4530 Series

SCR Temperature/ Power Control Panels

- **40 to 90 Amps**
- **Voltage Field Selectable**
- **Three Phase, Two Leg**
- **Zero Crossover Fired**
- **NEMA 12*, 4 and 7 Enclosures**
- **Cost Effective SCR Power Control**
- **Pre-Wired, Ready to Install**

Description

The 4530 SCR Panel Series is an economical, convenient solution to mid-range SCR power control requirements, and eliminates the need to select, collect and assemble separate components. The pre-configured panels are ready to install, requiring only power supply, load and sensor wiring. Compact packaging makes them easy to mount, even in limited spaces.

The control signal may be a customer supplied 4-20 mA signal or manually operated with remote or door mounted potentiometer, or a Chromalox model 2104 digital indicating temperature controller.

An optional digital indicating or non-indicating overtemperature controller can be provided.

Model 4537
Explosion Proof Control Panel

Features

- Enclosure -

NEMA 12*	General Purpose, fan cooled and louvered
NEMA 4	Weatherproof
NEMA 7	Explosion-proof for Class I, Groups C&D

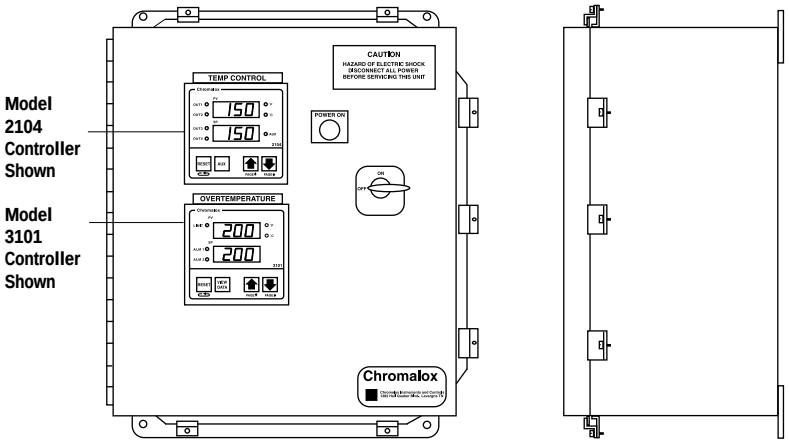
- Control Signal Input Device
- Zero-Crossover Fired SCR Power Controllers
- Manual Disconnect Switch
- I^2T Fusing for SCR Protection
- Overtemperature Shutdown Contactor
- Power “ON” Pilot Light
- Multi-Tap Control Power Transformer
- Optional Overtemperature Controller with Reset
- Drawings for Record
- Installation and Operation Manual
- Terminals Provided for remote shutdown

* Ventilating a Nema 12 enclosure alters the rating to Nema 1

4532, 4534

SCR Temperature/ Power Control Panels *(cont'd.)*

Dimensions



Front View

Side View

Ordering Information

All Dimensions in Inches (mm)

Complete the Model Number using the Matrix provided.

Model	SCR Power Control Panel, Model 4115 Two Leg Zero Crossover Fired SCR, I²T Fusing, Fused Control Power Transformer, Main Disconnect, Power "ON" Lamp, Outgoing Terminal Blocks, Temperature Controller and Optional Overtemperature Controller
4532	Control Panel as described above in Louvered, Fan Cooled NEMA 12 Enclosure, Door Mounted Controller(s)
4534	Control Panel as described above in NEMA 4 Enclosure, Door Mounted Controller(s) with Integrally Hinged Window.

Code	Voltage (Multi-Tap Transformer)	Amps NEMA 12* 40°C	Amps NEMA 4 25°C	Amps NEMA 4 40°C	Power at 40°C** Three Phase Loads (kW) NEMA 12	Power at 40°C** Three Phase Loads (kW) NEMA 4	Power at 40°C** Two Single Phase Loads (per phase) (kW) NEMA 12	Power at 40°C** Two Single Phase Loads (per phase) (kW) NEMA 4	External Dimensions (In.) NEMA 12* Enclosure	External Dimensions (In.) NEMA 4* Enclosure
40	120 Vac				—	—	11	3.5		
	240 Vac	90	47	30	37.5	12.5	21	7	20x20x9	24x20x8
	480 Vac				75	25	43	14.5		

Code	Temperature Controller
1	Terminal Connections for remote control signal: 4-20mA, 3-32 Vdc, contact closure or 10K potentiometer.
2	Door Mounted 10K Potentiometer, 0 to 100% Power Output Scale.
5	Digital Indicating PID Temperature Controller, Model 2104, door mounted.

