

01417

Actuator and RGB(W) dimmer, 4 PWM outputs up to 5 A 12-48 VDC with constant voltage control, brightness control of max. 4 monochrome LEDs or RGB(W) LED strips or spotlights or Dynamic White LED strips or spotlights, 1 NO relay output 6 A 120-240 V~ for LED power supply units, push buttons for local control, By-me home automation, installation on DIN rail (60715 TH35), occupies 4 modules size 17.5 mm.

The device is fitted with 4 amber front LEDs which indicate the status of the outputs, 4 front buttons to test the outputs, 1 red LED to signal any anomalies, 1 relay contact to pilot the mains voltage of the auxiliary power supply unit of the LEDs and 4 independent output channels.

CHARACTERISTICS

- BUS Rated supply voltage: 29 V
- Absorption from the BUS: 10 mA
- VIN LED auxiliary supply voltage (min-max): 12-48 VDC (SELV)
- Maximum output current per channel: up to 5 A (see table in fig. CONTROLLABLE LOADS)
- Output voltage: 0-Vin VDC
- LED auxiliary input current (max): 12 A
- Terminals:
 - 2 for TP bus
 - 4 for LED auxiliary power supply
 - 2 for relay contacts (C, NO)
 - 8 for the 4 RGB(W) LED channels
- Operating temperature -5 °C + 45 °C (indoor)
- Max. casing temperature: 80 °C
- IP20 protection degree
- The device 01417 should be configured with the Automation Gateway 01410-01411 and App VIEW Pro.
- Not compatible with By-me control panels 21509 and EasyTool Professional.

CONTROLLABLE LOADS

- Relay output:
 - controllable loads at 120 - 240 V~, NO contact: auxiliary power supply units for LED auto overload-protected (direct current limitation, automatically resumes operation after the error condition is removed): 6 A (20,000 cycles)
- RGB(W) outputs: monochrome LED, RGB(W) or dynamic white LED strips and spotlights.

OPERATION

The actuator 01417 can be configured with the home automation Gateway 01410-01411.

- **ON/OFF switching**
Upon receipt of the ON/OFF controls, the device activates the last brightness value stored or deactivates (0%) the corresponding channel.
- **Relative brightness control (White)**
Allows you to increase or decrease the brightness value of the channel according to the controls received from other By-me devices. Upon receipt of a stop control, the control stops and the brightness value reached at that moment is maintained.
- **Absolute brightness control (White)**
Allows you to set the absolute brightness percentage value defined by the control received. The brightness value is reached via a ramp.
- **Relative RGB(W) colour control**
When the device is configured to control a RGB(W) LED strip, you the shade, saturation and brightness values can be increased or decreased independently.
- **Absolute RGB(W) colour control**
When the device is configured to control a RGB(W) LED strip, the absolute RGB coordinate can be set. The transition occurs via a ramp, the duration of which can be configured.
- **Dynamic control of "Dynamic White" white**
The dynamic white technology makes it possible to adjust the colour temperature of the white light between 2,500 K and 7,000 K. The device in dynamic white mode simulates natural daylight, adapting to the setting and to personal taste.
- **Timed switching (Staircase Light)**
The device activates the channel corresponding to the last brightness value stored for the time set on the "ON duration" parameter and deactivates it (brightness value 0%) when the time expires (not available in RGB(W) mode).

Protections

The device is fitted with the following integrated protections:

- Over-temperature (reversible auto-off)
- Anti polarity inversion of auxiliary LED power supply
- Over-current including the short-circuit of the 4 LED outputs
- Over-voltage

Over-temperature

The possible over-temperature of the device is signalled by the red flashing of the front Alarm LED while the amber channel status LEDs are off. During the over-temperature, the 4 LED outputs are fixed with PWM at 1% and every manual control or control received from the bus is ignored. Once the cause of the over-temperature has been remedied and the normal operating temperature has been reached, the amber LEDs of the 4 output channels flash and the red Alarm LED remains flashing. Normal operation can resume and the over-temperature signal can

be deactivated by manually pressing any of the front buttons of the 4 channels (1-R, 2-G, 3-B, 4-W) or via bus control.

LED indications

Description	amber channel status LED	amber manual operation LED	Red Alarm LED
No fault, load piloted	On	Manual on Bus off	Off
No fault, load off	On	Manual on Bus off	Off
Over-temperature	Off	Off	On flashing
Return below threshold over-temperature	On flashing	Off	On flashing
Reset test after over-temperature	On flashing	Off	Red permanently on
Polarity inversion or absence of auxiliary voltage	Off	Off	Red permanently on

CONFIGURATION

For the configuration operations, see the By-me Plus system manual.

