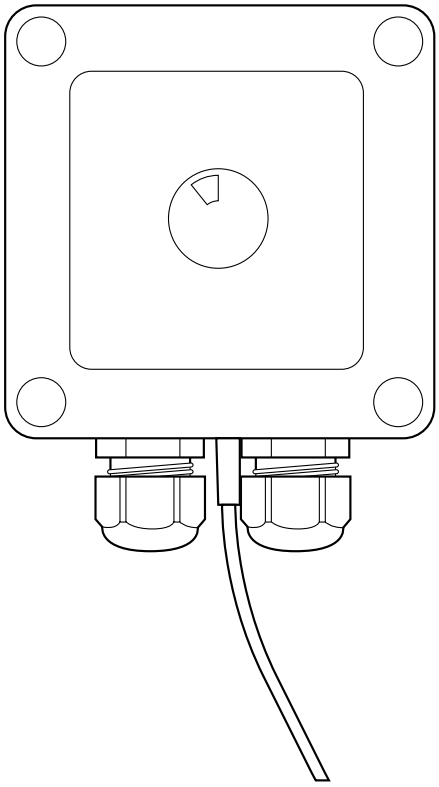
Original instructions

BPIR4



EN ... 5

SE ... 7

NO ... 9

FR ... 11

DE ... 13

ES ... 15

NL ... 18

IT ... 20

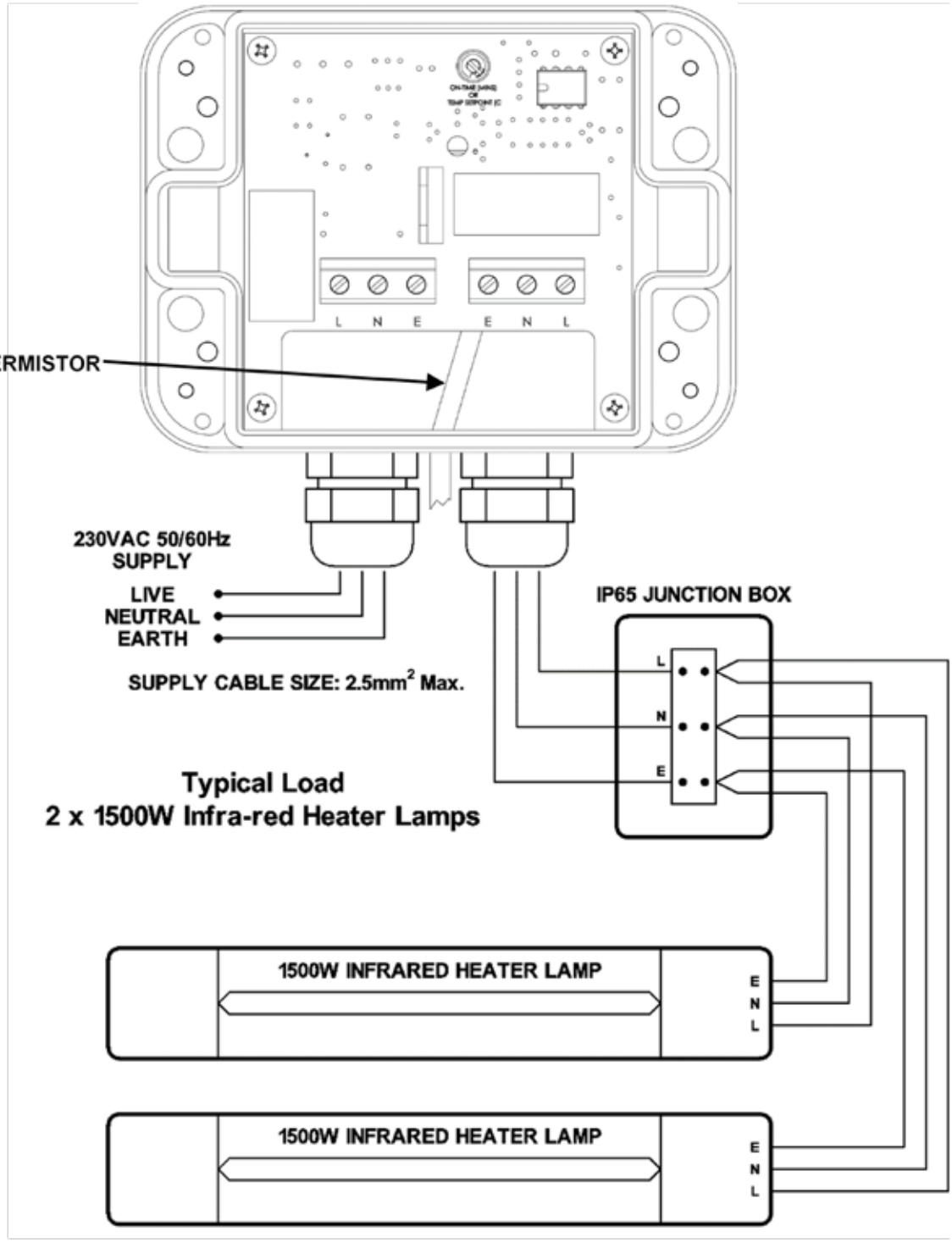
PL ... 22

RU ... 24

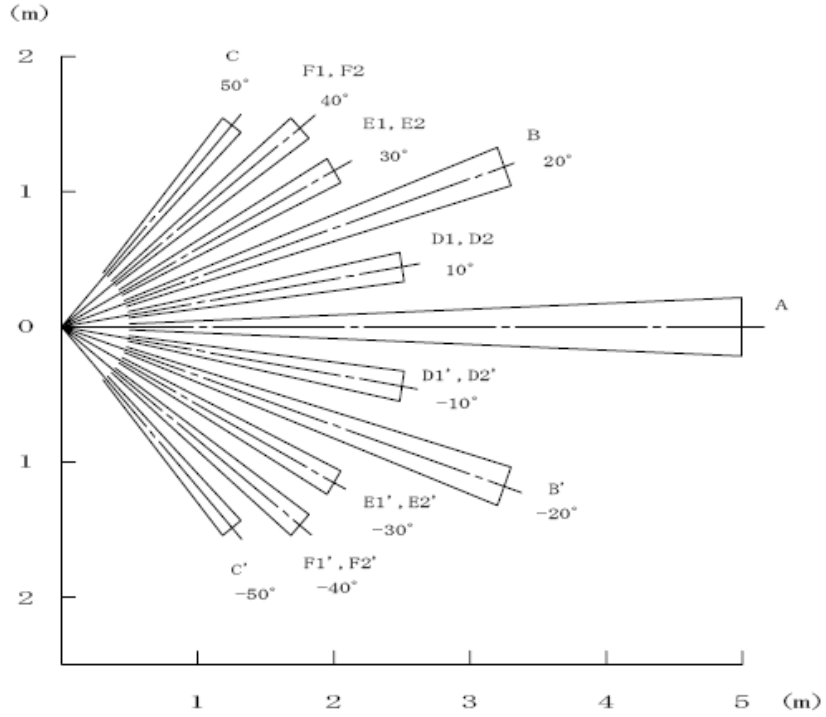
FI ... 27

DK ... 29

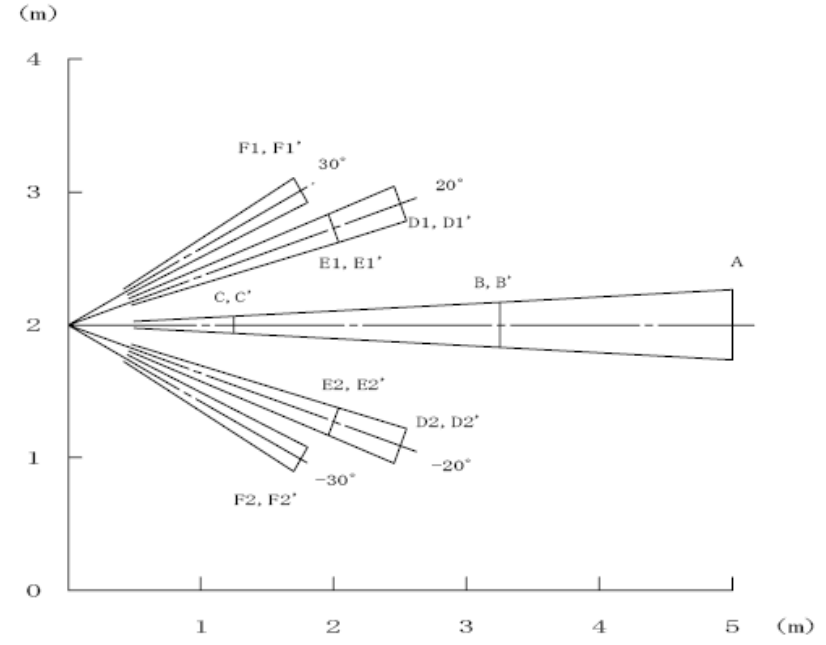
Wiring Diagram:



BPIR4 Detection Area:

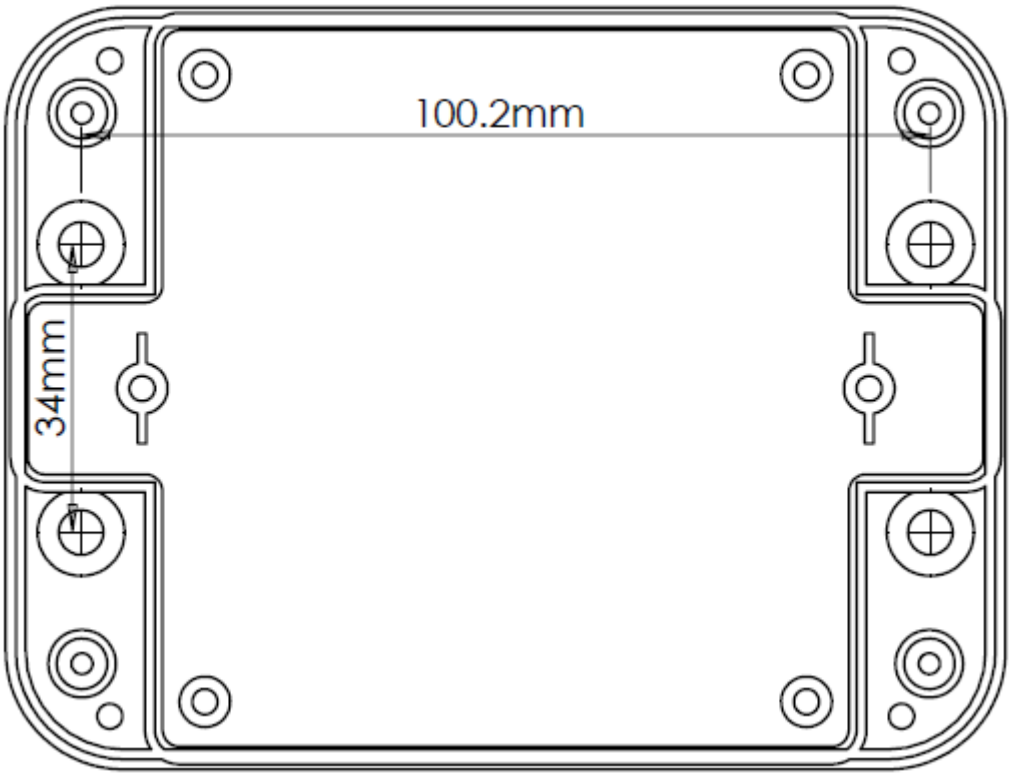


Horizontal



Vertical

Drawing:



Installation and operating instrutions

Introduction

The BPIR4 is part of a family of controllers designed to provide energy saving when used with Quartz Infrared Halogen Lamps. It has a built in PIR sensor allowing the lamps to automatically switch on only when people are present. In addition to the BPIR4, a temperature sensor monitors the outside temperature and inhibits the lamps when the temperature exceeds a pre-determined set point of between 1°C and 60°C. The microcontroller-based system incorporates zero-voltage switching and a softstart 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 fixed time period of 5 minutes. This period is reset each time the BPIR4 detects any further movement. Installation of the unit is simple and once installed is relatively maintenance-free.

