

DGOZ-DINBSR-01 RAPIX DALI-2 DIN Mount Blind/Shutter Relay

Product summary and capabilities

This DIN mounted relay is suitable for the control of curtain, blind, shutter and tilt motors commonly used for curtains, blinds and shading systems.

This relay product supports both ac and dc motors,

This product is DALI-2 certified and suitable for use in DALI and DALI-2 systems.

Product Features

- Blind/Curtain/Shutter control for up/open and down/close, using received DALI commands.
- Suitable for ac motors 100 V – 240 V 50/60 Hz up to 2 A (1 hp) and also dc motors 12 – 24 V dc up to 2 A.
- Entirely DALI line powered, with 2.5 mA current draw from DALI line.
- LED indicators (DALI / Identification and motor energised).
- Uses a single DALI Short Address.
- Can be included in up to 16 DALI Group Addresses and/or up to 16 DALI Scenes.
- DALI Short Address, Group Addresses and DALI Scenes are configured using **RAPIX Addressing** or **RAPIX Integrator** software. Can also be commissioned using other DALI commissioning software that supports DALI Device Type 7.
- When commissioned with RAPIX software, enhanced operation is available - DALI Arc Power commands can be used to set a proportion of the open/close amount; and DALI scenes can store presets for the amount of open/close.
- Complies with DALI standard IEC 62386 (Ed 2 – DALI-2) and Device Type 7 (Switching Function).



Important notes and safety information



WARNING – Electric shock may result in serious injury or death. Follow all warnings in this guide and on the product. Work in accordance with the latest electrical safety practices.

- The RAPIX DALI Blind/Shutter Relay may have a mains supply connection when used with ac motors, and so may present an electrical safety hazard.
- The installer must be suitably qualified and should work in accordance with standard safety procedures for mains-powered electrical equipment.
- DALI system wiring is only single insulated from mains. **Treat DALI wiring the same as mains wiring.**
- There are **no user serviceable parts** inside the DALI Relays. Do not attempt to disassemble or operate the device with any covers removed.
- This DALI Blind/Shutter Relay is for **indoor use only**.

Operation and Indicators

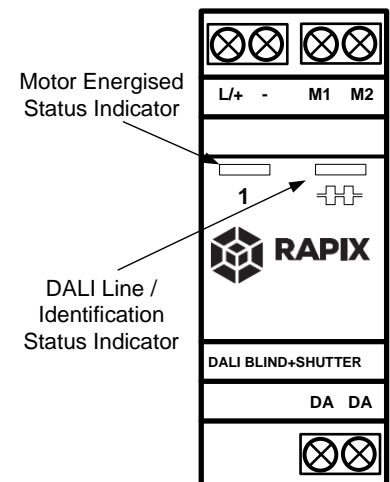
The relay unit has indicators for displaying if the motor is energised, and the DALI line status and identification.

DALI Line / Identification Indicator

Indicator	Operation
Green: On with short blink OFF every 2 seconds	DALI Power is present.
Green: Short blinks OFF	DALI Traffic on the line.
Green: Blinking at regular period, half second on / half second off	DALI Identification command issued to allow the device to be located.
Off	No power on the DALI line.

