

# CONSTANT LIGHT CONTROL MODULE - CLC01



Figure 1 : Constant Light Control module CLC01

## 1. Product Description

Stand-alone module to be connected to the bus, containing a light sensor which measures the light level in the area the CLC01 is located, and which based on the difference between the measured and the desired light level controls the 0/1-10V ballast of tubular fluorescent lamps. The module is equipped with six wires, 2 yellow ones for the bus connection (no polarity), a grey (-) and a white (+) one to connect the light sensor and a blue (-) and a red (+) wire for connection to the 0/1-10V ballast. A magnetic separation between the bus and output guarantees safe operation.

The CLC01 comes with multiple accessories which allow for easy installation of the light sensor in any environment (ceiling mounting, clipped over a fitting or directly on a T5 or T8 tubular fluorescent lamp, extension pieces, a full circle shader and a 75% circle shader to capture or shield light from different angles).



Figure 2 : Accessories to CLC01

The CLC01 can be programmed as a one-button dimmer (CLC 1B – mode) or as a 2-button dimmer (CLC 2B – mode) via the Qbus configuration software. In that software, the requested dimmer level (DimStart Level) can be set – when the circuit is activated, the light sensor will ensure that the requested light level is reached – if needed the lights will be turned on automatically to reach that level. If natural light is already sufficient to reach the required level, the lights will remain off.

The CLC01 control of the light circuit can be overruled by pushing the switch of the light circuit for 3 to 4 seconds (putting the light circuit to 100% dim level). When the CLC01 is overruled manually, it will remain in this overrule status until the circuit has been turned off again. When the circuit is activated again, it will be controlled automatically by the CLC01.

The CLC01 can drive up to 100mA (1-10V – sink). Hence the number of fittings that can be controlled via one CLC01 is dependent upon the specifications of the ballast (total load of the circuit can be 100mA).

Each module has a unique serial number enabling programming anywhere and anytime.

## 2. Safety Instructions

Read the complete manual before carrying out the installation and activating the system.



### WARNING

- The device must be mounted and commissioned by an authorized electrician in accordance with the country-specific regulations.
- The device may be used for permanent interior installations.
- The device must not be opened.

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## 3. Mounting and wiring

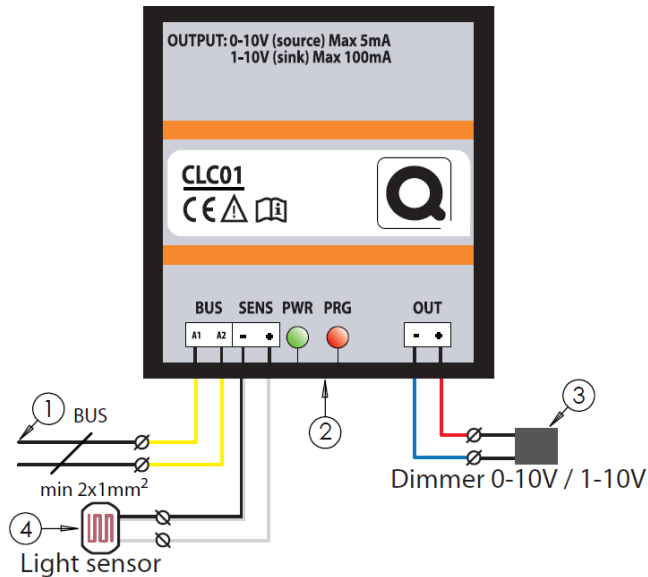


Figure 3: Connection example for mains voltage and loads

### INSTALLATION & BUS WIRING ①③:

Connect the yellow bus connection wires to the bus, the blue (-) and red (+) wires to the 0/1-10V input.

It is recommended to use the Qbus cable or any other cable with minimum 2 x 1mm<sup>2</sup> conductors as a bus lead. The green protected EIB wire is also allowed when the conductors are guided per 2 in order to obtain a section of minimum 2 x 1mm<sup>2</sup>.

**IMPORTANT : THE BUS CABLE SHOULD BE SHIELDED AND GROUNDED! THE GROUNDING SHOULD BE CONNECTED TO THE OVERALL GROUNDING OF THE BUILDING.**

The CLC01 module is powered via the bus

### LED INDICATION ② :

Green light : power supply.

Red light : start-up 2 seconds and during programming.

### LIGHT SENSOR ④ :

Calibrated light sensor to be installed using the required accessories delivered with the CLC01 (see figure 2). Connect the white (+) wire to the white wire on the light sensor, the grey (-) wire to the grey wire on the light sensor. The light sensor will measure between 100-1000 lux.

## 4. Technical Data

### GENERAL SPECIFICATIONS :

- Power supply : bus connection

- Ambient temperature :  
Working temp. range : 10°C to 50°C  
Storage temp. range : -10°C to 60°C
- Maximum humidity : 93%, no moisture condensation
- Bus load : 15mA at nominal 13,8V
- Max installation altitude : 2.000m

### OUTPUT :

- 0-10V (source): maximum 5mA
- 1-10V (sink): maximum 100mA

### PHYSICAL SPECIFICATIONS

- Housing : Plastic housing – filled with resin
- Protection Degree : IP66, EN 60529
- Dimensions (HxWxL) : 15mm x 48mm x 52mm
- Weight : approx. 0,052 kg

### ELECTRICAL SAFETY

- Bus : 13,8VDC safety extra low voltage (according EN 60950 – 1:2006)
- Non-toxic WEEE/RoHS compliant

### CE

- Complies with the EMC regulations and low voltage regulations. The device complies with HBES – EN 50090-2-2 and EN 60950 – 1 : 2006.

## 5. Guarantee provisions

Period of guarantee : 2 years from date of delivery.

Guarantee will not be accepted if the device has been opened!

Any faulty devices should be send postage-free with a description of the defect to our central customer service office :

### QBUS N.V.

Joseph Cardijnstraat 19

9420 Erpe-Mere

Belgium

T +32 53 60 72 10

F +32 53 60 72 19

Email : support@qbus.be