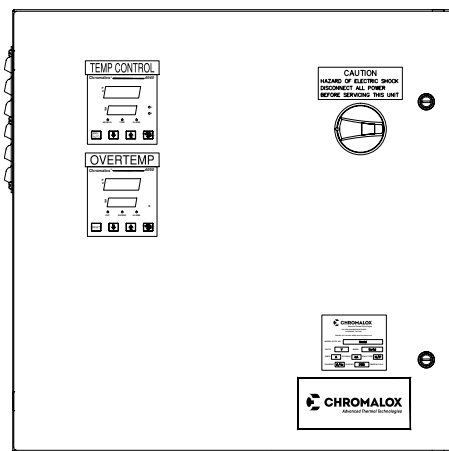


## 4530 Series SCR Temperature/ Power Control Panels

- 30 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



*Front View*

### 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 digital indicating temperature controller.

An optional digital indicating overtemperature controller can be provided.



*Model 4537  
Explosion Proof Control Panel*

### Features

- Enclosure -
  - NEMA1 General Purpose, indoor
  - NEMA 12\* General Purpose, fan cooled and louvered
  - NEMA 4 Weatherproof
  - NEMA 7 Explosion-proof for Class I, Div. 1&2, Groups B,C&D Class II, Div. 1&2, Groups E,F & G
- Control Signal Input Device
- Zero-Crossover Fired SCR Power Controllers
- Manual Disconnect Switch
- I<sup>2</sup>T Fusing for SCR Protection
- Overtemperature Shutdown Contactor
- Power "ON" Pilot Light
- Multi-Tap Control Power Transformer 480/240/120 Vac
- Optional Overtemperature Controller with Reset
- Drawings for Record
- Installation and Operation Manual
- Terminals Provided for remote shutdown
- Optional Ground Fault Monitor with Door Mounted Illuminated Reset
- Optional Enclosure Heater Anti-Condensation and Instrument Protection for Ambient Temperatures as low as 0°F

\* NEMA 12 available with additional venting measures. Consult Factory.



## 4532

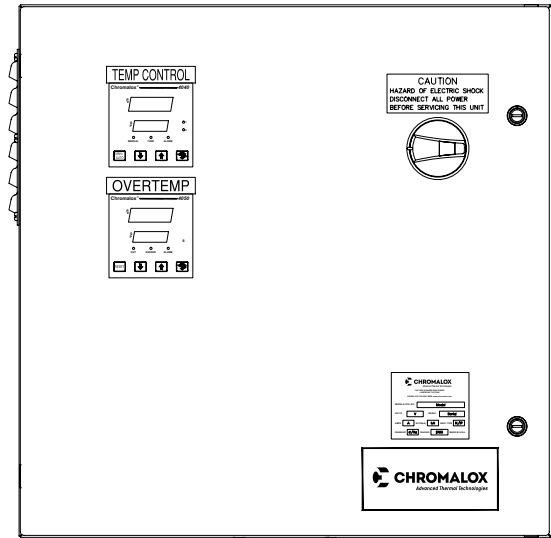
### SCR Temperature/ Power Control Panels

(cont'd.)

**In Stock:**

Model	PCN
4532-40530	307070

**Note:** Additional control panel options available. See pages H-143 to H-145.



### Ordering Information

Complete the Model Number using the Matrix provided.

**Model**

**4532 Three Phase Two-Leg Zero Fired SCR Power Control Panel**

**Panel Configuration**

cUL and UL Listed Three Phase SCR Power Control Panel. Features: Factory pre-wired for quick installation, Step-down Transformer with Primary & Secondary Fusing for 120 volt Control Circuit, NEMA 1/12\*\* rated Enclosure for Indoor Applications, Forced Air Cooling, Main Disconnect Switch, Three-Pole Shutdown Contactor, and SCRs for Power Switching. Options Include: Process and Hi-Limit Controllers, Customer Supplied Control Signal, Door Mounted Potentiometer and Ground Fault Monitor. **NOTE:** A Vari-Watt is supplied when either the Customer Supplied Control Signal or 10K Potentiometer Control Option is selected.

**Code Current @ 40°C (104°F) Ambient**

Code	SCR Component	Enclosure Dimensions
40	90 Amp SCR Power Controller	(24"H x 24"W x 10"D)

**Code Process Controller Options**

- 1 Terminal Block for Customer Supplied Control Signal (4-20 mA, 3-20 VDC, Contact Closure, or 10K Potentiometer)
- 2 Door Mounted 10K Potentiometer, 0 - 100% Power Output Scale
- 3 6040-SR0000 1/16 DIN SSR, Relay
- 4 6040-SRA100 1/16 DIN SSR, Relay, Retransmit, RS485
- 5 4040-SR0000 1/4 DIN SSR, Relay
- 6 4040-SRA110 1/4 DIN SSR, Relay, Retransmit, RS485, Remote Setpoint
- 7 4080-COSRA-04000 1/4 DIN Graphic Display, SSR, Relay, Retransmit, Ethernet

**Code Overtemperature Controller Options**

- 0 None
- 1 6050-1R000 1/16 DIN Fixed 5A Relay, Relay
- 2 6050-1RA10 1/16 DIN Fixed 5A Relay, Relay, Retransmit, RS485
- 3 4050-1R000 1/4 DIN Fixed 5A Relay, Relay
- 4 4050-1RA10 1/4 DIN Fixed 5A Relay, Relay, Retransmit, RS485

**Code Ground Fault Sensing/Interrupt Option**

- 0 None
- 1 Ground Fault Monitor & Shutdown includes Illuminated Reset Switch

4532- 40 5 3 0 **Typical Model Number**

**Technical Notes:**

- \*Ground Fault detection requires grounded supply
- \*\*NEMA 12 available with additional venting measures. Consult factory.

