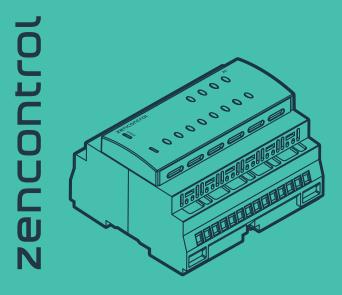
# 4-Channel DALI relay controller **zc-relay-4-pro**



#### **Product range**

Order code	Description
zc-relay-4-pro	4-Channel DALI Pro relay controller, with 8 x 0-10V
zc-relay-2d2s-pro	4-Channel DALI Pro relay controller, 2 x SPST + 2 x SPDT with 8 x 0-10V

# Specifications

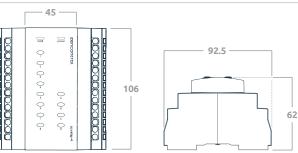
Specificacions		
Supply voltage	220 - 240 V ~ 50 Hz	
Control system	Wired DALI-2 Wireless IEC62386-104 over Thread	
Radio support	IEEE 802.15.4	
Frequency band	2.4 GHz	
DALI line current	2 mA	
Relay type	zc-relay-4-pro	4 x SPST
	zc-relay-2d2s-pro	2 x SPST 2 x SPDT
Output type	8 x 0-10V 4 x dry-contract volt-free relay	
Output load AC	10 A resistive  ✿ 6 A inductive  ₽	
Max inrush (SPST only)	165 A 20 ms 492 A 1.5 ms	
Output voltage rating AC	0 - 240 V ~ 50 Hz	
Output load rating DC	0 - 25 V 3 A resistive 🎄 25 - 240 V 200 mA resistive 🎄	
Min. rated relay operations	12 000	
Max. operations per hour	360	
Wiring	1 - 4 mm² Strip 6 - 7 mm	
Operating temperature	0 to 45°C	
Operating humidity	0 to 85 %	
Material	PC	
Classification	Class II	
0-10V output current	5mA max sink / source per channel	

## Dimensions

Mounting options	DIN rail (35 mm)
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#### Dimensions

92.5 / 106 / 62 mm

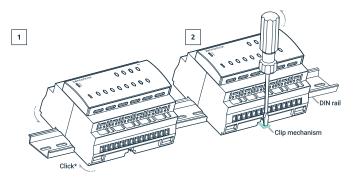


# Installation

Remove the product from the box and inspect it for any damage. If you believe the product to be damaged or otherwise unsound, *do not* install the product. Please pack it back into its box and return it to the place of purchase for replacement.

If the product is satisfactory, proceed with the installation:

- 1 Ensure safety warnings are adhered to.
- 2 Mount the zc-relay-4-pro on DIN rail inside a mains rated enclosure as shown in *fig 1*. To remove from DIN rail, release the clip mechanism with a flat blade screw driver, as per *fig 2*.
- 3 Wire the zc-relay-4-pro as per wiring diagram, overleaf.



### Safety information

- This product must only be installed by a licensed electrician.
- Before commencing installation turn off and isolate the electrical supply.
- There are no user serviceable parts, attempting to service any part of the product will void the warranty
- DALI is not SELV and as such should be treated as LV.
- As the installer, it is your responsibility to ensure you comply to all relevant building and safety codes. Refer to applicable standards for the relevant rules.
- When the installation is complete, leave this manual with the building's owner for future reference.

#### **Relay button actions**

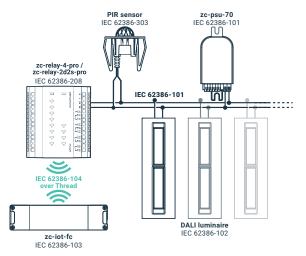
Button	Action	Function
Α	Hold	Relay 1 state off override
В	Hold	Relay 2 state off override
С	Hold	Relay 3 state off override
D	Hold	Relay 4 state off override
1 and 2	Hold 5⁺ sec	Physically select relay 1
	Hold 10⁺ sec	Physically select relay 1 and toggle relay state
3 and 4	Hold 5 <sup>+</sup> sec	Physically select relay 2
	Hold 10⁺ sec	Physically select relay 2 and toggle relay state
5 and 6	Hold 5 <sup>+</sup> sec	Physically select relay 3
	Hold 10⁺ sec	Physically select relay 3 and toggle relay state
7 and 8	Hold 5⁺ sec	Physically select relay 4
	Hold 10⁺ sec	Physically select relay 4 and toggle relay state

#### System overview: modes

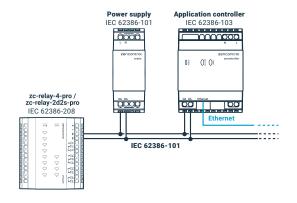
**104 mode** is enabled after the device has been added to a 104 application controller such as zc-iot-fc.



**104 + 101** Bridge mode is enabled after the device has been added to a 104 controller and a 101 power supply has been connected to the DALI terminals.



**101 mode** is enabled after a 101 power supply has been connected to the DALI terminal and the device **has not** been added to a 104 application controller.

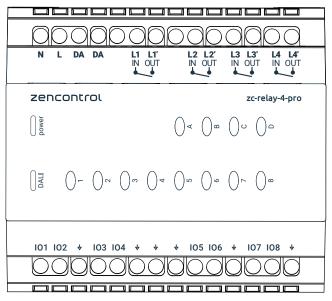


# **LED indicators**

Status	Description
ON	Device is powered
OFF	Device is not powered
Flashing	There is traffic on DALI line
OFF	There is no traffic on the DALI line
ON	Relay 1 ON
OFF	Relay 1 OFF
ON	Relay 2 ON
OFF	Relay 2 OFF
ON	Relay 3 ON
OFF	Relay 3 OFF
ON	Relay 4 ON
OFF	Relay 4 OFF
	ON OFF Flashing OFF ON OFF ON OFF ON OFF ON

### Wiring diagram

zc-relay-4-pro



#### zc-relay-2d2s-pro

	000000
N L DA DA L1' L1 L1' L2' NC IN NO NC	L2 L2' L3 L3' L4 L4' IN NO IN OUT IN OUT
zencontrol	zc-relay-2d2s-pro
	< ()m ()o ()n
Data Delta Del	∞ () ⊲ () ∞ () α
101 102 ÷ 103 104 ÷ ÷ ÷	105 106 + 107 108 +
00000000	000000