BASK ZONE®

BaskZone® CC3 Controller
Technical Manual

Key Features
- Soft-Start – up to 30% extended lamp life.
- Variable Control – allows the user to find the perfect comfort, heat level.
- Simple Installation – option to be wired from a 13A plug for up to 3kW load.
- Energy Saving – automated system, only heating when required.
- Temperature Monitoring – if the ambient is above the preset temperature, then the controller remains switched off.

Optional Extras (can be wired in)

Temperature Sensor	Black Bulb Sensor	PIR (12v)

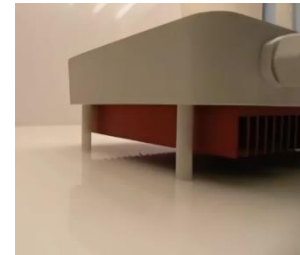# BaskZone® CC3 Controller

Overview

The BaskZone® CC3 controller has been designed to offer a complete control solution for up to 6kW of BaskZone® infrared heaters, improving comfort and energy saving. It has been designed specifically for our BaskZone® shortwave infrared heaters where high in-rush current is an issue and therefore has a soft-start system.

The BaskZone® CC3 Controller has ten incremental heat settings, allowing you to adjust to the optimum comfort level in your specific area. With the optional energy-saving external PIR and temperature / black bulb sensors, the controller automatically manages the heating system. The optional temperature sensor monitors the ambient temperature, only allowing the heaters to switch on once the temperature has dropped below the set point. The optional PIR sensor will only allow the heater to turn on when someone is detected in the zone. This saves considerable energy and heater life as the heater is only on when someone is present. With the addition of a 'soft start' function, which gradually switches the infrared heaters on, this can increase the infrared element life by up to 30%.

Installation

The installation and maintenance of this equipment must be conducted by suitably qualified personnel, with reference to the current edition of the I.E.E. Wiring Regulations BS7671 18th edition. The regulations contain important requirements regarding the safety of electrical equipment.

The BaskZone® CC3 Controller is designed to be wall mounted with the cable glands facing downwards. All four fixing points for each corner of the controller should be utilised. No additional holes should be drilled into the enclosure. It is recommended that the controller is not mounted directly to any flammable material e.g. wood. It may be necessary to use 'stand-off' pillars to aid cooling and heat dissipation. The PCB must not be removed from the heatsink/enclosure.

NOTE: *Not complying with any of these rules may invalid warranty*

How to use

To adjust the heat level:

- Press and hold the up arrow to move **up** incrementally through the heat levels '**0' to 'F'(full power)** and release on the desired setting.
- Press and hold the **down** arrow to move down incrementally through the heat levels '**F' to '0'** and release on the desired setting.
- To turn on to full power short press the up arrow
- To turn off, short press the down arrow

Display Features (if sensors have been wired in)

- Display shows '**t'**: The controller is turned off as the **ambient** temperature is **above** the trip level set on the PCB (if a temperature sensor has been wired in).
- Display shows '**F'**: The controller is set to **full output**.
- Display '**decimal point' pulses**: The PIR input is **waiting** to be enabled i.e. no movement. (If you are seeing this and DO NOT HAVE A PIR, please ensure that the link-wire is fitted between 'sig in' and 'com' at the PIR terminal)
- Display 'decimal point' fully on: The unit is in standby mode.

