

Daylight Controller, 2 outputs Type G 3448 5239



- Switching and daylight regulation of adjustable ballasts 1 to 10 V
- For maintaining a constant brightness level in rooms/offices
- 8 control-channel receiver
- For DIN-rail mounting
- LED-indications for Dupline[®] carrier and outputs
- Lamp-protective soft-start function
- Channel coding by GAP 1605
- Transmits the status of the dimming outputs

Product Description

The G 3448 5239 2-output Daylight Controller is a component of the Dupline Installation System. It allows different types of electronic ballasts to be operated and regulated.

The Controller regulates the lamps in the room in such a way that the brightness will be kept constant, independently of the sunlight. The Controller can regulate up to two groups of light, either in two separate rooms, or two light groups placed in the same room. For measuring the light level in the room/light group, the G 8210 2220 is used. The light level is transmitted by means of the Dupline bus.

The desired light level can be changed very simply, by long activation of the On/Off channel. This means that the light level can be changed in the actual room, without consulting the Controller module.

The Controller transmits the status of the dimming output for every individual output. The light level setting which was selected last is stored as a "memory setting" in the internal memory and is reselected next time the lighting is switched on via channel 1/4. A power failure will not erase the memory setting. The lighting is switched on and off via a soft-start facility.

Ordering Key

G 3448 5239 230

Type: Dupline[®] _____
 "H4"- Housing _____
 Dimmer _____
 8 Channels _____
 2 outputs _____
 1 to 10 V with Daylight regulation _____
 Power supply _____

Type Selection

Supply	Ordering no.
230 VAC	G 3448 5239 230

General Specifications

Power ON delay	≤ 1 s
Indication for	
Power On	LED, green
Dupline [®] carrier	LED, yellow
Output On, Dimmer output 1	LED, red
Output On, Dimmer output 2	LED, red
Environment	
Degree of protection	IP20
Pollution degree	3 (IEC 60664)
Operating temperature	0° to +50°C (32° to +122°F)
Storage temperature	-20° to +85°C (-4° to +185°F)
Humidity (non-condensing)	Max. 85%
Mechanical resistance	
Shock	15 g (11 ms)
Vibration	2 g (6 to 55 Hz)
Dimensions	
Material	H4-housing
Weight	250 g
Standards	IEC 60669, EN 55022/ EN 50081-1 and EN 55024/ EN 50082-1

Output Specifications

Ballast outputs	2
Dimming capacity	2 x 1 to 10 V
Max. load capacity	50 mA
Dimming speed	23 s (10% - 100%)
Delay before start of dimming	9 s
Relay outputs	
Max. switching voltage	250 VAC
Load capacity	10 A
Response time	2 cycles: ≤ 272 ms @ 128 channels

Supply Specifications

Power Supply	Overvoltage cat. III (IEC 60664)
Rated operational voltage through term. 21 & 22	230 VAC ±10%
Frequency	50/60 Hz
Power consumption	2 VA
Power dissipation	Max. 4.5 W
Rated impulse withstand voltage	4 kV
Dielectric voltage Supply - Dupline	≥ 4 kVAC (RMS)

Mode of Operation

Coding

With the GAP1605 programming unit, each switching channel can be assigned any address between A1 and P8 via the modular socket on the front of the dimmer. The allocation of the channels is as follows:

Channel	Description
DIMMER 1	1 ON / OFF / Dimming
	2 Light level input Dimmer 1
	3 Dimmer 1 status output
DIMMER 2	4 ON / OFF / Dimming
	5 Light level input Dimmer 2
	6 Dimmer 2 output status
7 Sync. input for light level data	
8 Not used	

Functions which are not required should remain uncoded. The coding of the dimmer can be carried out without either supply voltage or Dupline signal. It is retained permanently, but may be overwritten at any time. The Dimmer outputs are configured in such a way at the factory that they will be switched off in the event of a fault. This configuration, too, can be changed with the GAP1605. Setting "1" results in switching on the lighting to 100% in case of a fault, while setting "0" switches off the Dimmer outputs (factory setting).

Putting into service

Commissioning may only be carried out by an authorized, trained technician. Observe the connection diagram when installing. All lines to be connected must be dead.

The following table shows the allocation of terminals:

Terminal	Description
1	Dupline signal conductor + (D +)
2	Dupline signal conductor - (D -)
4	Dimmer 1, 1 to 10 V +
5	Dimmer 1, 1 to 10 V -
7	Dimmer 2, 1 to 10 V +
8	Dimmer 2, 1 to 10 V -
21	Line in
22	N-conductor
24	Dimmer 1 Relay, L _{in}
25	Dimmer 1 Relay, L _{out}
27	Dimmer 2 Relay, L _{in}
28	Dimmer 2 Relay, L _{out}

Connections between the Dupline signal and to earth potential will cause malfunctions and are not permissible. Attention should be paid to the correct polarity of the supply voltage and the Dupline signal. In order to meet the requirements for protective low voltage, VDE 0100, part 410, should be observed and applied during installation.

Functions and programming

The controller is programmed with the GAP1605 programming unit. Up to seven addresses are used. As default, the controller is programmed for channels A1 to A7.

Channel 1/4 (programmed to A1/A4) turns the output on or off by short activation. By long activation (> 9 s), the output starts a slow dimming process until the channel is released again.

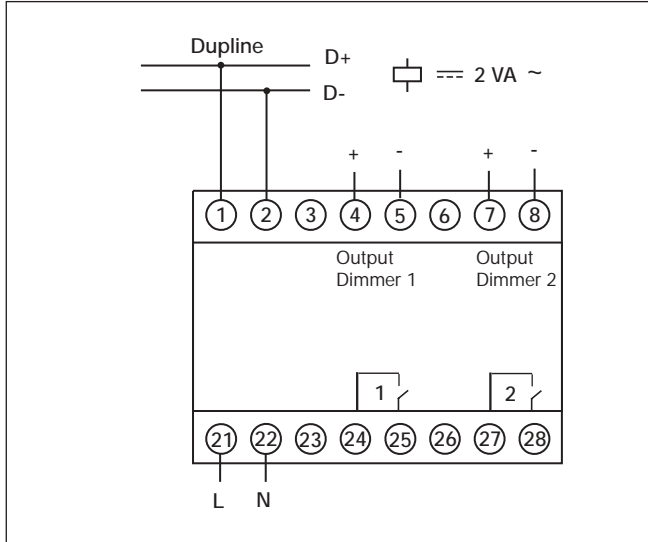
Channel 3/6 (A3/A6) sends the output status for the desired output. The channel is on when the output is on. For receiving light levels from the light sensors, channels 2/5 (A2/A5) are used as inputs for serial data. Channel 7 (A7) is also used for receiving data from the light sensors. The channel is used as an input for synchronizing the serial data. In the configuration software for the Master Generator, the channel must be selected as a „Daylight sync.“ channel. The Master Generator will then automatically generate the sync. signal used for the controller and the light sensors. Only one channel in the Dupline system needs to be configured as a sync. channel, independently of the number of light controllers and light sensors. All sync. channels of the modules just have to be configured to the same channel selected in the Master Generator.

LED-indicators

Front-mounted LEDs indicate the status of the device:

LED	Description
GREEN	Supply ON
YELLOW "Bus OK"	Dupline carrier: OFF: Bus fault ON: Bus is OK
RED Output 1	Dimmer 1: OFF: Dimmer output off ON: Dimmer output on
RED Output 2	Dimmer 2: OFF: Dimmer output off ON: Dimmer output on

Wiring Diagram



Dimensions (mm)

