



2.25

## WCC 103 MotorController



Comfort  
ventilation

230V

Operating  
voltage

24V

±24V DC  
actuators

### Application

- for daily comfort ventilation
- for controlling ±24V DC standard window actuators
- 1 comfort ventilation group at max. 3A
- may be combined with external temperature and time automated BMS

MotorController for controlling ±24V DC standard actuators for daily comfort ventilation. It can also control locking actuators. The number of actuators that may be connected to the motor line depends on the type of actuator – see the table, “Maximum number of actuators per MotorController” for type/number.

### Description

The MotorController controls (opens/closes) the window actuators based on a signal from the connected component(s) e.g. comfort keypad (operating keypad), room sensors and weather sensors.

We recommend connecting comfort keypad when sensors and other operators are connected so that users always, via the comfort keypads, can override the signals and open or close windows themselves should there be a need for more or less fresh air.

Up to 10 MotorControllers can be connected as part of a larger solution and may be connected to the same weather station. Several MotorControllers may be operated from the same comfort keypad.

The MotorController is also supplied in a 3A and 6A version which can be controlled from a remote control or app.

### Prioritised inputs

The actuators may be overridden via three prioritised inputs. All switches must be potential free.

- common CLOSE ALL/safety (rain) function (highest priority)
- hand operation of the motor line
- automated control of the motor line (lowest priority)

### Power supply for external units

When connecting sensors the auxiliary power from the built-in 24V DC 500mA power supply can be used

### Configuration

Via a DIP switch it can be configured if there should be maintained action on the connected comfort keypads.

### Specifications

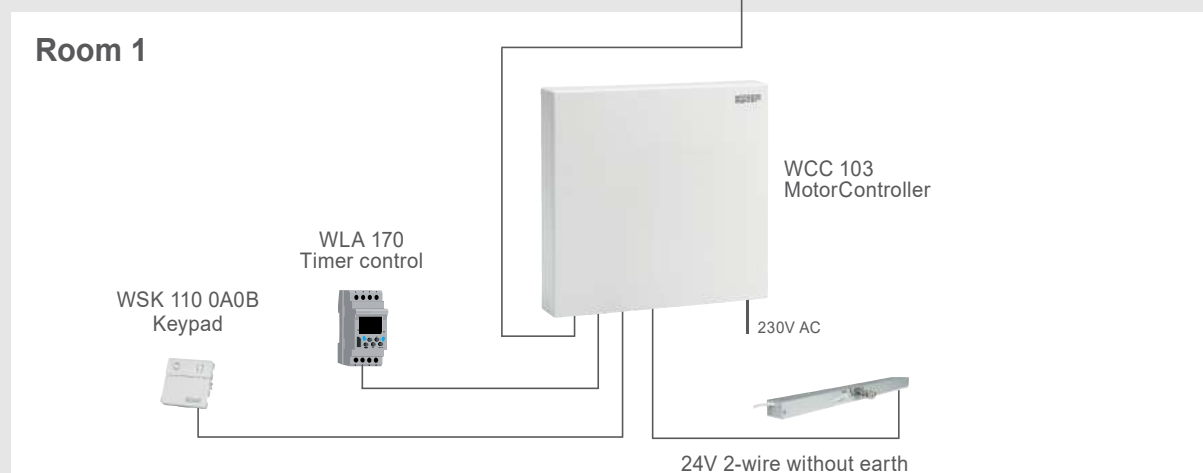
- 1 motor group with up to 3A in total
- Max output voltage 24VDC at 230VAC
- simple and quick installation
- up to 10 MotorControllers may be linked
- rain/wind sensors can be connected
- 3 prioritised inputs

The MotorController may either be mounted horizontally or vertically on a wall.

### Example: WCC 103 with timer control and wind/rain sensor

In the room 1 pcs.  $\pm 24\text{V}$  standard actuator is connected as well as comfort keypads for individual operation of the window.  
A timer control is fitted that opens/closes the windows in the room at preset times, e.g. open and close at start and end of a lunch break and "close all" at the end of the day.

A wind/rain sensor is mounted on the roof.



