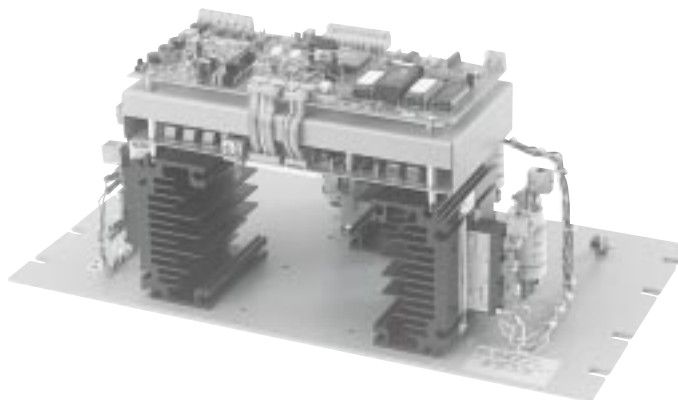




7830

Three Phase Six-SCR Power Pak



- Phase-Angle Firing
- ON/OFF Power Control
- Proportional Power Control
- 3 Phase Delta, 3-Wire Wye or 4-Wire Wye Connected Loads
- 6 SCR Full Converter
- 208-575 Vac @ 30-400 Amps
- Interchangeable Modular Firing
- Shorted SCR Protection (Option for Proportional & On-Off Firing)
- dV/dT Voltage Transient Protection

Description

The 7830 Three Phase Solid State Six SCR Power Controller is a highly versatile power pak with plug-in firing control boards, which can be changed in minutes from one firing technique to another. Firing techniques include: Phase Angle Firing, ON/OFF Power Control (Contactor) and Proportional Power Control (Zero Voltage Switching, DOT fire). DOT Firing provides the finest resolution of output with the EMI and RFI immunity of a zero-crossover design.

Phase Angle Features

- Current Limiting (10-100% of rated output current)
- Soft Start (25% demand per second)

Phase Angle and Proportional Features

- Adjustable Zero, Gain and Manual Bias
- Remote Manual Bias Optional

Mechanical Features

- LED Indication of Firing.
- Electrical Control Connections made on a Plug-In Screw Type Terminal Block.
- Zero, Gain, Manual Bias and Optional Remote Manual Bias.
- Current Limit Optional
- Heat Sink Mounted Thermostat Protection with N.C. Contact Standard on Forced-Air Cooled Units and N.O. Contact Available on All Units.

Electrical Features

- SCRs PIV 1200V Minimum.
- Isolated Semiconductor Power Blocks are used on ALL Current Ratings.
- Operates in Balanced or Severely Unbalanced Load Application.
- Shorted SCR Detection (1A alarm output)

Safety Features

Personnel Safety

- Ground Potential Heat Sink
- SCR to Heat Sink Isolation (1200 Volt)

Equipment/Process Safety

- Input to Output Isolation (1500 Volt)
- Transient Overvoltage Protection
- I²T Fuse Protection Option
- Emergency Shutdown



More Information
is Available Online
on SCR Power Control.

Bookmark Your Browser to
www.chromalox.com
and Select **Manuals**.

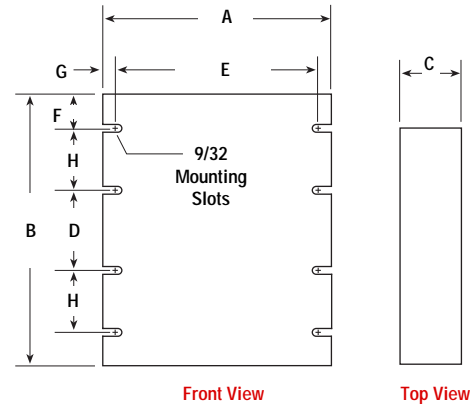
7830 Three Phase Six-SCR Power Pak (cont'd.)

Dimensions

Amps	A	B	C	D	E	F	G	H
30-50-75A	19 (483)	10.46 (266)	8.5 (216)	3 (76)	18.37 (467)	1.48 (38)	.31 (7.87)	2.25 (57)
100-125-150A	19 (483)	17.46 (443)	10.5 (267)	6.5 (165)	18.37 (467)	1.48 (38)	.31 (7.87)	4 (102)
175-200A	19 (483)	24.46 (621)	10.5 (267)	7.5 (190)	18.37 (467)	1.48 (38)	.31 (7.87)	7 (178)
250-300A*	19 (483)	19.21 (488)	10.5 (267)	5.75 (146)	18.37 (467)	1.48 (38)	.31 (7.87)	5.25 (137)
400A*	19 (483)	26.21 (666)	10.5 (267)	9.25 (235)	18.37 (467)	1.48 (38)	.31 (7.87)	7 (178)

500 Amps and above consult factory for dimensions

* Fan cooled. Allow fan clearance below mounting plate, 4" for 250-400 Amps and 6" on 500 Amps and above.



All Dimensions in Inches (mm)

Ordering Information

Complete the Model Number using the Matrix provided.

For more options, see SCR Component Options following the 7930 SCR in this catalog.

In Stock:

Model	PCN
7830-303520-F03	307408
7830-306520-F06	307416
7830-309520-F09	307424
7830-311520-F11	307432

Model	SCR Power Pak
7830	3 Phase Six SCR Power Pak
Code	Output Firing Mode
1	Phase Angle Control (specify 1A for 3-wire, 1B for 4-wire)
2	ON/OFF Control
3	Proportional Control (DOT)
6	On/Off Control with Shorted SCR Detection
7	Proportional Control (DOT) with Shorted SCR Detection
Code	Current at 50° C (122° F)
01	30 Amps
02	50 Amps
03	75 Amps
04	100 Amps
05	125 Amps
06	150 Amps
07	175 Amps
08	200 Amps
09	250 Amps (Fan Cooled)
10	300 Amps (Fan Cooled)
11	400 Amps (Fan Cooled)
X	Consult Factory for 500 Amps and above.
Code	Voltage
2	208 Vac
3	240 Vac
5	480 Vac
6	575 Vac
Code	Input Signal
16	0-5mA into 1000 Ohms
17	0-20mA into 250 Ohms
18	0-50mA into 100 Ohms
19	1-5mA into 1000 Ohms
20	4-20mA into 250 Ohms
21	10-50mA into 100 Ohms
22	0-5 Vdc into 1000 Ohms
23	0-10 Vdc into 1000 Ohms
24	120 Vac (ON/OFF Control only)
25	240 Vac (ON/OFF Control only)
26	Contact Closures (ON/OFF Control only)
27	3-32 Vdc (ON/OFF Control only)
X	Other (Consult Factory)
Code	Options
	See Options Table at end of this section.

7830 - 1A 08 3 21 - F08-14 (3) Typical Model Number