



## WCC 103BT

# MotorController with bluetooth remote control



Comfort ventilation

230V

Operating voltage

24V

±24V DC actuators

Bluetooth

Bluetooth

### 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
- opening/closing of windows via bluetooth remote control

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 included remote control or the connected component(s) e.g. room sensors and weather sensors.

In addition to the supplied remote control, it is also possible to connect comfort keypads.

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

The MotorController is also supplied in a 6A version and a 3A version without remote control.

### 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 any 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
- Bluetooth remote control

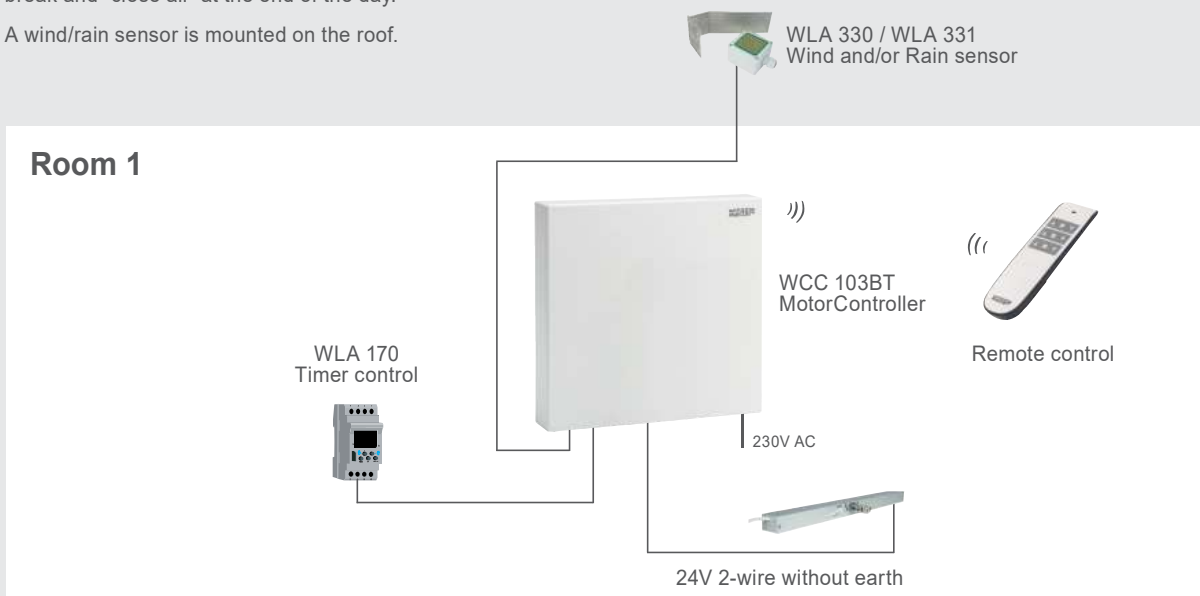
The MotorController may either be mounted horizontally or vertically on a wall.

The remote control has an operation range up to 50m outside and 10m inside. Physical barriers such as walls, cabinets etc. will reduce the operation range.

**Example 1: WCC 103BT with timer control and wind/rain sensor**

In the room 1 pcs.  $\pm 24V$  standard actuator is connected. The remote control is used for 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.

