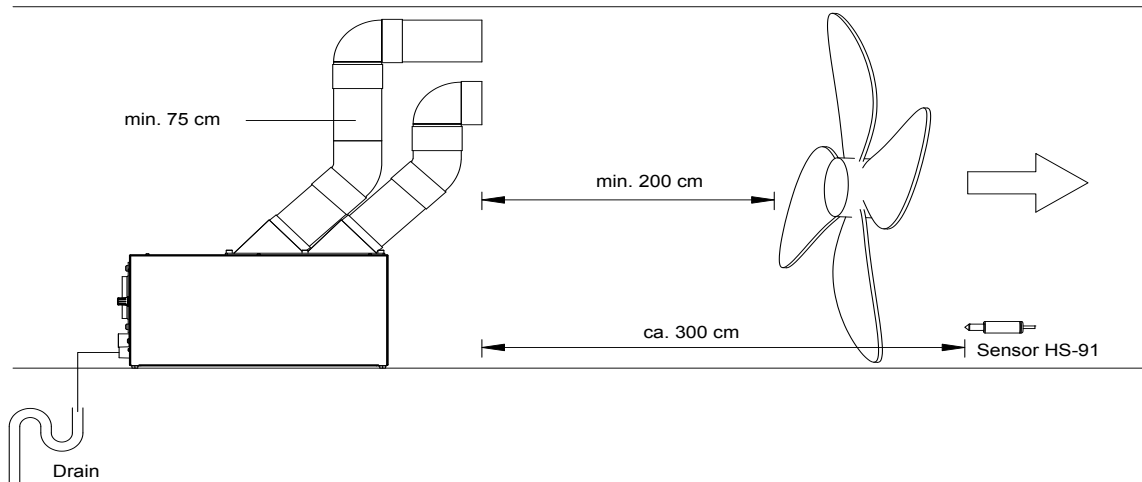


Humidifier with duct system

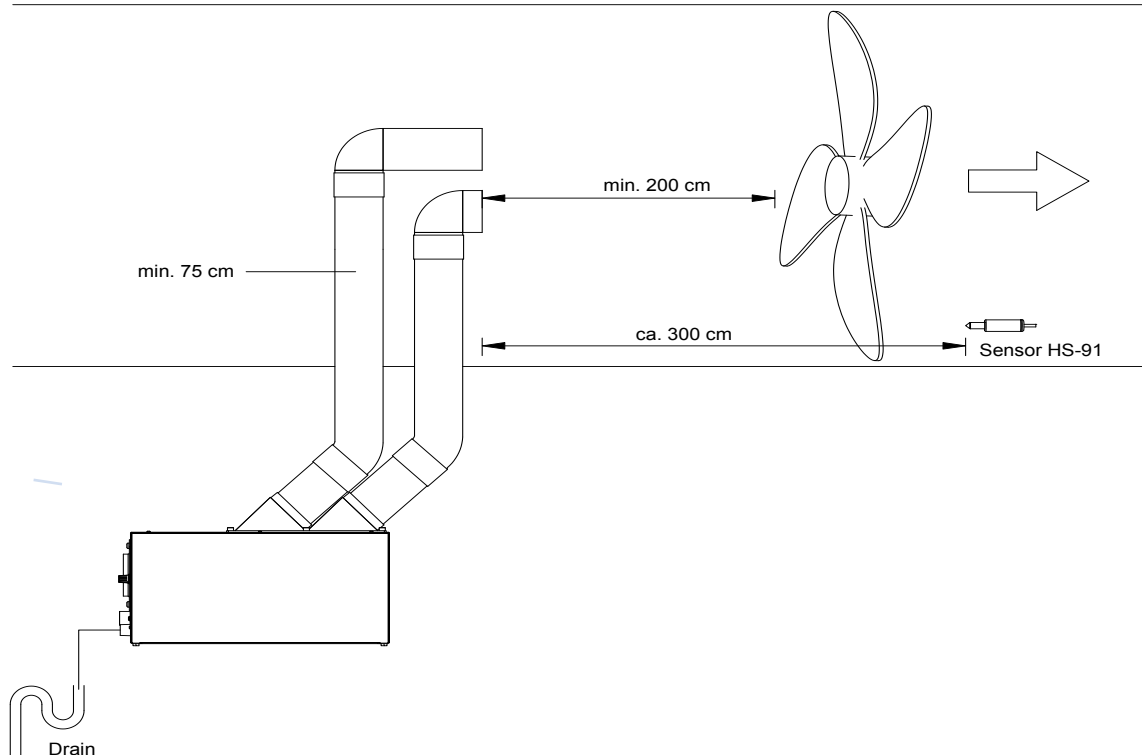
APPLICATION NOTE

Low pressure side of a duct

Humidifier inside the lowpressure side of a duct



