

7100L

MODEL



Single Phase Solid State Contactor for use with Resistive Loads Specification Sheet

Ideal for :

- Small ovens
- Chillers
- Sterilisers
- Heat sealing

Features :

- Current range from 16 to 100 amps at 45°C
- Voltage up to 500V
- Simple installation and maintenance
- Reduced size due to optimised design
- Protected against transients
- Fast cycle times give increased heater life
- High reliability with no mechanical contacts
- 2 Year warranty

The 7100L is a simple, economic solid state contactor for use with low temperature coefficient resistive loads.

The 7100L range provides an effective replacement for electromechanical contactors. Fast switching reduces the thermal cycling of the elements resulting in long element life. There are no mechanical contacts to wear out and so maintenance costs and downtime are reduced.

Silent operation and lack of electrical interference, achieved by zero voltage switching, give environmentally friendly operation.

Ratings

The 7100L is offered in a wide range of current ratings (from 16 to 100 amps) which are rated at 45°C

Inputs

These units, with integral heatsinks, are driven by a logic input signal which can be either DC or AC, depending on the order code. Firing is ON/OFF in response to the logic input, with zero voltage switching.

A green 'heat' LED indicator on the front face indicates the status of the input signal.

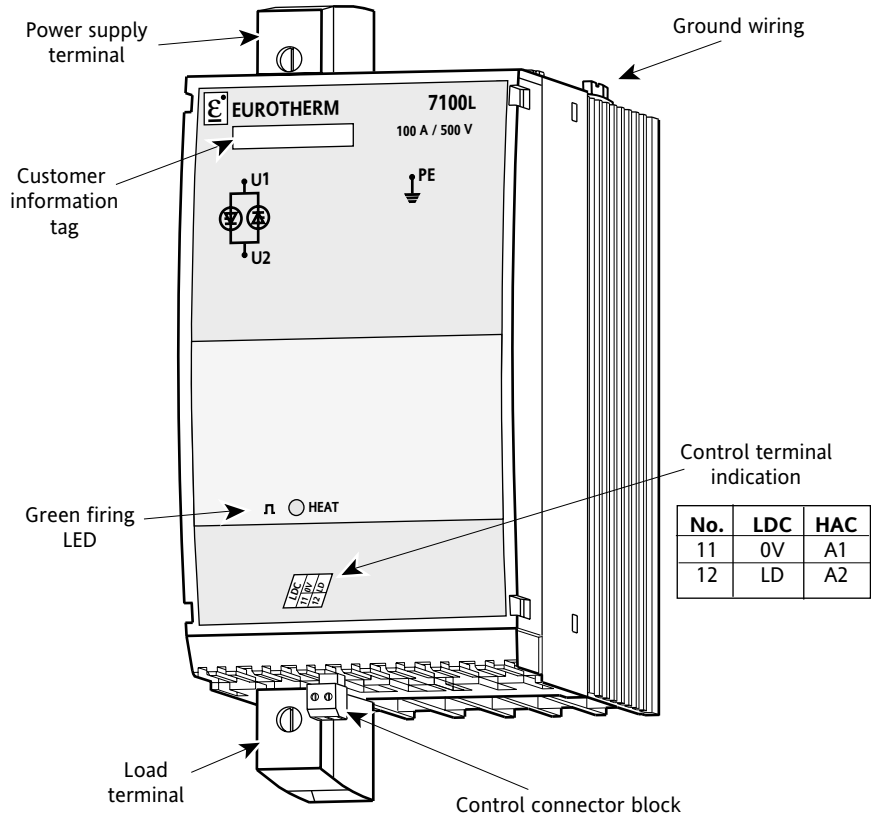
Fusing

High speed fuses are external to the unit and can be ordered complete with fuseholder as part of the 7100L order code. Spare fuses or complete fuse and fuseholder assemblies can also be ordered separately.

International approvals

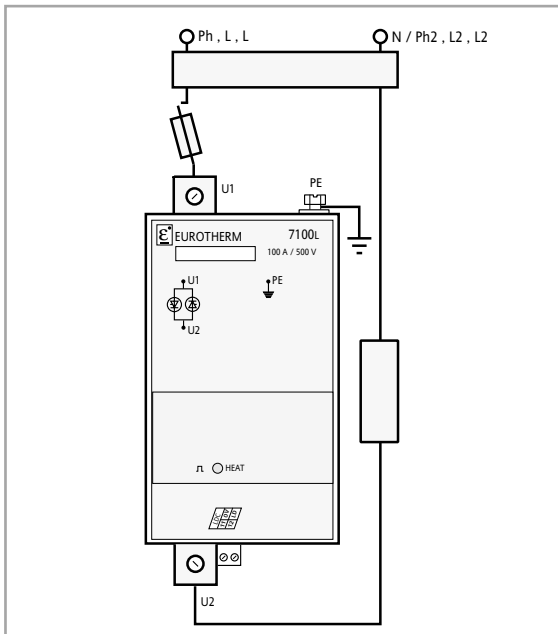
CE (EN60947-4-3), UL and cUL (file number E86160)

