EPV

DAYTRONIC®
The Daylight Harvesting Ballast

Installation and usage instructions for DAYTRONIC Daylight Harvesting Ballast Sets (model range HFS1)

Wiring

Between ballast and lamp please use solid core wiring of 0.5 mm^2 to 0.75mm^2. Keep power supply wiring and sensor wiring separat from lamp wiring. For power supply and lamp connection the ballasts provide combi-wiring terminals for both push-in or IDC-wiring.
For sensor wiring 0.5mm^2 to 1.5mm^2 wiring (solid or flexible with wire end sleeve) can be used. When using flexible wiring make sure to unlock the terminal clamp pushbuttons.

Wiring lengths

Wiring towards lamp minimum 0.2m, maximum 1.7m. Connections 1+2 (single flame) and 1+2 / 6+7 (double-flame) should be kept as short as possible. The minimal distance between lamp and lamp wiring is 20 mm. **The ballasts may only be used in** earthed **fixtures in which there is a earth-connected area parallel to the lamp within 25mm.** The earthed area must be positioned between connection wiring and lamp.

Operating Conditions

- Operating Voltage: 230V/50-60Hz
- Operating Frequency: 29-70 KHz
- Operating Temperature: +0°C...+50°C
- Storage Temperature: -20°C....+50°C

For security reasons lamp should be changed only when power supply is switched off. (In any case the ballast will restart by itself after change of lamps).

The three different filter caps can be used to adjust the ballast's control range to the individual application:
Roughly the three colours suit the following applications:

- **Transparent = Corridors**
- **Orange = Cantines**
- **Blue = Offices, class rooms, etc.**

The control range is approx. between 10% to 100% of maximum light level (which equals approx. 26% to 100% of electrical power).

With increasing daylight the artifical light is gradually reduced.
When putting the lamps into operation please take care of the lamp manufacturers' instructions.

The sensor input can also be used for 1-10V control. Sensor input and power supply are galvanically separated to 2.5kV.
Alternatively to light sensors any electrical potentiometer can be used for dimming.

Load current of the ballast at the sensor input is 0.35mA. If you want to use one light sensor to control several ballasts, please ask us for sensor-controlled potentiometers. Next to the sensor input there is a potentiometer which can be used to adjust minimum light level between 10% and > 50%. Factory preset is 10%.

Electrical appliances with this sign have a connection for protective Earth, which must be connected with the power supply Earth wire for optimum electromagnetic protection. In addition to this, each manufacturer is responsible that his fixtures comply with the CE mark requirements.

Photo sensor installation

- 9.5 mm diameter hole (without recesses) or 9mm diameter hole with recesses of 1x1mm for clips
- Optional accessories are for other installation options, such as a ceiling clip or a retrofit clip to attach the sensor to the fixture's louver