SIEMENS

Dimmer UP 525/21 **5WG1 525-2AB21**

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Product and Applications Description

The dimmer UP 525/21 is a dimming actuator for box mounts. The bus line is connected via the bus connection block and the load circuits are connected via screwless connection blocks. The dimmer UP 525/21 can switch and dim incandescent lamps, high voltage halogen lamps, low voltage halogen lamps with intermediate conventional transformers.

Note: The dimmer UP 525/21 is a phase interval dimmer.

Several tasks are available for the dimmer, i.e. the dimmer UP 525/21 consists of the device (hardware) and its application programs (software).

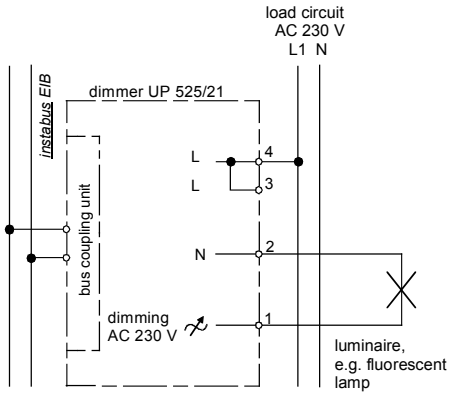
Several tasks can be set in parameter list e.g. switching on and off low voltage halogen lamps, increasing and decreasing their light intensity or setting them to a specified light intensity value.

With the ETS (EIB Tool Software) the application program is selected, its parameters and addresses are assigned appropriately, and downloaded to the dimmer UP 525/21.

Additional Information's

http://www.siemens.de/gamma

Example of Operation



Technical Specifications

Power supply
via bus cable and 230 V mains

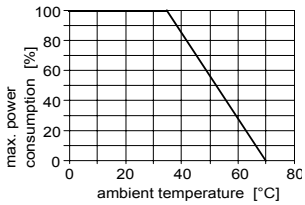
230 V-Supply connection
- rated voltage: AC 230 V, 50 Hz
- rated current: 1,1 A
- no-load current: approx. 5,5 mA
- no-load power input: approx. 1,3 VA
- no-load power loss: approx. 0,5 W

Short-circuit protection
Electronic protection that switches the device down for one minute when it detects a short-circuit and tries to switch the device on automatically to the actual set value in a time cycle of 1 minute.

Overload protection
Electronic protection switching the dimmer down for at least one minute when exceeding the permitted maximum temperature due to overload and sets the actual set value after cooling down automatically.

Load output
- number: 1 output
- rated voltage: 230 V AC, 50 Hz
- rated current: 1,1 A
- maximum power consumption of devices connected at 35°C ambient temperature:
  - incandescent lamp: 500 W
  - high voltage halogen lamps with intermediate electronic transformers: 20...250 W
  - low voltage halogen lamps with intermediate electronic transformers: 20...250 W

- maximum power consumption of devices connected in relation to the ambient temperature:



Characteristic at mains voltage failure
The dimmer resumes the actual switching condition and light intensity value saved in the bus coupling connection after mains voltage recurrence.

Characteristic at bus voltage failure
switch-off (cannot be set in the parameter list)

Characteristic at bus voltage recurrence
set in parameter list according to application program

Connections
- load circuit, physical:
  strip insulation for 9 ... 10 mm
  permissible conductor types/cross sections:
  - 0,5 ... 2,5 mm² single core or flexible conductor, 8 mm ultrasonically compacted
  - 0,5 ... 2,5 mm² flexible conductor with terminal pin, crimped on gas tight
  - 0,5 ... 1,5 mm² flexible conductor with connector sleeve
  - 1,0 and 1,5 mm² plain flexible conductor
- load circuit, electrical:
  - plain flexible conductor, min. 1 mm²: current carrying capacity max. 6 A
  - flexible conductor with terminal pin, crimped on gas tight, min. 1,5 mm²: current carrying capacity max. 10 A
  - all other conductors, min. 1,5 mm²: current carrying capacity max. 10 A

DANGER

When looping through the L-conductor (L-connection block), take care that the maximum connection current of 10 A (as governed by the maximum permissible printed conductor load) is not exceeded!

