

**MAXIMUM COMFORT AND CONTROL IN HEATING**

**TSSHHC-3IL-24** is an electronic heading thermostat designed to be installed in a standard single gang electrical box with a minimum width of 2-1/4". Once installed, it requires no maintenance.

An **LED** illuminates to indicate “call” for heating, this also aids in system testing. An **ON/OFF** selector switch on the front of the cover makes system operation extremely simple.

**CE MARKING**

This product meets the requirements of the European Council's directive 89/336 and successive modifications as to electro-magnetic compability and the Council directive 73/23 as to electrical equipment to be applied within certain voltage ranges.

**Standards applied**

En 50 081 -1, EN 61000-6-2, and EN 60730-2-9.

If the product has been exposed to damage e.g. in transport, it must as checked and overhauled by qualified staff before the product is powered up.

**CLASSIFICATION**

The product is a class III device according to IEC 60730-2-9 and EN W730-2-9 and the product must be connected to the following conductors:

- 1) L-24V AC
- 2) N - 0 (neutral)

**WARNING**

**The system may not be energized unless the system is installed according to this instruction and the installation meets all applicable codes.** Warranty is void if not installed according to this instruction and proper procedure.

**TECHNICAL DATA**

Power supply .....24V AC +/-10%, 60 Hz  
 Output relay, SPST, dry contact.....2A  
 Built-in switch.....2 pole  
 ambient operating  
 temperature.....32-122 F (0-50 C)  
 Scale limitation.....minimum and maximum  
 Scale range.....40-104 F (5-40 C)  
 Temperature setback.....not available  
 On/Off differential.....0.7 F (0.4 C)  
 Enclosure is.....IP20  
 Dimensions (HxWxD).....4.5"x3.3"x2.0"  
 .....(115x84x50 mm)



<b>PRODUCT LINE</b>	
<b>TSSHHC-3IL °F</b>	
<b>24V ( -24 )</b>	
TSSHHC-3IL-24FSF	UDF with floor sensor
TSSHHC-3IL-24	UDF with built-in sensor
<b>TSSHHC-3IL °C</b>	
<b>24 V supply</b>	
TSSHHC-3IL-24CFS	UDC with floor sensor
TSSHHC-3IL-24C	UDC with built-in sensor

## FLOOR SENSOR INSTALLATION (where applicable)

The sensor shall be mounted in a conduit which should be sealed and placed as high as possible in the concrete, etc. The sensor is UL and cUL approved regarding the isolation test. The sensor wiring may be extended up to 150' (50 m) using 18 gauge wire and the wiring resistance shall not exceed 20 ohms. Sensor wires must be kept in a separate conduit, away from all other wiring. The sensor and wires must be protected from damage during the installation. If shielded wire is used, it must not be grounded but connected to terminal 6 on the thermostat.

## ERROR DETECTION (floor sensor model only)

The TSSHHC-3IL-24 has built-in error detection which will de-energize the heating circuit if the sensor is damaged or if it detects an open or shorted sensor circuit.

## CAUTION!

Disconnect all electrical power prior to installing or servicing this unit.

## THERMOSTAT INSTALLATION (fig. 1 2)

1. Remove thermostat knob, noting the position (A).
2. Loosen screw to remove frame and cover (B).
3. Attach wiring from the rear of the thermostat according to the wiring diagram.
4. The thermostat is mounted in a standard single gang electrical box with a minimum width of 2-1/4".
  - re-install frame and over
  - re-install the knob in the proper position

## TEMPERATURE SETTING/ADJUSTMENT

Adjust the temperature knob to the desired room or floor temperature, if after a few days you find the temperature to be different from the setting, adjustment can be made as follows: Measure the room temperature with thermometer, remove the knob without rotating it, then reposition the knob according to the measured temperature on the scale and re-install it.

## MAXIMUM/MINIMUM TEMPERATURE LIMITATIONS

Behind the knob there are red and blue locking rings hold in position by a screw. To set the limitations, loosen the screw (C) and adjust the red limit ring to the desired maximum, set the blue ring to the desired minimum temperature, then retighten the screw. The knob must be re-installed exactly as it was removed.

Fig. 1

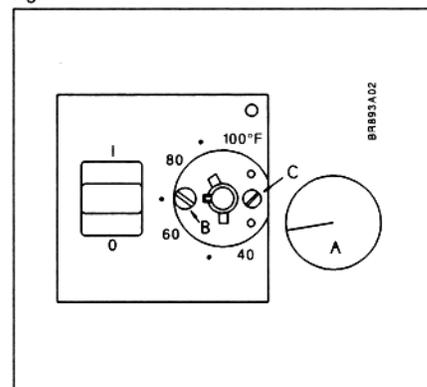


Fig. 2 - with floor sensor / avec capteur du sol  
PE: Ground, use as required

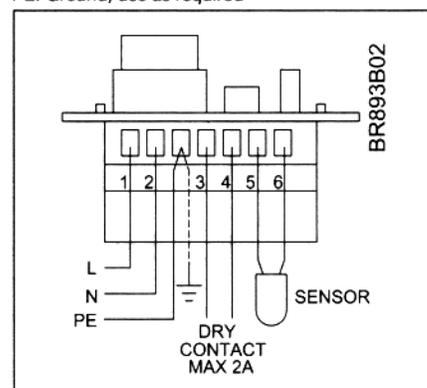


Fig. 2 - with built-in sensor / avec capteur incorporé  
PE: Ground, use as required