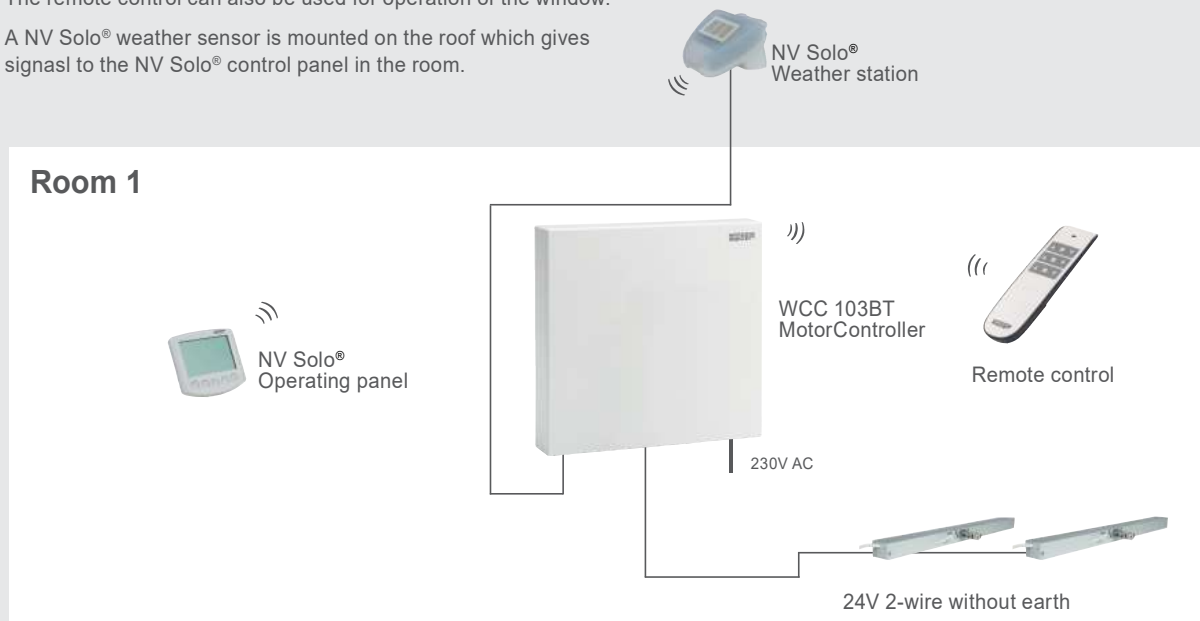


**Example 2: WCC 103BT with NV Solo®**

In the room 2 pcs.  $\pm 24V$  standard actuators are connected. A NV Solo® control panel is with built in temperature sensor and comfort keypad which also can be used for individual operation of the actuators.

The remote control can also be used for operation of the window.

A NV Solo® weather sensor is mounted on the roof which gives signals to the NV Solo® control panel in the room.



Technical specifications							
Output current	3A incl. load on X7 (max 0.5A)						
Motor lines	1 x ±24V standard motor line						
Primary voltage	MotorController: 100-240 VAC 0.85A 50/60Hz Remote control: 2 x AAA alkaline batteries (1.5V)						
Actuator secondary voltage	<table border="1"> <tr> <td>Nominal voltage</td> <td>24V DC (±15%)</td> </tr> <tr> <td>Open circuit voltage at 230V AC (no load)</td> <td>24V DC @ 20°C</td> </tr> <tr> <td>Ripple at max load</td> <td>150mVp-p)</td> </tr> </table>	Nominal voltage	24V DC (±15%)	Open circuit voltage at 230V AC (no load)	24V DC @ 20°C	Ripple at max load	150mVp-p)
Nominal voltage	24V DC (±15%)						
Open circuit voltage at 230V AC (no load)	24V DC @ 20°C						
Ripple at max load	150mVp-p)						
Power consumption	Idling < 0.5W Max load 77 W						
Inrush current on primary side	65A < 5ms v. 230V Max. 6 x WCC 103 per 10A power supply group. Circuit breaker "C" characteristic.						
AUX	24V DC, 500mA						
Operating conditions	-5°C - +45°C, for indoor installation, the controller may not be covered						
Switch-on duration	ED 40% (4 min. per 10 min.)						
Connection cable	<p><b>Actuators</b> Flexible max 6mm<sup>2</sup> / solid max 10mm<sup>2</sup>, max 2V voltage drop.</p> <p><b>Other components</b> Min 0.2mm<sup>2</sup> / max 1.5mm<sup>2</sup></p>						
Operation range between MotorController and remote control	<p>The used Bluetooth technology (Bluetooth 4) has the following operation range:</p> <ul style="list-style-type: none"> <li>- Outside: up to 50m in radius</li> <li>- Inside: up to 10m in radius</li> </ul> <p>Physical barriers such as walls, cabinets etc. will reduce the range.</p>						
Size	MotorController: 215 x 206 x 37mm (W x H x D) Remote control: 41 x 18 x 144mm (B x H x L)						
Material	Plastic						
Colour	White (RAL 9016)						
Weight	MotorController: 0.92kg Remote control: 61g (incl. batteries)						
IP rating	IP20						
Safety class	I (with PE)						
Delivery includes	Standard version: MotorController with 1.2 m cable with Schuko plug and remote control UK version: MotorController with 1.2 m cable with Schuko plug with UK network adapter and remote control						
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 103BT
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 / 836 / 851-1	3
WMU 831 / 836 / 851-2	2
WMU 831 / 836 / 851-3	3
WMU 861-1	2
WMU 861-2	2
WMU 842 / 852 / 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 103BT

# MotorController

Variants	Item number
MotorController 3A	WCC 103BT 0101
MotorController 3A, UK version	WCC 103BT 0401

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