



CompactSmoke™ WSC 106 MH S Smoke control panel 6A



Application

- smoke extraction and daily comfort ventilation
- 1 smoke / 1 daily ventilation groups
- 6A panel
- to be used with 24 VDC standard actuators, MotorLink[®] actuators or pyrotechnic gas generators
- configuration on DIP switches
- less cabling as the panel uses bus technology
- low power consumption
- metal housing

Compact smoke control panel for the control of 24 VDC actuators, actuators with MotorLink® or pyrotechnic gas generators 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., staircases and restaurants.

Smoke zone / break glass unit

Break glass units from the WSK 5 series are to be used together with this panel.

Up to 10 break glass units type WSK 5xx can be connected. If keypad and smoke detector are to be connected to the break glass unit, break glass unit type WSK 501 or WSC 502 is to be used. Only one of this type of unit can be connected to the panel, the remaining (up to nine) break glass units must be type WSK 503 or WSK 504.

Specifications

- CE marked according to EN 12101-10
- complies with ISO 21927-9
- automatically limited window opening and / or opening duration for comfort ventilation without additional modules
- triggering by BMS via potential-free contact without any additional modules
- configuration via 8 DIP switches
- max. output voltage 24VDC @ 230VAC
- LED indication of the status of the panel
- simple installation less cabling

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 or differential heat detector, 1 input for break glass units (where up to 10 break glass units can be connected) and 1 input for ventilation keypads (no max number of keypads).

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

Use break glass unit WSK 501 or WSK 502 when smoke detector or ventilation keypad is connected to the break glass unit - see example:

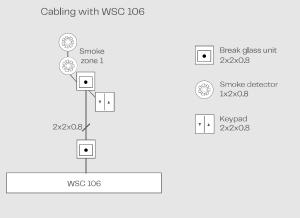
Cable surveillance

Actuators with MotorLink® are monitored via data communication

For cable monitoring on 24 VDC actuators and actuators not supplied by Window Master an "end of line module" type WSA 514 is to be added.

Back-up batteries

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



Description of the panel

The panel includes a power supply unit WCA 1P2 (6A), which is connected to the mains, a control card WSA 1SS as well as two back-up batteries.

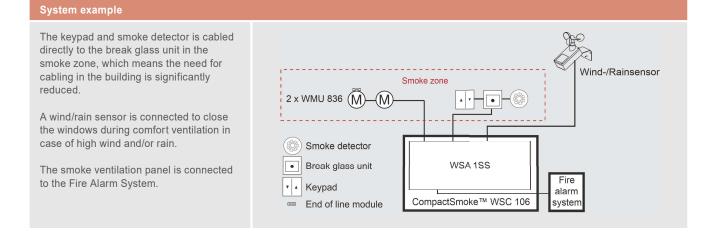
The card contains:

- 1 motor lines for 24 VDC standard actuators, MotorLink® actuators or pyrotechnic gas generators
- 1 inputs for keypads for comfort ventilation
- 1 inputs for break glass units
 1 input for smoke / differential heat detector

• output for alarm signal

- output for fault signal to Fire Alarm System
- input for weather station (WLA 330 or WLA 331)
- connection for USB device
- 8 DIP switches for easy configuration

For information on connections please see the installation guide.



Configuration / DIP switches For configuration the smoke panel has DIP switches. The factory settings for all the DIP switches is OFF.

| Switch | Description | ON / OFF function | | |
|-----------|--|---|--|--|
| 1 | No mains window position unchanged | ON: No change in position in case of power failure OFF: The windows close in case of power failure. | | |
| 2 | Momentary action OPEN / CLOSE (comfort ventilation) | ON: The window actuators run as long as the comfort keypad is pressed. OFF: The windows close / open completely when pressing the comfort keypad once. | | |
| 3 | VdS triggering by alarm | ON: When the alarm is triggerend the actuators will, in accordance with VdS 2581, for a duration of 30min be triggered to shortly reverse and open every second minute. OFF: Normal alarm. | | |
| 4 | Smoke detector CLOSE (pirmarily used in Switzerland) | ON: When the alarm is triggered by a smoke detector, the windows will close in all smoke zones. A following operation of a break glass unit will leave the system in alarm but trigger the actuators to open the windows. Break glass units have higher priority than smoke detectors. OFF: Regardless if the alarm is triggered by smoke detectors or break glass units, the window actuators will open the windows | | |
| 5 | The windows open or close in case of fire | ON: The windows close in case of fire OFF: The windows open in case of fire | | |
| 6 | Window opening is limited | ON: The window opening is limited to 30% during comfort ventilation OFF: The windows will open 100% during comfort ventilation | | |
| 7 | Window opening is time limited | ON: The windows will close after 30min during comfort ventilation. OFF: The windows will close when triggered by safety signal or close command. | | |
| 8 | Pyrotechnic gas generator is connected | ON: A pyrotechnic gas generator is connected. OFF: Window actuators are connected | | |
| Factory s | Factory setting is OFF | | | |

