

HUMIDIFIER

HU-45-CA

USER MANUAL





Contronics Engineering B.V., Ambachtsweg 8, 5492 NJ Sint-Oedenrode, The Netherlands, hereby declares that product HU-45-CA is produced and delivered by Contronics Engineering B.V., in accordance with the following CE directives:

EMC-Directive : 2004/108/EG

Directive for low-voltage electrical installation : 2006/95/EG

1. PREFACE

This user manual contains the installation and operating instructions for the ultrasonic humidifier HU-45-CA. The HU-45-CA consist out of a HU-45, DZR-45 and 2x HS-91. Separate manuals for each of these products are enclosed.

2. INTRODUCTION

The HU-45-CA is an ultrasonic humidifier that is a dedicated solution for applications that do not allow the external air to be mixed with air that circulates through the HU-45 (CA environment). For this reason the humidifier is build into an airtight enclosure. An internal heating element is installed for applications in which very cold air (till - 5 °C) is circulated through the humidifier. The complete set-up is controlled via a DZR-45.

3. CONTENT OF DELIVERY

The content of delivery consist out of:

- HU-45-CA
- Mains Lead
- User manual: - HU-45-CA
 - HU-45
 - DZR-45
 - HS-91

4. CONNECTIONS AND FUNCTIONS

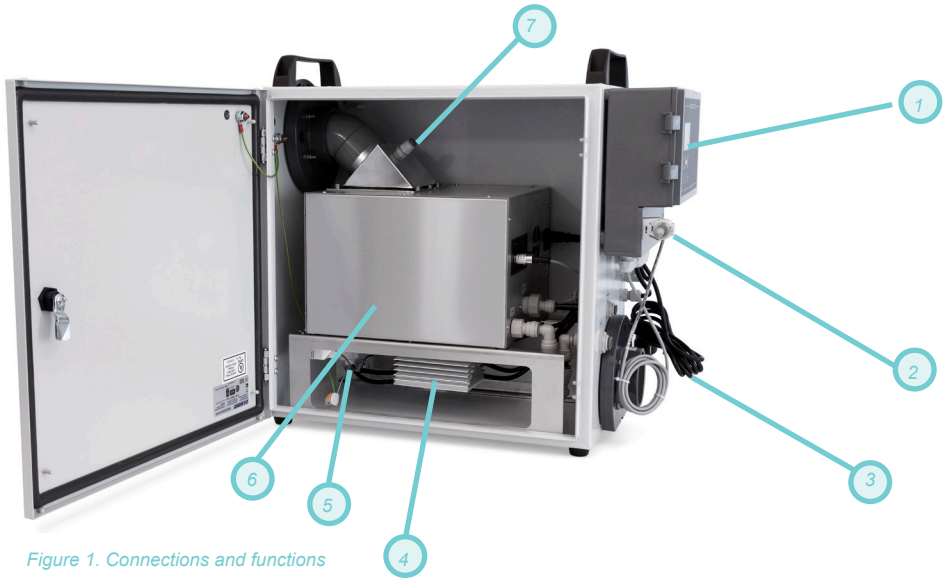


Figure 1. Connections and functions

- 1. DZR-45.
- 2. HS-91.
- 3. Mains.
- 4. Heating element.
- 5. Power outlet.
- 6. HU-45.
- 7. Ribbon heating (connection).
- 8. Air intake: "AIR IN".
- 9. Water drain (1/2").
- 10. Water supply (3/8").
- 11. Indication LEDs.
- 12. Display.
- 13. Push buttons.
- 14. On/off switch.
- 15. Air outlet: "AIR OUT".

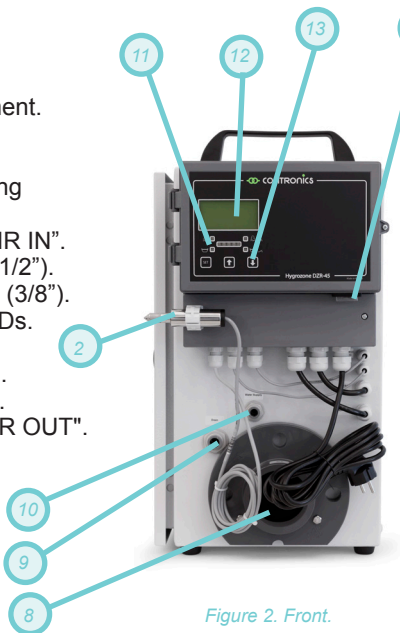


Figure 2. Front.



Figure 3. reverse.

5. INSTALLATION INSTRUCTIONS

Before the HU-45-CA can be installed all caps etc. need to be removed. The device must be installed on a flat surface. After the HU-45-CA has been installed a number of connections have to be made:

- Air intake (75mm)
- Air Outlet (75mm)
- Water supply (John Guest 3/8")
- Water drain (John Guest 1/2")
- Power supply (220VAC)

It is recommended to install a valve on both air intake and air outlet so the cabinet can be opened without disrupting the CA climate.

As an option it is possible to add a ribbon heating to the system's pipes. The power can be supplied via a cable gland (see 7 in figure 1) on the humidifier and the power can be supplied via a power outlet (see 5 in figure 1).

The HU-45-CA can be switched on by the ON/OFF switch on the DZR-45.

6. SETTINGS

After the HU-45-CA has been switched on, it can be controlled via the DZR-45. For more information on how to control the DZR-45 please refer to its manual.

The DZR-45 has an alarm output, RELAY4, which indicates if the internal temperature becomes too low. The factory-default alarm output is set to 0 °C and may be adjusted.

Factory defaults

When the DZR-45 leaves the factory its default settings are:

Temperature alarm: 0 °C

Housing temperature: 5 °C

Sensor 1= External HS-91

Sensor 2 = Internal HS-91

Alarm --> Sensor 2 = Minimum temperature = 0 °C

Thermostat --> Setpoint = 5 °C

Thermostat --> Mode = Heating

Thermostat --> Sensor selection = Sensor 2