

Dewchecker 0.1



Features:

The dew point measurement instrument Dewchecker 0.1 is a portable device used to measure the dew point of gases. Per definition, the dew point is the temperature of a body marking the start of condensation of water vapor on its surface respectively the balance adjusted between condensing and evaporating water.

The gas sampling occurs via a gas sampling fitting furnished in the hot zone to the furnace wall with a ceramic inner tube.

Due to a steel tube length of at least 150 mm, outside the furnace wall, the sample gas is cooled quickly and guided at a gas dew point temperature below room temperature through a dense gas hose to the gas inlet port of the device.

The Dewchecker 0.1 is equipped with a capacitive on-line sensor used accordingly for continuous measurements. The measurement result can be forwarded by an universal analog output or a digital RS-485 / RS-422 interface.

Advantages

Easy handling

High measuring certainty and accuracy

Insensitivity to gases containing dust and corrosive gases

Robust construction

Dewchecker 0.1



Technical Data:

Design:

Portable steel housing

Dimensions:

330x310x320 mm (WxHxD)

Weight:

Approx. 17 kg

Degree of Protection:

Housing IP 20 according to IEC 60529
Front panel IP 40 according to IEC 60529

Ambient Temperature:

10...40°C during operation
0...50°C during storage

Power Supply:

230 or 115 VAC ±10% 50...60 Hz (please specify)

Measuring Gas Connectors (hose connectors):

Input: Tube outer diameter 5...6 mm

Output: Tube outer diameter 5...6 mm

Built-in measuring pump

Measuring Gas Pressure:

±50 mbar

Measuring Range:

-80...+20°C (indirect measurement with capacitive sensor)

Measuring Accuracy:

±2°C (indirect measurement with capacitive sensor)

Resolution in steps of:

0,1°C

Maintenance Interval:

Every year

Analog Output:

-80...+20°C, 0...20 mA or 4...20 mA or 0...10 V
galvanic isolated, 4...20 mA is the predefined setting

Pin Assignment:

Current output: Pin 6, GND = Pin 2

Voltage output: Pin 7, GND = Pin 3

Digital Output:

Either RS-485 / RS-422 four-wire or
RS-485 two-wire (please specify)

Isolated interface with Modbus-protocol

Pin Assignment:

Four-wire: GND = Pin 1, TxA = 9, TxB = 5,

RxA = 8, RxB = 4

Two-wire: GND = Pin 1, A = 9, B = 5

Order number

531-3021

Device name

Dewchecker 0.1

Spare parts

24799

531-8001

24659

130-6050

24181

Mirror plate for Dewchecker complete

Pump for Dewchecker

A005 for Dew Checker v.3.6

Polishing cotton wool

Sinter filter inlet 7 µm