BOGE AIR. THE AIR TO WORK.

BOGE
COMPRESSED AIR SYSTEMS



Interconnection control airtelligence provis 2.0

Easy to operate, hard to beat:
Interconnection control
airtelligence provis 2.0

AN INTELLIGENT CONTROL SYSTEM THAT MANAGES YOUR ENERGY EFFICIENCY LEVELS FOR YOU



The user-friendly 9“ TFT color touch screen offers intuitive control and 24/7 visibility for all your plant‘s parameters.

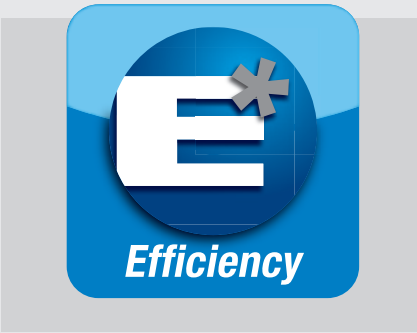
OPTIMIZED ENERGY COSTS

During standard operating mode, all parameters are set toward an optimized delivery volume. This requires an intelligent control mode, which is why we perfected the airtelligence control unit to determine regulation based exclusively on consumption independently. This is how it works: airtelligence provis 2.0 anticipates the suitable compressor size and activates the corresponding machine even before the pressure limit is reached. In consequence, you can rely on optimized energy efficiency.

THREE OPTIONS TO CHOOSE FROM

In addition to delivery volume; priorities are customizable per your requirements and individually adjustable per individual machine. We recommend this if, for example, older compressors are to be connected last. With dynamic run-time optimization, all compressors are either streamlined or optimized to coordinate a common maintenance date. All three operating methods can be combined - resulting in approx. eleven control modes to choose from, adjustable to meet your requirement specifications.

Superordinate controls render compressed air generation considerably more efficient – especially with fluctuating compressed air consumption, and speed-controlled compressors are integrated into the network. As one of the most innovative consumption-oriented control systems on the market, airtelligence provis 2.0 coordinates up to 16 compressors and manages them to maximize efficiency. The airtelligence sets new standards as regards efficiency and operating comfort.



INTELLIGENT

With the **air**telligence provis 2.0, intelligent consumption-dependent control of all connected compressors practically runs by itself. Based on the actual compressed air extraction, the airtelligence automatically selects the optimum compressor combination, streamlines load / idle times and avoids energy-intensive over-compaction.



VERSATILE

The **air**logic module of the **air**telligence provis 2.0 allows you to manage even complex pneumatic stations. Available status values can be linked individually. This eliminates additional programming of functions which up to now could be realized only with the help of expensive, specialized software. Find out more about the details of this module from page 6 onwards.



INFORMATIVE

A browser-based visualization comes as part of the package. The system is easily integrated into an existing server structure via an Ethernet interface. From now on, you will be able to monitor all trend graphs for the pressure gradient, compressor status, volumetric flow rate, pressure dew point, etc. directly on your PC screen!



NETWORK-COMPATIBLE

The airtelligence provis 2.0 comes with an abundance of communicative talent. Not only can all participants communicate with one another, but data is also displayed in a clear manner on all common devices. Industry 4.0 in its purest form.



RECEPTIVE

In addition to the recording and visualization of process data via the superordinate controller, numerous accessory components can also be integrated into this system and displayed transparently on the controlling unit, via a web browser, or on a smartphone or tablet.



