	172	191	211	234
Reduced moment of inertia		[kgm ²]	12.6	15.6	19.1	24.0	29.8	9.1	10.1	11.3	12.6
Sound pressure level with hood		[dBA]	83	83	83	84	85	85	85	86	86
Sound pressure level without hood		[dBA]	104	105	106	107	108	108	108	109	109
1.75		Intake volume flow	[m ³ /h]	4513	5167	5939	6937	7825	8501	9101	9709
	Coupling power	[kW]	198	222	251	290	326	355	382	411	442
	Discharge temperature	[°C]	148	145	143	142	142	142	143	144	145
	Motor speed	[rpm]	1490	1490	1490	1490	1490	2980	2980	2980	2980
	Motor power rating	[kW]	250	250	315	355	400	400	500	500	500
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	74	87	104	129	153	172	191	211	234
	Reduced moment of inertia	[kgm ²]	12.6	15.6	19.1	24.0	29.8	9.1	10.1	11.3	12.6
	Sound pressure level with hood	[dBA]	83	83	85	85	85	86	86	87	87
	Sound pressure level without hood	[dBA]	104	105	106	107	108	109	109	110	110
	2	Intake volume flow	[m ³ /h]	4454	5108	5881	6878	7767	8443	9043	9651
Coupling power		[kW]	220	246	277	319	358	389	417	447	481
Discharge temperature		[°C]	164	161	158	156	155	155	155	155	156
Motor speed		[rpm]	1490	1490	1490	1490	1490	2980	2980	2980	2980
Motor power rating		[kW]	250	315	315	355	400	500	500	500	560
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	74	87	104	129	153	172	191	211	234
Reduced moment of inertia		[kgm ²]	12.6	15.6	19.1	24.0	29.8	9.1	10.1	11.3	12.6
Sound pressure level with hood		[dBA]	83	83	85	85	86	86	87	87	87
Sound pressure level without hood		[dBA]	105	106	108	109	110	110	111	111	112

Performance data for intake pressure $p_1=1.0$ bar (a) and air intake temperature $t_1=20$ °C. Measured in accordance with ISO 1217. Volume flow corresponds to delivery volume flow based on intake conditions. (Performance data not binding. Products subject to technical changes.)

VML 250											
Discharge pressure p_2 [bar]			Transmission ratio designations								
			2	3	4	5	6	7	8	8/9	9
0.75	Intake volume flow	[m ³ /h]	5951	6893	7933	9014	10142	11695	13252	14205	14855
	Coupling power	[kW]	133	150	171	194	219	256	297	323	343
	Discharge temperature	[°C]	85	84	83	83	83	84	85	87	87
	Motor speed	[rpm]	1490	1490	1490	1490	1490	1490	1490	1490	1490
	Motor power rating	[kW]	160	200	200	250	250	315	355	400	400
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	39.5	47	56	67	78	96	117	131	141
	Reduced moment of inertia	[kgm ²]	15.61	19.27	23.68	29.02	35.84	44.69	54.96	63.02	68.75
	Sound pressure level with hood	[dBA]	79	80	82	83	84	85	85	85	85
	Sound pressure level without hood	[dBA]	98	98	100	100	101	103	105	106	107
	1	Intake volume flow	[m ³ /h]	5875	6775	7814	8896	10025	11578	13136	14090
Coupling power		[kW]	169	191	215	242	271	313	359	389	411
Discharge temperature		[°C]	104	102	101	100	99	99	100	101	101
Motor speed		[rpm]	1490	1490	1490	1490	1490	1490	1490	1490	1490
Motor power rating		[kW]	200	250	250	315	315	355	400	500	500
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	59	47	56	67	78	96	117	131	141
Reduced moment of inertia		[kgm ²]	15.61	19.27	23.68	29.02	35.84	44.69	54.96	63.02	68.75
Sound pressure level with hood		[dBA]	80	80	82	83	84	85	86	86	86
Sound pressure level without hood		[dBA]	98	98	100	100	101	103	105	106	107
1.25		Intake volume flow	[m ³ /h]	5782	6724	7764	8845	9976	11461	13020	13974
	Coupling power	[kW]	199	225	256	289	326	372	423	456	479
	Discharge temperature	[°C]	120	118	116	116	115	115	115	115	116
	Motor speed	[rpm]	1490	1490	1490	1490	1490	1490	1490	1490	1490
	Motor power rating	[kW]	250	250	315	355	400	500	500	560	560
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	59	71	84	100	117	143	173	192	206
	Reduced moment of inertia	[kgm ²]	15.61	19.27	23.68	29.02	35.84	44.69	54.96	63.02	68.75
	Sound pressure level with hood	[dBA]	80	81	82	83	84	85	85	86	86
	Sound pressure level without hood	[dBA]	98	99	100	101	102	104	106	107	108
	1.5	Intake volume flow	[m ³ /h]	5687	6629	7670	8753	9883	11438	12998	13952
Coupling power		[kW]	229	259	292	329	368	426	487	527	549
Discharge temperature		[°C]	138	134	131	130	129	129	130	130	131
Motor speed		[rpm]	1490	1490	1490	1490	1490	1490	1490	1490	1490
Motor power rating		[kW]	315	315	355	400	500	500	560	630	630
Power, idling $p_1=p_2=1.0$ bar (abs)		[kW]	59	71	84	100	117	143	173	192	206
Reduced moment of inertia		[kgm ²]	15.61	19.27	23.68	29.02	35.84	44.69	54.96	63.02	68.75
Sound pressure level with hood		[dBA]	81	82	83	83	84	85	85	86	87
Sound pressure level without hood		[dBA]	99	100	101	102	103	105	107	108	109
1.75		Intake volume flow	[m ³ /h]	5594	6536	7577	8659	9790	11345	12906	13861
	Coupling power	[kW]	259	292	329	368	411	473	539	581	610
	Discharge temperature	[°C]	155	151	147	144	143	142	142	143	143
	Motor speed	[rpm]	1490	1490	1490	1490	1490	1490	1490	1490	1490
	Motor power rating	[kW]	315	355	400	500	500	560	630	710	710
	Power, idling $p_1=p_2=1.0$ bar (abs)	[kW]	59	71	84	100	117	143	173	192	206
	Reduced moment of inertia	[kgm ²]	15.61	19.27	23.68	29.02	35.84	44.69	54.96	63.02	68.75
	Sound pressure level with hood	[dBA]	82	83	84	84	85	85	87	87	87
	Sound pressure level without hood	[dBA]	101	102	103	104	105	107	109	109	110
	2	Intake volume flow	[m ³ /h]	5500	6442	7484	8566	9697	11253	12815	13770
Coupling power		[kW]	290	325	365	408	454	521	590	635	666
Discharge temperature		[°C									



AERZEN. Compression - the key to our success.

AERZEN was founded in 1864 as Aerzener Maschinenfabrik. In 1868, we built Europe's first positive displacement blower. The first Turbo blowers followed in 1911, the first screw compressors in 1943, and in 2010 the world's first rotary lobe compressor package. Innovations "made by AERZEN" keep driving forward the development of compressor technology. Today, AERZEN is among the world's longest established and most significant manufacturers of positive displacement blowers, rotary lobe compressors, screw compressors and turbo blowers. AERZEN is among the undisputed market leaders in many areas of application.

At our 50 subsidiaries around the world, over 2,500 experienced employees are working hard to shape the future of compression technology. Their technological expertise, our international network of experts, and the constant feedback we get from our customers provide the basis for our success. AERZEN products and services set the standard in terms of reliability, stability of value and efficiency. Go ahead - challenge us!

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