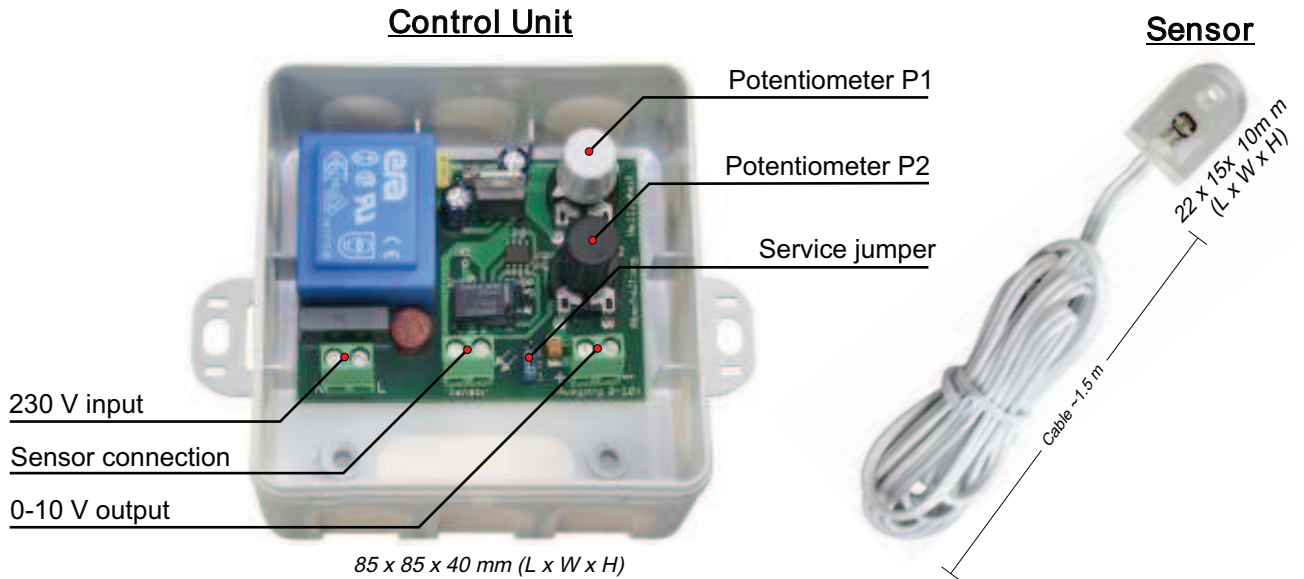


Light-dependent Control System Operating Instructions Part 1

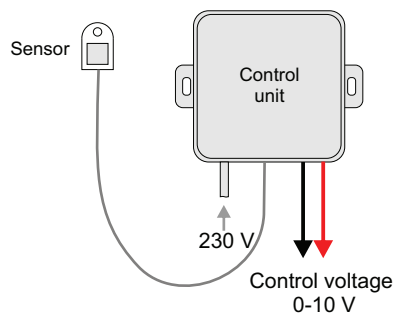


Control Elements:

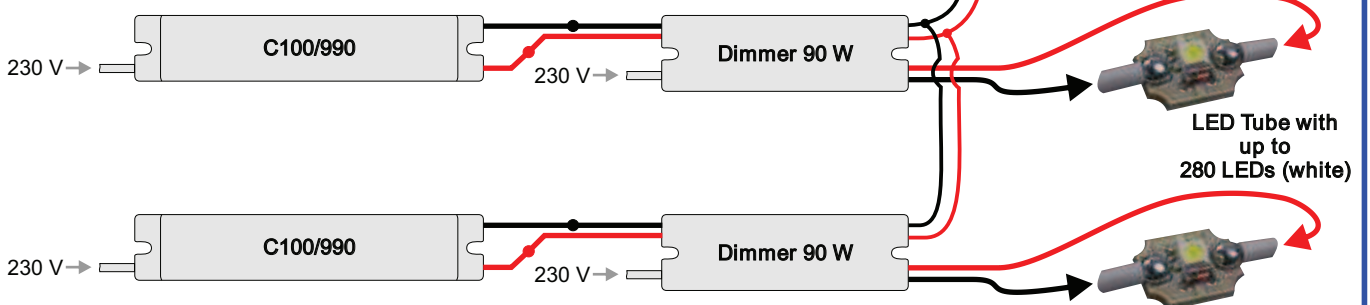
- P1 (brightness): potentiometer for setting the dimming level of the LEDs
- P2 (switch-off): potentiometer for setting the switch-off response characteristic
- Service jumper: for bridging the delay element

