7300A
True Three Phase SCR Power Controller

Features

- 16-40A, 120-500V
- current limit option for phase angle and selected burst firing modes
- SCR short circuit or open circuit alarm option
- diagnostic and status LED's

The model 7300A is a rugged three-phase SCR Power Controller designed with Din Rail or panel mounting. The 7300A offers zero cross firing for fixed resistance loads or phase angle firing for inductive and variable resistance loads. This unit is available with optional load diagnostics, which monitors SCR failure, total load failure and partial load failure.

Specifications

Dimensions:
16 to 40A: 220H x 96W x 225D mm (basic)
220H x 96W x 243D mm (w/options)
Above 40A: consult Eurotherm
Operating temperature:
0 to 45°C at nominal current
Mounting:
Panel mounting
Load type:
Resistive, Short Wave Infrared, and Inductive/Transformer coupled
Inputs:
0-20mA, 4-20mA, 0-5V, 0-10V
Firing mode:
Phase Angle, Single Cycle, Advanced Single Cycle, Burst firing, Transformer Burst Firing
Optional features include:
Overcurrent alarm
Diagnostic partial load failure alarm (DLF)
Power control mode
Current limit/chop off
Delay on first firing for burst firing transformers
Communications

Ordering codes

7300A	1	2	3	4	5	6	7	8	9	10	11

12	13	14	15	16	17	18	19	20

1 Current †

16A	16 amps
25A	25 amps
40A	40 amps
63A	63 amps
80A	80 amps†
100A	100 amps†
125A	125 amps†
160A	160 amps†

2 Voltage

200V	200 volts
230V	230 volts
277V	277 volts
400V	400 volts
460V	460 volts
480V	480 volts
500V	500 volts

3 Aux. voltage

SELF	Self-powered (except 690V)
115V	115V
230V	230V

4 Fan Supply

XXXX	≤63A : No fan
115V	>80A:115V fan with 115V or SELF electronics
230V	230V fan with 230V or SELF electronics

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

5 Load Coupling

3S	Star without neutral
4S	Star with neutral
3D	Closed delta
6D	Open delta

6 SCR Fuse

FUSE	Standard fuses
MSFU	Fuses with fuse blown microswitch
NONE	No fuses (short wave infrared elements)

† Consult factory for availability

7 Firing Mode

PA	Phase angle
C16 C64	Burst mode: base time 16 cycles base time 64 cycles
FC1	Single-cycle: 1 base cycle
ASC	Advanced single-cycle: 1 base cycle non-firing by half cycles in 4S or 6D coupling only

8 Internal EMC Filter

XXXX	Phase angle or rating ≥125A: no filter
FILT NONE	Burst mode or single-cycle 16A to 100A: with filter no filter

9 Input

	Analog signal:
0mA20	current 0--20mA
4mA20	current 4-20mA
0V5	voltage 0V-5V
0V10	voltage 0V-10V

10 Manual Language

ENG	English
FRA	French
GER	German

11 Selected Options

NONE	No options, V^2 control and End of code
YES	Version with Options

Options for Phase Angle Firing

12 Control Options

V2	Voltage control (V^2)
I2	Current control (I^2)
V2I2	Current limit by control transfer (V^2 to I^2)
VII2	Current limit by control transfer (VxI to I^2)
OL	Open loop

13 Delay on First Firing

XXXX	No delay on first firing

14 Type 1 Alarms

GRF	Serious alarms: SCR short-circuit, total load failure, over-temperature for ratings ≥80A
DLF	Partial load failure and Serious Alarms
NONE	No alarms

15 Load type (for DLF)

SWIR	With DLF option: Short wave infrared elements
LTCL	Low temperature coefficient load
XXXX	Without DLF option or High temperature coefficient load

16 Type 2 Alarm

XXXX	No over-current alarm

17 Alarm Relay Contact

NC	With alarm option: Contact closed on alarm
NO	Contact open on alarm
XX	without alarm option

Options for Burst /Single-Cycle Firing

12 Control Options

V2	Voltage control (V^2)
V2CL	Burst firing C16 only: Voltage control (V^2) and current limit
VICL	Power control (VxI) and current limit

13 Delay on First Firing

	Burst firing C16 or C64
XFMR	Transformer primary
NONE	Other configurations
XXX	Single cycle (FC1/ASC)

14 Type 1 Alarms

GRF	Serious alarms: SCR short-circuit, total load failure, over-temperature for ratings ≥80A
DLF	Partial load failure and Serious Alarms
NONE	No alarms

15 Load type (for DLF)

SWIR	With DLF option: Short wave infrared elements
LTCL	Low temperature coefficient load
XXXX	Without DLF option or High temperature coefficient load

16 Type 2 Alarm

ICO	Over-current alarm (for DLF option) except codes:SWIR, XFMR, VICL and V2CL
NONE	No over-current alarm

17 Alarm Relay Contact

NC	Contact closed on alarm
NO	Contact open on alarm
XX	no alarm option

18 19 Comms Option

NONE	Available later

20 Certification Option

NONE	No certificate of Compliance w/ order
CFMC	certificate of Compliance w/ order