

Modular Dimmers compatible and energy saving

In the end, it enables the end user to save money!

By renewing the dimmer range, Hager again affirms its commitment to reducing the environmental impact of its products. These new products feature greatly reduced power consumption during operation. In addition, new functions enable energy consumption to be matched exactly to requirements.

As an answer to the phasing out of high consumption lamps and the introduction of energy saving alternatives (CFL, LED), Hager proposes a range of dimmers adapted to these new types of loads. Compatible with all the bulb brands available on the market, this range allows quick and efficient implementation of dimming of all lighting load types.



The advantages for you

- universal dimmers, compatible with all type of loads, including energy saving fluocompact lamps (CFL) and LED,
- the dimmers themselves save up to 10% in operating energy consumption, in addition to the reduced energy consumption of the dimmed lamps.

Technical data

- load learning modes (auto and manual)
- compact size (1 ■ 300W , 3 ■ 500W)
- comfort version: expert button to override detection mode, scenes (progressive switch off, night light, 100%,...)

Description

Hager dimmers control the lighting level of all types of lighting source: incandescent, LV halogen, VLV halogen with electronic or ferromagnetic transformer, LED VLV lamps with electronic transformer, fluorescent with electronic ballast.
The new generation EVN dimmers 300W and 500W also allow the lighting level adjustment for dimmable CFL and dimmable LED lamps.

Dimming controlled by push button :

- start / stop by short press
- increasing / decreasing by maintaining pressure

Common characteristics

- universal dimmers with automatic load recognition
- Softstart (progressive start) to increase the working life of lamps
- memorisation of last dimming level
- protection against overheating.

Dimmer 1000 W

Several lamps with up to 1000W power can be driven with the same control by associating EV102 (master) with up to 30 EV102 or EV100 (slave), that represents a total power of 30kW.

Dimmers 1-10V

The lamps equipped with a 1-10 V dimmable input, whatever their power, can be driven by EV106 or EV108.

A dimmer can drive up to 30 ballasts: the total power depends on the lamps power.

Description	Characteristics	Width in ■ 17,5 mm	Pack qty	Cat. ref.
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Universal dimmers 300 W

- compatible with dimmable CFL and LED
- 3 modes for load learning: auto, advanced, expert (comfort version)
- can replace a latching relay, with lighting level function
- push button (phase or neutral)
- very low consumption

- | | | | |
|------------------|---|---|---------------|
| standard version | 1 | 1 | EVN011 |
| comfort version | 1 | 1 | EVN012 |
- expert mode
 - scene by 2 short double presses on the remote PB (progressive switch-off, night light, 100%, no function)

Universal dimmers 500 W

- compatible CFL and LED
- 3 modes for load learning: auto, advanced, expert (comfort version)
- very low consumption

- | | | | |
|------------------|---|---|---------------|
| standard version | 2 | 1 | EVN002 |
| comfort version | 2 | 1 | EVN004 |
- expert mode
 - 100% via 2 short presses on the dim input PB
 - 1 scene PB (scene, time delayed scene, progressive switch-off, night light)
 - multi-voltage dim PB

Commercial dimmers 1000 W

- mode selection switch: "local": autonomous operating "slave": 1/10V input "master" (EV102 only): 1/10V output
- min. and max. dim level

- | | | | |
|------------------|---|---|--------------|
| standard version | 5 | 1 | EV100 |
| advanced version | 5 | 1 | EV102 |
- 2 scene PB (scene or override)
 - dimming level display
 - adjustable parameters (min. and max. dim level, dimming rise time, rise time when switching on and off)

1/10V pilot dimmers

- to control electronic ballast or EV100/EV102 dimmers (max. 30)
- dim level display
- adjustable parameters (min. and max. dim level, dimming rise time, rise time when switching on and off)

- | | | | |
|------------------|---|---|--------------|
| standard version | 4 | 1 | EV106 |
| advanced version | 4 | 1 | EV108 |
- 2 scene PB (scene or override)

