

7100S

Single Phase Solid State Contactor



The Model 7100S is a new range of economic solid state contactors for use with low temperature coefficient resistive loads. It features integral heatsinks with AC or DC logic inputs for fast switching that reduces thermal cycling of the heating elements resulting in longer element life. Options include Gross Fault (GRF) and Diagnostic Load Failure (DLF). GRF indicates when a shorted device or an open load is detected. DLF detects a shorted device, an open load and partial load failure. There are no mechanical contacts to wear out so maintenance costs and downtime are reduced. Silent operation and lack of electrical interference achieved by zero voltage switching give environmentally friendly operation.

Ordering code Phased introduction, consult Eurotherm for availability

7100S	1	2	3	4	5	6	7	8
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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
127V	127 volts
230V	230 volts
277V	277 volts
500V	500 volts

3	Filter
FILT	16 to 40A (std)
	63 to 100A: w/filter
NONE	without filter

4	Fan Supply
XXXX	16A to 100A (no fan)

† Current rating will extend up to 630A. Check availability.

5	Fuse
FUSE	Fuse no microswitch
MSFU	Fuse with microswitch
NONE	No fuse

6	Input
LDC	DC logic
HAC	AC logic
ATP	DC 4-20mA (fast cycle firing)

7	Manual Language
ENG	English
FRA	French
GER	German

8	Options
NONE	(end of code)
YES	(specify further code)

High speed fuses not recommended for short wave infrared heaters. Spare fuses see page 3-47.

Optional

9 Alarm option

GRF	SCR short circuit or load open circuit
DLF	Partial load failure + GRF
NONE	No alarms

10 DLF Load type

For alarm option DLF:	
LTCL	Resistive (std)
SWIR	Short Wave Infrared
XXXX	If 'DLF' not specified

11 Alarm Relay Contacts

	GRF or DLF alarm opt.
NO	Open in alarm
NC	Closed in alarm
XX	If alarm choice 'none'

12 Comms Option

NONE	No comms
MOD	Modbus

13 Baud Rate

For comms option:	
9K6	96 Kbaud
19K2	192 Kbaud
XXXX	No comms

14 Certificate

NONE	No certificate of conformity
CFMC	Certificate of conformity

Features

- 16-100 amps, 120-500Vac
- On-Off logic or fast cycle firing
- load diagnostics and fault indication
- optional Modbus® comms

Specifications

Dimensions:

16A:	156H x 35W x 110D mm
25A:	156H x 35W x 140D mm
40A:	156H x 52.5W x 140D mm
63A:	156H x 70W x 160D mm
80A:	226H x 96W x 164D mm
100A:	226H x 96W x 164D mm

Line Voltage:

127V, 230V, 277V or 500V (+10%, -15%),
47 to 63 Hz

Load:

Resistive

Firing mode:

Zero cross, logic on-off or fast cycle

Inputs:

DC logic (LDC): On: 5 to 32 Vdc, > 9 ma,
Off: < 2 Vdc or <0.5 ma

AC logic (LDC): On: 85-253Vac, 8.5 KW/
60 Hz, Off: < 10
VacATP

Analog (ATP): 4-20mA fast cycle burst
firing

Options:

GRF: detects shorted SCR and an
open load

DLF: detects a shorted SCR, an open
load and partial load failure

Communications:

Modbus®: 9600 or 19200 baud

Mounting:

Panel or symmetrical Din Rail

Ambient:

0 to 45°C

External fuses and holders may be ordered separately, see pages 3-47 to 3-49.