Avoid idling, save energy

Increase efficiency with a compressor and energy management system



The Airleader Easy compressor and energy management system is the little brother of the Airleader Master, which has been tried and tested for 25 years. Equipped with all the functions of the Airleader Master, Airleader Easy is designed as a cost-effective variant for smaller compressed air stations with up to four compressors where the desire to increase efficiency is present, but "large" air management systems do not pay off quickly enough.

irleader controls compressors depending on demand. Only as many compressors are running as necessary, unnecessary idling is avoided, and the station works with maximum possible efficiency. Depending on the network volume and the compressor dynamics, a pressure range of just ± 0.15 bar can be achieved with minimal switching frequencies at the same time - this means maximum energy efficiency while using the compressor gently.

The new operating concept dispenses with conventional operating elements such as a keyboard or touchscreen. Programming and operation are carried out via a standard web interface via LAN or WLAN - WiFi user-guided. A smartphone, tablet or notebook is sufficient to connect wirelessly or via LAN cable. There is remote maintenance by the compressed air service partner

the possibility of accessing the station via GSM module and proven web visualization - without the customer having additional computer hardware or interfering with their IT structure (data security!).

The Airleader Easy offers the following functions and details, among others: standard:



it Airleader ensures that only the most efficient compressors are used

combination exactly the amount of compressed air generated currently in production is needed.

Dipl.-Ing. Norman Kloss, WF Steuerungstechnik, Wiernsheim

- Most energy-efficient control of up to four frequency-controlled compressors
- Weekly timer
- 2 pressure profiles for temporary pressure reductions

- 2 rankings for temporary prioritization (e.g. WRG summer/winter)
- up to 6 inputs for accessory monitoring (dryer, filter, dispenser,...)
- up to 6 analog inputs for sensors (pressure, dew point, flow, temp. etc.)
- Long-term data storage (> 10 years) for operating data, messages, sensor values
- Precision control pressure transmitter 0 to 16 bar
- Sheet steel control cabinet for wall mounting with 3 key switches
- WiFi module (Airleader Hotspot) for easy configuration
- Compressed air visualization with remote programming (web server)
- 3 1⁄2″ color display

Transparency about the condition of the compressed air system

The Airleader visualization shows the condition of the compressed air system very transparently: Defects and energy waste are exposed and you can take targeted action against efficiency-damaging factors among the compressors. In addition, auxiliary units such as dryers, filters, Bekomat, etc. are also monitored. Furthermore, the system provides real energy balancing (ISO 50001) through ampere/kW measurement and is therefore eligible for BAFA funding. Another plus: The data generated by Airleader Easy is available to the user on his web server (20-year long-term data backup via IT) and redundantly in the Airleader - and not on third-party servers for a monthly fee.

In addition to bearing vibration monitoring, real current/kW measurement (ISO 50001) and temperature monitoring for compressors of any age or make, the Airleader also serves as a decision-making aid when purchasing new compressors. With the operating data of the Airleader and the manufacturer-neutral simulation tool from WF Steuerungstechnik, the individually suitable compressor combinations can be found - under Be

consideration of efficiency and redundancy. The energy consumption and reserves can be precisely calculated in advance for various concepts and clearly presented. This prevents bad investments in incorrect compressor sizes.

Airleader can be used regardless of the manufacturer and works via signal exchange according to industry standards. All internal data, measurements and energy-relevant evaluations are openly available for further use by customers in various formats (e.g. EXCEL, OPC, XML).

In addition to the special control concept, the compressed air consumption is constantly determined iteratively and then decided depending on which compressors are switched, simple operation and intrinsic safety are further advantageous features of the system. If the bus and/or components fail or there is a power outage, the compressors switch to self-operation via the internal pressure switches.

www.airleader.de

Optional features

- With the alarm and service management, the Airleader reports automatically

In the event of irregularities (e.g. dew point or temperature increases) and in the event of malfunctions (compressors, dryers, condensate drains, etc.) by email, fax or SMS upon request.

The operating and load hours are monitored and logged separately for each compressor. Once the service interval has been reached, the Airleader will automatically contact you via email or SMS.

- On the one hand, the kW or amp->re measurements determine the performance of the

Compressors automatically calculated and made available for energy report; On the other hand, the visualization software carries out permanent belt breakage and intake regulator defect monitoring.

- Differential pressure monitoring in compressed air systems saves energy and filter costs.

With the Airleader differential pressure transmitter, ΔP minimization can be achieved through timely warnings and element changes.

- The OPC server presents the Airleader's process data to the second as an OPC object.

jects available. The OPC client accesses the data provided by the OPC server and displays it graphically in the control station (GLT). Today, OPC is the standard for manufacturer-independent communication in automation technology. With OPC it is sufficient to write an OPC-compliant driver exactly once for each device. The Airleader OPC driver can be integrated into any size control and monitoring system or energy management system software without major adjustment effort.

- Bearing vibration monitoring, oil temperature monitoring, heat recovery counter, and much more.

- Control cabinet variants, GSM modules for remote access, etc.

- Decentralized stations via Ethernet network (TCP/IP) avoids long BUS cables.