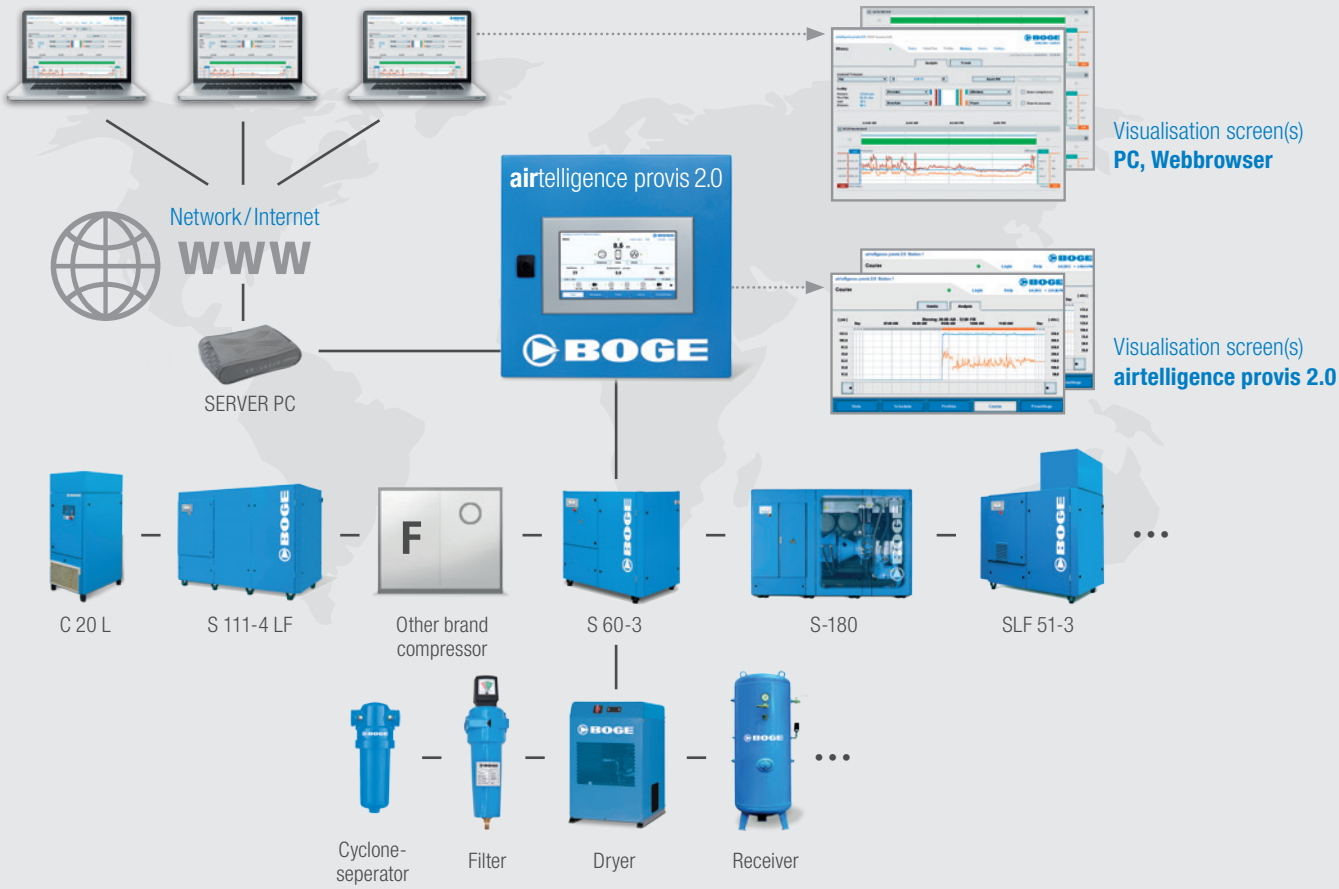
FLEXIBLE

The most common accessory components are:

- Temperature sensor
- Volume flow rate measurement
- Dewpoint sensor
- Humidity measurement
- Performance measurement
- Digital contacts

Cross-linked control at its finest: **air**telligence provis 2.0

INTEGRATIVE, TRANSPARENT AND CORRESPONDINGLY MEANINGFUL



DESIGNED FOR COMPRESSORS OF ALL TYPES AND ORIGIN

The airtelligence provis 2.0 manages a network of up to 16 compressors in a very energy-efficient manner - regardless of the machines' brand, origin and whether the machines are fixed or frequency-controlled. A clear visualization unit displays every single compressor station and integrates up to 20 connected accessory components - e.g., dryers, condensate separators, filters, fans, flaps and more. The optional "Pro" visualization includes an additional extensive alarm management with active error messages as well as "remote monitoring," to manage your system remotely - including data analysis and export for evaluation.

