DRYING OF TECHNICAL CERAMICS

Monitored and controlled drying is a very important stage in the production process for technical ceramics. To achieve optimum product quality, both the temperature and the humidity are controlled in the drying process. Because of the high levels of chemical contamination of the humidity/temperature measuring transducer which occur during the drying process, the EE33 industrial measuring transducer is used.

The EE33 humidity/temperature transducer installed in the drying chamber is exposed to a high level of chemical contamination during the several days of the drying process. With conventional humidity measuring transducers, this chemical contamination results in a drift in the sensor characteristics and therefore large measurement errors. The high-accuracy EE33 humidity measuring transducer works perfectly, even under these difficult operating conditions, and provides measurement results which are stable in the long-term.

This is made possible by the monolithic humidity sensor HMC01 and the heating function of the EE33. After each drying cycle, the humidity sensor is briefly but intensively heated and the chemical contamination simply evaporates. The bake-out function (ARC) of the EE33 can be started both manually and automatically in a defined time interval.

**Application conditions**

- Measurement range: 0…100 % rel. hum. / 00...80 °C
- Output: 4 – 20 mA
- Conditions of use: 20…100 % rel. hum. / 30…60 °C / chemical contamination with ammonia

**E+E Product**

EE33-MFTC9055ARHC01/AB6-T21

Humidity / Temperature measuring transducer for chemical applications

Highly accurate measurement of relative humidity and temperature, even with high levels of chemical contamination. HC01 sensor coating to prevent dirt deposits. ARC module for manual activation of the sensor heating.