WINDOW
MASTER ®
Fresh Air. Fresh People.

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, CO_2 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, WSC 320 PLUS, WSC 520, WSC 540 or WSC 560 via WSK-Link™. The number of sensors that can be connected to a controller depends on the controller type, see "Max. number of sensors per 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.
- CO_2 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
- WSC 520: 10 x WWS 100 + 20 WSK 5xx
- WSC 540 per 20A section: 10 x WWS 100 + 20 WSK 5xx
- WSC 560 per 20A section: 10 x WWS 100 + 20 WSK 5xx

6.10

Guideline for the carbon dioxide concentration in rooms

CO₂-concentration	Assessment of air quality
< 800 pmm	Good
800-1400 pmm	Moderately
> 1400 pmm	Low / Unhealthy

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

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 / WSC 520 / WSC 540 / WSC 560
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
CO₂ 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, CO2 and humidity sensor – WSK-Link™	WWS 100