Motor Energised Status Indicator

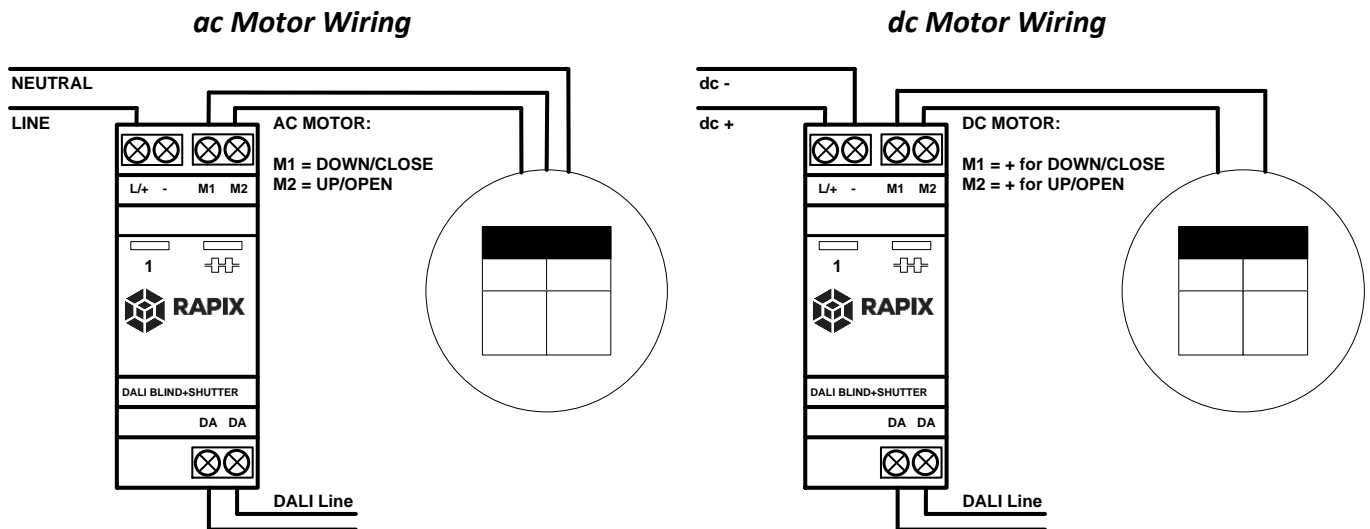
Indicator	Operation
Green – on	The motor has power applied, either up/open or down/close.
Off	The motor has no power applied.



Installation and Wiring

The DALI Blind/Shutter Relay is mounted on DIN rail which should be installed horizontally in a suitable switchboard enclosure. Multiple DALI Relays, DALI power supplies, controllers or other devices can be mounted on the same DIN rail. All terminals allow 3 x 1.5 mm² or 2 x 2.5 mm² (solid or stranded) wire per tunnel.

For ac motors and mains connection, ensure the mains circuit is protected by a 16A circuit breaker.



For ac motors, do not connect neutral to the relay unit.

Commissioning – RAPIX Commissioning Software

RAPIX Software for commissioning is free of charge and recommended. When this software is used, the following additional settings and capabilities are possible:

- Enable RAPIX Enhanced Operation Mode
- Disable processing broadcast commands
- Set the blind/shutter/curtain sweep time, which allows failsafe shutoff of power to the motor and proportional control, for example, setting a percentage of open amount.

These setup options are strongly recommended:

- Set operation for RAPIX Mode – this gives more flexible operation.
- Disable Broadcast.
- Program a Sweep Time – measure the blind / curtain travel time in seconds, and program in this number.
- Set a Short Address.
- Use Groups if desired.
- Ensure the Minimum Level is set to 1.
- Ensure the Power-On Level is set to 0 (OFF), to ensure that there is no blind/shutter movement after power up.

The following DALI commands are supported when in the RAPIX Enhanced Operation Mode:

RECALL MIN	Energises the DOWN/CLOSE motor direction, with failsafe power off after the sweep time
RECALL MAX	Energises the UP/OPEN motor direction, with failsafe power off after the sweep time
OFF	Removes power and stops the motor
UP	Moves the blind UP/OPEN by 10%
DOWN	Move the blind DOWN/CLOSED by 10%
LEVEL	Setting an arc power level 0 = OFF/STOP, and levels 1 .. 254 correspond to a proportion of the blind/shutter/curtain travel, where 1 = fully closed and 254 = full opened. Amounts in between correspond to some proportion. For example, 128 = 50% open.

These commands allow the product to be used for simple 3 button control, as well as easy adjustment of position, scheduled level setting, and complex tracking and adjustment of shading system position.

Commissioning – Non-RAPIX Commissioning Software







When **RAPIX** commissioning software is not used, this product complies with the DALI Relay DT7 standard and supports basic UP/OPEN, DOWN/CLOSE and OFF/STOP operations using the DALI commands:

- RECALL MIN Energises the DOWN/CLOSE motor direction
- RECALL MAX Energises the UP/OPEN motor direction
- OFF Removes power and stops the motor

These commands allow the product to be used for simple 3 button control.

IMPORTANT: For correct operation, the Minimum Level must be set to 1 by your DALI commissioning software.