- Functional units: 8
 - Dimmer (1-R), Dimmer (2-G), Dimmer (3-B), Dimmer (4-W), Dimmer (1-R + 2-G)
 - Dynamic white dimmer (1-R + 2-G), Dynamic white dimmer (3-B + 4-W)
 - RGB/RGBW dimmer (1-R + 2-G + 3-B + 4-W)

INSTALLATION RULES

- Installation must be carried out by qualified persons in compliance with the current regulations regarding the installation of electrical equipment in the country where the products are installed.
- The power supply units used to power the auxiliary input must have the SELV or SELV Equivalent output.
- The loads controllable from the LED outputs must be in class III.
- The relay output power circuit must be protected against overloads by installing a device, fuse or automatic 1-way switch, with a rated current not exceeding 10 A.
- This device is compliant with the reference standard, in terms of electrical safety, when it is installed in the related control unit.
- If this device is used for purposes other than those specified by the manufacturer, the protection provided may be compromised.
- Observe the maximum current and voltage values given for the device.
- Ensure minimum clearance distances all round the device in order to provide sufficient ventilation. The device must not be exposed to water drip, splash or spray.

REGULATORY COMPLIANCE

LV Directive. EMC directive. EN 60669-2-5, EN 50491 standards.

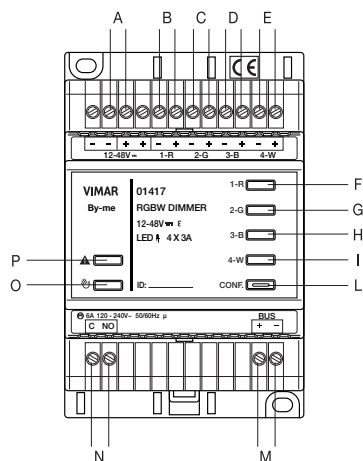
REACH (EU) Regulation no. 1907/2006 – Art.33. The product may contain traces of lead.



WEEE - User information

The crossed bin symbol on the appliance or on its packaging indicates that the product at the end of its life must be collected separately from other waste. The user must therefore hand the equipment at the end of its life cycle over to the appropriate municipal centres for the differentiated collection of electrical and electronic waste. As an alternative to independent management, you can deliver the equipment you want to dispose of free of charge to the distributor when purchasing a new appliance of an equivalent type. You can also deliver electronic products to be disposed of that are smaller than 25 cm for free, with no obligation to purchase, to electronics distributors with a sales area of at least 400 m². Proper sorted waste collection for subsequent recycling, processing and environmentally conscious disposal of the old equipment helps to prevent any possible negative impact on the environment and human health while promoting the practice of reusing and/or recycling materials used in manufacture.

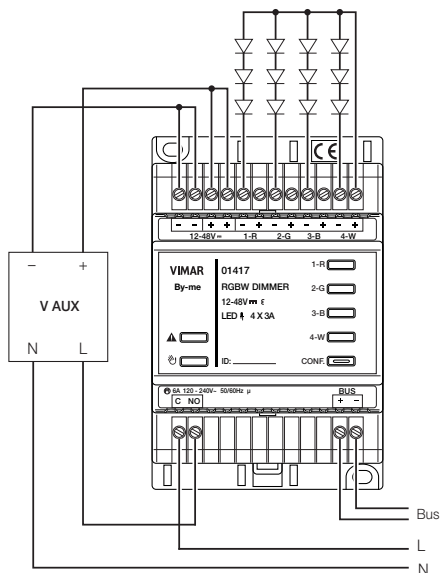
FRONT VIEW



- A: Auxiliary LED power supply
- B, C, D, E: Channels 1-R, 2-G, 3-B and 4-W respectively
- F: LED and channel 1-R activation push button
- G: LED and channel 2-G activation push button
- H: LED and channel 3-B activation push button
- I: LED and channel 4-W activation push button
- L: LED and Configuration push button
- M: By-me bus terminals
- N: Relays (C, NO)
- O: Manual mode push button
- P: LED and Alarm push button

CONTROLLABLE LOADS

Wiring 1



Wiring 2

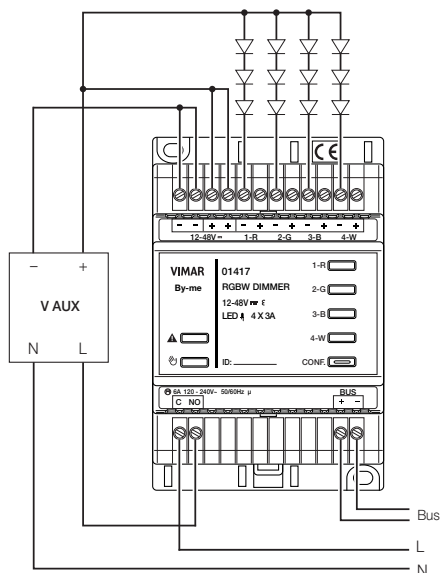


Table of RGB(W) output loads.

