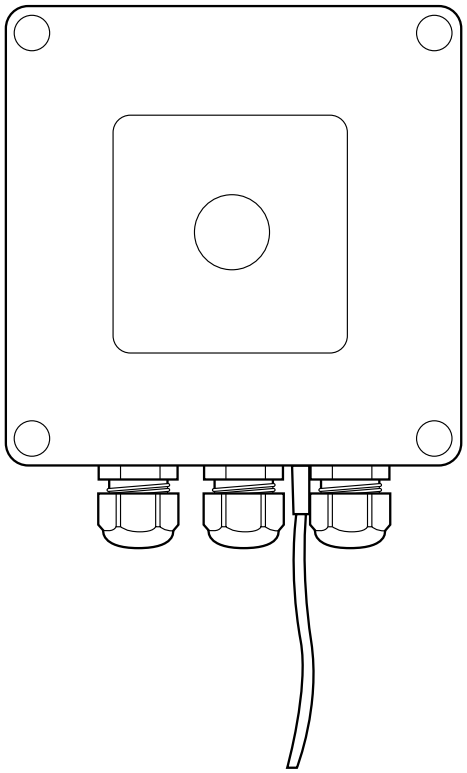
Original instructions

BPIR6



EN ... 5

SE ... 7

NO ... 9

FR ... 11

DE ... 13

ES ... 15

NL ... 18

IT ... 20

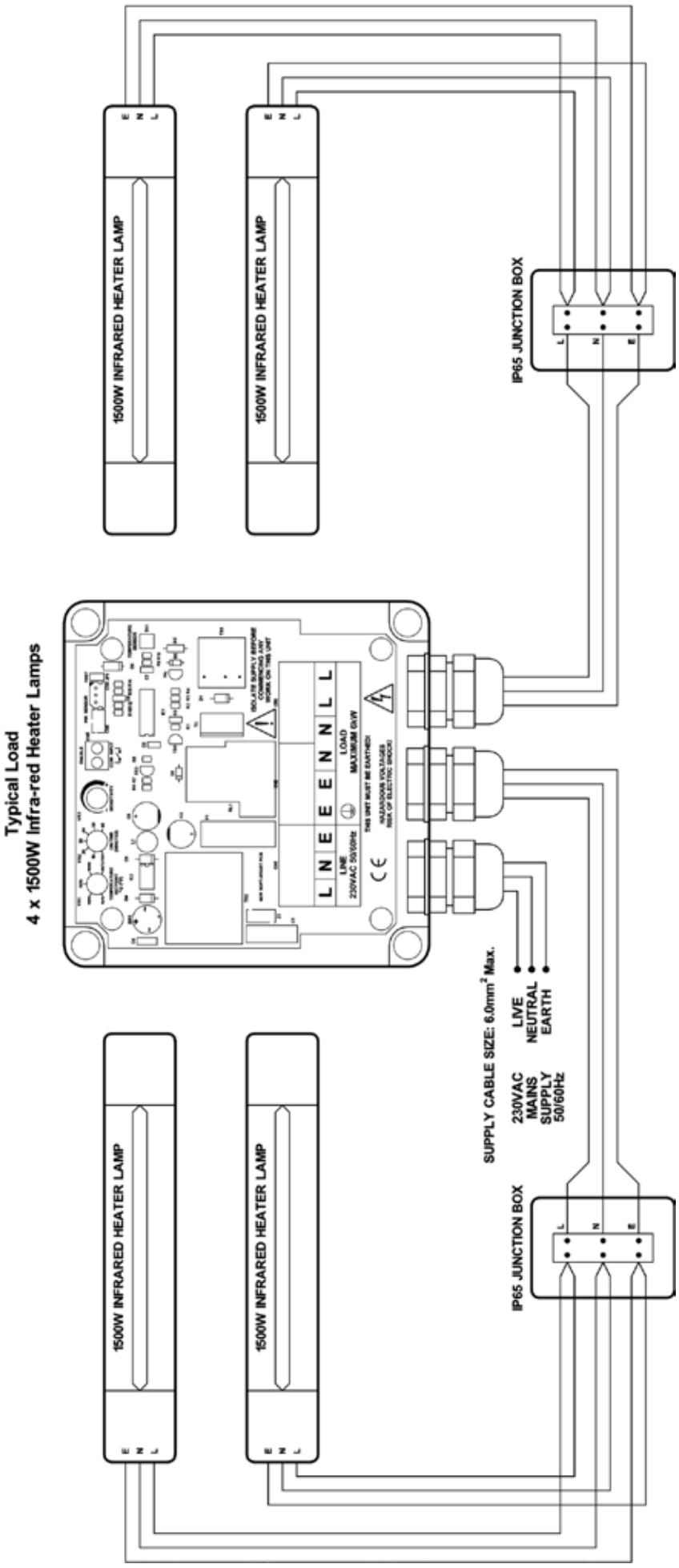