Heat dissipation insert

- | | | | |
|--|-----|----|--------------|
| | 1/2 | 12 | LZ060 |
|--|-----|----|--------------|



EVN011



EVN004



EV100



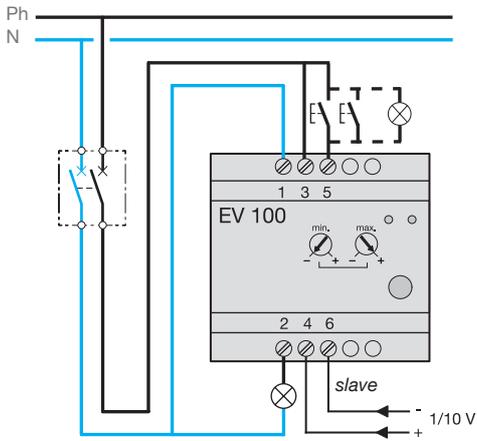
EV108



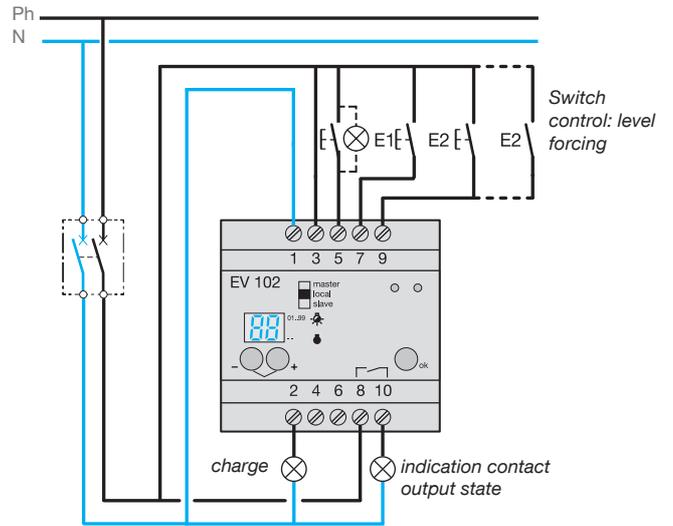
LZ060

Wiring diagrams

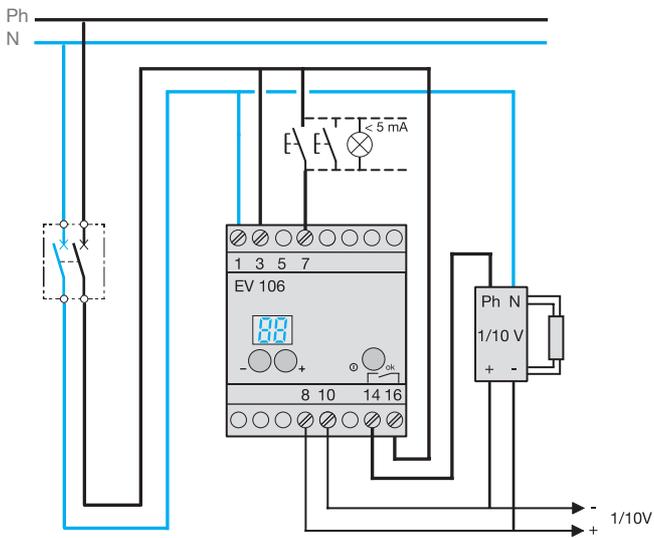
EV100



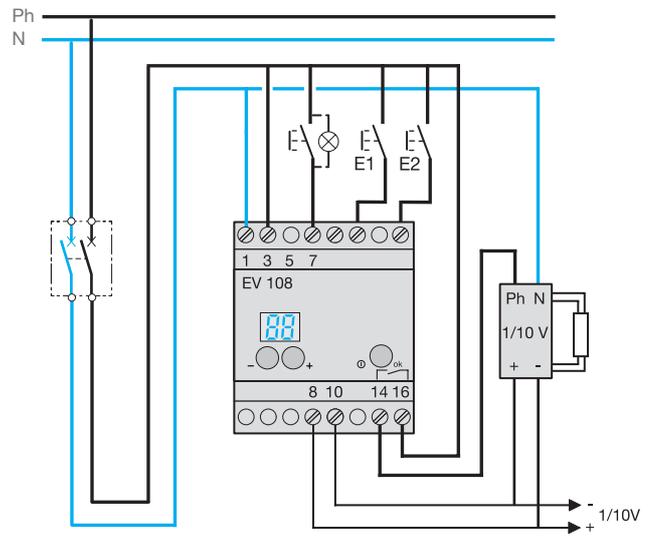
EV102



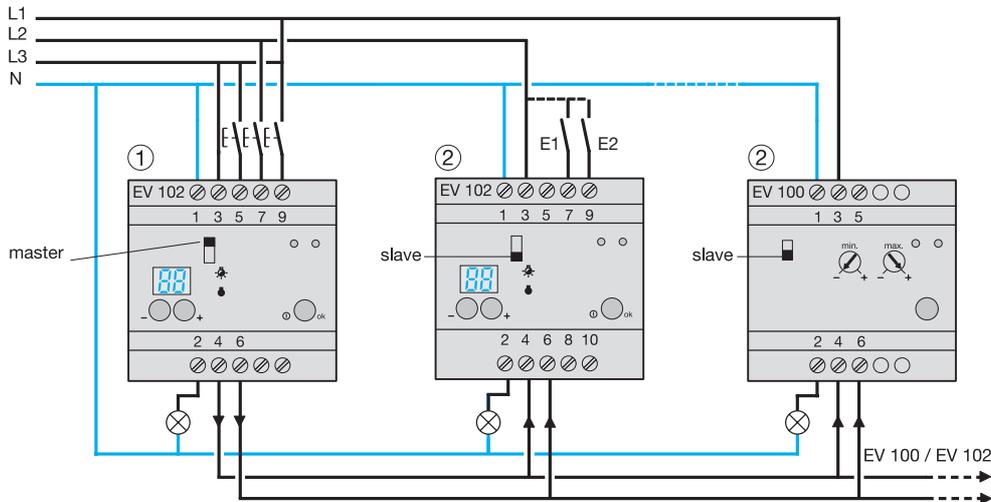