Max numbers of actuators per panel The table shows the maximum number of actuators, which can be connected to the panel depending on the type of the actuator. The total power consumption of all the connected actuators must not exceed 6A.

| | 24 VDC actuators | MotorLink® actuators 1) |
|-----------------------------|------------------|-------------------------|
| WMU 831 / 851 / 861-1 | 6 | 4 |
| WMU 831 / 851 / 861-2 | 6 | 2 |
| WMU 831 / 851 / 861-3 | 6 | 3 |
| WMU 831 / 851 / 861-4 | 4 | 4 |
| WMU 836-1 | 6 | 4 |
| WMU 836-2 | 6 | 2 |
| WMU 836-3 | 6 | 3 |
| WMU 836-4 | 4 | 4 |
| WMU 842 / 852 / 862 / 882-1 | 3 | 3 |
| WMU 842 / 852 / 862 / 882-2 | 2 | 2 |
| WMU 842 / 852 / 862 / 882-3 | 3 | 3 |
| WMU 863 / 883-1 | 2 | 2 |
| WMU 863 / 883-2 | 2 | 2 |
| WMU 864 / 884-1 | 1 | 1 |
| WMU 885 / 895-1 | 1 | 1 |
| Continued on the next page | | |

| | 24 VDC actuators | MotorLink [®] actuators ¹⁾ | |
|--|---|--|--|
| WMX 503 / 504 / 523 / 526-1 | 12 | 4 | |
| WMX 503 / 504 / 523 / 526-2 | 12 | 2 | |
| WMX 503 / 504 / 523 / 526-3 | 12 | 3 | |
| WMX 503 / 504 / 523 / 526-4 | 12 | 4 | |
| WMX 803 / 804 / 813 / 814 / 823 / 826-1 | 6 | 4 | |
| WMX 803 / 804 / 813 / 814 / 823 / 826-2 | 6 | 2 | |
| WMX 803 / 804 / 813 / 814 / 823 / 826-3 | 6 | 3 | |
| WMX 803 / 804 / 813 / 814 / 823 / 826-4 | 4 | 4 | |
| WMD 820-1 | 6 | 4 | |
| WMD 820-2 | 6 | 2 | |
| WMD 820-3 | 6 | 3 | |
| WMD 820-4 | 4 | 4 | |
| WMS 306 / 309-1 | 6 | 4 | |
| WMS 306 / 309-2 | 6 | 2 | |
| WMS 306 / 309-3 | 6 | 3 | |
| WMS 306 / 309-4 | 4 | 4 | |
| WMS 409 xxxx 01 | 3 | 0 | |
| WMS 409-1 | 3 | 3 | |
| WMS 409-2 | 2 | 2 | |
| WMS 409-3 | 3 | 3 | |
| WML 820 / 825 | 6 | 0 | |
| WML 860-1 | 6 | 4 | |
| WML 860-2 | 6 | 2 | |
| WML 860-3 | 6 | 3 | |
| WML 860-4 | 4 | 4 | |
| WMB 801 / 802 ²⁾ | Actuators with a total of max. of 6A can be connected to the locking actuator | | |
| WMB 811 / 812 / 815 / 816 / 817 / 818 2+3) | 6 | 4 | |

 $^{\mbox{\tiny 1)}}$ MotorLink actuators must be of same type and with same configuration

²⁾ Do not exceed the total power consumption of the motor line

³⁾ When having two locking actuators on one motor line use: 1 x WMB 811 and 1 x WMB 812, 1 x WMB 815 and 1 WMB 816 or 1 x WMB 817 and 1 x WMB 818

Actuator type / number of speeds

This smoke ventilation panel gives the possibility of two window actuator speeds depending on the type of connected actuator:

The different speeds:

- manual control speed actuators run fast and audibly.
 H&S and safety control speed actuators run fastest. H&S control always has highest priority.
- 24 VDC standard actuator 1 speed (H&S)

• MotorLink® actuator - 2 speeds

(H&S / manually operated)