PL ... 23

RU ... 25

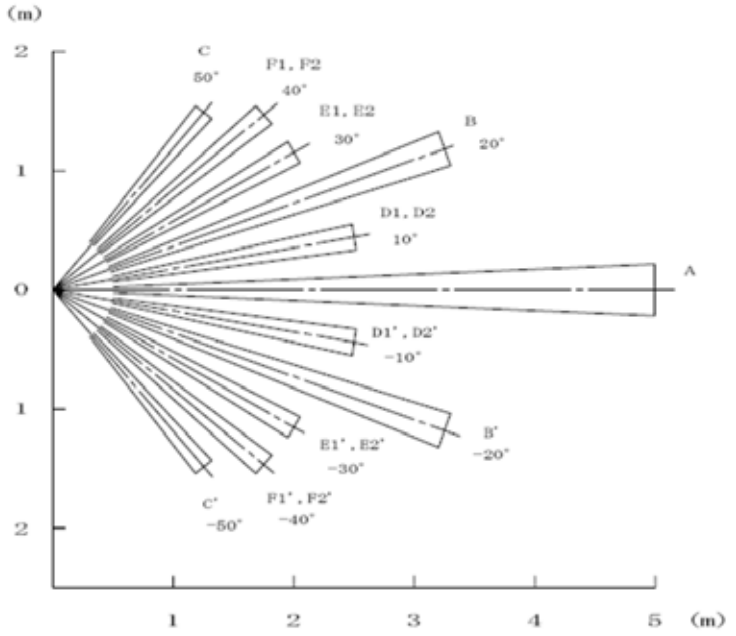
FI ... 28

DK ... 30

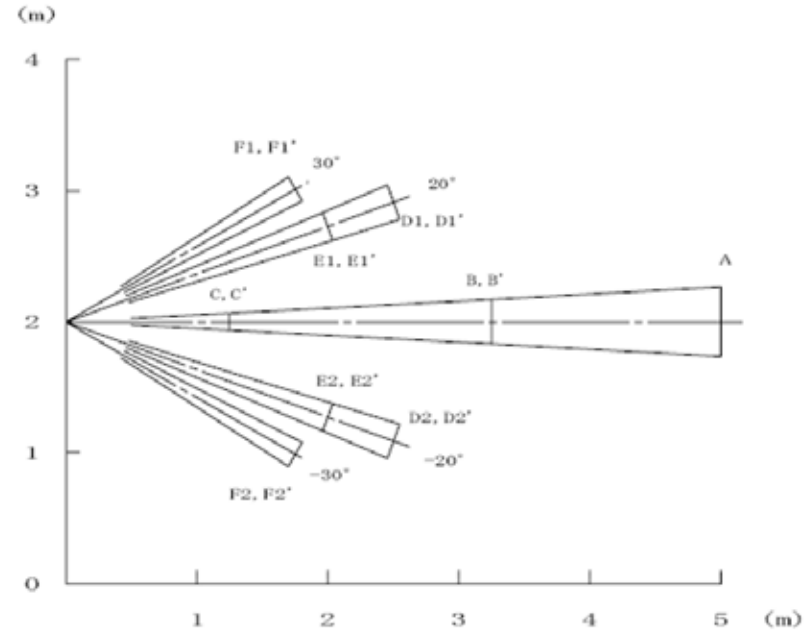
Wiring Diagram:



Detection Area:

