





# AirPure MONITOR

Breathing air quality monitoring system

## BartelsRieger AirPure MONITOR

### Individually configurable system for continuous monitoring of breathing air quality

The AirPure MONITOR offers the possibility to monitor breathing air according to the standard "Compressed gases for respiratory protective devices" (DIN EN 12021:2014) with compressed air or process air systems.

Due to free configurability, various (gas) concentrations in the breathing air can be measured continuously. The system is designed for use of 2 to 8 sensors.

All common (gas) concentrations required by the standard, such as carbon monoxide (CO), carbon dioxide (CO2), oxygen (O2) as well as moisture and oil can be monitored. The combination of other sensors, such as for hydrogen sulphide (H2S) or nitrogen compounds NO/NO2, is possible.

- ▼ Breathing air monitoring in accordance with standard EN 12021:2014
- f f V Integrable into existing breathing air systems
- Free configurability of the complete system
- Optional: backup systems/emergency air supply in the event of deviations from standard parameters
- Precise, reliable and accurate measurement of desired (gas) concentrations
- V Optional: Combination with compressed air filters by BartelsRieger
- V Optional: Internet/cloud connection



Operation

Monitored breathing air on site

#### Safe and clean breathing air supply for the user

In case of a fault or if limit values for the primary source (compressed/process air) are exceeded, the system warns and can optionally switch to an emergency air supply, e.g. cylinder batteries.

#### Technical features

- » S7 compatible PLC with colour touch panel (3.5 inch TFT)
- » QVGA resolution (320x240 pixels)
- » 512 kB RAM
- » Ethernet, CAN, RS 232 with free ASCII protocol, RS 485 Modbus RTU
- » Supplied in ready-to-use mode
- » 2-8 x digital inputs/outputs
- » Micro SD card (8 GB)

#### **Properties**

- » Use of 2-8 sensors 4-20 mA
- » Alarm values, pre-alarm and main alarm freely adjustable
- » Preconfigured measuring device
- » Visualisation by various system images
- » Recording of measurement diagrams and alarms on micro SD card (8 GB)
- » Fault messages in text form (CSV format) with forwarding via relay
- » Possibility of data transfer option via Modbus (RTU)

#### Air source

e.g. Ring mains or compressors



## Optional air preparation

e.g. AirPure K (as a case unit)



2	4)	A	<b>9</b> (	19:54 ੌ 2	6.03.23
1	Pressure dewpoint			-20.0	pdp
2	O <sub>2</sub>			21	%
		BARTE	LS V		0
		СО		2	ppm
1	CO <sub>2</sub>			410	ppm
	<u>a</u>			<b>A</b>	<u>@</u>

#### Alarm system

Warning if limit value is exceeded

### Optional backup system

Switchover to emergency air supply if the limit values are exceeded



Continuous breathing air monitoring, optionally with cloud/internet connection for external supervising





# With Safety.

#### BartelsRieger Atemschutztechnik GmbH

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