# DALC NET

# **DAC230-1CH**

Data Sheet EASY AC FW 1.2







- DIMMER + FADER
- AC Input: 230V AC
- Command:N.O. Push button
- 1 output at 200W max
- Adjusting the brightness of white light
- Output channel for R-C Loads
- Single channel dimmer output phase-cut (trailing edge) for LED Lamp dimmable and Halogen Lamp dimmable
- Typical efficiency > 95%
- Memory function
- Push Menù:
  - Minimum value of dimming adjustable
  - Power-on ramp (fade-up) and Power-off ramp (fade down) adjustable
- · Optimized output curve
- Soft start and soft stop
- 100% >Functional test 5 Years warranty

# > APPLICATION: Dimmer at phase-cut

CODE	Supply Voltage	Output	Channel	Local Command	
DAC230-1-CH	230VAC	1 x 200W max	1	N°1 N.O. Push Button	

Memory Function: memorize the last minimum level of the device in case of power-off.

L'AC Dimmer is a single channel dimmer output phase-cut and adjusting the brightness of dimmable LED Lamp dimmable halogen lamp and AC phase-cut power supply.

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# **REFERENCE STANDARD**

EN 61347-1	Lamp controlgear – Part 1: General and safety requirements		
EN 55015	Limits and methods of measurements of radio disturbance characteristics of electrical lighting and similar equipment		
EN 61000-3-2	Electromagnetic compatibility (EMC) – Part 3-2: Limits – Limits for harmonic current emission (equipment input current ≤ 16° per phase)		
EN 61000-3-3	Electromagnetic compatibility (EMC) — Part 3-3: Limits — Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection		
EN 61547	Equipment for general lighting purposes – EMC immunity requirements		

## **TECHNICAL SPECIFICATIONS**

		230Vac	Variant
INPUT	Nominal Voltage	230 Vac	
	Voltage Range	210240Vac	
	Mains Frequency	50 Hz	
	Efficiency <sup>1</sup>	>95%	
	Power loss in stand by mode @230Vac	<500mW	
	Nominal Output Voltage	210240 Vac	
	Nominal Output Current	max 0.8 A	
OUTPUT	Type of Load	R+C	
	Minimum load power @230V	1 W	
	Nominal Power @230V <sup>2</sup>	200 W	
	Dimming Resolution	16 bit	
DIMMING	Dimming method	Trailing Edge	
	Dimming Range	5 – 100% ³	
	Ambient Temperature <sup>1</sup>	min: -10 max: +40 °C	
	Storage Temperature	min: -40 max: +60 °C	
	Maximum Temperature at Tc (Test Point)	45°C <sup>4</sup>	
	Protection Grade	IP20	
END (IDONINAENITAL	Wiring	2.5mm <sup>2</sup> solid – 2.5mm <sup>2</sup> – stranded – 30/12 AWG	
ENVIRONMENTAL	Wire preparation length	6 mm	
	Mechanical dimensions (LxWxH)	45 x 58 x 25 mm	
	Packaging dimensions (LxWxH)	56 x 68 x 35 mm	263 x 178 x 82 mm
	Casing material	Plastic	
	Product Weight	40 g	1000 g

<sup>&</sup>lt;sup>1</sup> At full load

<sup>&</sup>lt;sup>2</sup> Maximum value, dependent on ventilation conditions

<sup>&</sup>lt;sup>3</sup> It depends on the type of lamp connected <sup>4</sup> The Tc point is measured with an ambient temperature of 22°C



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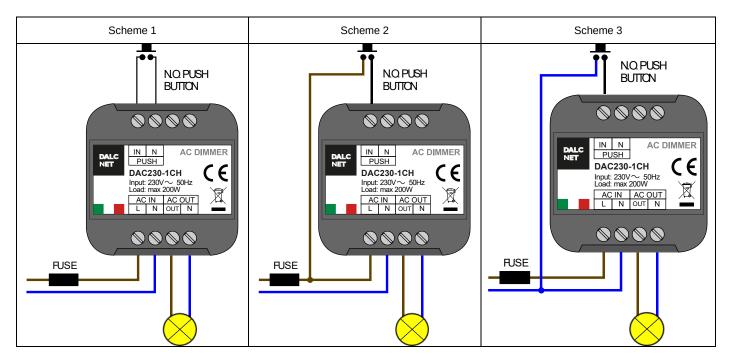
Data Sheet EASY AC FW 1.2