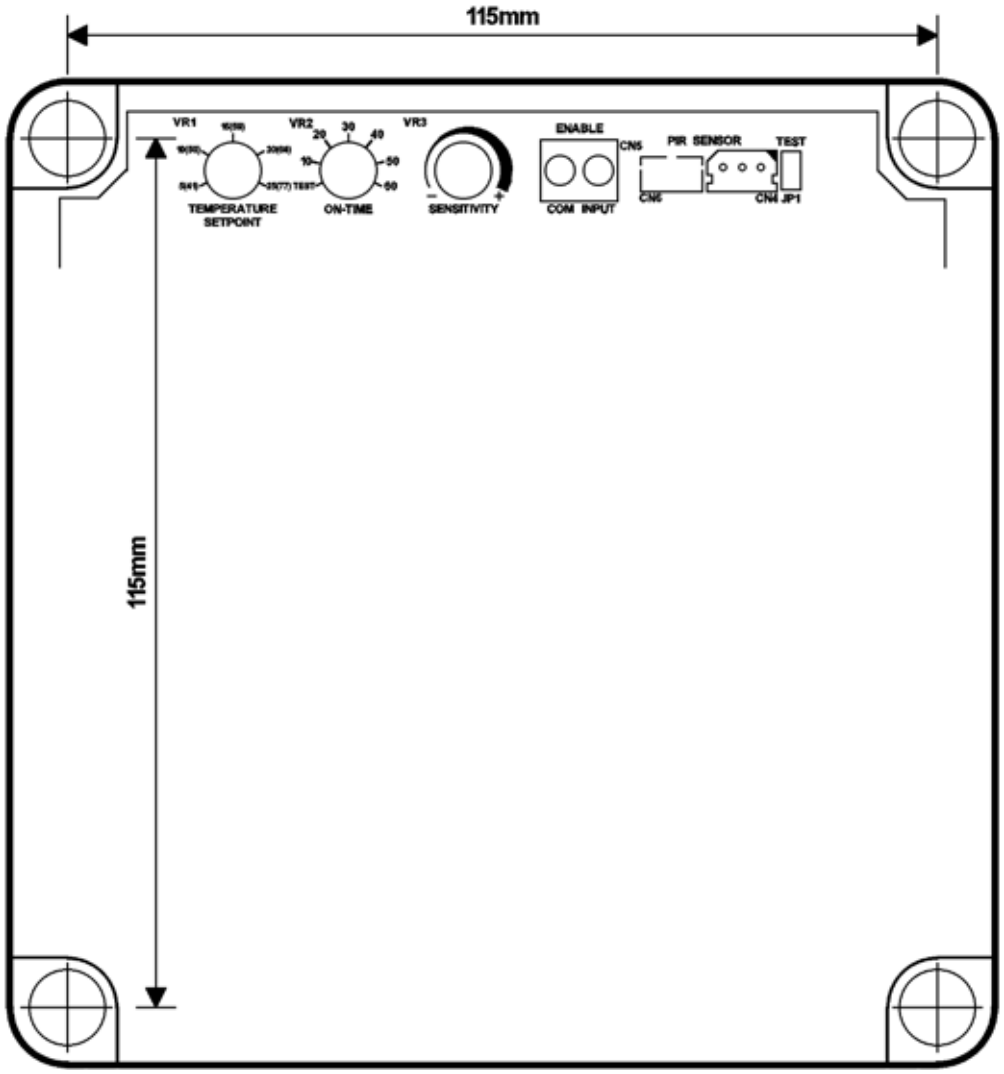


Horizontal



Vertical

Drawing:


115mm
115mm
VR1
VR2
VR3
TEMPERATURE SETPOINT
ON-TIME
SENSITIVITY
ENABLE
CN5
COM INPUT
PIR SENSOR
TEST
CN6
CN4 JP1

Installation and operating instrutions

Introduction

The BPIR6 is part of a family of controllers designed to provide energy saving when used with quartz infrared halogen lamps or other heating and lighting products. It has a built in PIR sensor allowing the lamps to automatically switch on only when people are present. In addition to the PIR, a temperature sensor monitors the outside temperature and inhibits the lamps when the temperature exceeds a predetermined set point of between 5°C and 25°C. The microcontroller-based unit incorporates zero-voltage switching and a soft-start function to eliminate the lamps' initial high inrush current – potentially increasing lamp life by as much as 30%. The lamps are switched on for a user-settable time period of between 1 and 60 minutes. This period is reset each time the PIR detects any further movement. Installation of the unit is simple and once installed is relatively maintenance-free.

Installation

Important: Read carefully the following information before installing the unit.

The passive infrared sensor (PIR) fitted in this unit detects changes of infrared energy through the Fresnel lens on the front face of the unit. The detection area and range depend significantly on its mounting position.

The BPIR6 not only detects movement of the human body, but also other heat sources similar to the human body. To prevent false activation, the unit must not be located directly facing or in close proximity to the heater lamps. Avoid locating the unit near to heating flues/ exhausts, air conditioning units, moving trees/ bushes and reflective surfaces.

Note: The BPIR6 cannot detect the presence of a human body that is not moving. To prevent malfunction of the BPIR6 sensor, avoid subjecting it to rapidly-changing temperatures, strong shock or vibration or high humidity and temperature.

Troubleshooting

Warning! Isolate the mains supply before commencing any work on the unit. Failure to do so could result in serious injury or fatality.

