

# User manual

document version 1.0 for fw from version 1.0

## DALirel1, 2, J



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1 or 2 or jalousie relay module

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DALI bus control

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according to IEC 62386-208

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indication of communication

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fit in KU68 box

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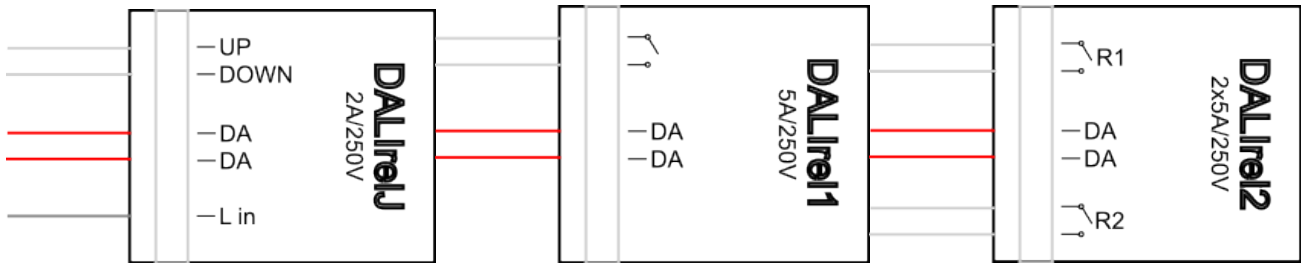
DALI1,2,J is a universal relay unit for DALI bus with 1 or 2 potential-free outputs that are independently adjustable.

Technical Specifications			
bus		DALI	
number of outputs	DALIrel1	1	
	DALIrel2	2	
	DALIrelJ	Output for 1 jalousie	
switching voltage		< ~250	V
maximum resistive load	DALIrel1	5	
	DALIrel2	2x5	
	DALIrelJ	2	
power source		DALI	
Consumption	permanently	3	mA
	temporarily on/off	12	mA
Ingress protection		IP20	
ambient working temperature		0 ÷ 50	°C
storage temperature		-10 ÷ 50	°C
weight		30	g

For other than resistive loads, the maximum load may be significantly lower. For switching power supplies, it is not primarily the power that matters, but the inrush current. For switching power supplies we recommend to connect triak unit REL23 behind the relay.

Signaling		
DATA	Red	when communicating
	Green	when switching the relay

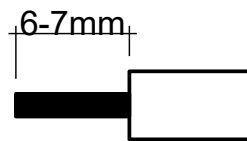
## Connection



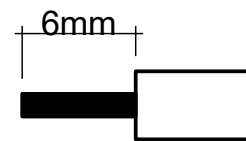
<i>Designation</i>	<i>Description</i>	
DA/DA	DALI bus, two inputs interchangeable	
DALirel1		Normally opened contact (NO)
DALirel2	R1	Normally opened contact (NO)
	R2	Normally opened contact (NO)
DALirelJ	UP	Direction up
	DOWN	Direction down
	L in	power supply - Input

### wire preparation:

**outputs**



**DALI**



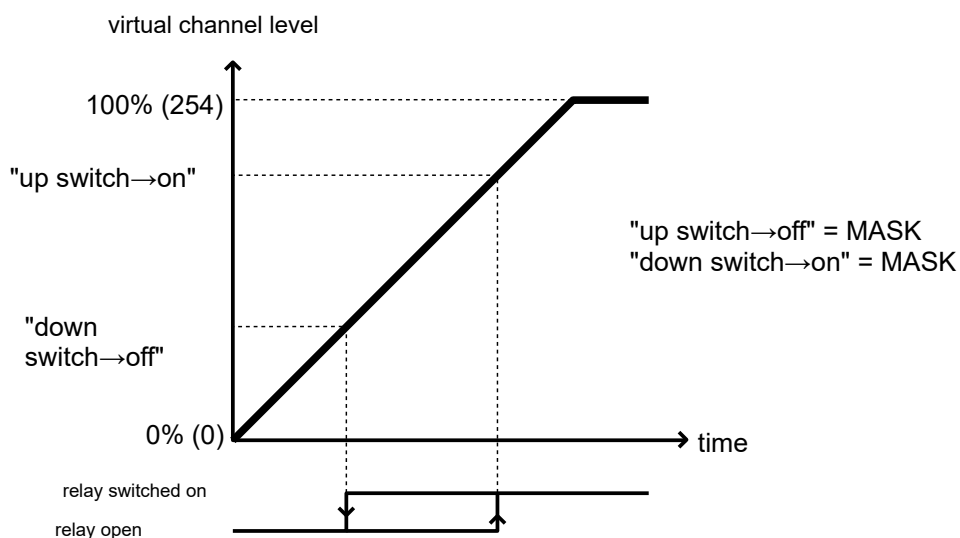
Function - Normal - only DALIrel1 and DALIrel2 variants

