



## RTV-5/RTF-5/RTFC-5 Temperature, humidity and CO<sub>2</sub> sensor

*Your environmental system is only as good as the sensor*

Your environmental system is only as good as the sensors. DGT-Volmatic has throughout many years specialized in high quality sensors and environmental control, and has always been acknowledged for the high quality sensors. Now, a new generation has been developed.

### **Combined sensor**

For the first time, it is possible to have a combined temperature, humidity, and CO<sub>2</sub> sensor. The combined sensors ensure that the climate conditions are measured in the same spot. Therefore, when combined in the climate control calculations, the different measurements are comparable. One sensor is used for each compartment. The sensor is aspirated. The air surrounding the crop material is sucked through the sensor, giving precise measurement of the instant microclimate.



- *Precise*
- *Reliable*
- *Long Lifetime*
- *Easy Maintenance*

### **Temperature, humidity and CO<sub>2</sub>**

The temperature sensor has a surface relation to the mass, which gives the best possible reaction time on temperature deviations. The humidity sensor can be either full electronic or it can be the dry/wet bulb. The electronic has a teflon filter protecting the open chip and preventing droplets by high humidity. The reading is constant over many years, and even by exchange no calibration is needed. The sensor is maintenance free. With the dry/wet sensor a wellknown physical principle is used. By measuring the temperature of a dry and a wet sensor it is possible to calculate the humidity. The reading is very precise even by almost 100% relative humidity. The sensor has to be filled with water twice a month.

The CO<sub>2</sub> sensor is working with infrared absorption. The reading is very precise and constant over long time. Has to be calibrated only twice a year.

# Specifications

# RTV-5/RTF-5/RTFC-5

<i>Technical</i>	
<i>RTV-5 temperature and humidity sensor</i>	
Measuring range:	From -10 to +60°C, (from -13 to +140°F)
Tolerance temperature:	± 0.3°C (0 - 50°C), ± 0.6°F (32 - 122°F)
Measuring area humidity:	10 - 100% RH
Tolerance humidity:	±3% RH (40 - 100%)
<i>RTF-5 temperature and humidity sensor</i>	
Measuring range:	From -10 to +60°C, (from -13 to +140°F)
Tolerance temperature:	±0.3°C (0-50°C), ± 0.6°F (32-122°F)
Measuring area humidity:	10 - 100% RH
Tolerance humidity:	±3% RH (40 - 100% RH)
Reaction time:	About 15 seconds with filter
<i>RTFC-5 temperature, humidity and CO<sub>2</sub> sensor</i>	
Measuring range:	From -10 to +60°C, (from -13 to +140°F)
Tolerance temperature:	±0.3°C (0 - 50°C), ± 0.6°F (32-122°F)
Measuring area humidity:	10 - 100% RH
Tolerance humidity:	±3% RH (40 - 100% RH)
Reaction time:	About 15 seconds with filter
Measuring area CO <sub>2</sub> :	0 - 2000 ppm
Tolerance CO <sub>2</sub> :	±100 ppm (0 - 50°C), (32 - 122°F)
Reaction time:	Max 300 sec
Supply Voltage:	24V + 10% - 15%, 50/60 Hz
<i>Physical</i>	
Dimensions, H x diameter:	320 x 200 mm (12 x 8")
Weight:	1,9 kg (4.1lb.)
Proofing:	IP42
Emission:	EN50081-1
Immunity:	EN50082-1
Temperature:	0 - 45°C (32 - 113°F) without direct sunradiation
Humidity:	0 - 100% RH without condensation

Distributor:

Specifications subject to change without notice.

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