

ac Voltage Free Relays
DATA SHEET





Order Codes DGOZ-DINRLY-12A-01

DGOZ-DINRLY-12A-02

Overview

These DALI one and two channel DIN mount Relays are designed for on/off switching loads up to 12 Amps via DALI commands issued on a connected DALI line.

Each relay channel can switch 12 A of LED, fluorescent, incandescent and HID lighting loads for ac line voltages of 100 - 240 V, making it suitable for a wide range of commercial and industrial building applications.

Relay cable termination uses high quality rising cage clamp style screw terminals, and is suitable for terminating 1.5 mm² or 2.5 mm² cables (ac supply cables, switched load cables and DALI Line cables).

To maximise contact life, the relay unit includes zero cross switching to ensure that when the load is switched on the relay contacts are closed at the ac voltage zero-crossing point.

Features

General purpose load switching (ON and OFF) via received DALI commands.

Capable of switching 12 AX @ 240 V ac.

Very high inrush current rating.

Zero crossing detection to maximise relay contact life on relay close operation.

LED indicators (DALI, power, and for each load channel).

Each channel uses a single DALI Short Address; can be including 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.

Complies with DALI-2 standard IEC 62386 and Device Type 7 (Switching Function).

Typical Applications

Commercial & Industrial buildings, Education Facilities, Health care facilities, Hotels, Warehouses, Homes.



Connections

- Mains Power Input
- DALI Input
- One or Two channels Voltage Free connections for a load

Compatible Load Types

Symbol	Load Type	Comment
	LED Lamps / Drivers	
□ //≥	Electronic Transformers	
	Standard Iron-Core Transformers	100 V – 240 V ac, up to 12 A per channel.
	Toroidal Iron-Core Transformers	100 v 240 v de, ap to 12 // per channel.
Ö	Incandescent	
4€≡	CFLs	
(N)	Motors	100 V – 240 V ac, up to 2 A (1 hp), including exhaust fans & ceiling fans

SAFETY NOTES

SELV note

The relay contacts of this product are voltage-free and have Basic Insulation from mains voltages. The voltage free switching terminals are not suitable for connection to a Safety Extra Low Voltage (SELV) system.

If connection to a SELV system is needed, the RAPIX Low Power Voltage Free Relay (order code DGOZ-LPVFR-11) is appropriate.

Multiple Phases note

Supply and Load must be on the same phase.

The 2-channel relay is not suitable for use where each channel switches different phases.



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Specifications

Parameter	Specification
Number of Switched Outputs	DGOZ-DINRLY-12A-01: 1
	DGOZ-DINRLY-12A-02: 2
DALI Compatibility	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	2 mA
DALI Mains tolerance	DALI input is mains voltage tolerant
DALI Device Type	Type 7
Power source	ac mains
Nominal Mains Supply Voltage	100 – 240 V ac
Mains Frequency Range(s)	47 – 63 Hz
Electrical Isolation	2 kV (Channel Input/Output terminals to DALI and to Mains)
Status Indicators	Power & DALI - Green
	Each Channel - Green
Load Rating	ac Loads: Resistive, Inductive, Fluorescent, LED, Capacitive: 12 A per channel
	Motor: 2 A (1 hp) per channel
Inrush Current Rating	500 A (2 ms)
Relay Switch Operations	> 50 000 operations at rated load
Relay Contact Type	Bifurcated High Inrush
Relay Switching Type	Zero voltage detection for relay turn-on.
Relay Terminals Polarity	Non-polarised
Standby Power	< 150 mW
Mains 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
Operating Temp. Range	0 - 50°C
Operating Humidity Range	0% to 95% RH non-condensing
Ingress protection	IP20
Materials	Enclosure/fascia – flame resistant polycarbonate
	DIN rail clip – ABS
Weight	1 Channel: 105 g
	2 Channel 120 g



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Standards & Compliance

IEC/EN 60669-2-1, AS/NZS 60669.2.1 IEC/EN 61000-3-2, -3, AS/NZS 61000.3.2, .3 IEC/EN 61000-4-2, -3, -4, -5, -6, -8, -11 EN 61547 IEC/EN 55015, AS/NZS CISPR 15, AS CISPR 15

DALI Standards and Compliance

IEC 62386-101 Ed2 (DALI-2) IEC 62386-102 Ed2 (DALI-2) IEC 62386-208 Ed1 (DALI-1, Switching Function)

EC Council Directives

2014/35/EU Low Voltage

2014/30/EU Electromagnetic Compatibility (EMC)

2015/863 Restriction of Hazardous Substances (RoHS) in Electrical and Electronic Equipment









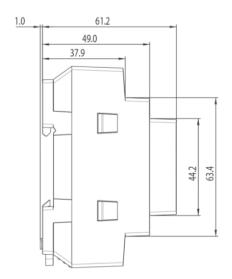


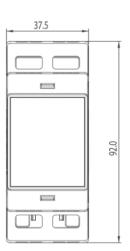




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Dimensions





Contact Information

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Ozuno Trading Pty Ltd

This product includes a TWO-YEAR WARRANTY against manufacturing defects.

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