

Operating instructions for the EGS12.2 electronic current-inrush group-control switch as part of the BRS shading system and roller shutter control.



**EGS12.2-400-12V UC/24V UC/230V, 2+2 NO for 1 or 2 motors 10A/250V AC. Maximum total current 16A/250V AC**

The EGS12.2 processor-controlled impulse group switch implements the commands of sensors, or sensor relays connected in series, and controls one or two motors as a function of the settings of rotary switches arranged on the front side under a lid.

Two modules = 36mm wide, 55mm deep. Supply voltage 230V at terminals L - N. The control voltage at terminals A1 through A8 must have an identical potential.

The **function** of this electronic group impulse switch is based on the principle that, on the one hand, impulse control is used to accomplish UP-stop-DOWN-stop (contact 1 closed - both contacts open - contact 2 closed - both contacts open) and, on the other hand, additional control inputs can be employed to select UP or DOWN as desired. 'Dynamic' refers to control inputs for which one impulse of not less than 20 milliseconds is sufficient to close a contact. 'Static' denotes a control input for which the contact is only closed as long as the control command is applied.

UP and DOWN apply to shutters, venetian blinds and roller blinds. For awnings, UP = coil, i.e. retract, and DOWN = uncoil, i.e. extend. For windows, UP = open, and DOWN = shut.

**Automatic reversal** for venetian blinds and awnings is controlled by means of the top rotary switch. 0 = OFF, otherwise from 0.1 to 5 seconds ON with selected reversal time. In this case, it is only for DOWN that the sense is reversed on time-out of the time lag selected by means of the middle rotary switch, for example to stretch awnings or set venetian blinds to a defined position. When a contact switch connected to A1 is used or when A3 and A4 are used for local control with a dual roller shutter contact switch while mode set 'Auto dyn.', a double-impulse activates the **advanced automatic reversing system**: The venetian blind rotates **slowly** in the opposite direction and, thus, can be stopped in the desired position at the touch of a button.

The **time delay** (release delay RV) is set by means of the middle rotary switch. Whilst the group impulse switch is in the UP or DOWN position the selected time delay is 'timing out' and, on time-out, the device is automatically changed to STOP. Therefore, the minimum time delay to be chosen is that required for the shading element or shutter to move from one limit position to the other.

The **manual control** is selected by means of the lower rotary switch. ▲ and ▼ are the positions for manual control 'UP' and 'DOWN' on the device. These have priority over any other control command. They can even be used to override 'Central with priority'. LED Display for the UP switch position below the middle rotary switch, and for the DOWN switch position below the bottom rotary switch. A = automatic function.

**Local control with pushbutton** connected to terminal A1. Each impulse causes the group impulse switch to change its position in the UP-stop-DOWN-stop sequence. A double-impulse activates the **advanced automatic reversing system**: The venetian blind rotates **slowly** in the opposite direction, and thus, can be stopped in the desired position at the touch of a button.

**Local control with roller shutter toggle switch** connected to terminals A3 and A4.

**Local control with dual roller shutter contact switches** connected to A5 and A6. The 'UP' or 'DOWN' position is activated by a switch impulse. A further impulse from one of the two contact switches stops the sequence immediately. A double-impulse activates the **advanced automatic reversing system**: The venetian blind rotates **slowly** in the opposite direction, and thus, can be stopped in the desired position at the touch of a button.

**Dynamic without priority central control** connected to terminals A5 (UP) and A6 (DOWN). Through a control signal the switch position 'up' or 'down' will be activated. A further control signal (<700ms) at this control input interrupts the operation immediately. The next control signal (>700ms) continues the operation.

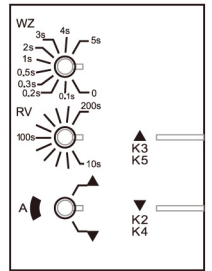
'without priority' because the local control input A1 and the central control inputs A7 and A8 can immediately override even whilst the control contact on A5 or A6 is still closed.

**Dynamic with priority central control** connected to terminals A7 (UP) and A8 (DOWN). Through a control signal the switch position 'up' or 'down' will be activated. A further control signal (<700ms) at this control input interrupts the operation immediately. The next control signal (>700ms) continues the operation.

'with priority' because these control inputs cannot be overridden by other control inputs **as long as** the central control contact is closed. These central control contacts A7 and A8 are used by the universal sensor relay for the wind sensor, the frost sensor and the rain sensor functions as these are required to have absolute priority over other sensor commands. However, they are also used for the sun sensor and the twilight sensor functions, as these signals have a duration of 2 seconds only and are not transferred as long as wind or rain is detected.

**Settings**

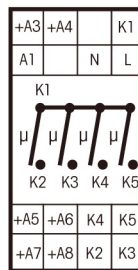
<b>Automatic reversing system</b>	0	automatic reversing system off
	0.1 s to 5 s	automatic reversing system on with set reversing time WZ



<b>Delay</b> (release delay RV)	10 to 200 s	After the time delay has elapsed the device is automatically changed to 'stop'
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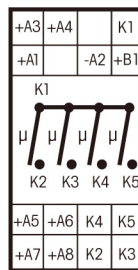
<b>Manual control</b>	▲	up with priority
	▼	down with priority (no automatic reversing system)
	A	automatic function

**Connecting -terminal assignment EGS12.2-400-230V**



- L = phase of supply voltage 230V
- N = neutral of supply voltage 230V
- A1 = 'UP-stop-DOWN-stop', local contact switch
- A3 = 'UP' static, local or central
- A4 = 'DOWN' static, local or central
- A5 = 'UP' dynamic, local or central
- A6 = 'DOWN' dynamic, local or central
- A7 = 'UP' dynamic, central with priority
- A8 = 'DOWN' dynamic, central with priority
- K1 = basis NO contact, floating
- K2 = motor 1 down
- K3 = motor 1 up
- K4 = motor 2 down
- K5 = motor 2 up

**Connecting -terminal assignment EGS12.2-400-12V UC/24V UC**



- +B1 = phase or + of supply voltage
- A2 = neutral or - of supply voltage
- A1 = 'UP-stop-DOWN-stop', local contact switch
- A3 = 'UP' static, local or central
- A4 = 'DOWN' static, local or central
- A5 = 'UP' dynamic, local or central
- A6 = 'DOWN' dynamic, local or central
- A7 = 'UP' dynamic, central with priority
- A8 = 'DOWN' dynamic, central with priority
- K1 = basis NO contact, floating
- K2 = motor 1 down
- K3 = motor 1 up
- K4 = motor 2 down
- K5 = motor 2 up

**Caution!**

**These electrical devices may only be installed and fitted by trained technicians.**