

# **DZR-45**

PRODUCT INFORMATION



# **Accurate Multipurpose hygrostat/thermostat**

- Graphic readout screen (multi-lingual)
- LED bar readout of the proportional control
- LED indicators for humidification and dehumidification
- Touch key operation
- Bandwidth setting
- 3 Hygrozones ®
- Maximum/minimum setting
- Offset for the sensors
- Hygrostat functions (2x)
- Thermostat function
- Capacity control
- Proportional control 0-10 Volt (2x)



# Proportional and relay control

The Hygrostat operates in 3 zones: Humidifying zone, Dead zone and Dehumidifying (Hygrozones). Humidification and dehumidification are then controlled by a 0 to 10 Volt signal (see figure 1). This means that if RH = setpoint, both outputs are 0 Volt

(humidification and de-humidification).

The Hygrostat can control 2 rooms at different setpoints when 2 sensors (HS-91) are connected.

# Humidification

If RH is less than setpoint, the Hygrostat-output for humidification will increase to 10 Volts. This signal can be connected directly to the Contronics humidifiers for proportional control. If this difference of setpoint minus RH exceeds the adjusted bandwith, the humidification relay will switch on. The Hygrostat offers the choice of proportional or on/off control or both in case extra humidification is required.

#### **De-humidification**

If RH is greater than setpoint, the Hygrostat-output for dehumidification will increase to 10 Volts. This signal can be connected directly to a dehumidifier for a proportional control. If this difference RH minus setpoint exceeds the adjusted bandwith set (between 1% and 20%) the dehumidification relay will switch on. In this case the Hygrostat again offers the choice of proportional or on/off control or both.

## **Specifications DZR-45**

Supply voltage  $230V \pm 10\% 50/60 \text{ Hz}$ 

Maximum relay load 8A 250 VAC
Proportional outputs 0-10V (2x)
Range 1% till 99%

General accuracy:

with humidity sensor HS-91 ± 2% (2x)
with humidity sensor HS-10 ± 5% (1x)

Power consumption <5W

Permissible ambient temp. 0°C - 50°C

Dimensions (LxWxH) 267 x 225 x 104 mm

Housing protection class IP-54 with closed cover

Temperature -40°C - 70°C

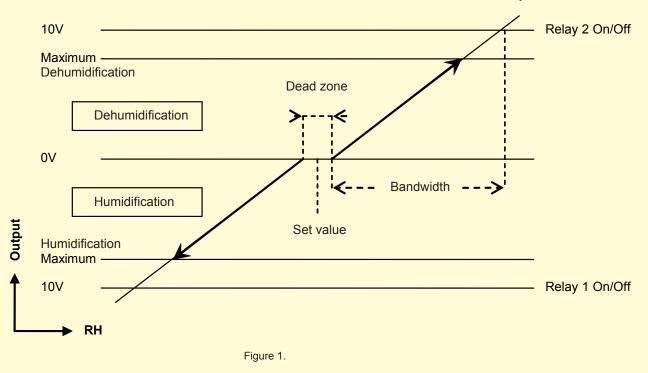
# **Option**

DZR-45NET Network connection

Hygrostat/Thermostat with NETwork connection. Simple to connect to the network with a standard network cable. Works via the normal IP/IPC protocol. Using a PC you can control the DZR-45NET remotely and read the information. The data can be graphically displayed or exported to Excel. The DZR-45NET is also accessible via the internet if required.

#### **Accessories**

HS-91 Humidity and temperature sensor HS-10 Humidity sensor





P.O. Box 144 5490 AC Sint-Oedenrode The Netherlands

Telephone: +31(0)413-487000 Telefax: +31(0)413-473903 Website: www.contronics.nl E-mail: info@contronics.nl