Specifications

DALI Compliance	DALI and DALI-2
DALI Operating Voltage	16 V dc (nominal), with suitable operation from 9.5 V – 22.5 V
DALI Line Current Draw	4 mA (peak) / 2 mA (average)
DALI Mains tolerance	DALI input is mains voltage tolerant
DALI Device Type	Type 7
Power Source	DALI line
Electrical Isolation	4 kV (Input/Output Terminals to DALI)
Status Indicators	DALI Present & Identification - Green ON (Motor running) - Green
Rating – ac motors	100 V – 240 V ac, 50/60 Hz: 2 A (1 hp)
Rating – dc motors	12 – 24 V dc: 2 A
Relay Switch Operations	> 10 000 operations at maximum of rated load
Start-up time	15 seconds from DALI power application
Motor and Power terminals	2 x 2.5 mm ² maximum per terminal or 3 x 1.5 mm ² maximum per terminal
DALI terminals	2 x 2.5 mm ² maximum per terminal or 3 x 1.5 mm ² maximum per terminal
Ambient operating temperature	0 - 50°C
Humidity	0% to 95% RH non-condensing
Ingress protection	IP20
Materials	Enclosure/fascia – flame resistant polycarbonate DIN rail clip – ABS
Weight	150 g
Approvals	     

Standards and compliance

The product is designed to meet/exceed the following Australian and International standards:

EMC and Electrical Safety Frameworks and Standards

IEC/EN 60669-2-1, AS/NZS 60669.2.1
 IEC/EN 61000-3-2, -3, AS/NZS 61000-3-2, -3
 IEC 61000-4-2, -3, -4, -5, -6, -8, -11, EN 61547:2009
 AS/NZS CISPR 15:2011

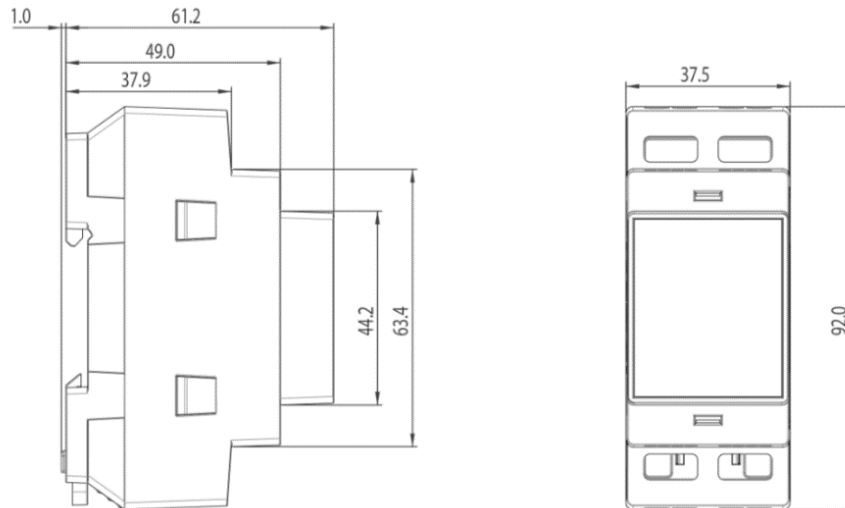
DALI Standards and Compliance

IEC 62386-101 Ed 2 (DALI-2)
 IEC 62386-102 Ed 2 (DALI-2)
 IEC 62386-208 (DALI Switching Function)

EU Directives

2014/35/EU Low Voltage
 2014/30/EU Electromagnetic Compatibility (EMC)
 2015/863 Restriction of Hazardous Substances (RoHS) in Electrical and Electronic Equipment

Dimensions



Warranty

This product has a TWO YEAR warranty against manufacturing defects. The warranty applies from the date of purchase.

Refer to [ozuno.com](https://www.ozuno.com) for the full conditions for warranty and returns process. A summary of the process:

1. Contact the seller of the goods, or in their absence contact Ozuno to request a return goods authorisation.
2. When a return is authorised, the goods must be returned to Ozuno at the owner's expense for technical evaluation.
3. The warranty claim will be evaluated by Ozuno and accepted if the goods are found to be faulty, or rejected if the fault was caused by conditions beyond the responsibility of Ozuno. Considerations of installation, removal, return, freight and testing are not the responsibility of Ozuno.

The Australian Consumer Law requires the inclusion of the following statement with this Warranty:

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

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