The DALIrel1 and DALIrel2 units contain 1 or 2 independent relays. The control is performed over the DALI bus according to IEC 62386-208. The control according to this standard is similar to that for dimmable outputs. The standard messages for dimmers ("direct arc power", "off", "recall max level", "on and step up", etc.) are used to set the virtual dimmable level of each channel (relay). The value of this virtual channel level is converted to the relay output state using the 4 parameters shown in the following table:

"up switch→on"	treshold level „ON“ for relay when switching up
„up switch→off“	treshold level „OFF“ for relay when switching up
„down switch→on“	treshold level „ON“ for relay when switching down
„down switch→off“	treshold level „OFF“ for relay when switching down

These parameters can take values 0 - 100% (0 - 254) or "MASK" (255) which means that the parameter is not to be used. The settings can be made with the DALIconfig program, which is available for free download on the website [www.foxtron.eu](http://www.foxtron.eu).

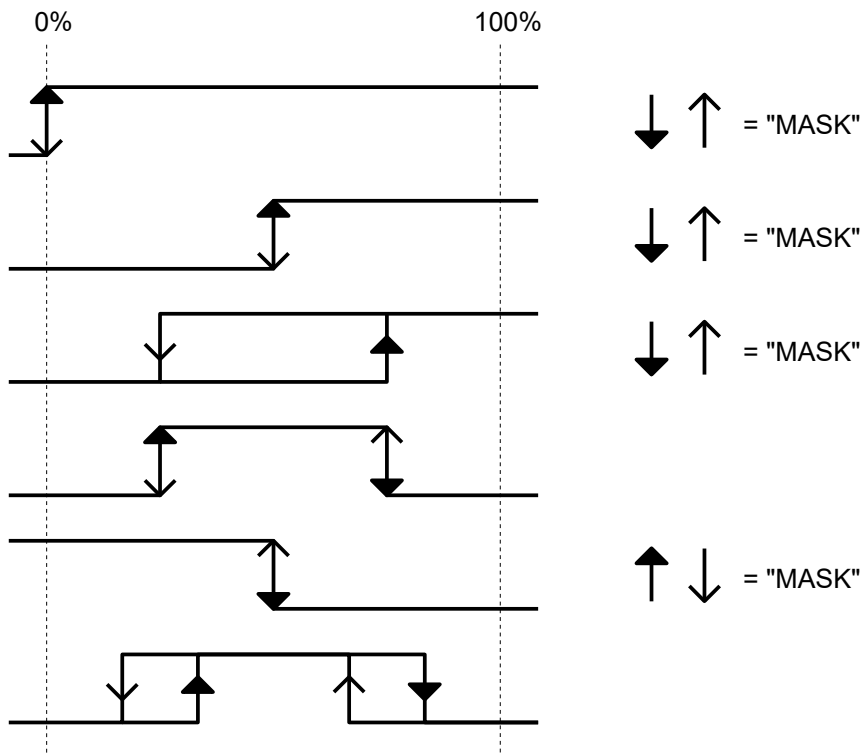
The dependence of the virtual level on the relay closure is shown graphically in the following figure.







When lighting up, the relay switches on at the level "lighting on→on" and when dimming, the relay switches off at the level "dimming→off". The level values for "on→off" and "dim→on" are set to "MASK" in this case and therefore have no effect

For a zero virtual level value, the relay is switched off except when the "light→on" parameter is deactivated (by setting it to "MASK") - then the relay is switched on for a zero virtual level value.

### Examples of settings



 "up sw.→on"	 "up sw.→off"	 "down sw.→on"	 "down sw.→off"
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## Function - Jalousie mode - only DALIrelJ variant

This function allows you to control motorized blinds, screens, etc. The unit can control 1 blind. Odd outputs always change direction (relay is switching), even outputs switch the travel. This prevents direction change when the travel is switched on (and thus destroying the motor). The jalousie mode is set automatically in the DALIrelJ variant.

The following standard DALI commands are used for control in jalousie mode.

OFF	Stopping the jalousie
UP	Jalousie up
DOWN	Jalousie down

### Settings

Run time	<p>Maximum running time of the blinds. The motors are stopped independently in the end position, but it is better to disconnect the power from them when they run out. The time should be set slightly longer than the maximum time the jalousie need to move from one position to another.</p>
Safe delay	<p>Safety delay between changes of direction of travel of the jalousie. The time is specified by the manufacturer of the jalousie drive, but normally this value is 300-400ms.</p>

### Wiring

UP	Power jalousie - ride up
DOWN	Power jalousie - ride down
L in	Power supply - L

Dimensions (in mm)

