FAQ

Questions and answers

Question: How do I choose the right power supply for LED luminaires to ensure they work properly?

Answer: The sum of the wattage of all LED luminaires connected to one power supply must be less than the wattage of the power supply. For example, if you have three LED luminaires, each rated at 30W, the sum of their wattage is 90W. In this case, it is recommended to use a power supply of at least 100W to provide a safety margin.

Question: What happens if I connect luminaires with a higher total wattage than the power supply I have?

Answer: If you connect LED luminaires with a higher total wattage than the wattage of the power supply, the power supply may overheat, shut down, operate unstably (flickering light) or even be damaged. Always make sure that the power supply power is higher than the total power of the luminaires, with a safety margin.

Question: Where should I place the switch in my LED lighting installation?

Answer: The circuit breaker should be placed between the power supply and the LED luminaire. This means that the switch cuts the power directly to the luminaire, ensuring that the lighting is switched off safely and reliably. This protects the power supply from possible voltage spikes during switch-on and switch-off.

Question: How do I connect LED luminaires in a master system?

Answer: First connect the master luminaire to the power supply. Then connect the other luminaires to the master luminaire. This arrangement allows the entire lighting system to be controlled synchronously. The master luminaire controls the operation of the other luminaires, thus enabling uniform control of the entire lighting system.

Question: Can I use a 12V power supply for a 24V light fitting?

Answer: No, you cannot use a 12V power supply for a 24V light fitting. LED luminaires must be powered at the correct voltage according to their specification. Using a lower voltage power supply will result in the luminaire not operating correctly and using a higher voltage power supply may damage the luminaire.

Scan the QR code for more information!

ul. Kolejowa 5
48-340 Głuchołazy
+48 77 40 92 570
www.hlt.pl
hlt@hlt.pl

FAQ

Questions and answers

Question: What happens if I use a 24V power supply for a 12V light fitting?

Answer: Using a 24V power supply to a luminaire designed for 12V can cause serious damage to the LED luminaire. The luminaire will be exposed to overvoltage, which can lead to overheating, LED burnout and even fire. Exceeding the voltage rating of an LED luminaire will significantly shorten its life and can be a safety hazard. Therefore, always use a power supply with a voltage compatible with the requirements of the luminaire.

Question: What do the watts, volts, light colour and lumens values mean on the LED lighting rating label?

Answer:

- Watts (W): Measures the power consumed by the LED luminaire. Higher wattage means higher power consumption, but not always higher lumen output.
- Volt (V): Determines the operating voltage needed for the LED lighting to work properly. It must match the voltage of the power supply.
- Colour of light (K): Measures the colour temperature of the light, expressed in kelvin (K). Lower values (e.g. 2700K) indicate a warm, yellowish light, while higher values (e.g. 4000K and above) indicate a cooler, white light.
- Lumen (lm): Measures the luminous flux, i.e. the amount of light emitted. A higher lumen value means brighter lighting.

Question: How do I correctly connect LED lights to the mains supply?

Answer: To correctly connect LED lighting to mains power, you must first select a power supply compatible with the voltage and wattage required by the LED lighting. The power supply should have a suitable output, greater than or equal to the sum of the wattage of all LED luminaires. Next, the power supply (AC) wires should be connected to the input of the power supply, as marked. The output wires of the power supply should be connected to the LED luminaires, paying attention to polarity. Solidity of the connections is required, which can be ensured by using suitable connectors or soldering. Once the installation is complete, switch on the power supply and check that the LED lighting is working correctly, making sure that all luminaires are lighting evenly and that the power supply is not overheating.

Scan the QR code for more information!

ul. Kolejowa 5
48-340 Głuchołazy
+48 77 40 92 570
www.hlt.pl
hlt@hlt.pl