Technical Data:

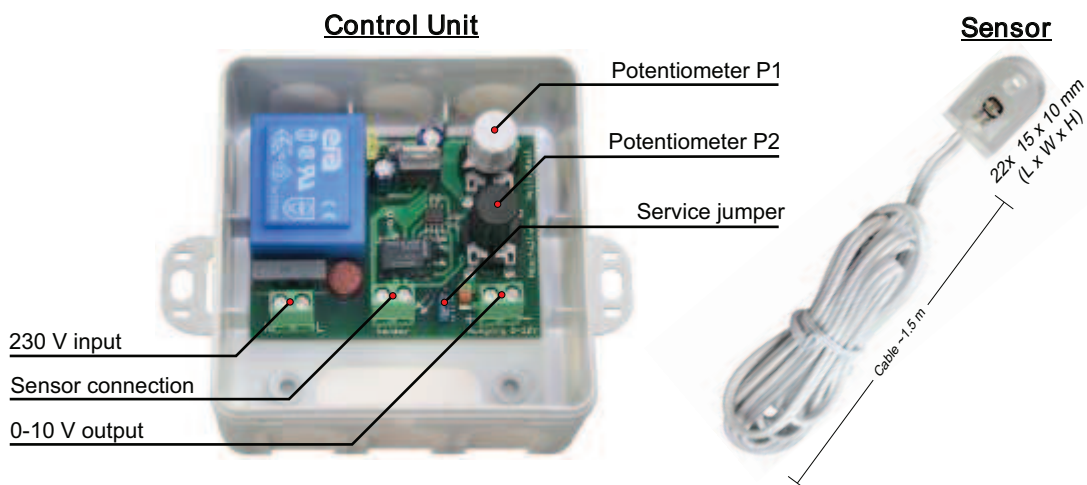
$U_{off} = 230 \text{ V}, 50/60 \text{ Hz}$
 $I_{on} = 0.005 \text{ A} (\sim 1.2 \text{ W})$
 $U_{off} = 0-10 \text{ V (controlled)}$
 Degree of protection = IP54



Wiring:



Light-dependent Control System Operating Instructions Part 2



Functional Description

The purpose of the light-dependent control system is to switch and dim an illuminated advertising sign depending on the ambient brightness (twilight switch and dimmer function). Both functions help to reduce the energy consumption and extend the service life of the system.

Example:

An illuminated advertising sign is switched on at dusk to shine at full brightness. With increasing darkness, the brightness of the system is reduced.

At dawn, the brightness of the system is increased again corresponding to the increasing ambient brightness until the sign is finally switched off.

Initial Installation

First, the converter, dimmer, LEDs and the control unit must be installed and wired as shown in the wiring plan (see part 1 of this instruction). The service jumper in the control unit must be put into the position 1-2 (to deactivate the time delay).

The potentiometer P1 is used to set the maximum dimming level at night:
Potentiometer P1 turned fully to the right: System is dimmed to approx. 30%
Potentiometer P1 in middle position: System is dimmed to approx. 70%
Potentiometer P1 turned fully to the left: No dimming

The potentiometer P2 is used to set the ambient light level at which the system is switched on and off. The pre-set default is 10 lux. The setting can be changed as follows:
Middle position: System is switched on and off at 10 lux
Turned to the right: System is switched on earlier (at a lower ambient light level)
Turned to the left: System is switched on later (at a higher ambient light level)

As the light conditions around illuminated signs can be very different, the switching and dimming levels should be set under real light conditions (i.e. at dusk or dawn).

After the setting has been made, the service jumper must be put into the position 2-3 to reactivate the time delay.

Additional Information

Time delay: The control system is equipped with an internal time delay function to prevent the control system from being influenced by short-time light sources (such as car headlights or lightning flashes). When working on the system, however, the delay can be very inconvenient so that it can be deactivated using the service jumper.