

7100L

MODEL



EUROTHERM

CONTROLS
PROCESS AUTOMATION
RECORDERS

Single Phase Solid State Contactor

Benefits/Features:

- **Current range; from 16 to 100 amps at 45°C**
- **Voltage up to 500V (600V available non CE)**
- **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**

A new range of simple, economic solid state contactors for use with low temperature coefficient resistive loads.

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.

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.

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.

Technical specification

ELECTRICAL RATINGS

Current	16, 25, 40, 63, 80 and 100 amps single phase at 45 degrees C.
Voltage	230V (48-253V), 500V (96-550V) or 600V non CE (96-660V)
Frequency	47 to 63 Hz

LOAD

Load type Constant resistance single phase load, switched Line to Neutral or Line to Line.

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

Humidity	5 to 95% Non condensing, non streaming.
Pollution	Pollution degree 2
Enclosure protection.	IP20 without additional protection.
Temperature	Operating: 0 to 45 Deg. C. (2,000 metres maximum altitude). Storage: -10 to 70 Deg. C.
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 3 (voltage transients must not exceed 4.0 KV)

INSTALLATION

Dimensions (H x W x D) mm	16A: 156 x 35 x 110.	25A: 156 x 35 x 140.	40A: 156 x 52.5 x 140.
	63A: 156 x 70 x 160.	80-100A: 226 x 96 x 164.	
Mounting.	DIN Rail or panel mounting. Allow a minimum of 10mm between units. Unit must be mounted with fins running vertically.		
Max. cable size.	16 and 25 amp: 6mm ² . 40 and 63 amp: 16mm ² . 80 and 100 amp: 35mm ²		

CE MARKING

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.

Ordering code



1	Current	2	Voltage	3	Fuse	4	Input	5	Language
16A	16 amps	230V	230 volts	FUSE	External fuse	LDC	DC logic	ENG	English
25A	25 amps	500V	500 volts	MSFU	Fuse + m/switch	HAC	AC logic	FRA	French
40A	40 amps	600V	600 volts (not CE)	NONE	No fuse			GER	German
63A	63 amps							SPA	Spanish
80A	80 amps							ITA	Italian
100A	100 amps								

FUSES

Current rating amps	Fuse rating amps	Fuse number	Fuse and holder assembly
16	20	CH260024	FU1038/16A/00
25	32	CH260034	FU1038/25A/00
40	50	CH330054	FU1451/40A/00
63	80	CS173087U080	FU2258/63A/00
80	100	CS173087U100	FU2258/80A/00
100	125	CS173246U125	FU2760/100A/00

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