EV106



EV108



Association of dimmer EV102 with EV100



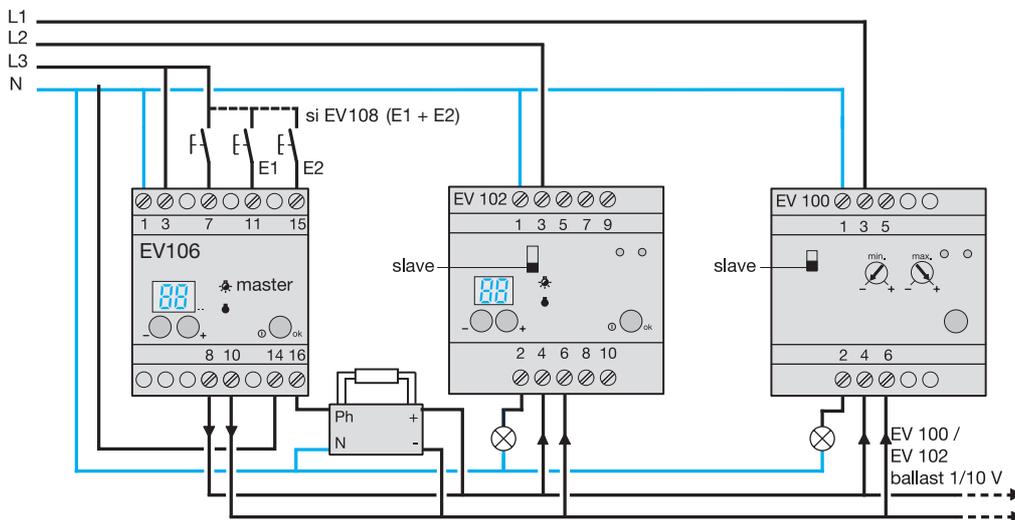
- ① mode switch in position “master” = output 1/10 V.
- ② mode switch in position “slave” = input 1/10V (in this position only priority settings with E1 and E2 are available)

Remark : it is possible to extract temporarily a product from system by switching from “slave” to “local”.

