

# WSC 310/320 PLUS

## AOV CONTROL UNIT

### VOLTAGE

Input = 230V AC, Output = 24V DC

### MOTOR LINES

2 or 10 (WSC 320-PLUS-10)

### MOTOR LOAD

10 A (WSC 310-PLUS) or  
20 A (WSC 320-PLUS-2/10)



### DESCRIPTION

Smoke extraction and daily comfort ventilation up to 10 smoke zones / 10 daily ventilation groups 10A and 20A versions to be used with  $\pm 24V$  standard actuators and/or actuators with MotorLink® comfort ventilation via bus communication KNX, BACnet IP or BACnet MS/TP less cabling as the panel uses bus technology wind direction depending H&S ventilation more panels can be linked (master/slave) low power consumption. Smoke control panel for the control of  $\pm 24V$  DC actuators and actuators with MotorLink® for smoke ventilation and daily comfort ventilation. The panel can be used in small and medium sized buildings as well as in building sections e.g. stair cases and restaurants. Easy configuration via the built-in touch screen.

### INPUTS FOR

- Manual Override Switch
- Smoke Sensor
- Fire Alarm
- Switch
- Thermostat
- Wind Sensor
- Rain Sensor
- BMS (BACnet or KNX)

### APPLICATION



SMOKE  
VENTILATION

### CERTIFICATION

Certified and tested in accordance to EN 12101-10 

## DESCRIPTION (CONTINUED)

### Panel types

The PLUS panel is supplied in three versions:  
10A, 2 smoke zones / 2 daily ventilation groups  
WSC 310 P 0202

20A, 2 smoke zones / 2 daily ventilation groups  
WSC 320 P 0202

20A, 10 smoke zones / 10 daily ventilation groups  
WSC 320 P 1012

The number of smoke zones and ventilation groups is the max number possible. These are to be configured via the built-in touch screen and thus be fitted to the building.

The panel is also supplied as a STANDARD version where the configuration is done on DIP switches – please see the separate product sheet for further information

### Communication card

The panel can be expanded with a communication card thus comfort ventilation will be possible via bus communication KNX, BACnet IP or BACnet MS/TP together with e.g. NV Comfort® or NV Advance®. The card is to be bought separately.

### Card types:

WCA 3FK with KNX  
WCA 3FM with BACnet MS/TP  
WCA 3FB with BACnet IP

### Break glass unit

Break glass units from the WSK 5 series are to be used together with this panel. The units are configured and assigned to smoke zones via the built in touch screen.

On each line up to five break glass units type WSK 503 or WSK 504 can be connected.

If keypads and smoke detectors are to be connected to the break glass unit, break glass unit type WSK 501 or WSK 502 is to be used. Only one of these types can be connected per line, the remaining (up to four) break glass units must be type WSK 503 or WSK 504.

Smoke zone / ventilaton group / motor line

A ventilation group (motor group) consists of one or more motor lines and all the motor lines in the group are operated simultaneously.

A ventilation group can contain motor lines with ±24V standard actuators and MotorLink® actuators, whereas a motor line can only have ±24V standard actuators or MotorLink® actuators connected.

### Cabling

The panel uses bus technology and the overall cabling for break glass units, smoke detectors and keypads is significantly reduced compared to other types of smoke panels.

The panel has 1 input for a smoke detector, 2 inputs for break glass units (where up to 10 break glass units can be connected) and 2 or 12 inputs for ventilation keypads (no max number of keypads).

Use break glass unit WSK 503 or WSK 504 when smoke detectors are connected to the smoke detector input in the panel.

Use break glass unit WSK 501 or WSK 502 when smoke detectors are connected to the break glass unit.

Linking smoke panels

By linking several panels together the panels can be used in large buildings. Max total master/slave cable length between two panels is 200m.

### Commissioning

The PLUS panel is configured, commissioned and maintained via the built in LCD touch screen – easy and simple without the use of an external PC.

For easy commissioning and quick troubleshooting when maintaining the system, faults in the system will be shown on the touch screen.

### Back-up batteries

Built-in uninterruptible power supply for min. 72h in case of power loss (batteries are supplied).

### Specifications

approval according to EN 12101-10 automatically limited opening for comfort ventilation – no additional modules required simple installation due to substantially less cabling field bus cards are available for KNX, BACnet IP and BACnet MS/TP max. output voltage 27.6VDC @230VAC flexible open system design easy configuration at start up / expanding / rebuilding on the 2½" LCD built in touch screen in the panel – this can also be done on a PC without any additional modules the touch screen is also used for quick troubleshooting when maintaining the system.

### Connection options

triggering by BMS via potential-free contact – no additional modules required magnetic clamps – for further information see the installation guide.

## TECHNICAL DATA

Primary Voltage (Input)	230V AC
Secondary Voltage (Output)	24V DC
Motor Load	10 A (WSC 310) or 20 A (WSC 320)
Motor Lines	2 or 10 (WSC 320-PLUS-10)
Inputs	Manual Override Switch, Smoke Sensor, Fire Alarm, Switch, Thermostat, Wind Sensor, Rain Sensor, BMS (BACnet or KNX)
Operating Condition	-5°C - +40°C
Battery Backup	>72 hr
Size	400 x 300 x 120 mm (WSC 310) or 400 x 300 x 210 mm (WSC 320)
Protection Type	IP 54
Delivery	1 x Control Unit & 2 x Batteries
Battery Size	2 x 12V 7Ah (WSC 310) or 2 x 12V 12Ah (WSC 320)
Certification	EN 12101-10

## ACCESSORIES

NV SOLO	-	Control Unit & Weather Station
SSR-D	-	Optical Smoke Sensor
WCA3FB	-	Fieldbus card BACnet-IP key
WCA3FK	-	Fieldbus card KNX interface
WCA3FM	-	Fieldbus card BACnet/MSTP interface
WLA110	-	Room Thermostat
WLA150	-	Co2 & Temperature Sensor
WLA330	-	Wind & Rain Sensor
WLA331	-	Rain Sensor
WSK100	-	Ventilation Keypad
WSK501	-	Manual Override Switch
WSK503	-	Manual Override Switch

## PART CODES

WSC310-PLUS-2	-	WSC 310-PLUS Control Unit 2-Zone 24 V 10 A
WSC320-PLUS-2	-	WSC 320-PLUS Control Unit 2-Zone 24 V 20 A
WSC320-PLUS-10	-	WSC 320-PLUS Control Unit 10-Zone 24 V 20 A

## COMPATIBLE WITH



**WMX 826**  
Chain Actuator



**WMU 836**  
Chain Actuator



**WMU 842**  
Chain Actuator



**WMD 820**  
Folding Arm Actuator

(Multiple 24V DC actuators, total load must not exceed 10 A (WSC 310) or 20 A (WSC 320) max.)