

SATA AB1



German Engineering

Spray Guns | Cup Systems | Breathing Protection | Filter Technology | [Accessories](#)



Technical Documentation

SATA AB1 - Breathing Air Humidifier and Air Warmer

The application of paint and other hazardous material requires health protection through air supplied breathing protection equipment. However, full face breathing masks are often seen as an unwelcome necessity, due to undesirable secondary effects of modern compressed air systems and refrigerant dryers: The compressed air reaching the breathing mask is too dry and cold. As a result, painters feel uncomfortable and are unhappy wearing full face masks. Furthermore, the mucous membranes in mouth and nose dry out, leading to respiratory issues.

The breathing air humidifier and air warmer SATA AB1 helps prevent these problems. It provides comfortable breathing conditions inside the mask and significantly increases their acceptance.

SATA AB1





■ Features

- The SATA AB1 first filters, then humidifies and warms compressed air while it streams through hot water. The temperature can be infinitely variably regulated between 20° C and 25° C.
- A bypass switch allows to top up the SATA AB1 with demineralised water also while in use, to avoid work interruptions.
- The SATA AB1 is designed to supply up to five full face breathing masks, provided the air pipe system has large enough pipes and insulation.

■ Field of Application

Industrial workplaces where several breathing protection masks are simultaneously used in continuous operation.

■ Technical components

Main switch

The breathing air is heated up with electrical energy. Therefore, the SATA AB1 has to be installed outside the spray booth (explosion protection).



Thermostat

The required air temperature is adjusted via a thermostat. The SATA AB1 automatically controls the heating temperature.



Pressure adjustment

The system is equipped with a pressure reducer allowing the pressure adjustment at the point of use.



Bypass switch

The manual bypass switch ensures that all connected breathing masks are sufficiently supplied with air even while the liquid container is being filled up again.



Technical Details

Dimensions (b x h x d)	900 mm x 600 mm x 350 mm
Weight	approx. 50 kg
Relative breathing air humidity* (approx.)	22 - 25%
Breathing air temperature** (approx.)	20 - 25° C
Min. inlet pressure	6.5 bar
Max. inlet pressure	8.0 bar
Recommended operating pressure	4.0 - 5.5 bar
Max. allowed operating pressure after AB1 regulation valve	6.0 bar
Max. air flow	1900 NI/min
Water filling quantity	max. 10 l
Electrical connection	230 V~
Heating power	800 W

* Depending on air inlet pressure and heating temperature

** With heating switched on (depending on insulation/length of tubes and heating temperature)



SATA® AB1™ - Wall Mounted Breathing Air Humidifier and Air Warmer

Supplies up to five breathing protection hoods.

We recommend breathing protection equipment with belt unit without additional filter element when using the SATA AB1.

Art. No. 46 250

Accessories:

SATA® vision 2000™

A full face breathing protection mask to protect respiratory tracts, face, hair and neck - for daily use.

Art. No. 52 662



SATA® Industrial belt unit

Belt unit for the use of SATA vision 2000 or SATA air star C with activated charcoal filter elements or with SATA AB1.

Art. No. 58 941



Safety compressed air hose

To supply breathing protection equipment, crush- and kink-proof, 6m length, 9.5 mm.

Art. No. 49 080



SATA® top air™

Portable breathing air humidifier for single workplaces where the installation of the SATA AB1 would not make sense.

Art. No. 89 086



Additional practical accessories like air hoses, respirators, compressed air filters etc. are available from your SATA dealer.

Your SATA dealer



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