AERZEN CONTROL SYSTEM AERTRONIC

for rotary lobe compressor, screw compressor and positive displacement blower packaged units





AERTRONIC IS JUST CLEVER. CLEVER IN FUNCTIONALITY, EASY IN OPERATION.

Easy to use. With intelligent features. And designed to provide you with the assurance that your facilities will always run at the desired operating point, depending on system pressures and other parameters. During negative pressure operation as well, of course. After all, that's why AERZEN designed it in the first place. We're talking about AERtronic, the advanced unit control system from AERZEN.

Innovation for Aerzen products.

With the worldwide established AERtronic AERZEN sets new standards with its series Delta Blower, Delta Hybrid and Delta Screw. It concerns a modern, uniform and intelligent control system of packaged units. Also the easy connection of an optional power cabinet of any manufacturers can be realised at any time. Its range of function offers the customers a wide spectrum of possibilities for control, securing and maintenance of AERZEN units. If the control is once active, from now on it takes over the most efficient control of the machine for the operator, e.g. in dependence of the system pressure and this naturally also in negative pressure operation.

Moreover, it shows the operating data, runs the operating hour meter, reports early operational events and records them for later traceability with corresponding date and time in its controller memory. This is to show at any time how the unit is integrated into the process so that corrective actions can be introduced specifically.

Also the subject service and maintenance is dealt in detail by this new, progressive control. Service employments can be planned more efficiently, this increases the operating times of your machine in a significantly.



This basic equipment has a lot to offer.

Already the basic equipment offers numerous functions to the operator:

- Operating panel on the front side of the acoustic hood with touchscreen and 4.3" Colour Graphic-TFT-display
- Control of an external or integrated power cabinet
- Monitoring of measured values by means of adjustable limit values
- Output or recording of the incidents
- Communication via MODBUS RTU (standard)
- Continuous acquisition of operating and service hours
- Extensive language selection (all common languages have been pre-implemented)
- Graphic display of selected measured values for specified periods
- Intuitive navigation due to clearly arranged and password protected menu mode

Targeted extension due to modular technology.

The following optional modules are available to the operator:

- Regulation according to system pressure with speed stipulation to frequency converter (=energy efficient operation)
- Communication with a DCS via Profibus DP
- Communication due to network connection (=Ethernet)
- Option of failure notification by SMS via GSM modem
- Control of acoustic hood heating for low ambient temperatures
- Vibration monitoring with limit value consideration
- Visualisation software and interface for PC connection

Control in compound systems – simply solved with AERtronic. A **base load-/alternate switching** is already implemented in each AERtronic. Consequently up to 5 AERZEN machines of the same priority can be simply cross-linked via MODBLIS PTU

the same priority can be simply cross-linked via MODBUS RTU. Depending on an adjusted pressure band a connection resp. shutdown of the machines is carried out and its running periods are evenly distributed.

Moreover, for achieving energy savings of up to 30%, optimizing running periods of the units and better control of maintenance intervals, the application of a superior AERtronic "Master" (additional unit) is recommended as **control system**. Hereby up to 12 Rotary Lobe Compressors -, Screw Compressors - and Positive Displacement Blowers – with fixed or variable speeds – also different manufacturers are combined to an efficient and powerful machine cooperation.

If an additional increasing demand is required, the "Master" determines the suitable machine of the cooperation and switches this in addition. Load-/Idle running switching cycles of the machines are minimized and an energy saving as high as possible is achieved by avoiding idle running times. The operator is also in the position to monitor the relevant process data of his combination on the display of the "Master unit". This creates transparency and security.

Advantages which will pay off.

With AERtronic you set on a reliable and practice proven control of AERZEN machines up to a compound system. Thanks to the cost-effective modular design operators of the units only have to pay for services they really require. Regardless of the machine type the control is effected according to the same principle so that a re-accustoming is not necessary. Already after shortest time the unit operator is in the position to operate with an AERtronic rotary lobe compressors, screw compressors and positive displacement blowers safely and efficiently. The practice has shown - thanks to the AERtronic the availability of the machines has significantly increased and downtimes could be clearly minimised. AERtronic upgrades your total unit significantly.



Controls the perfect operating point: advanced AERtronic packaged unit control system, when using a frequency converter



AERZEN. Compression the key to success.

AERZEN was founded in 1864 as Aerzener Maschinenfabrik. In 1868 we manufactured the first positive displacement blower in Europe. In 1911 the first turbo blowers followed, in 1943 the first screw compressors and in 2010 the first rotary lobe compressor packaged unit of the world. Innovations made by Aerzen accelerate the development of the compressor technology more and more. Nowadays AERZEN counts among the oldest and most important manufacturers of positive displacement blowers, rotary lobe compressors, rotary piston gas meters, screw compressors and turbo blowers. And in many fields of application AERZEN counts among the uncontested market leaders. In over 40 affiliates around the world and with more than 2,000 employees, we put our experience to work on constantly improving compressor and blower technologies. Our technical competence and the ongoing dialogue with customers form the foundation on which AERZEN's intelligent and successful products are built. Solutions that constantly set new standards for energy efficiency, performance and quality, and that meet constantly changing regulations – with post-sales service available all around the world. Challenge us!

Aerzener Maschinenfabrik GmbH Reherweg 28 – D-31855 Aerzen Telephone: 05154 81-0 – Fax: 05154 81-9191 info@aerzener.de – www.aerzen.com

