



**Order Code** SS-DGOZ-DM-400W-01

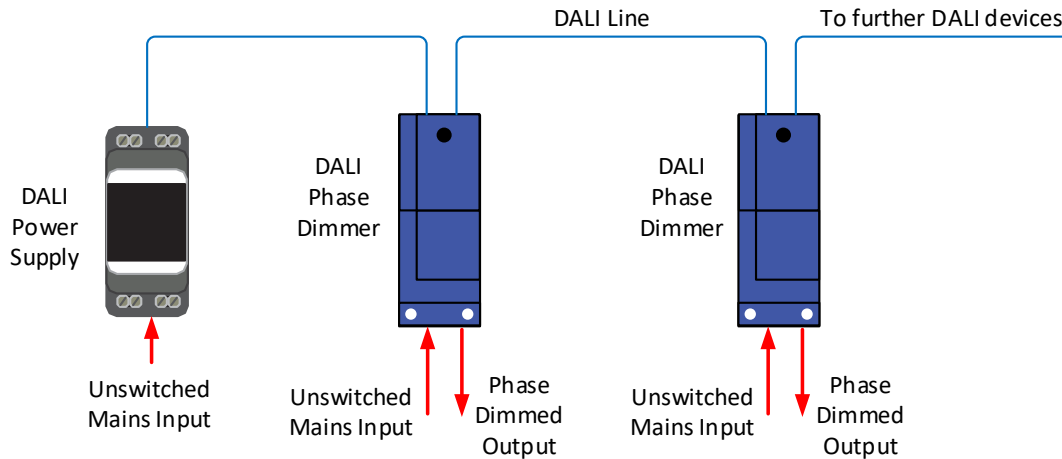
**Overview** This DALI Adaptive Phase Dimmer is suitable for dimming of mains phase dimmable loads. DALI commands are mapped to phase angle dimming. A large area is included for terminating 1.5 mm<sup>2</sup> or 2.5 mm<sup>2</sup> double insulated cables used for ac mains supply, phase dimmed load, and DALI line. This DALI Phase Dimmer is DALI-2 compliant in accordance with DALI standard IEC 62386 (Ed 2). The device is **not** suitable for use with Ceiling Sweep Fans, Exhaust Fans or any motor loads.

**Features** Phase dimming of lighting loads by received DALI commands. Dimming for lighting loads nominal 400 W, including most LED lighting loads. Refer to specifications for detailed load rating. DALI Line powered – draws under 2 mA from a DALI line. Two wire dimming device – no Neutral required, only 220 - 240 V ac Line (Active) and Load wiring is used. Suitable for mounting in a ceiling void or on DIN rail using the optional DIN rail mounting bracket. The phase dimmed load has a DALI Short Address and 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 the RAPIX Addressing or RAPIX Integrator software. Can also be commissioned using other DALI commissioning software that supports DALI Device Type 4. Complies with DALI-2 standard IEC 62386 (Ed 2) and Device Type 4. Compatible with both DALI and DALI-2 Systems.

**Typical Applications** Commercial Buildings, Hotels, Health Care facilities, Education facilities, Museums, Art Galleries, Homes.

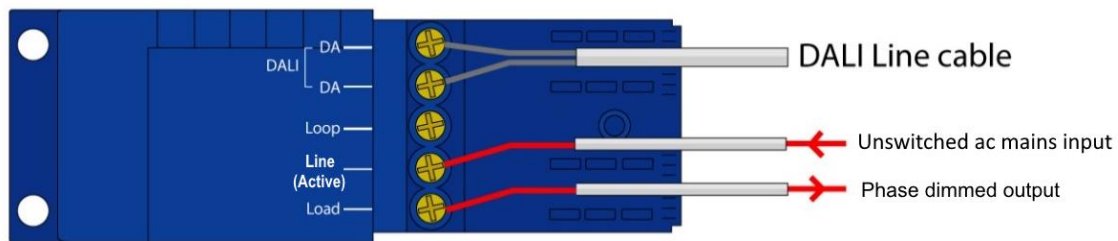
**Connecting to a DALI Line**

The DALI-2 Adaptive Phase Dimmer must be connected to both ac mains power and a DALI Line.  
The DALI line needs to be powered by a DALI Power Supply, which must meet DALI standards. The RAPIX DALI Power Supply, (available separately) is suitable and recommended.



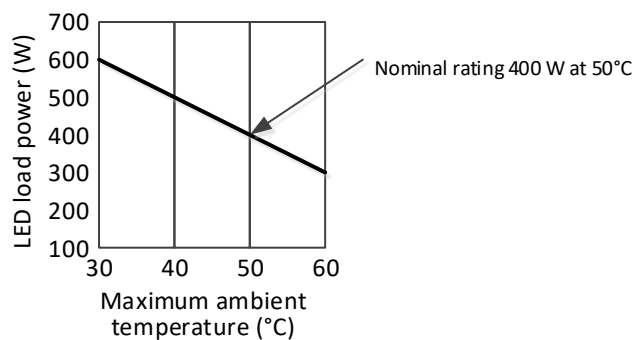
**Wiring**

- The Phase Dimmed Output (Load connection) is internally connected via the dimming circuitry to the mains input connection (line / active).
- The Loop terminal is not connected internally. It can be used to loop unused conductors, such as Neutral.