CONTROL SYSTEMS

## 4534

### SCR Temperature/ Power Control Panels

(cont'd.)

**Note:** Additional control panel options available. See pages H-143 to H-145.

#### Model

#### 4534 Three Phase Two-Leg Zero Fired SCR Power Control Panel

##### Panel Configuration

cUL and UL Listed Three Phase SCR Power Control Panel. Features: Factory pre-wired for quick installation, Step-down Transformer with Primary & Secondary Fusing for 120 volt Control Circuit, NEMA 4 rated Enclosure for Indoor/Outdoor Applications, Main Disconnect Switch, Three-Pole Shutdown Contactor, and SSRs for Power Switching. Options Include: Process and Hi-Limit Controllers, Customer Supplied Control Signal, Door Mounted Potentiometer, Cabinet Heater and Ground Fault Monitor. NOTE: A Vari-Watt is supplied when either the Customer Supplied Control Signal or 10K Potentiometer Control Option is selected.

##### Code Current @ 40°C (104°F) Ambient

	SCR Component	Enclosure Dimensions
40	30 Amp Solid State Relays	(24"H x 24"W x 10"D)

##### Code Process Controller Options

1	Terminal Block for Customer Supplied Control Signal (4-20 mA, 3-20 VDC, Contact Closure, or 10K Potentiometer)
2	Door Mounted 10K Potentiometer, 0 - 100% Power Output Scale.
3	6040-SR0000 1/16 DIN SSR, Relay
4	6040-SRA100 1/16 DIN SSR, Relay, Retransmit, RS485
5	4040-SR0000 1/4 DIN SSR, Relay
6	4040-SRA110 1/4 DIN SSR, Relay, Retransmit, RS485, Remote Setpoint
7	4080-COSRA-04000 1/4 DIN Graphic Display, SSR, Relay, Retransmit, Ethernet

##### Code Overtemperature Controller Options

0	None
1	6050-1R000 1/16 DIN Fixed 5A Relay, Relay
2	6050-1RA10 1/16 DIN Fixed 5A Relay, Relay, Retransmit, RS485
3	4050-1R000 1/4 DIN Fixed 5A Relay, Relay
4	4050-1RA10 1/4 DIN Fixed 5A Relay, Relay, Retransmit, RS485

##### Code Options

0	None
1	Ground Fault Monitor & Shutdown includes Illuminated Reset Switch *
2	Thermostat Controlled Enclosure Heater
3	Ground Fault Monitor & Enclosure Heater

4534- 40 5 3 0 Typical Model Number

## 4537

### SCR Temperature/ Power Control Panels

(cont'd.)

#### Ordering Information

Complete the Model Number using the Matrix provided.

**Note:** Additional control panel options available. See pages H-143 to H-145.

#### 4537 Three Phase Two-Leg Zero Fired SCR Power Control Panel - Class I, Div 1 & 2, Group B, C, D, Class 2, Div 1 & 2, Groups E, F, G

##### Panel Configuration

Three Phase SCR Power Control Panel. Features: Factory pre-wired for quick installation, Step-down Transformer with Primary & Secondary Fusing for 120 volt Control Circuit, NEMA 7 rated Explosion-Proof Enclosure for Hazardous Areas, Main Disconnect Switch, Three-Pole Shutdown Contactor, SSR's for Power Switching, and Viewing Window. Options Include: Process and Hi-Limit Controllers, Customer Supplied Control Signal, Cabinet Heater, Weather Proof-Gasket, and Ground Fault Monitor. NOTE: A Vari-Watt is supplied when the Customer Supplied Control Signal Control Option is selected.

##### Code Current @ 40°C (104°F) Ambient

	Current @ 40°C (104°F) Ambient	SCR Component	Enclosure Dimensions (250 lbs.)
40	45 Amp	Solid State Relays	(28.5"H x 21"W x 13"D)
	<b>Code</b>	<b>Process Controller Options</b>	
	0	Terminal Block for Customer Supplied Signal (4-20 mA, 3-20 VDC, Contact Closure or 10K Potentiometer)	
	1	6040-SR0000 1/16 DIN SSR, Relay	
	2	6040-SRA100 1/16 DIN SSR, Relay, Retransmit, RS485	
	3	4040-SR0000 1/4 DIN SSR, Relay	
	4	4040-SRA110 1/4 DIN SSR, Relay, Retransmit, RS485, Remote Setpoint	
	5	4080-COSRA-04000 1/4 DIN Graphic Display, SSR, Relay, Retransmit, Ethernet	
	<b>Code</b>	<b>Overtemperature Controller Option</b>	
	0	None	
	1	6050-1R020 1/16 DIN Fixed 5A Relay, Relay, Digital Input	
	2	6050-1RA20 1/16 DIN Fixed 5A Relay, Relay, Retransmit, Digital Input	
	3	4050-1R020 1/4 DIN Fixed 5A Relay, Relay, Digital Input	
	4	4050-1RA20 1/4 DIN Fixed 5A Relay, Relay, Retransmit, Digital Input	
	<b>Code</b>	<b>Options</b>	
	0	None	
	1	NEMA 7/4 Weather Proof Gasket for Out Door Applications	
	2	Ground Fault Monitor & Shutdown includes Illuminated Reset Switch*	
	3	Enclosure Heater	
	4	Weather Proof Gasket and Ground Fault Monitor	
	5	Weather Proof Gasket and Cabinet Heater	
	6	Ground Fault Monitor and Cabinet Heater	

4537- 40 5 1 1 **Typical Model Number**

**Note:** A Vari-Watt is supplied when the Customer Supplied Control Signal Control Option is selected.

#### 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.