

# MUC 160 / WUC 160 UL MotorController



### Application

- for 24V DC window actuators
- 4 / 8 ventilation groups each off 4A, but with a max. total current consumption up to 16A
- can be combined with external temperature sensor, timer or BMS
- rain/wind sensor connectable
- the motor outputs can be operated individually or simultaneously

The central control unit is used for the operation of 24 VDC actuators with a total current consumption of max. 16A.

### The central control unit is available in several versions: 230V without UL certification

- WUC 160 040A 16A in 4 actuator groups
- WUC 160 080B 16A in 8 actuator groups (2 x 4)

120V with UL certification

- WUC 160 UL 040A 16A in 4 actuator groups
- WUC 160 UL 080B 16A in 8 actuator groups (2 x 4)

Actuator and power supply cables are easily and fast connected to the MotorController. The cable access can be made from the side or from underneath the MotorController, which can be mounted vertically or horizontally on the wall. The actuator outputs are independent and have three levels of priority for the control of window actuators:

#### Input 1 (first priority):

Common OPEN/CLOSE function for 4 / 8 outputs (without self-hold)

#### Input 2 (second priority):

Individual OPEN/CLOSE function for each actuator group. For connection of double potential free switches (e.g. sensors) for individual control of each actuator group (without self-hold)

#### Input 3 (third priority):

Individual OPEN/CLOSE function for each actuator group. For conection of double potential free switches (e.g. keypads) for individual control of each actuator group. (Option: with or without self-hold).

By connection of sensors auxiliary power from the built-in 24 VDC 0.3A power supply is to be used.

The switch contacts must be potential free.

#### **Specifications**

- comfort ventilation in 4 / 8 groups total max. of 16A, however max. 4A per group
- 3 potential free inputs (OPEN/CLOSE) with priority with the possibility of connecting rain/wind sensor, timer, thermostat and keypads

Technical specifications				
Primary voltage	WUC 160/161: 230V AC ±10%, 500VA, 50Hz WUC 160 UL: 120V AC ±10%, 620VA, 50-60Hz			
Secondary voltage	24V DC, up to 4A per actuator output, max. 16A current consumption			
Inrush current	Max. 20A < 5msec			
Standby consumption	Ca. 5W			
Ripple	10% (5Vpp)			
Open circuit voltage	33V at 253V			
Connection	Primary side:	screw joints up to:	4 mm <sup>2</sup> flexible cable 6 mm <sup>2</sup> solid cable	
	Secondary side:	screw joints up to:	keypads	actuators
			1.5 mm <sup>2</sup> flexible cable	4 mm <sup>2</sup> flexible cable
			2.5 mm <sup>2</sup> solid cable	6 mm <sup>2</sup> solid cable
Operating condition	-5°C - +45C°, for indoor installation, the MotorController may not be covered			
Material	Steel cabinet, laquered			
Colour	White (RAL 9010)			
Size	88 x 455 x 240mm (H x W x D)			
Weight	7.5kg			
IP rating	IP20			
Certification	WUC 160 UL is certified according to UL Std. 325, Cert. to CAN/CSA C22.2 No. 247-14			
Delivery includes	MotorController			
Note	We reserve the right to make technical changes.			

Items	ltem no.
MotorController with 4 outputs of 4A, max. 16A total (up to 4 zones). With key. For actuators type WMX, WMB, WMS and WMU.	WUC 160 040A
MotorController WUC with 8 outputs of 4A, max. 16A total (up to 8 zones). With key For actuators type WMX, WMB, WMS and WMU.	WUC 160 080B
MotorController with 4 outputs of 4A, max. 16A total (up to 4 zones), UL certified. Without key. For actuators type WMX, WMB, WMS and WMU.	WUC 160 UL 040A
MotorController with 8 outputs of 4A, max. 16A total (up to 8 zones), UL certified. Without key. For actuators type WMX, WMB, WMS and WMU.	WUC 160 UL 080B

# MUC 160 / WUC 160 UL MotorController

Accessories	Item no.
Keypad, flush mounting	WSK 100 1161
Keypad, type FUGA, surface mounting (DK version)	WSK 102
Keypad, flush mounting (CH version)	WSK 300
Keypad	WUI 110 0102
Room thermostat	WLA 110
Rain and wind sensor	WLA 330
Rain sensor	WLA 331

	Max. number of window actuators which can be connected			
WindowMaster actuators	Secondary voltage: high (standard) (max. 30V)			
n=actuator variant	WUC 160 040A / WUC 160 UL 040A	WUC 160 080B / WUC 160 UL 080B		
WML 825	16	32**		
WMS 306 / 306 (-1/-2/-3/-4)	16	32**		
WMS 309 / 309 (-1/-2/-3/-4)	16	32**		
WMS 409 / 409 (-1/-2/-3/-4)	8	16		
WMS 515	*	*		
WMU 836 (-1/-2/-3/-4)***	12	24**		
WMU 861 (-1/-2)***	8	16**		
WMU 862-1***	4	8		
WMU 863-1***	4	8		
WMU 864-1***	4	8		
WMU 882-1***	4	8		
WMU 883-1***	4	8		
WMU 884-1***	4	8		
WMX 503/504/523/526 (-1/-2/-3/-4)***	32	64**		
WMX 803/804/823/826 (-1/-2/-3/-4)***	16	32**		

\* the actuator is not suitable for this MotorController.

\*\* the max current consumption of 16A is not to be exceeded meaning that all actuators are not to run at the same time (see actuator product sheet for current comsumption)

\*\*\* besides the window actuators up to two espagnolettes actuators WMB / WMB-n (single or double) can be connected to one window