

# **INFRESCO-S – SOFT START**



## INTRODUCTION

The Infresco-S is one of a range of products that has been designed to work with Quartz Infrared Halogen Lamps. This particular model when operated from a conventional light switch soft starts on switch on and soft stops at switch off each time the lamps are required. The Soft Start feature will add up to 30% addition life to the lamp joined with the benefit of having control. With the addition of a sensor you can monitor the temperature also ensuring the lamps only switch on when the environment is cold enough. Installation is simple requiring only a mains supply and once installed is maintenance free.

## APPLICATIONS

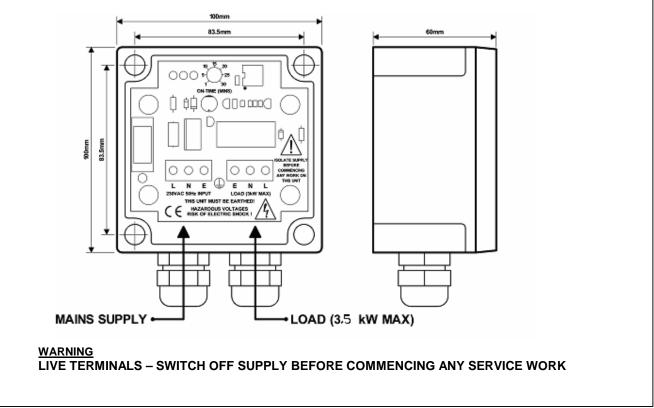
Any application were high inrush current is an issue and can be initiated with a low current switch. Typical use is for Infra Red Heating lamps.

## **FEATURES**

- Energy Saving.
- Switches 3.5kW
- Soft Start/Soft Start.
- Extended Lamp life.
- Low Cost.
- Can be switched with light switch







#### Why use guartz infrared halogen lamps?

Short wave infrared lamps are a highly efficient heat source, converting over 90% of consumed electrical power into radiated heat. They offer a very clean and safe form of heating as they generate no fumes plus the design of the lamps ensures a constant level of heat output throughout the lamp life.

As the heat can be directed by reflectors, just like light, and only objects are heated rather than the surrounding air, this is the ideal heating solution for areas which can be occupied intermittently or may be draughty.

The use of 'Infresco' control products enables the lamps to be dimmed to create the optimum comfort levels and with the 'soft-start' feature, the life of the lamp will be significantly extended, by up to 30%

#### Why do lamps fail?

Infrared halogen lamps fail in the same way as incandescent bulbs do, usually from melting or breakage of a thin section of an ageing filament. The most common failure mode is filament 'notching' or 'necking'. This normally occurs at the ends of the filament, where they are connected to the lead wires and are somewhat cooler. At these points, the halogen will attack the filament, gradually eroding and weakening it. Other 'thin spots' occur where the 'halogen' cycle re-deposits metal back on the filament unevenly, creating 'weak' spots along it's length.

The higher resistance 'necked' ends or 'thin spots' will heat up more rapidly than the rest of the filament, when the bulb is switched on. If the power is instantly applied, the current surge present can overheat and melt or break.

#### Advantages of 'Infresco' Soft-Start

A 'soft-start' device prevents any excessive current surge, reduces 'hot-spots', mechanical vibration and hence, protects any weak spots from breaking.

By 'soft-starting' an infrared halogen lamp, over a few seconds, a typical lamp will have its' life expectancy extended by up to 30%. The use of an 'Infresco' controller, with a reliable 'soft-start' facility, will minimise the stresses on the filaments and ultimately make your lamos less costly & replacement jobs less frequent.

On 'switch-on' an infrared halogen lamp can create a current surge, up to 10 times the normal operating current. So, in addition, by preventing unwanted 'current surges', the mains supply is subject to much less demands on it's capacity.

230V ac @ 50 Hz

Max Cable Entry 2.5mm<sup>2</sup>(Line & Load)

Max 16A

50mA

3.5kW

65°C

65

## SPECIFICATIONS

Mains supply ( within 10%) Operating Current **Power Consumption** Max load at 20°C ambient Max unit operating temperature IP Rating Gland Diameter

## FUSING

It is recommended to use an appropriately rated mains fuse or D Type Breaker for protection. On initial 'switch on' some loads may need an increased Factor of Safety (F of S) for Unit and/or Device protection. See SRA Data sheet for further information.

### CE MARKING

This family carries a "CE" marking. These phase angle controllers need a suitable remote filter. For more information see recommendations section and contact our sales desk. (See Declaration of Conformity)

#### RECOMMENDATIONS

Other documents available on request, which may be appropriate for your application: -

CODE	IDENTITY	DESCRIPTION
X10229	RFI	Single Phase Filtering recommendations - addressing EMC Directive
X10213	ITA	Interaction, uses for phase angle and for burst fire control.
X10255	SRA	Safety requirements - addressing the Low Voltage Directive
		(LVD) including: - Thermal data/cooling; "Live" parts warning & Earth
	requirements; Fusing recommendations.	
AP02/4	COS	UAL Conditions of sale.

NOTE 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. The regulations contain important requirements regarding safety of electrical equipment (For International Standards refer to I.E.C/ directive IEC 950).

#### **ORDER CODE: INFRESCO-S** State part number: A86372 Local Sensor W26048 **Optional Extras** UNITED AUTOMATION LIMITED 1Southport Business Park Tel: 0044 (0) 1704 - 516500 Main Kew Tel: 0044 (0) 1704 - 516516 Sales Fax: 0044 (0) 1704 - 516501 Southport, PR8 4HQ ENGLAND Enquiry@united-automation.com

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