

# MC DZ M/J



Art.-no.: 01754310

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Microprocessor-powered decentralised motor control with integrated individual operation for controlling awnings, screens and blinds.

## Installation and Operating Instructions

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### 1. General

The control system is used to manually and automatically operate electric awnings, screens or blinds. The integrated buttons allow to control the shading additionally. Motor run time and tilting time could be set individually. Additionally you can switch off central commands as sun- and temperature commands from the central controller. To realise this function, it is important to use only central controller with IDS functionality. Please read the manual carefully before start up the device.

### 2. Safety precautions

- Contact a professional electrician to install the control system, because the control system requires a power supply of 230VAC, 50 Hz.
- Check the control system for signs of mechanical damage after unpacking. If you notice any shipping damage, do not start up the control system and notify your supplier immediately.
- The control system should only be used for the purpose specified by the manufacturer (refer to the operating instructions). Any changes or modifications thereof are not permissible and will result in loss of all warranty claims.
- If the control unit cannot be operated without presenting a hazard, it must be switched off and prevented from being switched on unintentionally.
- When performing work on the windows, controls or connected shades, protect them against unauthorised or unintentional operation.

### 3. IDS functionality

This control is a decentralised control system, equipped with IDS functionality for controlling awnings and blinds. IDS functionality allows sun- and temperature-dependent central commands to be disabled by pushing the button to get the control in semi-automatic operation. Central commands relating to privacy protection and safety-related commands will be executed. All central control commands will be executed in automatic operation.

### 4. Technical data

Power supply:	230VAC, 50 Hz
Impulse voltage withstand level:	2.5 kV
Rated power:	2 W
Output:	230VAC, 50 Hz
Maximum load:	250VAC, 3 A, cos φ ≥ 0.8 ind.
Align switching time extend:	3 – 180 seconds
Align switching time retract:	180 seconds
Tilting time:	0 – 1.95 seconds
Software class:	A
Operating temperature:	0 °C to +40 °C 32 °F to 104 °F
IP class:	IP 40
Degree of contamination:	2
Dimensions (L x W x H):	50 x 50 x 45 mm (without cover frame)
Colour information:	signal white (similar to RAL 9016)
Mark of conformity:	CE

### 5. Installation



#### WARNING! Risk of injury due to improper installation and commissioning.

- Improper installation and commissioning may lead to personal injury or property damage.
- Therefore:
- When connecting the device, observe the currently valid VDE standards (in particular DIN VDE 0100/0700), your local power company's regulations and the current accident prevention regulations.
  - Connect the control in accordance with the wiring diagram.

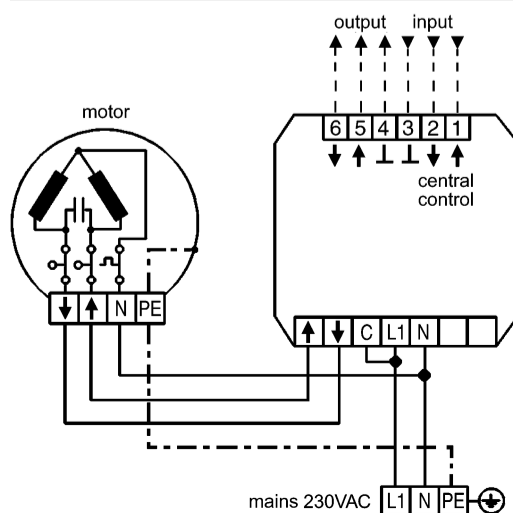
#### Notes for professional electricians

1. Switch off the power supply.
2. Connect the power supply in accordance with the wiring diagram.
3. Fit the power supply into a deep flush box and fix in place.
4. Fit the frame cover.
5. Fit the operating device into the power pack by applying gentle pressure to the frame cover.
6. Switch on the power supply.
7. You can test the direction of the sunshade using the "Retract" and "Extend" buttons.

### 6. Wiring diagram



- WARNING!**
- Parallel control of more than one roller shutter drive motor can only be implemented by means of isolating relays and group control devices.
  - The central command can only be connected via a 3-wire central line.
  - Only IDS-enabled central controls should be used.
  - The central line must not exceed 100 m.



### 7. Start-up



**IMPORTANT!**  
The control should only be driven by IDS-enabled central controls.

After connecting the power supply, set the motor run time (see chapter 10) and, if applicable, the tilting time (see chapter 11). Fit the frame cover onto the operating device then switch the power supply on.

The control system will be initialised, during which time the LEDs will flash. The control system will then switch to semi-automatic operation.

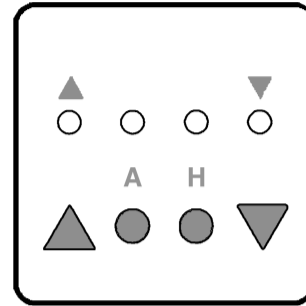
Use the retract and extend buttons to check the direction of the connected sunshade. After this, the control system will be ready for use.

### 8. Individual control

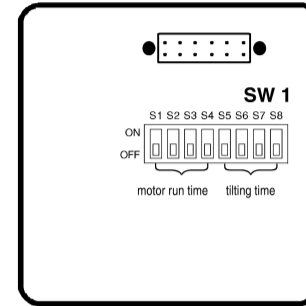
If you press the **retract** or **extend** button, the awning/ blind will immediately retract or extend and the green LED will flash under the respective retract or extend symbol, as long as the central control is not performing any retract/extend commands.