- bus line: pressure contacts on data rail 0,6...0,8 mm Ø single core remove approx. 5mm of isolation

Physical specifications
- dimensions:
  - spacer dimensions (W x H): 71 x 71 mm
  - mounting depth: 39 mm
- weight: approx. 80 g (mounting hanger included)

Electrical safety
- protection (according to EN 60529): IP 20

Environmental specifications
- ambient temperature operating: - 5 ... + 45 °C
- ambient temperature non-op.: - 25 ... + 70 ° C
- relative humidity (non-condensing): 5 % to 93 %

Location and Function of the Display and Operator Elements

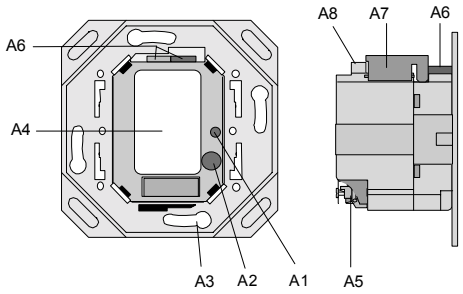


Figure 1: *Location of the display and operator elements*

A1	LED for indicating normal operate mode(LED off) or addressing mode (LED on); returns to normal operating mode automatically after receiving the physical address
A2	Learning button for switching between normal operating mode and addressing mode and for receiving the physical address
A3	Long slots for attaching the application unit on the box mount
A4	Type label
A5	Screwless plug-in connection blocks with verification tap to connect the load circuits
A6	Bus connection block for single core conductors with 0,6...0,8 mm Ø
A7	Snap-on cover for bus line and single bus wires
A8	Clamping slots for guiding the bus lines

Installation Instructions

Notice:
- The device may be used for permanent interior installations in dry locations within box mounts.

DANGER
- The device must be mounted and commissioned by an authorised electrician.
- A safety disconnection of the device must be possible.
- There mustn't be any switching actions at the load output.
- The device may be mounted to switch and socket combination box mounts if VDE-certified devices are used exclusively.
- The prevailing safety rules must be heeded.
- The device must not be opened.
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.

Mounting and Wiring

The dimmer UP 525/21 is built into box mounts (60 mm ∅, depth 60 mm) via a screw mount. It is connected to the bus line via the bus connection block (screwless plug-in connection blocks for single core conductors).

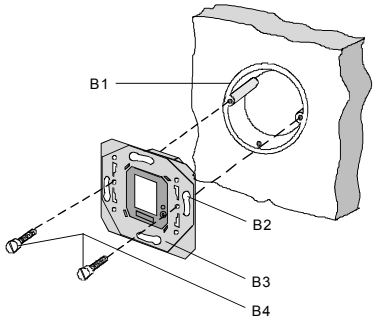


Figure 2: *Mounting the dimmer UP 525/21*

B1	Box mount
B2	Mounting slots
B3	Dimmer UP 525/21
B4	Mounting screws

Connecting bus cables (Figure 3)
- Put the screw-driver between the cover (C1) and the dimmer (C2) from the side and lever out the cover.
- Carefully put the screw-driver to the wire-inserting slit of the bus connection block's grey component and pull the bus connection block from the dimmer.
- Remove approx. 25 - 35mm of the insulation from the sheathing of the bus cable (C3).
- Remove the end of the conductor's insulation and plug it into the bus connection block (red = +, grey = -).
- Slip the bus connection block onto the guide slot of the dimmer and press the bus connection block down to the stop.
- Press the sheathing of the cut-off insulation bus line projecting >3mm into the open clamping slot.
- Press the single bus wires into the recess below the bus connection block and snap on the cover.

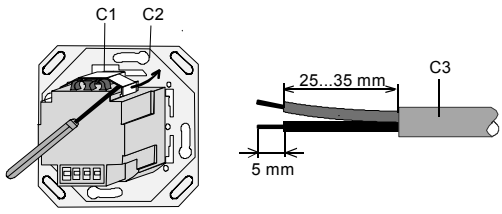


Figure 3: Connecting bus cables

General Notes

- Any faulty devices should be returned to the local Siemens office.
- If you have further questions about the product, please contact our Technical Support:

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