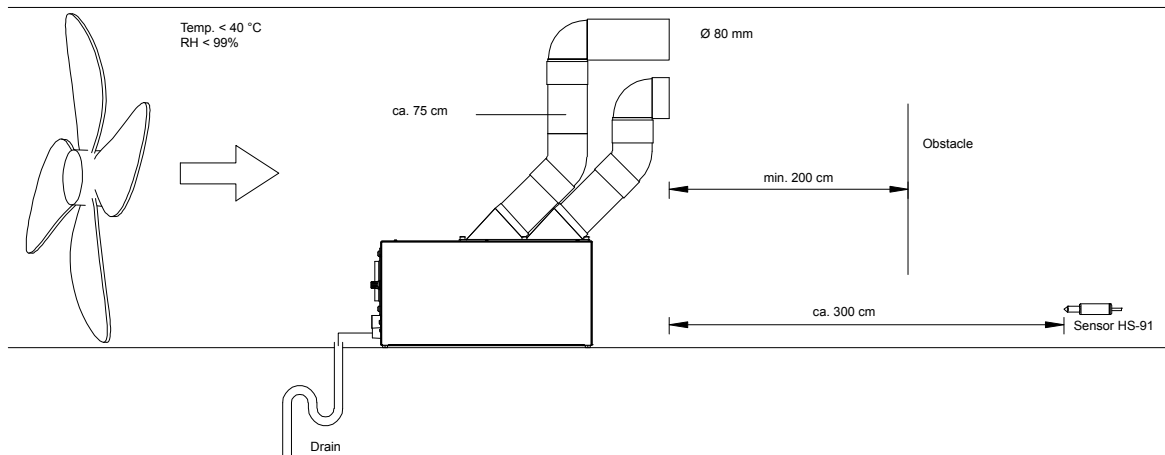
Humidifier parallel to the low pressure side of a duct



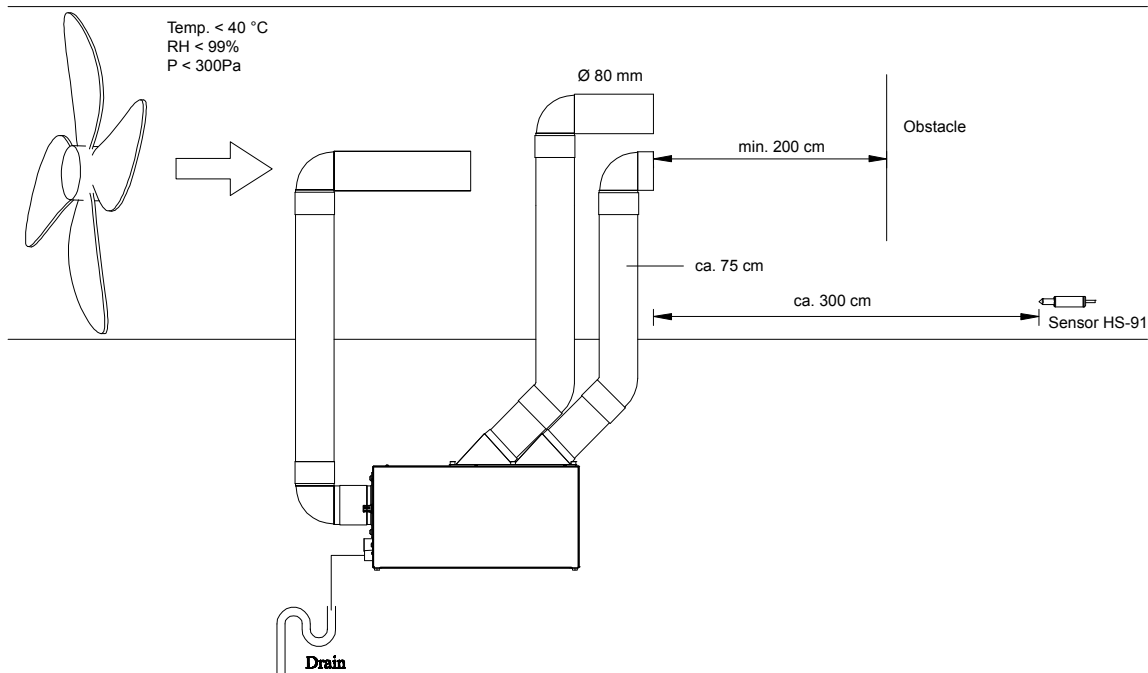
- Whenever possible install the humidifier on the lowpressure side of the ducting.

