FRENGER

Touchscreen Programmable Control Thermostat T60-EH

INSTALLATION INSTRUCTION

Thank you for the purchase of our product. Please read the instructions before mounting and installing.

The T60-EH is an Touchscreen Programmable Controller for temperature control by means of NTC sensors, located either internally within the programmable controller or can be made compatible with external sensors.



PRODUCT PROGRAM

ulti-functional controller with built-in therr	mostat sensor
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WARNING – Important Safety Instructions

Disconnect the power supply before carrying out any installation or maintenance work, on this thermostat and/or associated components.

The thermostat, and the associated components, should only be installed by a qualified and authorized electrician.

Electrical installation must be in accordance with appropriate national regulations.

PLACEMENT OF THE THERMOSTAT

The controller should be placed on the wall, approximately 1.2 m above the floor level, when the built-in sensor is used for temperature regulation.

Ensure and allow free air circulation around it. Draught and direct sunlight, or other heat sources, must be avoided. It can affect controller functions.

MOUNTING OF THE PROGRAMMABLE CONTROLLER THERMOSTAT

The controller is designed to be flush mounted, and requires a minimum 35 mm deep junction box, recessed, within the wall.







Step 1

Loosen the screw from the bottom of the controller to release the front half. Then carefully pull and separate the front part away from the back-plate, initially from the lower part of the controller.

Step 2

Place the front part of the controller in a safe place, to prevent scratches and damage. Connect the wires in accordance with the diagram on page 2. The wiring diagram must be followed.

Step 3

Screw the controller back-plate onto the recessed junction box in the wall. Use the supplied screws or the original screws of the junction box.

Step 4

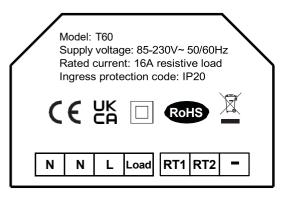
When the back-plate is secure, refit the front part carefully to the back-plate, starting with the upper part of the controller, and gently tighten the bottom retaining screw.

The controller is now ready to operate.

CONNECTIONS - WIRING

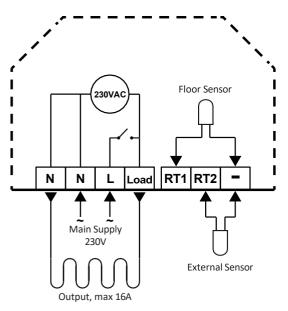
Terminal Marking

Terminal N:	Output (neutral)	
Terminal N:	Power supply (neutral)	
Terminal L:	Power supply (live)	
Terminal Load:	Output, max. 16A (3680W)	
Terminal RT1:	External floor sensor (hot)	
Terminal RT2:	External room/air sensor (hot)	
Terminal - (minus):	Sensor connection point (cold)	



Wiring

Connect the wires in accordance with the diagram. The wires must be connected as follows:



OPERATING THE CONTROLLER

When powering up the thermostatic programmable controller, it will automatically start to run in mode with the factory settings. There is no mechanical ON/OFF switch. To access this feature, simply soft tap on the touchscreen and/or the symbol 也



Programming and Setup

The controller carries a lot of features and settings. In order to access these points please contact our technical department for a copy of the user manual. This document will guide you through the setup of the different functions and modes.

TECHNICAL SPECIFICATION

Operating voltage / Power supply	85-230VAC, 50/60Hz
Standby power	< 1.0W
Rated current / Relay	16A resistive load, 230V / SPST
Setting range, temperature	5-45℃
Floor limitation, temperature range	20-45°C
On/Off differential	±0.5°C
Humidity sensor, air	0-100%
Operating modes	Three programming modes: Weekday/Weekend (5 + 2) - edit/set 4 time periods per day Seven day programming (7) - edit/set 4 time periods per day 24 hours mode - edit/set 4 time periods Hold/Timer mode: - activate and adjust a boost period of up to 24h, by optional setting range temperature Home/Away mode: - the controller will turn on the heat- ing, if the room temperature drops below the set value. Holiday mode: - calendar based and programmable in advance. OFF mode: - frost protection included, by adjust- able temperature range
Battery backup	2 months
Appliance and protection class	Class II - IP20
Size (H/W/D)	86/96/44 mm
Build-in depth	30 mm
Installation type	Flush, hole pitch 60 mm
Terminals	2.5 mm ² , screw cage clamp
Terminal wire size	max. 2.5 mm ²
Display size	3.5" - Color capacitive touch
Display resolution	480x320 TFT
Optional external floor sensor	NTC (10 kΩ), Class II, 3 meter
Optional external room/air sensor	NTC (10 kΩ), Class II, 3 meter
Max. length sensor cable	50 m, 2 x 1.5 mm ²
CE FR	 - Low Voltage Directive 2014/35/EU - EMC Directive 2014/30/EU - RoHS Directive 2011/65/EU - Radio Equipment Directive 2014/53/EU - Electrical Equipment (Safety) Regulations 2016 - Electromagnetic Compatibility Regulations 2016

V1.4