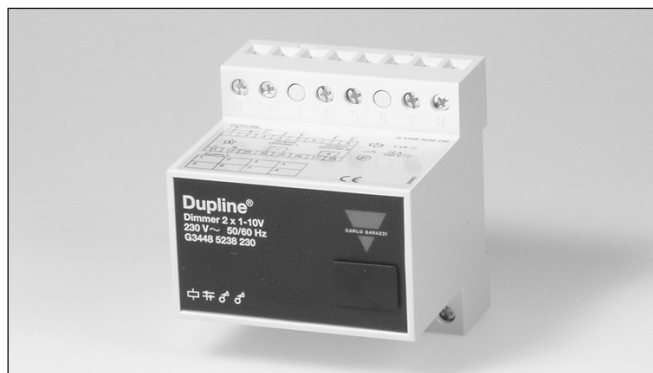


Dimmer, 2 outputs, 1 to 10 V Type G 3448 5238



- Switching and dimming of adjustable ballasts 1 to 10 V
- 8 control-channel receiver
- For DIN-rail mounting
- LED-indications for Dupline® carrier and outputs
- Bulb-conserving soft-start function
- Channel coding by GAP 1605
- 4 lighting scenes
- Transmits the status of the dimming outputs

Product Description

The G3448 5238 2-output lighting scene dimmer is a component of the Dupline Installation System. It allows different types of electronic ballasts to be operated and dimmed and enables up to 4 lighting arrangements (per output) to be stored, which can then be retrieved at any time. In addition, it transmits the status of the dimming output for every individual output. The dimmer 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 1/5. A power failure will erase the memory setting. The brightness of the lighting scenes is preset at the factory in steps; these settings cannot be altered. By the aid of push-button combinations or by means of the test unit, the lighting scenes can be unlocked, modified and also retrieved. The lighting is switched on via a bulb-preserving softstart facility.

Ordering Key

G 3448 5238 230

- Type: Dupline®
- "H4"- Housing
- Dimmer
- 8 Channels
- 2 outputs
- 1 to 10 V Analog
- Power supply

Type Selection

Supply	Ordering no.
230 VAC	G 3448 5238 230

Supply Specifications

Power Supply	
Rated operational voltage	230 VAC ±10%
Power consumption	2 VA
Power dissipation	Max. 4.5 W
Frequency	50/60 Hz

Output Specifications

Ballast outputs	2
Dimming capacity	2 x 1 to 10 V
Max. load capacity	50 mA on each output
Dimming speed	3.6 s (10% - 100%)
Relay outputs	2
Max. switching voltage	250 VAC
Load capacity	10 A
Response time	1 cycle: ≤ 272 ms @ 128 channels)

General Specifications

Power ON delay	1 s
Indication for	
Power On	LED, Green
Dupline® carrier	LED, Yellow
Output On	LED, Red (one per output)
Environment	
Operating temperature	0° to +50°C/32° to +122°F
Humidity (non-condensing)	Max. 85%
Housing	H4-housing
Standards	IEC 60669, EN 55022/ EN 50081-1 and EN 55024/ EN 50082-1

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 Lighting scene 1 (3)
	3 Lighting scene 2 (4)
	4 Dimmer 1 output status
DIMMER 2	5 ON / OFF / Dimming
	6 Lighting scene 1 (3)
	7 Lighting scene 2 (4)
	8 Dimmer 2 output status

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 dimmer is programmed with the GAP1605 programming unit. Up to eight addresses can be programmed, 2 x 3 of which (IN/OUT 1-3, 5-7 of the GAP1605) are dedicated to controlling the dimmer itself (light level) - see the following table "Factory Settings". The remaining two addresses (IN/OUT 4, 8 of the GAP1605) are output signals on the bus and indicating if the dimmers are activated. The addresses are selected in the configuration software as push button channels.

The eight addresses (including two status signal addresses)

Address	Description
1	Dimmer up/down (long activation) Turn on/Turn off (short activation)
2	Desired light level, see "Factory Settings"
3	Desired light level, see "Factory Settings"
4	Dimmer activated
5	Dimmer up/down (long activation) Turn on/Turn off (short activation)
6	Desired light level, see "Factory Settings"
7	Desired light level, see "Factory Settings"
8	Dimmer activated

The light levels 3 and 4 can be programmed by combining 2 addresses.

Channel combinations (Dimmer1 / Dimmer2)			Activation	
1 / 5	2 / 6	3 / 7	Short	Long
			ON / OFF	Dimming Up/Down 10%..100%
			Light. scene # 1 (40%)	Store light. scene # 1
			Light. scene # 2 (80%)	Store light. scene # 2
			Light. scene # 3 (20%)	Store light. scene # 3
			Light. scene # 4 (60%)	Store light. scene # 4
			100%	Lock / Unlock (Locked)
			0% / OFF	Set light. scenes back to factory settings

() Factory settings

The shown values are factory settings and are consequently protected against accidental resetting. Nevertheless, it is possible to disable the protection to change the default values. The following steps 1-4 explain how the protection can be disabled, the values changed, the protection reestablished and default settings restored. The steps are explained with addresses for Dimmer 1, but the same is valid for Dimmer 2.

Mode of Operation (cont.)

1. Programming access (Unlock)

- a) Activate address 2 and 3 for approx. 6 seconds.
- b) When the light starts dimming fast up to 100%, down to 10% and back to actual value, the programming access is open.

2. New light level

- a) Open for the programming access according to **1. Programming access**.
- b) Use address 1 to set the required light level.
- c) Activate, for approx. 3 seconds, the address to which the chosen light level is to be allocated.
- d) When the light starts dimming fast up to 100%, down to 10% and back to actual value, the new light level is stored.

Undesirable changes of the programmed parameters can be avoided by reestablishment of the programming protection – see **3. Protection**.

3. Protection (Lock)

- a) Activate address 2 and 3 for approx. 6 seconds.
- b) When the light starts dimming fast up to 100%, down to 10% and back to actual value, the programming access is closed.

4. Restoring of factory settings

- a) Activate address 1, 2 and 3 for approx. 9 seconds.
- b) When the light starts dimming fast up to 100%, down to 10% and back to actual value, the factory settings are restored.

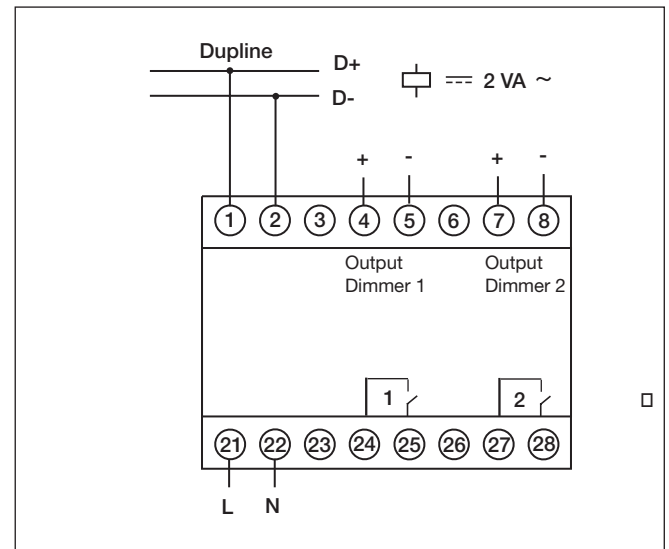
When the factory settings are restored the programming protection is not active.

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)