Code	Overtemperature Controller***
0	No provision for Overtemperature Controller
1	Non-indicating Model 3283-04000, 0-1000° F (0-500°C), Type J Thermocouple.
2	Non-indicating Model 3283-21000, 0-2000°F (0-1000°C), Type K Thermocouple.
3	Digital Indicating Model 3101-11000 Overtemperature Controller, door mounted.

Code	
0	Add to complete model number

4534 -	**40**	**5**	**3**	**0**	Typical Model Number

*See NEMA Enclosure Descriptions in this catalog.
**Consult Factory For Higher Power Ratings
***See "Single Channel Controllers" for controller specifications.

In Stock:

Model	PCN
4532-40530	307070
4534-40530	307088

4537

SCR Temperature/ Power Control Panels *(cont'd.)*

Ordering Information

Complete the Model Number using the Matrix provided.

Model	SCR Power Control Panel
4537	NEMA 7 Explosion-Proof Enclosure (suitable for Class I, Group C & D Hazardous locations), Model 4115 Two Leg Zero Crossover Fired SCR, I^2T Fusing, Fused Control Power Transformer, Main Disconnect, Power "ON" Lamp, Outgoing Terminal Blocks, Internal Shutdown Thermostat for SCR Overheating Protection, 2 each (top and bottom) 1.5" Diameter Conduit Openings for Power Supply and Load Wiring, 1 each (top) 0.5" Conduit Opening for Sensor Wiring. Sub-Panel Mounted Temperature and optional Overtemperature Controllers, 3" Diameter Panel Door Window and Door Mounted Reset Pushbutton.

Code	Voltage (Multi-Tap Transformer)	Amps 77°F (25°C)	Amps 104°F (40°C)	Power at 40 C* Three Phase Load (kW)	Power at 40 C* Two Single Phase Loads (per phase) (kW)	External Dimensions (In.)
	120 Vac	60	45	—	5.5	28.4 x 22.4 x 11.75
40	240 Vac	60	45	18.5	11	
	480 Vac	60	45	37.5	21.5	

Code	Temperature Controller**
1	Terminal Connections for remote control signal: 4-20mA, 3-20 Vdc, contact closure or 10K potentiometer.
5	Digital Indicating PID Temperature Controller, Model 2104, sub-panel mounted.

Code	Overtemperature Controller**
0	No provision for overtemperature controller
1	Non-indicating Model 3283-04000, 0-1000° F (0-500°C), Type J Thermocouple.
2	Non-indicating Model 3283-21000, 0-2000°F (0-1000°C), Type K Thermocouple.
3	Digital Indicating Model 3101 Overtemperature Controller, sub-panel mounted.

Code	
0	Not Used
1	NEMA 7/4 - Explosion-proof with weatherproof Gasketing.

4537 -	40	5	2	1	Typical Model Number

*Consult Factory For Higher Power Ratings
** See "Single Channel Controllers" for controller specifications.

NEMA Enclosure Descriptions

NEMA 3R - Enclosures are intended for outdoor use primarily to provide protection against falling rain, sleet and external ice formation.

NEMA 4 - Enclosures are intended for indoor or outdoor use primarily to provide protection against windblown dust and rain, splashing water and hose-directed water.

NEMA 7 - Enclosures capable of withstanding the pressures resulting from an internal explosion of specified gas, and contain such an explosion sufficiently that an explosive gas-air mixture existing in the atmosphere surrounding the enclosure will not be ignited. Enclosed heat-generating devices will not cause external surfaces to reach temperatures capable of igniting explosive gas-air mixtures in the surrounding atmosphere.

NEMA 12 - Enclosures are intended for indoor use primarily to provide protection against dust, falling dirt, and dripping non-corrosive liquids. When ventilated a Nema 12 enclosure rating is altered to Nema 1.

Note - These descriptions are not intended to be complete representations of National Electric Manufacturers Assoc. (NEMA) standards for enclosures.