7100L



Example of 7100L layout

Wiring schematic



CAUTION

7100L Solid State Contactors must be mounted and wired by qualified staff, authorised to work on low voltage electrical facilities

TECHNICAL SPECIFICATION

Additional information and documentation available on www.eurotherm.co.uk

POWER

Current 16, 25, 40, 63, 80 and 100 amps single phase at 45 degrees C.
Voltage 230V (48-253V), 500V (96-550V)
Frequency 47 to 63 Hz

LOAD

Load type Constant resistance single phase load, switched Line to Neutral or Line to Line.- Select appropriate voltage

FUSE

An external fuse is necessary in order to protect the solid state contactor (see the Ordering code)

INPUT

DC Logic (LDC). 5 to 32 VDC (ON > 5V, OFF < 2V) or (ON > 9mA, OFF < 0.5mA).
AC Logic (HAC) 100 to 230VAC (ON > 85VAC, OFF < 10VAC) 253VAC maximum. Impedance 7K at 50 Hz.

FIRING MODE

Logic firing (ON/OFF) with zero voltage switching.

INDICATION

Green 'HEAT' LED on front face indicates the presence of the input signal.

ENVIRONMENT

Temperature Operating: 0 to 45 Deg. C. (2,000 metres maximum altitude).
Storage: -10 to 70 Deg. C.
Pollution Pollution degree 2
Humidity 5 to 95% Non condensing, non streaming.
Enclosure protection. IP20 without additional protection.
Cooling Natural convection.
Heat dissipation 1.3 watts per amp. Allow 2 watts per amp to include heat dissipation from fuse (if used).
Safety standards Installation category II

INSTALLATION

Mounting. Allow a minimum of 10mm between units. Unit must be mounted with fins running vertically.
Rating from 16 to 63A: one symmetric DIN rail EN50022 or panel mounting (2 x M4 screws).
Rating from 80 to 100A: two symmetric DIN rail EN50022 (125mm between centres) or panel mounting (4 x M4 screws)
Max. cable size. 16 and 25 amp: 6mm². 40 and 63 amp: 16mm². 80 and 100 amp: 35mm²

PRODUCT STANDARD

The 7100L products comply with the terms of product standard EN 60947-4-3. Contactors and motor-starters - AC semiconductor controllers and contactors for non-motor loads.

CE LABELLING

7100L units installed and used according to User Instructions document HA176385FED comply with the requirements of the European Low Voltage Directive 73/23EEC (93/68 EEC) and product standard EN60947-3. This enables the installation in which the products are used to be declared compliant with the EMC directive, as regards the 7100L units.

WARRANTY

2 years

PHYSICAL DATA

	H(mm)	W(mm)	D(mm)	Weight Kg
16A	164	35	110	0.3
25A	164	35	140	0.45
40A	164	52.5	140	0.68
63A	164	70	160	0.9
80A - 100A	226	96	164	1.56

ORDERING CODE

7100L	1	2	3	4	5	6	NONE	00
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1 Current 16A 16 amps 25A 25 amps 40A 40 amps 63A 63 amps 80A 80 amps 100A 100 amps	2 Voltage 230V 230 volts 500V 500 volts	4 Input LDC DC logic HAC AC logic
3 Fuse FUSE External fuse MSFU Fuse + m/switch NONE No fuse	5 Language ENG English FRA French GER German SPA Spanish ITA Italian	

SPARE FUSE AND HOLDER

Current rating amps	Fuse and holder assembly	Fuse and Holder with Microswitch
16	FU1038/16A/00	MSFU1451/16A
25	FU1038/25A/00	MSFU1451/25A
40	FU1451/40A/00	MSFU1451/40A
63	FU2258/63A/00	MSFU2258/63A
80	FU2258/80A/00	MSFU2258/80A
100	FU2760/100A/00	MSFU2760/100A

SPARE FUSE

Current rating amps	Fuse number	Fuse Trip with Indicator
16	CH260024	CS176513U020
25	CH260034	CS176513U032
40	CH30054	CS176513U050
63	CS173087U080	CS176461U080
80	CS173087U100	CS176461U100
100	CS173246U125	CS173246U125

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