### Technical specifications

|                                |  |  |
|--------------------------------|--|--|
| Output current                 | 3A incl. load on X7 (max 0.5A)   |  |
| Motor lines                    | 1 x $\pm 24\text{V}$ standard motor line   |  |
| Primary voltage                | 100-240 VAC 0.85A 50/60Hz  |  |
| Actuator secondary voltage     | Nominal voltage<br>Open circuit voltage at 230V AC (no load)<br>Ripple at max load   | 24V DC ( $\pm 15\%$ )<br>24V DC @ $20^\circ\text{C}$<br>150mVp-p |
| Power consumption              | Idling < 0.5W<br>Max load 77 W   |  |
| Leakage current                | max 0.75mA @240VAC   |  |
| Inrush current on primary side | 65A < 5ms v. 230V<br>Max. 6 x WCC 103 per 10A power supply group.<br>Circuit breaker "C" characteristic.   |  |
| AUX                            | 24V DC, 500mA  |  |
| Operating conditions           | $-5^\circ\text{C}$ - $+45^\circ\text{C}$ , for indoor installation, the controller may not be covered  |  |
| Switch-on duration             | ED 40% (4 min. per 10 min.)  |  |
| Connection cable               | <b>Actuators</b><br>Flexible max $6\text{mm}^2$ / solid max $10\text{mm}^2$ , max 2V voltage drop.<br><b>Other components</b><br>Min $0.2\text{mm}^2$ / max $1.5\text{mm}^2$ |  |
| Size                           | 215 x 206 x 37mm (W x H x D)   |  |
| Material                       | Plastic  |  |
| Colour                         | White (RAL 9016)   |  |
| Weight                         | 0.92kg   |  |
| IP rating                      | IP20   |  |
| Safety class                   | I (with PE)  |  |
| Delivery includes              | MotorController with 1.2 m cable with Schuko plug<br>UK version supplied with UK network adapter   |  |
| Note                           | We reserve the right to make technical changes   |  |

## Max number of actuators per MotorController

The following table shows the maximum number of actuators, based on actuator type ( $\pm 24V$  standard ) that can be connected to the MotorController. Total power consumption for all connected actuators may not exceed 3A.

| Actuator type                           | Max. number $\pm 24V$ actuators that may be connected to WCC 103 |
|---|--|
| WMD 820-1                               | 3  |
| WMD 820-2                               | 2  |
| WMD 820-3                               | 3  |
| WMS 306 / 309-1                         | 3  |
| WMS 306 / 309-2                         | 2  |
| WMS 306 / 309-3                         | 3  |
| WMS 409 xxxx 01                         | 1  |
| WMS 409-1                               | 1  |
| WMU 831 / 851-1                         | 3  |
| WMU 831 / 851-2                         | 2  |
| WMU 831 / 851-3                         | 3  |
| WMU 836-1                               | 2  |
| WMU 836-2                               | 2  |
| WMU 852-1                               | 1  |
| WMU 861-1                               | 2  |
| WMU 861-2                               | 2  |
| WMU 842 / 862 / 882-1                   | 1  |
| WMU 863 / 883-1                         | 1  |
| WMX 503 / 504 / 523 / 526-1             | 6  |
| WMX 503 / 504 / 523 / 526-2             | 6  |
| WMX 503 / 504 / 523 / 526-3             | 6  |
| WMX 503 / 504 / 523 / 526-4             | 4  |
| WMX 803 / 804 / 813 / 814 / 823 / 826-1 | 3  |
| WMX 803 / 804 / 813 / 814 / 823 / 826-2 | 2  |
| WMX 803 / 804 / 813 / 814 / 823 / 826-3 | 3  |
| WML 820 / 825                           | 3  |
| WML 860-1                               | 3  |
| WML 860-2                               | 2  |
| WML 860-3                               | 3  |
| WMB 801 / 802                           | 3  |
| WMB 811 / 812 / 815/ 816 / 817 / 818 *  | 2  |

\* 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 x WMB 816 or 1 x WMB 817 and 1 x WMB 818

WCC 103

# MotorController

| Variants                       | Item number  |
|--------------------------------|--------------|
| MotorController 3A             | WCC 103 010x |
| MotorController 3A, UK version | WCC 103 040x |

| Accessories                                | Item number  |
|--|--------------|
| Comfort keypad, for fitting                | WSK 100 1161 |
| Comfort keypad, 1 window or 1 window group | WSK 110 0A0B |
| Comfort keypad, for fitting (CH version)   | WSK 300      |
| Room thermostat: temperature               | WLA 110      |
| Wind/rain sensor                           | WLA 330      |
| Rain sensor                                | WLA 331      |