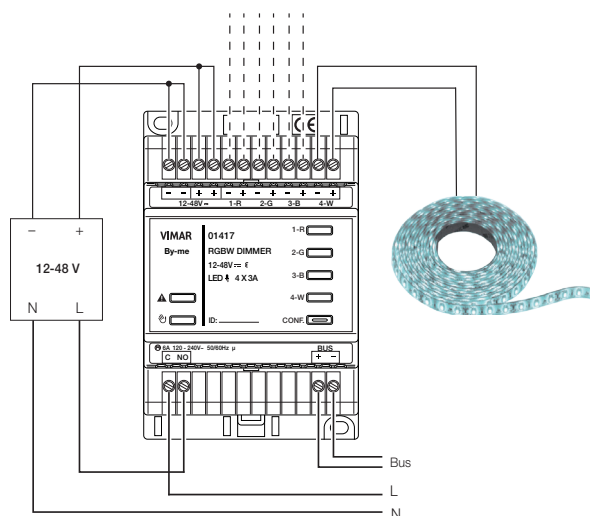
VIN LED auxiliary supply (min-max): 12-48 VDC (SELV)

No. of channels used	Wiring 1	Wiring 2
1	5 A	5 A
2	4 A	5 A
3	3 A	3.5 A
4	2.5 A	3 A

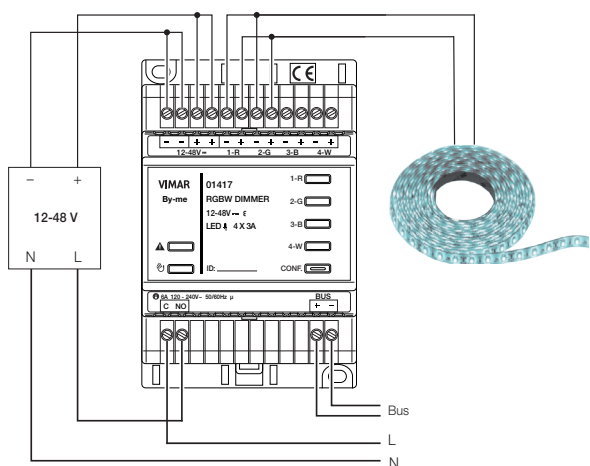
CONNECTIONS

WHITE connections

1. Separate outputs

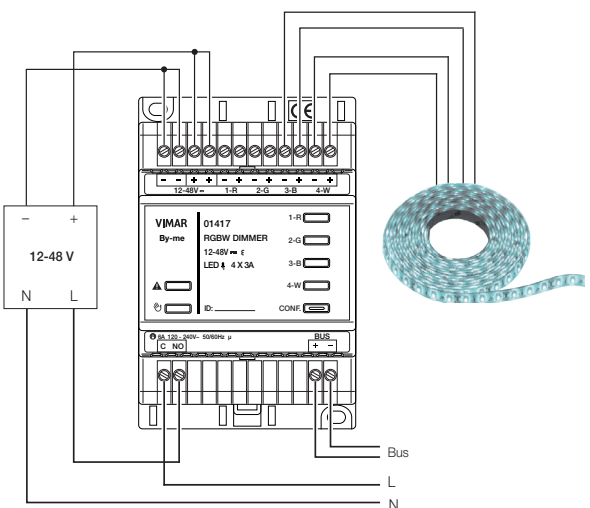


2. Outputs parallelized on channels 1-R and 2-G



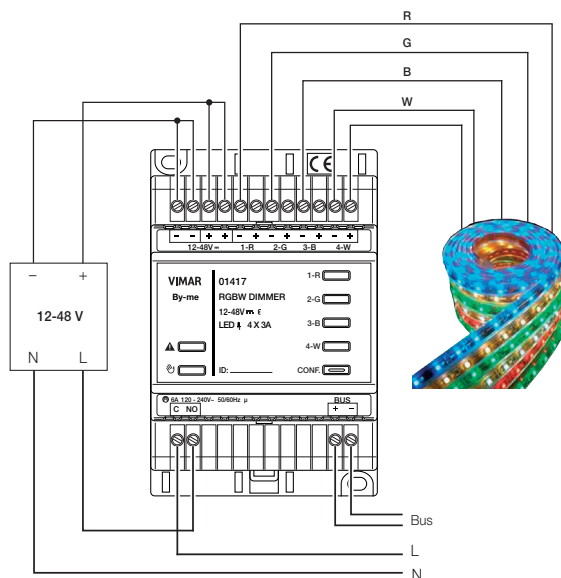
3. Dynamic White.

Usable channels: 1-R (Warm White) and 2-G (Cold White) or 3-B (Warm White) and 4-W (Cold White)



RGB Connections

1. RGB(W) connection



2. Separate RGB and White connection

N.B. The two RGB and White strips must have the same supply voltage.