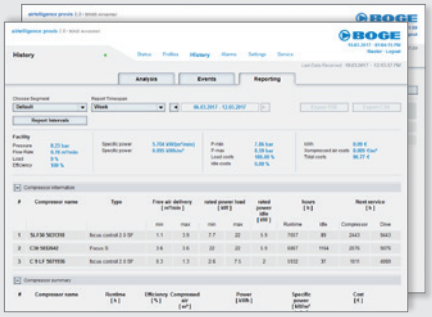
The clear visualization of all connected components and processes plays a decisive role as the interface between human and machine control. The airtelligence provis 2.0 standard range is already very informative, but the optionally available “visualization pro” offers even more detailed statements as well as additional control functions. In principle, all process data can be integrated into your network via a “virtual machine” or independently collected via IPC in a separate control cabinet.

VISIBLE EMPHASIS ON SECURE CONTROL



STANDARD VISUALISATION

With the “Light” version, process data such as history graphs are displayed directly on the control panel or via a web browser and stored locally for at least one year. They can be exported via CSV and then analyzed in Excel on your PC - even months later and after an upgrade to “visualization pro.”



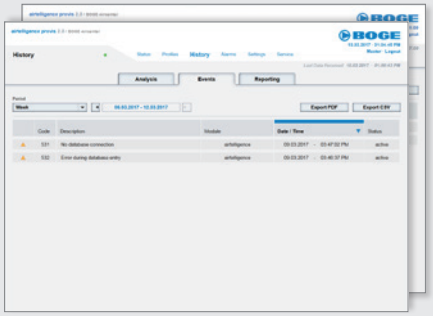
VISUALISATION PRO

“Visualisation pro” provides maximum facility transparency with comprehensive analysis and evaluation functions for compressed air requirements, compressor run times, delivery quantities, plant efficiency and energy costs. Moreover, with “remote monitoring,” that data can be manually evaluated or automatically sent by mail - daily, weekly or monthly.



OPTIMAL DATA PROTECTION

To ensure optimal data security, BOGE recommends skipping the cloud and instead using either a data protection-optimized “virtual machine” or an IPC “plug & play” solution (industrial PC) with a fully wired control cabinet including an integrated PC for “on-board” visualization. Whatever your preference, you will be in full control of your data.



PERFECT SYSTEM PROTECTION

With a differentiated alarm management, you can effectively monitor compressors and all components of the compressed air preparation. Error messages and warning alerts provide precise information on compressor status and temperature, network pressure (pressure range alarms can be lodged individually) or add-ons, e.g. for continuous temperature control.



SERVICE MANAGEMENT

For detailed analyses of control procedures, the service manager can access and examine even the smallest of time intervals of, e.g. 15 minutes. This meticulous look at the running and regulating behavior of the compressors, network pressure, delivery volume and plant efficiency allows for targeted “troubleshooting.“ Individual user rights can also be assigned via the user management.



REMOTE MONITORING

The entire compressed air station can also be monitored remotely, either actively through global access via a browser or by sending alert e-mails. All this to ensure continuous monitoring and continuous control of your compressed air system - without having to resort to a platform in the cloud!

The systemic approach for unlimited flexibility and effective cost reduction: **air**logic

SOVEREIGN INTERVENTION OPTIONS THANKS TO COMPLETE TRANSPARENCY

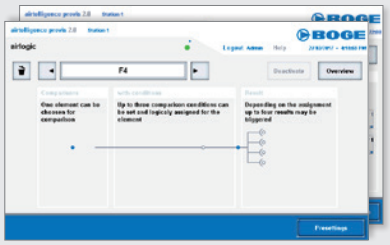


FINALLY: INDEPENDENCE FROM EXPENSIVE SPECIAL SOFTWARE!

