

# INFRESCO-T Push button and Timer

INFRESCO T X10697

# INTRODUCTION

The INFRESCO-T controller has been designed to give energy saving on Infra Quartz infrared Halogen Lamps. The Infresco 'T' includes a push button which initiates a time period set by an internal preset allowing the customer to pre set times for individual application dependant on need. The Soft Start feature will add up to 30% addition life to the lamp together with the benefit of having control. Installation is simple requiring only a mains supply and once installed is maintenance free.

# **APPLICATIONS**

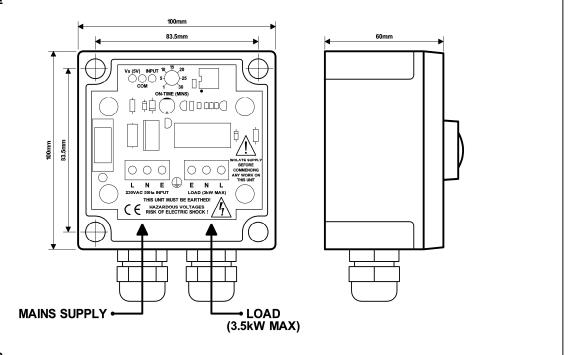
Any application were high inrush current is an issue or control is required. Typical use is for Infra Red Heating lamps where human input is required but with time limitations

# **FEATURES**

- Energy Saving.
- 1-30 Minute Timer.
- Soft Start/Zero Volts switch off
- Extended Lamp life.
- Low Cost.
- Simple Installation.



### **INSTALLATION**



#### <u>WARNING</u>

LIVE TERMINALS – SWITCH OFF SUPPLY BEFORE COMMENCING ANY SERVICE WORK

#### 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 lamps less costly & replacement iobs 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.

#### **SPECIFICATIONS**

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

Gland Diameter

230V ac @ 50 Hz

Max 16A 50mA 3.5kW 65°C 65

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

#### **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:** 

State part number: INFRESCO-T A86370



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