**Power Ratings and Temperature**

This product is rated for operation up to a 50°C ambient temperature. A higher rating can be achieved if the product is used in a lower ambient temperature environment. Use the following load power rating graph for LED loads:



**Compatible Load Types (rated capacity at 50°C maximum ambient temperature)**

Load Symbol	Load Type	Maximum Load	Notes
	Dimmable LED Lamps / Drivers	400 W	The LED driver must be dimmable. Maximum permitted number of drivers is 400 W divided by driver nameplate power rating. Due to variety of LED lamp designs, maximum number of LED lamps is further dependent on power-factor result when connected to dimmer.
	Electronic Transformers	400 W	
	Standard Iron-Core Transformers	250 W	Due to variety of transformer designs, maximum LV Lighting load is further dependent on transformer efficiency.
	Toroidal Iron-Core Transformers	300 W	
	Incandescent	350 W	
	Dimmable CFLs	400 W	Due to variety of CFL designs, maximum number of CFL lamps is dependent on particular CFL make/model.

**Incompatible Load Types**

- Ceiling Sweep Fans
- Exhaust fans
- Any other motor loads

**Specifications**

Parameter	Specification
Number of Outputs	1
Mains Supply Input Voltage	220 – 240 V ac (nominal)
Mains Frequency Range	47 – 53 Hz
Electrical Isolation	4 kV (DALI to Mains)
Load Brightness Control Range	0.1% to 100% - Minimum level may vary depending on load type
Minimum Load	1 W
Load Rating	See separate table: Compatible Load Types
Mains Standby Power	< 100 mW
Mains Terminals	2 x 2.5 mm <sup>2</sup> maximum per terminal or 3 x 1.5 mm <sup>2</sup> maximum per terminal
DALI Terminals	2 x 2.5 mm <sup>2</sup> maximum per terminal or 3 x 1.5 mm <sup>2</sup> maximum per terminal
Operating Temp. Range	0 - 50° C (for full performance - refer de-rating section)
Operating Humidity Range	0% to 95% RH non condensing
IP Rating	IP20
Housing Material Type	Flame retardant polycarbonate
Mounting Arrangement	Surface mount: 6mm mounting holes DIN rail mounting: using optional DIN rail mounting bracket
Weight	100 g
Compatibility	DALI-2 Certified, suitable for use in DALI and DALI-2 systems
Max. Number of Units on a single DALI Line	64
DALI Line Current Draw	2 mA
DALI Device Type	Type 4

**Optional Accessories**

DGOZ-SML-DINBKT	DIN rail mounting bracket to suit DGO-DM-400W-01
MMBP	Load Bypass Device to eliminate OFF-state LED load flicker – only required for LED loads where OFF-state flicker is a problem.

**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 61000-4-2, -3, -4, -5, -6, -8, -11  
EN 61547  
EN 55015, AS/NZS CISPR 15:2011

**DALI Standards and Compliance**

IEC 62386-101 Ed2  
IEC 62386-102 Ed2  
IEC 62386-205 Ed1

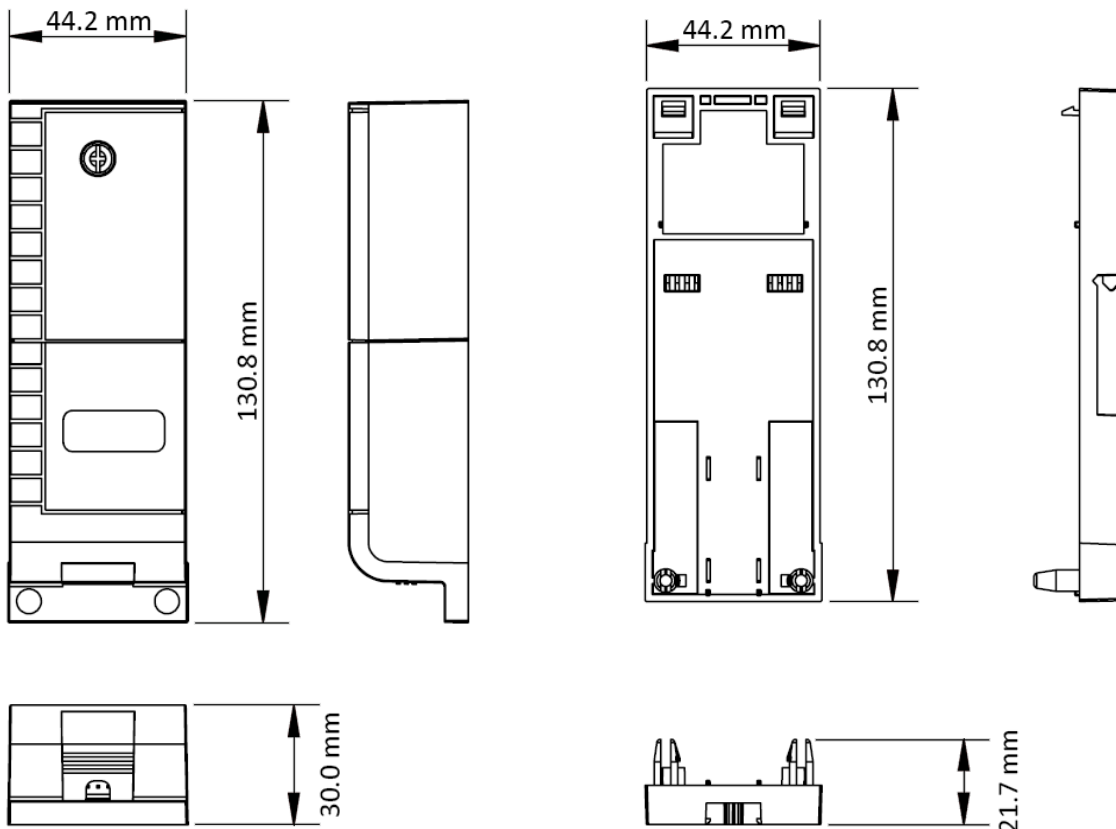
**EC Council Directives**

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

IP20



**Dimensions**



DALI-2 Adaptive Phase Dimmer

DIN Mounting Bracket (optional accessory)

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