The airlogic module is further evidence for BOGE's continuing innovative power and proverbial flexibility. Not only does it enable you to implement even the most extraordinary plant requirements in a cost-effective and highly flexible way, it also amazes with comparatively simple operation despite a vast range of functions. Although a service technician is usually responsible for this aspect, the logical structure, assuming appropriate training, means that technically savvy users are easily able to connect all plant data themselves.

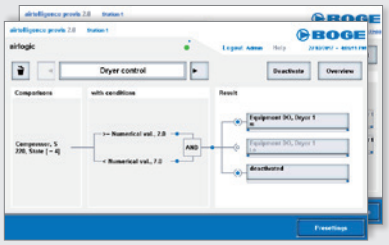
Interconnecting the entirety of status data requires a logical procedure – which is how the name airlogic arose. airlogic links all the condition-based data that flows into the control unit - including additionally connected components – and, based on their status, influences a considerable range of plant properties. This module takes over a range of functions that previously required a costly special software. At the same time, it expands the possibilities of compressor control intervention to an unprecedented extent.

PRACTICAL AND COMMITTED TO LOGICAL THINKING



SUSTAINABLE FLEXIBILITY

Get the greatest possible flexibility when linking your status data - including their retroactive effect on connected components. This includes, of course, that you are able to adapt any set function to changing conditions and requirements at any given time, e.g. after an expansion of the compressed air system due to your company growth...



EMPHASIZING ATTENTIVENESS

With **air**telligence provis 2.0 as the central intelligence of your compressed air system, airlogic acts as a “guarding officer,” who does not miss anything. If for example, this module detects that a compressor is running under load, it promptly switches on dryer 1 and opens flap 2, if this fits the defined scenario.



CONSISTENTLY EFFICIENCY-ORIENTED

Whether it is the supply, return or exhaust air flaps, or any component of the compressed air preparation - everything can be linked and controlled based on status or temperature. This simplifies handling and ensures the efficiency-optimized operation of your entire compressed air system. All that without any additional investment in a special additional software.

“Control competence is partly expressed via data security. Therefore, a closed infrastructure is preferable to any cloud solution.”

Gunnar Heise,
Product Market Manager
BOGE Kompressoren



No efficient operation without intelligent management. **With airtelligence provis 2.0 and airlogic, even with existing compressor stations, all plant requirements can be efficiently managed and implemented cost-effectively.**

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AIRTELLIGENCE PROVIS 2.0 AT A GLANCE

Rule algorithm	
Intelligent, forward-looking and consumption-dependent	different profiles available per weekly schedule
Connecting of Compressors	
connectable compressors	Monitoring of up to 16 fixed or frequency-controlled compressors (pistons, screws, scroll, HST) compatible with older and third-party compressors
Pro-FU	Parallel-control operation of frequency-controlled BOGE or third-party compressors in one compressed air system
processing components	Up to 24 additional accessory components
Control-Side Inputs	
2 analog inputs 4-20 mA	2. Network pressure sensor (optional)
6 digital Inputs 24 V	profile and operating mode selection
Customer-Specific Communication (Outputs)	
3 digital hubs for error messages	standard
airstatus compatible	remote diagnostics via GSM/GPRS (optional)
Bus Connection	
ModBus RTU / ModBus RTU (as a serial interface for connection to the remote diagnostics tool **air**status or for integration in the user's visualization system)	standard / optional
Profibus and Profinet	optional
ModBus RTU (e.g. older compressors from BOGE or third-party manufacturers)	standard (via optional Interface module with older compressors)
Visualisation	
WebServer for installation on a customer's PC, browser-based visualisation	standard
Comprehensive visualization / analysis & evaluation / remote monitoring	optional
IPC ("on-board" visualization for easy connection via plug and play)	optional (integrated in control cabinet)
Other Interfaces	
USB interface (e.g. for software release or download of service files)	Standard
Dimensions/Measurements	
control cabinet	Metal wall cabinet for wall mounting, IP 66, CE, UL, cUL
width x height x depth	500 x 500 x 210 mm
weight	15 kg

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