



ThermaTouchTM

Product sheet

4.3" Touch Screen HMI

V1.1 version

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Certificate No.253422016



Key features

- **Ultra-compact 4.3" touchscreen**
Small footprint with clear status display and intuitive user interface.
- **Single-mat control with smart switching**
Controls one heating mat based on real-time sensor data and setpoint logic.
- **Temperature & power monitoring**
On-screen view of current temperature, heater status, energy usage and total run time.
- **Built-in delay logic**
10-second start-up delay prevents tripping from transformer inrush current.
- **User-definable alarm conditions**
Alarm if temperature is below setpoint for too long – user sets duration.
- **Trend graphing & history logging**
View temperature over time; optional power trend with current sensor.
- **Remote alarm output & digital inputs**
Door switch, defrost interlock, freezer status, fault triggers.
- **PIN-protected settings menu**
Optional screen lock and secure access to temperature & system config.
- **Wi-Fi enabled** for remote access and data downloads via web page or app.

Benefits

Simple to use

Clear touchscreen with icon navigation; minimal training required.

Compact but capable

Fits small control enclosures without sacrificing functionality.

Peace of mind

Faults and alarms clearly displayed and logged for traceability.

Valuable monitoring

Gather valuable temperature and power data for effective management and reporting.

Energy efficient

System powers on only when needed, saving energy while protecting the subfloor.

Get access to data

Vital access to data ensures heating system continues to protect your investment.

Product information

The new ThermaTouch™ range of controllers are available in 7" and 4.3" sizes. The 4.3" controller by Thermatek® provides precision control and monitoring **for a single heater mat system** (ThermaMod™ or ThermaTrad™). This versatile system can also be used with any of our heater products where temperature and power measurement is required. Designed for ease of use this system offers smart touchscreen simplicity in a compact footprint. Optional Wi-Fi connectivity allows full remote access via a secure web page or app, mirroring the HMI screens to enable real-time monitoring, alarm viewing, and setpoint adjustments.

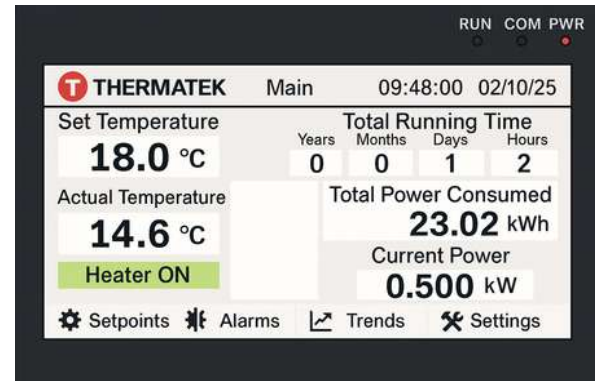
Enhanced capabilities of the 4.3" model

- **4.3" colour touchscreen display**
Crisp, glove-friendly display with real-time feedback
- **User-adjustable temperature setpoint**
Typically set at 7°C to prevent frost heave or ice formation
User adjustable hysteresis setting
- **Clear status overview**
Current temperature (°C)
Current power being used (calculated or measured via 4-20mA)
Heater ON/OFF indicator
Fault status
Total running time and total energy consumption
- **System trend logging**
Temperature over time
Power usage trend
- **Alarm and safety features**
Temperature below setpoint for user-defined period triggers alarm
Sensor faulty alarm
Remote alarm output available
On-screen alarm history with timestamps
- **Delayed start logic**
Built-in 10-second start delay to avoid transformer inrush trip
- **User access control**
Screen lock and PIN-protected settings menu
- **Wi-Fi connectivity**
Connect remotely using the Thermatek App or to a designated html page



Typical connections

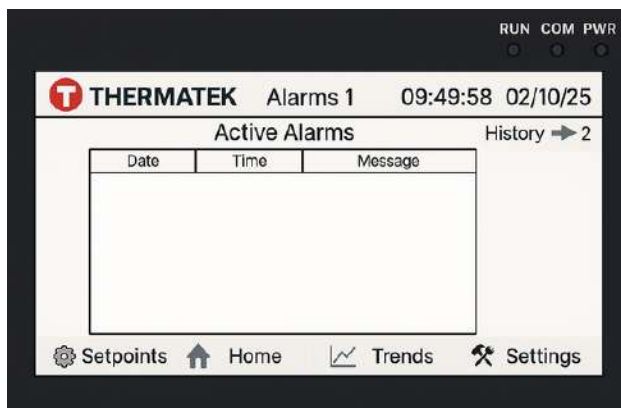
- 1 x NTC temperature input (for heater sensor)
- 12 x digital inputs (e.g. door contact, defrost interlock, freezer fault)
- 8 x digital relay outputs (heater, remote alarm, spares)
- Optional analog input for current sensor (power feedback)



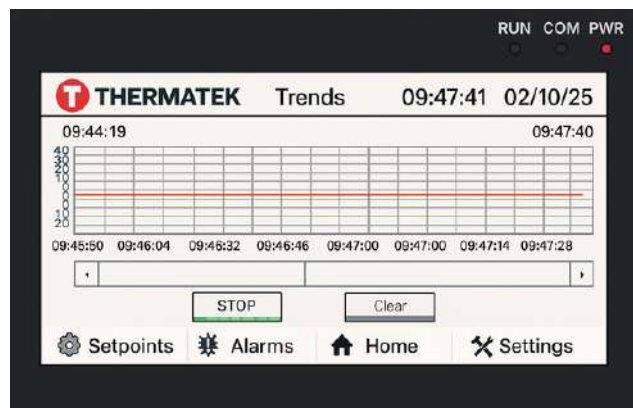
Main screen
Temperature et Power control

Typical applications

The ThermaTouch™ 4.3" controller is ideally suited for a wide range of cold store heating scenarios. It is commonly used to **prevent frost heave under freezer floors**, **manage condensation** in critical zones, and provide **targeted heating at door thresholds, ramps**, and entry points to maintain safe, **ice-free access**. The system also supports **void and column heating**, offering flexibility for complex installations, and can be configured as part of a **frost heave recovery strategy** where rapid corrective heating is required.



Alarm status panel



Trends overview panel



About us

Based in the UK, Thermatek® specialises in **bespoke frost heave and condensation prevention systems, designed and manufactured in the UK** to meet the unique demands of each client. With almost 35 years of experience, 14,000 installations and **ISO9001-certified** quality, our durable, ultra low-voltage systems are trusted by high-profile clients around the world. Our solutions offer unmatched fit-and-forget reliability ensuring cold stores run smoothly and carefree.

>14,000 projects



+2°C to -80°C



10sqM to > 9,000sqM



35 years



ISO 9001



International



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