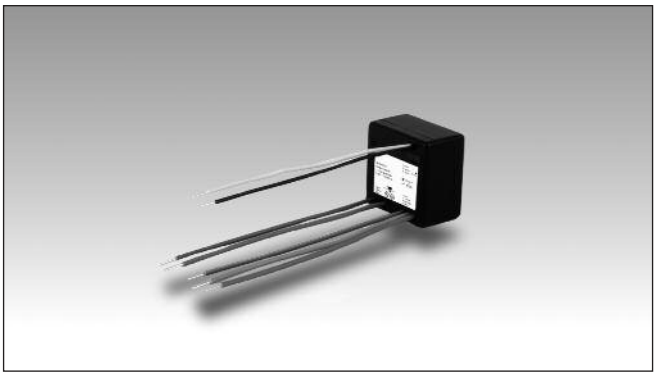
Smart Dupline®
Control for AC Rollerblind Motor
Type SHDRODC230



- **Up/down control of 1 rollerblind motor**
- **Up/down interlocking for motor**
- **AC power supply**
- **Design for mounting in eurobox**
- **Relay load 5A**

Product Description

The SHDRODC230 is a decentral module to control one AC rollerblind motor. It has been developed to be connected to and controlled by the smart-house system controllers. The rollerblind motor is driven by two relays in series: one to switch the motor ON/OFF and the second one to control the direction UP/DOWN. These two relays are controlled in such a way as to respect the motor timing before any reversing of the motor direction.

Ordering Key

SH D RO DC 230

smart-house
Decentral module
Rollerblind
Motor
Power supply

Type Selection

Supply	Mounting	Relay load	Ordering number
230 VAC	Eurobox	5A	**SHDRODC230**

Output Specifications

Outputs		1 SPST relay & 1 SPDT relay
Resistive loads	AC 1 DC 1	5 A/250 VAC (1250 VA) 0.25 A/250 VDC (62 W)
Inductive loads	AC 15 DC 13	2.5 A/230 VAC 5 A/24 VDC
Mechanical lifetime		≥ 30 x 10^6 operations
Electrical lifetime (at max load)	AC 1	≥ 2.0 x 10^5 operations
Operating frequency		≤ 7200 operations/h
Insulation voltage Outputs - Dupline®		≥ 4 kVAC (rms)

Supply Specifications

Power supply AC type	Overvoltage cat. III (IEC 60664)
Rated operational voltage through wires L & N	230 VAC ± 15% (IEC 60038)
Frequency	45 to 65 Hz
Drop-out tolerance	≤ 40 ms
Power consumption	Typ. 3.3 VA
Power dissipation	≤ 2 W
Transient protection voltage	4 kV
Insulation voltage	
Supply - Dupline®	≥ 4 kVAC (rms)
Supply - Outputs	≥ 4 kVAC (rms)
Dupline® - Outputs	≥ 4 kVAC (rms)

Dupline® Specifications

Voltage	8.2 V
Maximum Dupline® voltage	10 V
Minimum Dupline® voltage	5.5 V
Maximum Dupline® current	2 mA

General Specifications

Output OFF delay	
Upon loss of Dupline® bus	20 ms
Power ON delay	Typ. 2 s
Power OFF delay	≤ 1 s
Address assignments / channel programming	The address assignment is automatic: the controller recognises the module through the SIN (Specific Identification Number) that has to be inserted in the SH tool.
Environment	
Pollution degree	3 (IEC 60664)
Operating temperature	-20° to +50°C (-4° to+122°F)
Storage temperature	-50° to +85°C (-58° to +185°F)
Humidity (non-condensing)	20 to 80% HR
Housing	
Dimensions (h x w x d)	50 x 50 x 30
Material	ABS
Weight	100 g

CE Marking	Yes
EMC	
Immunity	EN 61000-6-2
- Electrostatic discharge	EN 61000-4-2
- Radiated radiofrequency	EN 61000-4-3
- Burst immunity	EN 61000-4-4
- Surge	EN 61000-4-5
- Conducted radio frequency	EN 61000-4-6
- Power frequency magnetic fields	EN 61000-4-8
- Voltage dips, variations, interruptions	EN 61000-4-11
Emission	EN 61000-6-3
- Conducted and radiated emissions	CISPR 22 (EN55022), cl. B
- Conducted emissions	CISPR 16-2-1 (EN55016-2-1)
- Radiated emissions	CISPR 16-2-3 (EN55016-2-3)

Mode of Operation

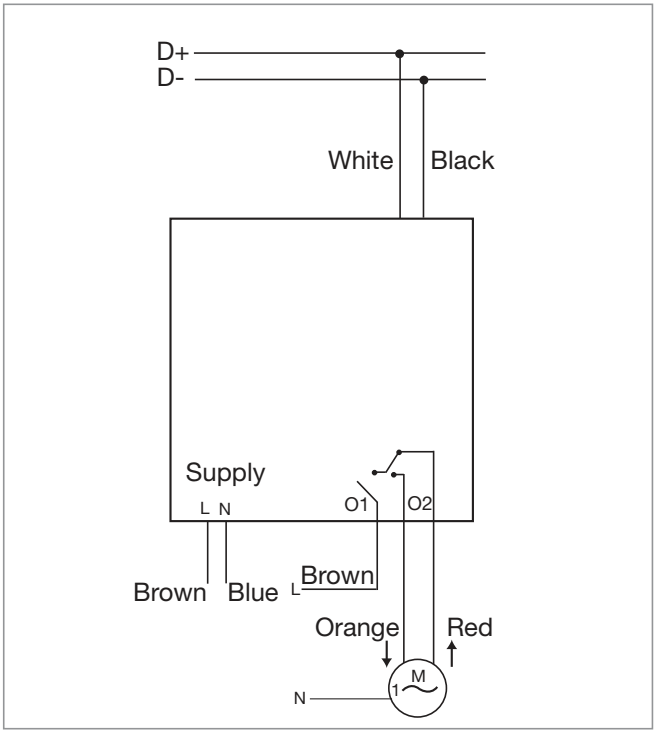
This rollerblind module is driven by the smart-house controller to move rollerblinds, sunblinds and shutters. It receives the UP and DOWN command from the smart-house, and then activates the relevant output accordingly. The two outputs are driven independently and can be managed by different rollerblind functions.

The UP/DOWN output remains active for a time known as “running time” or until another UP/DOWN command is received. Before reversing the movement, the output will remain deactivated for a time called “reverse delay”. The reverse delay time is sent to the SHDRODC230 by the smart-house. The running time is managed by the controller.

If the tilting function is enabled, the SHDRODC230 will be enabled to manage the tilting command received from the smart-house. The tilting command can be of two types: tilting UP and tilting DOWN. Once this command is received, the SHDRODC-230 will activate the UP or DOWN output for the tilting time always respecting the reverse delay time.

Addressing
No addressing is needed since the module is provided with a specific identification number (SIN): the user has only to insert the SIN number in the configuration tool when creating the system configuration.
Used channel: 1 output channel.

Wiring Diagrams



Wiring Connections

Bus	White =	smart-house signal, D+
	Black =	smart-house signal, D-
Supply	Brown =	L
	Blue =	N
Output	Brown =	O1, Motor on/off
	Orange =	O2, Motor up/down
	Red =	O2, Motor up/down
Bus wires	2 x 0.75 mm^2	
	250V insulation, single core, 150 mm	
Supply, output wires	5 x 1.5 mm^2	
	250V insulation, single core, 150 mm	

Dimensions