Problem: Lamps do not switch on.
Solution:

- Check the mains supply to the unit is switched on.
- The ambient temperature may be higher than the set point temperature. Either increase the set point temperature (VR1) or, to test the lamps, put the unit into 'walk test' mode.
- Check the LINE and LOAD wiring connections to the unit and lamps. Fit a lamp that you know is in working order.
- Contact your supplier

Problem: Lamps do not switch off.
Solution:

- Check the on-time preset (VR2) is set correctly and ensure no movement occurs within the detection area. Allow the on-time to expire.
- The BPIR6 may be receiving false activations. Either mask the BPIR6 lens on the front of the unit or carefully unplug the 3-way BPIR6 lead from the PCB inside the unit (CN4 or CN6) to disable the PIR. Allow the on-time to expire. If the lamps now switch off, the BPIR6 is receiving false activations. See section 'Installation'.
- Contact your supplier.

Positioning

The BPIR6 can be wall or ceiling-mounted. For wall-mounting, the unit should be positioned 1 to 3 metres high. The diagram above shows the BPIR6's detection area. The unit should be fixed securely using the four mounting holes accessible from the front of the unit. Remove the lid to access the mounting holes. To ease installation, a drawing is provided to locate the 4 mounting hole centres.**IMPORTANT! When wall mounting, the unit MUST be orientated with the cable glands facing down. Drilling of any holes through the enclosure will immediately invalidate the warranty of the unit.**

Wiring

It is recommended that installation and maintenance of this equipment should be done with reference to the current edition of the I.E.E. wiring regulations (BS7671) by suitably qualified/trained personnel. These regulations contain important requirements regarding

safety of electrical equipment (for International Standards refer to I.E.C/ directive IEC950).
Warning! Isolate the mains supply before commencing any work on the unit. Failure to do so could result in serious injury or fatality.

Wiring – continued

The unit is fitted with three cable glands. Only one cable should be fitted per gland to prevent degrading the unit's IP rating. To connect 4 lamps, refer to the **Wiring Diagram** on the next page for an alternative configuration using two junction boxes.
The mains supply connects to the terminal block marked '**LINE**'. Connect the supply **LIVE** to the '**L**' terminal, **NEUTRAL** to the '**N**' terminal and **EARTH** to the '**E**' terminal.
The lamps connect to the terminal block marked '**LOAD**'. Connect the load **LIVE** to the '**L**' terminal, **NEUTRAL** to the '**N**' terminal and **EARTH** to the '**E**' terminal.
Important! Ensure all earth wires are connected to maintain earth continuity to the lamp fittings.

Ensure the 3-way plug is connected to the socket marked '**BPIR6 SENSOR**' (CN4 or CN6). Check all wiring and make sure the cable glands are tightened.

Commissioning

- Turn the lamp on-time preset (VR2) fully anti-clockwise to select 'walk test' mode (see diagram opposite).
- Check the BPIR6 sensitivity preset (VR3) is set to approximately the half-way position (default). The temperature set point preset (VR1) is ignored in 'walk west' mode – adjust this later.
- Replace the lid and switch on the mains supply to the unit. The controller will remain idle for 60 seconds to allow the BPIR6 sensor to stabilise. After 60 seconds, the detection area should be walk tested to verify the BPIR6's coverage. Each time the BPIR6 detects sufficient movement, the lamps switch on for 5 seconds.

Note: Each time the lamps switch off, the BPIR6 is inhibited for 5 seconds to prevent thechange in infrared energy given off by the lamps from causing a false activation.

Once the detection area has been verified, adjust the on-time preset to between 1 and 60 minutes. This will automatically disable 'walk test' mode. Finally, adjust the temperature set point preset (VR1). When the ambient temperature (measured by the sensor) exceeds the set point, the lamps will remain off until the ambient temperature drops below the set point. For example, if the set point is 20°C the lamps will switch on when movement is detected as long as the ambient temperature is less than 20°C. The BPIR6 sensitivity preset can also be adjusted if necessary. Turning the preset clockwise increases the sensitivity.

Note: Increasing the PIR sensitivity may also increase the likelihood of false activations

Technical Specifications

Supply voltage 230VAC +/- 10% 50 Hz
Switching Capacity 6kW max.
Detection Range 5 metres
Detection Angle 100°
Temperature Set Point 5 to 25°C
Lamp On-Time 1-30 minutes
Current Consumption (control circuit) 20 mA
Terminals 2,5mm2 Rising clamp
Operating Temperature -20 to 40°C
Protection Rating IP65
Gland Diameter Max Cable Entry 2,5 mm²
Enclosure Dimensions (WxLxH) 130x130x75 (mm)

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2025-09-01 KT