

RAM 4021-DP

Continuous Dew Point Monitor for Respiratory and Medical Breathing Air



RAM 4021-DP

Dew Point Monitor

- Continuous dew point monitor for breathing air
- Robust, easy to operate design
- AutoCal® automatic calibration
- Dryer control relays
- Ideally suited for dessicant dryer applications
- User-adjustable alarm and dryer control set points
- Dry contact for remote alarm panel activation
- Internal, case-mounted horn with built in alarm silencer
- LCD display

GfG Instrumentation

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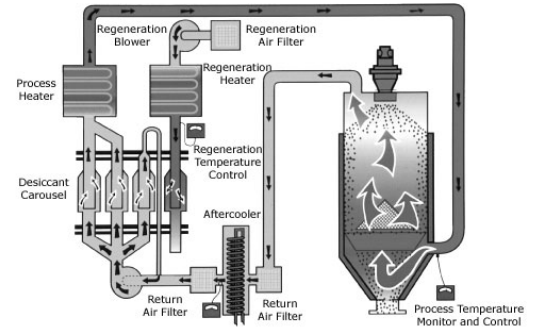
The RAM 4021-DP AutoCal® is the unit of choice where specific and accurate measurement of dew-point levels are required. This unit accurately indicates the level of dew point on an illuminated liquid crystal display.

Calibration and maintenance are not necessary with our innovative AutoCal® system. Additional features including alarm relay contacts, user adjustable set points, low flow alarm indicator, built in alarm reset and many more, make this unit an intelligent choice. The RAM 4021-DP is available in two models, the 4021-DP (dew point levels) and 4021-DP-PR (additional relay to signal power loss to monitor, complies with newest NFPA regulation).

Our innovative relay system allows for both a dew point alarm (exceeded dew point level relay), as well as a separate relay control for dryer operation (purge control). Set points can be user adjusted throughout the operating dew point temperature range independently for the ultimate in configuration flexibility.

Relay activation has a preset delay to prevent short cycling of dryers and false alarms. Using the dryer control relay greatly increases the efficiency of desiccant air dryer systems which can result in significant energy savings over time and promotes a green energy program. This feature is one of the largest factors when determining the proper compressed air system for a facility.

Typical Desiccant Dryer



NFPA Guidelines ('99 C-*26) (5.1.3.5-15)

5.1.3.5.15 Medical Air Quality Monitoring. Medical air quality shall be monitored downstream of the medical air regulators and upstream of the piping system as follows:

- (1) Dew point shall be monitored and shall activate a local alarm and all master alarms when the dew point at system pressure exceeds $t-4^{\circ}\text{C}$ ($+39^{\circ}\text{F}$).
- (2) Carbon monoxide shall be monitored and shall activate a local alarm when the CO level exceeds 10 ppm. [See 5.1.9.5.4(2).]
- (3) Dew point and carbon monoxide monitors shall activate the individual monitor's signal at all master alarm panels if the monitor loses power.

Specifications

Range and Resolution for Dew Point

Dewpoint -112- 68° F resolution 1° F
-80-20° C

Expected Sensor Life

Dew point Greater than 2 years

Detection Principles (sensor)

Dewpoint Thin film technology

Other Specification

Dimensions: 7.3x5.9x4 inches (185x150x101 mm)
Weight: 5 pounds (226 kg)
Power: 110 VAC - 24 VDC
Alarms: Audible: Case mounted horn
Visual: LEDs
Relays: Two dry contacts
Housing: NEMA 4X
Temperature range: +32 to +105°F (0 to +40°C)
Air temperature: +32 to +122°F (0 to +50°C)
Adjustable alarm points.
Factory Set to: Dew point 4°F
Sample flow rate: 0.8 cubic feet of air per hour (scfh)

Airline Input

1/8" feed Standard pressure 30 to 145 psi

Available Relay Contacts and Ratings

1 dew point high alarm NO/NC
1 dew point low (dryer control) NO/NC
1 power loss NO/NC (by request)

Available Models

4021-DP Dew point
4021-DP-PR Dew point with power loss relay (complies with NFPA '99 C-*26 (5.1.3.5-15))

Limited lifetime on instrument and electronics. One year on the Dew point sensor.

Refer to GfG complete warranty for details

Distributed by:



GfG Instrumentation

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Specifications subject to change without notification