High pressure side of a duct

Humidifier inside the high pressure side of a duct

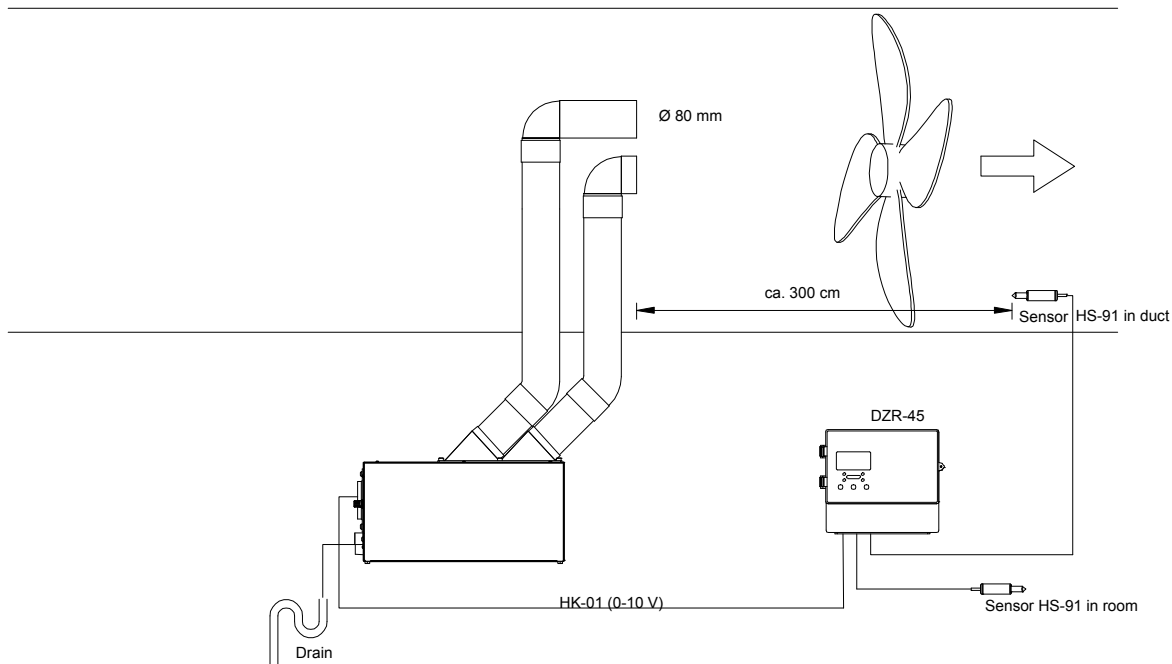


Humidifier parallel to the high pressure side of a duct



- When the unit is installed on the high pressure side the drain should have a siphon with a water block equalling the dynamic pressure inside the duct (100 Pa = 1 cm).
- If the unit is installed parallel to the high pressure side, the dynamic pressure inside the duct should not exceed 300 Pa.
- Allow at least 200 cm distance from the outlets to the first obstacle. (airflow ca. 2 m/sec.).
- Contact condensation inside the outlet pipes of the humidifier must be drained away, or allowed to flow back in to the humidifier.
- The outlets should always point slightly upwards to prevent dripping.
- The pipework must have a length of at least 75 cm.

Control of humidity in a duct system



- The humidifier should be controlled by a Contronics DZR-45/2xHS-91/HK-01.
- The first HS-91 functions as a maximum Hygrostat and should be positioned at a distance of ca. 300 cm from the outlets of the humidifier.
- This sensor is set around 80% RH or such that the humidity at the level of the first obstacle is 100%, to prevent contact condensation.
- The second HS-91 functions as a room hygrostat and should be positioned with in the room to be humidified.
- The DZR-45 is provided with a special software program to control these 2 sensors.