

Digital Engineered Solution

6180A Standardized STLR+FRC Solution

User Guide

For Pasteurization Safety Thermal Limit Recorder and Flow Recorder/Controller Applications

Eurotherm. a Watlow brand



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All pertinent state, regional, and local safety regulations must be observed when installing and using this product. For reasons of safety and to help ensure compliance with documented system data, only the manufacturer should perform repairs to components.

When devices are used for applications with technical safety requirements, the relevant instructions must be followed.

Failure to use Watlow software or approved software with our hardware products may result in injury, harm, or improper operating results.

Failure to observe this information can result in injury or equipment damage.

Safety Information

Important Information

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.





The addition of either symbol to a "Danger" or "Warning" safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

A DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

A WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

A CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

Note: Electrical equipment must be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Watlow for any consequences arising out of the use of this material.

Note: A qualified person is one who has skills and knowledge related to the construction, installation, and operation of electrical equipment, and has received safety training to recognize and avoid the hazards involved.

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Safety and EMC

A WARNING

UNINTENDED EQUIPMENT OPERATION

Do not use the product for critical control or protection applications where human or equipment safety relies on the operation of the control circuit.

Signal and power voltage wiring must be kept separate from one another. Where this is impractical, all wires must be rated to the power voltage and shielded cables are recommended for signal wiring. When shielded cable is used, it must be grounded at one end only.

This product has been designed for environment A (Industrial). Use of this product in environment B (domestic, commercial and light industrial) may cause unwanted electromagnetic disturbances in which cases the installer may be required to take adequate mitigation measures.

For Electromagnetic Compatibility, the panel or DIN rail to which the product is attached must be grounded.

Observe all electrostatic discharge precautions before handling the unit. Electrically conductive pollution must be excluded from the cabinet in which the recorder is mounted for example, carbon dust. In conditions of conductive pollution in the environment, fit an air filter to the air intake of the cabinet. Where condensation is likely, for example, at low temperature, include a thermostatically controlled heater in the cabinet.

Use appropriate safety interlocks where personnel and/or equipment hazards exist. Install and operate this equipment in an enclosure appropriately rated for its intended environment.

At commissioning, ensure cybersecurity robustness of the installation.

Ensure all cables and wiring harness are secured using a relevant strain relief mechanism.

The application of this product requires expertise in the design and programming of Control/data management systems. Only persons with such expertise must be allowed to program, install, alter and commission this product.

During commissioning ensure all operating states and potential fault conditions are carefully tested.

Do not use, or implement a recorder/controller configuration (recording/control strategy) into service without ensuring the configuration has completed all operational tests, been commissioned and approved for service.

It is the responsibility of the person commissioning the recorder/controller to ensure the configuration is correct.

Failure to follow these instructions can result in death, serious injury or equipment damage.

About this Guide

This User Guide is intended to be a supplement to the standard Eurotherm 6100A/6180A Graphic Recorder User Guide HA028910. The 6100A/6180A Graphic Recorder User Guide is available as a free download at

www.eurotherm.com/downloads/.

This User Guide has been designed to offer specific information about the 6180A standardized STLR+FRC solution, and its use within a pasteurization process. However, much of this manual can be used as a guide for similar Eurotherm standardized pasteurization solution recorder instrument variants.

- 6180A STLR+FRC
- 6180A STLR
- 6180A FRC
- 6100A STLR+FRC
- 6100A STLR
- 6100A FRC

All references to the pasteurized milk ordinance (PMO) are based on the U.S. Department of Health and Human Services Public Health Service Food and Drug Administration 'Grade "A" Pasteurized Milk Ordinance' 2019 revision.

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