## INSTALLATION

As shown in the scheme below, proceed as follows to install the product:

- 1) Installation and maintenance must be performed only by qualified personnel in compliance with current regulations.
- 2) Isolate the mains supply before the installation or adjusting the switches. The external supply must be protected. It is recommended to use a Circuit Breaker with overcurrent protection correctly dimensioned.
- 3) Connect a Fuse into "Line" cable. The fuse must be correctly dimensioned. Connect the table of supply mains to "AC IN" terminal block.
- 4) Connect the Push Button N.O. command to the "PUSH" terminal block.
- 5) Connect the Lamp Load to the "AC OUT" terminal block.



## NOTE:

The maximum value of fuse is 1,25A.

#### ATTENTION:

Even in off conditions, output is always connected to the main voltage Always remove the mains supply before the installation or maintenance of the product.

# **Technical Note**

# Installation:

- Isolate the mains supply before the installation or adjusting the switches. Installation and maintenance must be performed in the absence of AC Voltage.
- Installation and maintenance must be performed only by qualified personnel in compliance with current regulations.
- The product must be installed inside an electrical cabinet protected against overvoltages.
- The external supply must be protected. The product must be protected from Fuse and/or Circuit Breaker with overcurrent protection correctly dimensioned
- The product must be installed in a vertical or horizontal position with the cover/label upwards or vertically; other positions are not permitted, It is not permitted to bottom-up position (with the cover/label down).
- The use of the product in harsh environments could limit the output power.
- Keep separated the circuits at 230V (LV) and the circuits not SELV from circuits to low voltage (SELV)

#### Command and Output:

- The length of the connection cables between the local commands (N.O. Push button or other) and the product must be less that 30m; the cables must be dimensioned correctly.
- The length of the connection cables between the product and the LED module must be less than 30m; the cables must be dimensioned correctly.



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## LOCAL INPUT

The intensity and the status (On/Off) is controlled by N.O. push button.

Button	Intensity
Click	On / Off
Double Click	Maximum intensity
Long press (>1s) from OFF	Turn on at the minimum set (Night time), Dimming function from minimum to 100%
Long press (>1s) from ON	Dimmer UP / DOWN
15 click in 5 seconds-time	Access to Push Menù

#### BEHAVIOR AT THE FIRST POWER-ON

When you turn-on the AC dimmer, the output is set at 100% and the minimum of dimming is at 10%.

**Data Sheet** 

## DEVICE MENU'

- FUNCTION AVAILABLE
  - MINIMUM VALUE OF DIMMING
  - POWER-ON RAMP (FADE IN)
  - POWER-OFF RAMP (FADE OUT)
    - o ACCES TO MENU'

When you turn-on the Ac Dimmer, click the push button 15 times in 5 seconds-time. When the Load flashes, you are in "MENU" 1"

o MENU' 1 – MINIMUM VALUE OF DIMMING

Every single click make it changing the minimum value of dimming There are six levels of minimum: 5%, 10%, 20%, 30%, 40%, 50%, 100% After setting the minimum value of dimming press long to confirm. A double flashing confirms the storage and you can go to "MENU" 2"

MENU' 2 – POWER-ON RAMP (FADE IN)

Every single click make it changing the power-on ramp There are five levels of power-on ramp (FADE-IN): instantaneous, 1 second, 2 seconds, 3 seconds, 6 seconds. After setting the FADE IN press a long to confirm Three flashes confirm the storage and you can go to "MENU" 3"

MENU' 3 – POWER-OFF RAMP (FADE-OUT)

Every single click make it changing the power-off ramp
There are five level of power-off ramp (FADE-OUT): instantaneous, 1 second, 2 seconds, 3 seconds, 6 seconds.
After setting the FADE OUT press long to confirm
Three quick flashes confirm the storage and you go out from the "DEVICE MENU"

When you are out of the Menù, the Lamp which is connected to the AC Dimmer turns on at the minimum level of dimming previously set.