Max numbers of pyrotechnic gas generators per panel

Max. 12 pyrotechnic gas generators can be connected to the smoke panel.

| Technical specifications | | | | | |
|--------------------------------|---|--|--|--|--|
| Output current (nominel) | 6A | | | | |
| Motor lines Smoke zones | 1 motor line (the line can be either a 24 VDC standard motor line or a MotorLink® motor line) in 1 ventilation groups / 1 smoke zones | | | | |
| Primary voltage | 230V AC, 50Hz (85-264V AC, 47-63Hz) | | | | |
| Actuator secondary voltage | Motor voltage24 VDC (±15%)Open circuit voltage at 230V AC (no load)24 VDC @ 20°CRipple at max load150mVp-p | | | | |
| AUX | 24 VDC, 500mA | | | | |
| Power consumption | Min. config. 1.9W ¹ . Max. config. 3.4W ² . At max load 170W | | | | |
| | min. config. idle: 1 x break glass unit WSK 501 and 1 x smoke detector WSA 311, system operational but no actuators are running max. config. idle: 1 x break glass unit WSK 501, 9 x break glass units WSK 503, 10 x smoke detectors WSA 311 and 1 x rain sensor WLA 330, system operational but no actuators are running max load: 1 x break glass unit WSK 501, 9 x break glass unit WSK 503 and 10 x smoke detectors WSA 311 in alarm. Full load on motorline and AUX. | | | | |
| Leakage current | max 0.75mA @ 240 VAC | | | | |
| Inrush current on primary site | 60A / 230 VAC max. 4 x WSC 106 per 10A supply group. Circuit breaker "C" characteristic. | | | | |
| Operating condition | -5°C - +40°C, max. 95% relative humidity (not condensing) | | | | |
| Emergency power supply | >72 hours in accordance with EN 12101-10 | | | | |
| Switch-on duration | ED 40% (4 min. per 10 min.) | | | | |
| Cable connection | Actuator:flexible max 6mm² / solid max 10mm²Other components:min 0.2mm² / max 1.5mm² | | | | |
| Size and weight | 300 x 300 x 120mm (HxWxD), 4.3kg no batteries, 7kg with batteries (2 x WSA 003) | | | | |
| Material | Metal housing for surface mounting | | | | |
| Colour | Grey (RAL 7035) | | | | |
| IP rating | IP54 | | | | |
| Certification | CE marked according to EN 12101-10 Complies with ISO 21927-9 | | | | |
| Delivery includes | CompactSmoke™ smoke ventilation panel. Supplied with 1 end of line module type WSA 514, 7 x 10kΩ resistors and 2 back-up battery type WSA 003 | | | | |
| Note | We reserve the right to make technical changes | | | | |

CompactSmoke[™] WSC 106 MH S

Smoke control panel 6A

| Items | ltem number |
|--|-------------------|
| Smoke control panel 6A, 1 smoke zone / 1 daily ventilation group, 1 comfort input, 2 back-up batteries WSA 003 | WSC 106 MH S 0101 |
| Accessories | ltem number |
| Break glass unit with signal, plastic housing. With data communication and input for smoke detector. Max. one break glass unit per panel. Colour of the housing = x: red = 1, yellow = 2, grey = 3, orange = 5 | WSK 501 000x |
| Break glass unit with signal, metal housing. With data communication and input for smoke detector. Max. one break glass unit per panel. Colour of the housing = x: yellow = 2, grey = 3, orange = 5 | WSK 502 000x |
| Break glass unit with signal, plastic housing. With data communication. No input for smoke detector or keypad. Max ten units per panel. Colour of the housing = x: red = 1, yellow = 2, grey = 3, orange = 5 | WSK 503 000x |
| Break glass unit with signal, metal housing. With data communication. No input for smoke detector or keypad. Max ten units per panel. Colour of the housing = x: yellow = 2, grey = 3, orange = 5 | WSK 504 000x |
| Fireman's override switch | WSK 510 |
| Smoke detector | WSA 311 |
| Differential heat detectors | WSA 310 |
| Rain sensor | WLA 331 |
| Rain/wind sensor | WLA 330 |
| End of line motor module | WSA 514 |
| 10kΩ resistance, 10 pcs. | WSA 501 |
| Cable glands | WSA 133 |
| Cables for smoke ventilation – see separate product sheet for further information | WLL 8xx |
| Comfort keypad for 1 window or 1 window group | WSK 110 0A0B |