

7000 SERIES

Solid State Contactors and Thyristor Units



EUROTHERM

CONTROLS
DATA MANAGEMENT
PROCESS AUTOMATION



*One range:
all solutions*

 **invensys**
An Inverays company

7000L

LOAD CONTROLLERS

Single-phase solid state contactors

The 7000L solid state contactors are used with single-phase low temperature coefficient resistive loads. The range of current ratings extends from 16A to 100A and voltages up to 500V.

Simple and reliable

- self-powered units
- no commissioning required

Resistive loads

The 7100L is designed for cost effective control of low temperature coefficient resistive loads (LTCL).



Simple and direct implementation

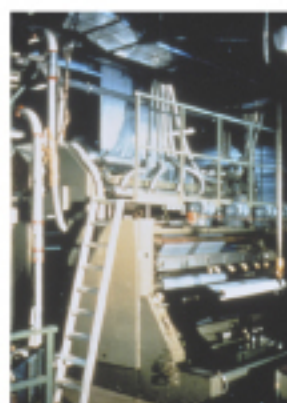
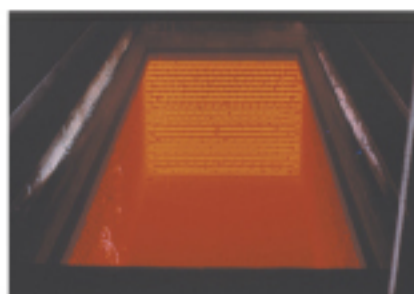
These units provide effective replacements for electromechanical power relays, they give:

- fast switching,
- no wear,
- quiet operation,
- no interference

Compliance with EMC directive relating to electrical and electromagnetic interference is standard on the 7000L.

Applications

Furnaces
Injection moulding
Extrusion
Heat treatment
Air conditioning



7100L

7100s
7200s
7300s

7100A
7200A
7300A

7000 SERIES

Destination : the whole world

Distributed world-wide

Eurotherm Limited has subsidiaries, distributors and agents in 50 countries throughout the world. This ensures that there's always a power control specialist near **you** to offer advice and support.



Compliance with International Standards

The 7000 Series of industrial solid state contactors and thyristor units is designed to comply with international standards, including CE (Europe) and UL (USA and Canada).

Products you can trust

The 7000 Series can be used in conjunction with our process and temperature controllers or can be used as part of an integrated system. They are designed and produced in our ISO9001-certified factory.



7000 SERIES

THE POWER SOLUTION

A complete solution with an innovative, uniform series

The 7000 Series incorporates industrial solid state contactors and thyristor units, to suit virtually all types of load.

- from the simple to the sophisticated
- single-phase or three-phase loads up to 750 kW
- extensive range of current ratings
- compatible with all industrial voltage supplies
- simple and quick to install, commission and maintain
- reliable and easy to use

A choice for all load configurations:

7100 For single-phase loads

7200 For 2 leg control of 3 phase loads

7300 For true 3-phase loads



Three levels of functionality

To adapt to your needs more closely, the 7000 Series is designed with three levels of functionality:

• **Load controller 7000L**

Solid state contactors for economical, high performance control of simple resistive loads

• **Smart controller 7000S**

Intelligent solid state contactors for total safety in control of resistive or short wave infrared (SWIR) loads

• **Advanced controller 7000A**

Sophisticated thyristor units which may be adapted to drive virtually all load types and can be easily integrated into complete control architectures

7100L

**7100s
7200s
7300s**

**7100A
7200A
7300A**

7000s

Easy to commission and adjust

- self-powered units
- overtemperature shut down of fan cooled units (>100amps)

Infrared loads

The power components are designed to drive short wave infrared (SWIR) sources as well as low temperature coefficient resistive loads.

Options

- diagnostic load fault detection
- short circuit thyristor fault detection
- load failure detection
- overtemperature alarm (fan cooled units)
- time proportioning output with 4-20mA input
- digital communications

SMART CONTROLLERS

Intelligent solid state contactors

The 7000s intelligent solid state contactors are used with single and three-phase low temperature coefficient resistive or short wave infrared loads. The range of current ratings extends from 16A to 630A and voltage up to 690V.



Quick and reliable diagnostics to maintain productivity levels

The power unit provides users with real-time information about :

- the condition of the load,
- the state of the thyristor including overheating,
- the presence of the power supply

Applications

Infrared heating
Extrusion
Thermoforming
Multi-zone heating
Conveyor furnaces
Ovens



7100L

7100s
7200s
7300s

7100A
7200A
7300A

7000A

ADVANCED CONTROLLERS

Power thyristor units

The 7000A power thyristor units are used with single-phase and three-phase loads of virtually all types. The range of current ratings extends from 16A to 630A and voltages up to 690V.

An adaptable power unit

- choice of input
- choice of control mode
- choice of firing mode
- alarms adaptable to the load
- overtemperature shutdown of fan cooled units (>100 amps)

All types of electrical loads

The 7000A is designed for virtually all types of load including:

- high temperature coefficient resistive load (HTCL)
- variable resistance over time
- transformer primaries
- inductive loads

Options

- diagnostic load fault detection
- short circuit thyristor detection
- load failure detection
- true power control (VxD)
- current limit
- digital communications
- overtemperature alarm (fan cooled units)



Advanced diagnostic function

- high performance alarm strategy including: supply faults, thyristor faults and load faults
- signalling of faults: front panel LEDs, alarm contacts, digital communications.

Applications

Heat treatment for metals
Glass heating
Semiconductor applications
Complex loads
Induction heaters



7100L

7100s
7200s
7300s

7100A
7200A
7300A

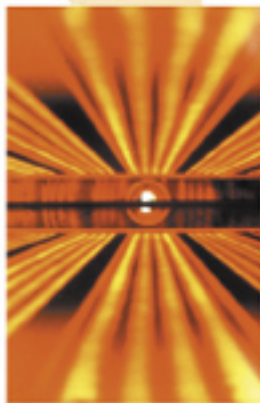
Working with your industry for over 30 years

Our strength : creative minds and innovative technologies

We have been building power thyristor units for over 30 years - our latest range of high-tech solid state contactors and thyristor units benefit from that experience.

A site near you

Trained engineers located throughout the country can work with you to define the solution you need.



Experience with your sector

We can offer experience based solutions to suit your processes whatever your field of activity. Typical applications include: food processing, metallurgy, chemistry, pharmacy, automotive, pulp and paper, plastics, research and laboratories



Choose Eurotherm equipment for :

... a complete range of process-control solutions

As leaders in industrial process control we can offer a full range of integrated products including:

- Sensors, convertors, display units,
- Single and multi-loop temperature and process controllers and programmers,
- Solid state contactors and thyristor units,
- Recorders, data acquisition and data management systems
- Supervisory systems,
- Remote input/output communicating interfaces
- Process automation systems

... Eurotherm's value-added services

Need advice, technical support (product or application), training, help with commissioning or troubleshooting? Our specialists are close at hand to give you all the assistance you need.

... assurance

An effective partnership which maximises your investments.

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