Product Features

- Energy saving – only provides heat when people are present.
- Extends lamp Life.
- Temperature Sensor – lamps inhibited when ambient temperature exceeds set point.
- Soft-start/zero-voltage switch-off.
- Low-cost.
- Easy to install.

Applications: patio areas, smoking shelters, restaurants, warehouses, workshops and garden lighting.

Installation

Important: Read carefully the following information before installing the unit. The passive infrared sensor (BPIR4) 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 BPIR4 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 BPIR4 cannot detect the presence of a human body that is not moving. To prevent malfunction of the BPIR4 sensor, avoid subjecting it to rapidly-changing temperatures, strong shock or vibration or high humidity and temperature.

Troubleshooting

Problem: Lamps do not switch on.
Solution:

- Check the LINE and LOAD wiring connections to the unit and ensure the mains supply is switched on.
- The ambient temperature may have exceeded the set point temperature. If necessary, increase the set point temperature (VR1).
- Check the lamps/Lamp fittings.
- Contact your supplier.

Problem: Lamps do not switch off.
Solution:

- Ensure nobody enters the detection area for 5 minutes. This will allow the 5 minute on-time to expire.
- The BPIR4 might be continually being re-triggered due to false activations. Mask the BPIR4 lens and wait 5 minutes. If the lamps switch off after 5 minutes, the BPIR4 is receiving false activations. See section 'Installation'.
- Contact your supplier.

Positioning

The BPIR4 can be wall or ceiling-mounted. For wall mounting, the unit should be positioned 1-3 metres high. The diagram above shows the BPIR4'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, continuance

The unit is fitted with two cable glands. Only one cable should be fitted per gland to prevent degrading the unit's IP rating. See 'Wiring Diagram' on the next page for an alternative wiring configuration using a junction box.

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.
If two lamps are to be fitted they must be wired in parallel.

Warning! Ensure all earth wires are connected to maintain earth continuity to the lamp fittings.
Check all wiring and make sure the cable glands are tightened.

Commissioning

- Turn the set point temperature preset (VR1) fully clockwise to select '**walk test**' mode.
- VR1 is located at the top of the printed circuit board as shown opposite.
- Replace the lid and switch on the mains supply to the unit. The controller will remain idle for 60 seconds to allow the BPIR4 sensor to stabilise.
- After 60 seconds, the detection area can be walk tested to verify the BPIR4's coverage. Each time the BPIR4 detects sufficient movement, the lamps switch on for 5 seconds.

Note: Each time the lamps switch off, the BPIR4 is inhibited for 5 seconds to prevent changes in infrared energy, given off by the lamps, from causing a false activation.
Once the detection area has been verified, adjust the set point temperature as required. This will automatically disable 'walk test' mode. The lamp on-time is fixed at 5 minutes.
Note: If the ambient temperature exceeds the set point temperature, the lamps are inhibited.

TECHNICAL SPECIFICATION

Supply Voltage 230VAC +/- 10% @ 50/60Hz
Switching Capacity 4kW Max.
Detection Range 5 metres
Detection Angle 100°
Temperature Set Point 1 to 60°C
Lamp On-Time 5 Minutes (fixed)
Current Consumption (control circuit) 50mA
Terminals 2.5mm2 Rising Clamp
Operating Temperature -20 to 40°C
Protection Rating IP65
Gland Diameter Max Cable Entry 2.5mm²
Enclosure Dimensions (WxLxH) 100 x 112 x 55 (mm)

Main office
Frico AB
Industrivägen 41
SE-433 61 Sävedalen
Sweden

Tel: +46 31 336 86 00

mailbox@frico.se
www.frico.net

For latest updated information and information about your local contact: www.frico.net

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