Use of input E1 and E2

(call of set up levels)
 Inputs E1 and E2 allow to call 2 or 3 set up lighting ambient levels. Call of levels can be done normally with push button (impulse ≤ 400 ms) or by priority setting with switch or automation (maintained contact).
 Setup mode 1 or 2 allows to discriminate behaviour of dimmer by cancellation of priority setting.

- **mode 1** (by default), corresponds to normal use.
 - Control by push button, called level is applied out of respect of set up transition. Dimmer still reacts to the other controls applied.
 - Switch control, called level is applied by priority setting out of respect of set up transition. By cancellation of priority setting, lighting remains at the same level as long as no other control is given.
- **mode 2**, particularly adapted for priority setting. Same behaviour as above by call of level. By desactivation of priority setting, dimmer set back to the preceding state. In that mode, when the 2 entries are simultaneously active, a 3rd level becomes available in priority setting (E1+E2 = E3)

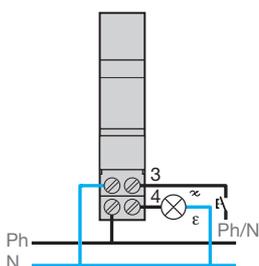


Technical characteristics

	EVN011	EVN012	EVN002	EVN004	EV100	EV102	EV106	EV108
Supply voltage	230 V +/- 10 %							
Frequency	50/60 Hz				50 Hz			
Load consumption	0,2 W				3 W			
Load control type	direct						through dimmer	
Remote power	300 W		500 W		20 to 1000 W		contact 10 A - 230 V	
Compatible load types :								
- incandescent 230 V	300 W		500 W		1000 W		-	
- halogen 230 V	300 W		500 W		1000 W		-	
- VLV halogen with transformer	300 VA		500 VA		1000 VA		-	
- dimmable fluocompact	60 W		100 W		-		-	
- fluocompact and LED not dimmable	-		-		-		-	
- dimmable LED 230 V	60 W		100 W		-		-	
1/10 V control	-				1 input	1 input/ output	1 output	
1/10 V control status	-				slave	slav./mast.	master	
I max. authorized for PB light	5 mA		-	5 mA	-			
max. PB-dimmers distance or 1-10 V control	50 m							
dim PB and ON/OFF on module	no		yes					
Number of preset lighting levels	-			1	-	2	-	3
Preset lighting levels control entry	-			1	-	2	-	2
Min. and max. dim lighting setting	-				yes			
On/Off status indication output	-					1 contact O	-	
Values digital display	-					yes		
Max. power dissipation	2,1 W		4,5 W		15 W		6 W	
IP	IP 20							
Operating temperature	- 10°C to + 45°C							
Storage temperature	- 25°C to + 70°C				- 20°C to + 60°C			
Rigid connection	1,5 to 6 mm ²				1,5 to 10 mm ²			
Flexible connection	1 to 6 mm ²				1 to 6 mm ²			

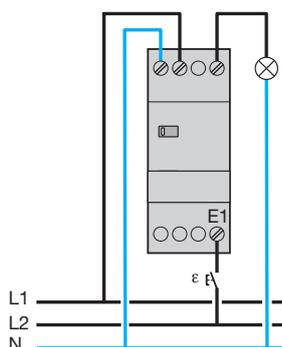
Wiring diagrams

EVN011 - EVN012

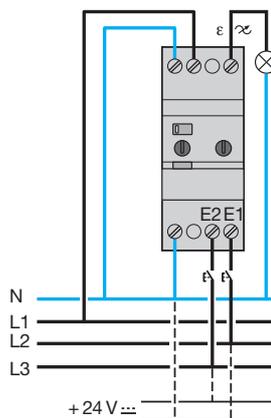


Use the same phase for control and supply.

EVN002



EVN004



Do not forget to connect the 2 neutral points.