



WWS 100

Temperature, CO₂ and humidity sensor with ventilation keypad and WSK-Link™



Natural ventilation

Application

Indoor sensor for air quality monitoring by means of temperature, CO₂ level and relative humidity measurement. Typically, one sensor per room/zone is used but multiple sensors can be used in the same room/zone if e.g. minimum, maximum and mean values are requested. In addition to sensor functionalities, the unit also has a push-button for simultaneous operation of all windows or selected motor groups in the room/zone; e.g. close or open all windows.

The sensor is connected to a WindowMaster control unit type WCC 310 PLUS, WCC 320 PLUS, WSC 310 PLUS or WSC 320 PLUS via WSK-Link™. Up to 15 sensors can be connected to a control unit.

WSK-Link™ is WindowMaster's effective, proprietary serial data networks protocol that integrates power supply and (serial) data communication in a three-conductor cable. WSK-Link™ is used for data communication between WindowMaster's latest generation of controllers, sensors and break glass alarms.

The maximum cable length must not exceed 200 metres and devices must not be connected in a ring bus system.

WWS 100 is specifically designed as room sensor in NV Embedded® solutions.

Specifications

- Temperature range measured: 0-50°C.
- CO₂ range measured: 400-2000 ppm.
- Relative humidity range measured: 0-100%.
- Measurements will be sent directly to the controller via WSK-Link™.

Max. number of sensors per control unit:

- WCC 310 P: 15 x WWS 100
- WCC 320 P: 15 x WWS 100
- WSC 310 P: 2 x WWS 100 + 10 WSK 5xx
- WSC 320 P: 10 x WWS 100 + 10 WSK 5xx

Guideline for the carbon dioxide concentration in rooms

CO ₂ -concentration	Assessment of air quality
< 800 pmm	Good
800-1400 pmm	Moderately
> 1400 pmm	Low / Unhealthy

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Technical specifications	
Power consumption	2mA
Power supply	via WSK-Link™
Connection	WSK-Link™, via MotorController type WCC 310 P / WCC 320 P or smoke control panel type WSC 310 P / WSC 320 P
Operating conditions	0°C - +50°C, for indoor wall mounting and must not be installed in dusty environments or covered
Materials	Self-extinguishing thermoplastic
Colour	Studio white (corresponding to RAL 9016)
Dimensions	83 x 114 x 24mm (W x H x D)
Weight	114 g
CO ₂ accuracy	±150 ppm during product life cycle at 25°C and 950 - 1050 hPa
Calibration	Factory calibrated for higher than ±50 ppm at 600 ppm and 1000 ppm. Auto-calibration using ABC logic™
Measurement of relative humidity	1 - 100% ±3% at 25°C
Measurement of temperature	0°C - 50°C, ±0,5°C at 25°C and ±1°C at 0..50°C
Operation	Must not be exposed to mechanical shock or excessive vibration
Cabling class	IP20, Class III (SELV/PELF)
Delivery	Sensor
Reservations	Subject to technical changes

Variants	Item no.
Temperature, CO ₂ and humidity sensor – WSK-Link™	WWS 100