

## BH4-RO5A2-230

- Up/down control of 2 rollerblind motors
- Up/down interlocking for each motor
- LED-indications for supply smart-house carrier and motor up/down
- For mounting on DIN-rail (EN 50022)
- Design for mounting in euro box
- AC power supply
- Channel coding by BGP-COD-BAT



### OUTPUT SPECIFICATIONS

<b>Outputs</b>	2 SPST x 2 SPDT relays		Mechanical lifetime		≥ 30 x 10 <sup>6</sup> operations
Isolated in groups of	2 x 2		Electrical lifetime		
Contact ratings (AgCdO)	μ (micro gap)		(at max load)	AC 1	≥ 2.0 x 10 <sup>5</sup> operations
Resistive loads	AC 1	5 A/250 VAC (1250 VA)	Operating frequency		≤ 7200 operations/h
	DC 1	0.25 A/250 VDC (62 W)	Insulation voltage		
	or		Outputs - smart-house		≥ 4 kVAC (rms)
Inductive loads	AC 15	2.5 A/230 VAC	<b>Response time</b>		1 pulse train
	DC 13	5 A/24 VDC			

### GENERAL SPECIFICATIONS

<b>Output OFF delay</b>			Pollution degree		3 (IEC 60664)
Upon loss of smart-house carrier	20 ms		Operating temperature		-20° to +50°C (-4° to +122°F)
<b>Power ON delay</b>	Typ. 2 s		Storage temperature		-50° to +85°C (-58° to +185°F)
<b>Power OFF delay</b>	≤ 1 s		<b>Humidity</b> (non-condensing)		20 to 80%
<b>Indication for</b>			<b>Mechanical resistance</b>		
Supply ON	LED, green		Shock		15 G (11 ms)
Output ON	4 LEDs, red		Vibration		2 G (6 to 55 Hz)
	(one per motor or direction)		<b>Material</b>		H4-housing
smart-house carrier	LED, yellow		<b>Weight</b>		300 g
<b>Environment</b>					
Degree of protection	IP 20 B				

### SUPPLY SPECIFICATIONS

<b>Power supply AC types</b>	Installations cat. III (IEC 60664)
<b>Rated operational voltage</b>	
through term. 21 & 22	230 VAC ± 15% (IEC 60038)
<b>Frequency</b>	45 to 65 Hz
Drop-out tolerance	≤ 40 ms
Power consumption	Typ. 3.5 VA
Power dissipation	≤ 9 W
Transient protection volt.	4 kV
<b>Insulation voltage</b>	
Supply - smart-house	≥ 4 kVAC (rms)
Supply - Outputs	≥ 4 kVAC (rms)
smart-house - Outputs	≥ 4 kVAC (rms)

### TYPE SELECTION

<b>Supply</b>	<b>Ordering no.</b>
230 VAC	BH4-RO5A-230

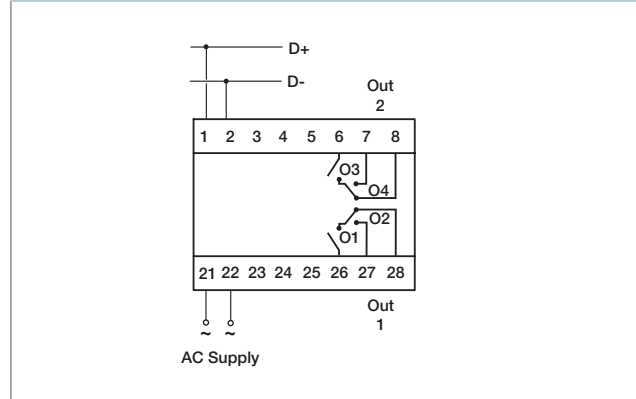
### MODE OF OPERATION

As indicated on the wiring diagram, there are two relays in series to control each motor. O1 is used to switch Motor 1 ON/OFF and O2 is used to control the direction of Motor 1 UP/DOWN. Correspondingly O3 (ON/OFF) and O4 (UP/DOWN) are used to control Motor 2. In this way, it is made sure that the motors are not controlled UP and DOWN at the same time (interlocking). O1, O2, O3 and O4 may be coded individually by means of the code programmer BGP-COD-BAT. The default setting of the module is to switch all outputs off in case of loss of smart-house carrier signal. The smart-house controller provides intelligent functions that makes it easy for the user to control the rollerblind motors individually or several at the same time (all UP or all DOWN).

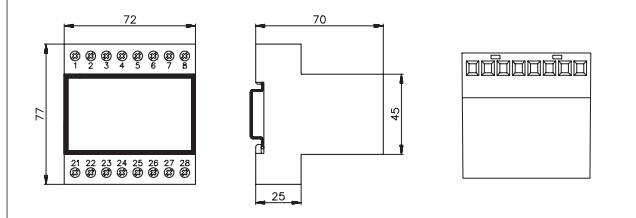
### ACCESSORIES

DIN-rail	FMD 411
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### WIRING DIAGRAM



### DIMENSIONS (mm)



## Output Modules for Rollerblind Motor



### 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 <sup>2</sup>	
	250V isolation, single core, 150 mm	
Supply, Output:	5 x 1,5 mm <sup>2</sup>	
	250V isolation, single core, 150 mm	