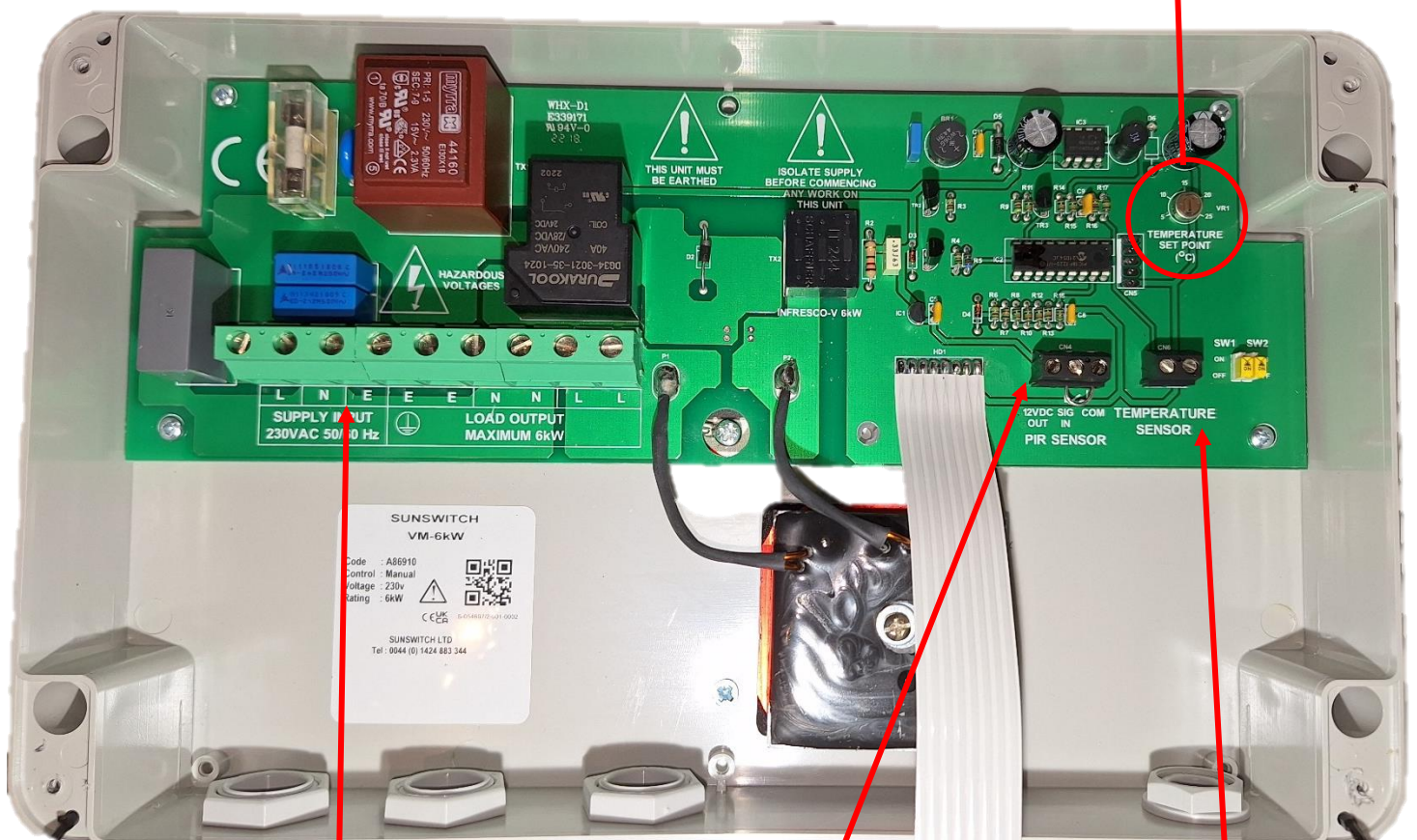### PIR Sensor Use (only applicable if wired in)

1. The PIR takes 60 seconds to activate before detection can occur.

2. The PIR continues to monitor the area and will reset to the set time every time it detects movement.

Before testing ensure the wiring is correct and the temperature trip point 'SET TEMP' cermet on the PCB is turned to the required temperature. The PIR time-on is fixed to 5 minutes (nonadjustable). The expected detection area can now be tested by walking, crossing in various directions to ensure coverage is as expected.

On initial switch 'on', if the enable link (SIG IN / COM) is missing, the unit will operate normally for a period of 30 seconds before the output switches 'OFF'. If the controller is operating and the enable link (SIG IN /COM) is removed the unit will continue to operate for 5 minutes before the output switches 'OFF'.

Wiring Diagram:

Temperature set point dial (if wiring in a remote temperature or black bulb sensor)

220-240Vac Supply 50Hz/60Hz (min 4mm² cable)

PIR sensor Port, if not being used, leave link-wire between 'SIG IN' and 'COM'

Optional temperature / black bulb sensor port

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Technical Specifications	
Supply Voltage	230Vac ±10% @ 50Hz
Max Load at 20°C Ambient	6kW
Power Consumption	50mA
PIR Set Time Period	5 minutes
Temperature Set Point	5 – 25°C
Factory Set Temperature Trip Point	20°C
Gland Diameter	Max Cable Entry 2.5mm2
2 Lamp Installation	Must be fitted in parallel
Ambient Operating Temperature	-20°C to +30°C
IP Rating	IP65
Unit's Max. Operating Temperature	65°C
Dimensions	W=280mm D=200mm H80mm
PIR Movement Sensor (optional, not included)	
Operating Voltage	12V DC
Detection angle	220°
Detection distance	<12m
Outdoor Temperature Sensor (optional, not included)	
Dimensions	W=115mm D=110mm H=55mm
IP Rating	IP 65
Temperature sensing	±0.2°C between 0°C and 70°C
Black Bulb Sensor (optional, not included)	
Radiant temperature sensing	±0.2°C between 0°C and 70°C
IP rating	IP30
Dimensions	115 x 85 x 30mm

This product must be disposed of responsibly at the end of its operating life. Please take to a waste collection Centre for electrical or electronic equipment

This product is covered by a 2-year warranty covering defective materials and manufacture. This does not affect your statutory rights.

BaskZone® - The Equine brand of SunSwitch®

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