Any retract/extend commands performed manually on the decentralised awning/blind controls can be interrupted by pressing the opposite direction button. To resume awning/blind retraction or extension, press the retract or extend button again.

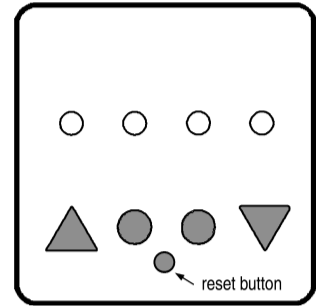
### 9. Display and operating elements



Front view



Back view



Front view without cover cap

#### 9.1 Short description of display and operating elements

##### Display elements:

- ▲ : LED display for sunshade retraction
- ▼ : LED display for sunshade extension
- A : LED display for automatic operation
- H : LED display for semi-automatic operation

##### Operating elements:

- ▲ : Retraction of sunshade
- ▼ : Extension of sunshade
- A : Selector button for automatic operation
- H : Selector button for semi-automatic operation

### 10. Setting motor run time



- IMPORTANT!**
- The motor run time for retraction is fixed for 180 seconds.
  - If several sunshades are being controlled, setting the motor run time depends on the function of the further motor control units.
  - Preset default setting: 180 seconds.

Setting the motor run time depends on the size and construction of the sunshade and is performed using **DIP switches S1 to S4 on the SW 1 switch row** on the rear of the device. When using blinds, it is recommended that you use the precise run time, as the slats are positioned at the correct angle immediately after the motor stops running.

#### Table for setting the motor run time:

S1	S2	S3	S4	Motor run time in seconds
OFF	OFF	OFF	OFF	3
ON	OFF	OFF	OFF	10
OFF	ON	OFF	OFF	15
ON	ON	OFF	OFF	18
OFF	OFF	ON	OFF	21
ON	OFF	ON	OFF	24
OFF	ON	ON	OFF	27
ON	ON	ON	OFF	30
OFF	OFF	OFF	ON	35
ON	OFF	OFF	ON	40
OFF	ON	OFF	ON	50
ON	ON	OFF	ON	60
OFF	OFF	ON	ON	80
ON	OFF	ON	ON	100
OFF	ON	ON	ON	120
ON	ON	ON	ON	180

### 11. Setting tilting time / inching mode



- IMPORTANT!**
- Inching mode of up to 2 seconds is only possible when a tilting time has been set.
  - A set tilt will be performed in automatic and semi-automatic operation.
  - If you press the **extend** button on the control system again while the sunshade is extending, no set tilt will be performed after the sunshade has fully extended.
  - Preset default setting: No tilt / no inching mode.

Setting the tilting time depends on the size and construction of the sunshade and is performed using **DIP switches S5 to S8 on the SW 1 switch row** on the rear of the device. At the end of the motor run time, the sunshade travels briefly in the opposite direction (retract), for example to enable the slats to be positioned at the correct angle.

#### Table for setting the tilting time:

S5	S6	S7	S8	Tilting time in seconds
OFF	OFF	OFF	OFF	no tilting / no inching mode
ON	OFF	OFF	OFF	0.34
OFF	ON	OFF	OFF	0.46
ON	ON	OFF	OFF	0.57
OFF	OFF	ON	OFF	0.69
ON	OFF	ON	OFF	0.80
OFF	ON	ON	OFF	0.92
ON	ON	ON	OFF	1.03
OFF	OFF	OFF	ON	1.15
ON	OFF	OFF	ON	1.26
OFF	ON	OFF	ON	1.38
ON	ON	OFF	ON	1.49
OFF	OFF	ON	ON	1.61
ON	OFF	ON	ON	1.72
OFF	ON	ON	ON	1.84
ON	ON	ON	ON	1.95

### 12. Automatic operation

Press button **A** to enable automatic operation. The green LED under the **A** symbol will light up. In this mode, the sunshade will travel in the direction set by the extend/retract command on the central control. If you press the **retract** or **extend** button, the sunshade will retract or extend, as long as the central control is not performing any retract/extend commands. Furthermore, the sunshade can also be controlled using the retract and extend buttons on the control. A **red** LED lights up or flashes under the retract or extend symbol to indicate that the central control is performing a command. When the **red** LED under the retract symbol lights up, the sunshade immediately retracts and cannot be extended again until the central command has been performed. However, any other travel commands (flashing red LED light) can be interrupted by pressing the opposite button. To resume sunshade retraction or extension, press the retract or extend button again.

### 13. Semi-automatic operation

Press button **H** to enable semi-automatic mode. The red LED under the **H** symbol will light up. Sun- and temperature-dependent central commands are not performed in this mode. If you press the **retract** or **extend** button, the sunshade will retract or extend, as long as the central control is not performing any safety-related (e.g. wind alarm) or time-related commands. A **red** LED under the retract or extend symbol lights up or flashes to indicate that a central command is being performed. When the **red** LED lights up under the retract symbol, the sunshade immediately retracts and cannot be extended again until the central command has been performed. However, any other travel commands can be interrupted by pressing the opposite button. To resume sunshade retraction or extension, press the retract or extend button again.



**The disposal of electrical equipment and batteries in household waste is strictly forbidden.**

The symbol (dustbin crossed out, in line with WEEE Appendix IV) indicates separate collection of electrical and electronic products in EU countries. Do not dispose of the device or battery in your household waste. Ask your town or local council about the return and collection systems available in your area to dispose of this product.