4168 & 4268

Mini-SCR Power Control Panel

- **NEMA 4 Steel Enclosure for Indoor/Outdoor Environments**
- **Shutdown Contactor**
- **Single or Three Phase 30 and 65 Rating Amp for Resistive Loads**
- **120/240/480 VAC Fused Control Power Transformer**

Description

The 4168/4268 Mini-SCR Power Control Panels are a convenient, economical solution designed to control most process heating applications that require precise temperature control, maximum operating efficiency and proven reliability.

Augmented process and high limit controllers as well as the optional design features provide the user with the flexibility to meet countless application needs. The temperature and process controllers are available in 1/16 or 1/4 DIN sizes and their base features include SSR driver and relay outputs. Remote management capabilities are facilitated via retransmitted or remote setpoint signals or customer supplied process analog input. Communication options include Modbus RTU/RS485 or Ethernet (1/4 DIN 4080 only).

The Limit controllers are also available in either 1/16 or 1/4 DIN sizes. They are equipped with two relay outputs/alarms and optional analog retransmit and Modbus RTU/RS485 communications.

Design feature options include: Ground fault monitoring with shutdown; integral main disconnect switch; and a thermostat-controlled enclosure heater.

Options

- Ground Fault Monitor for Equipment Protection
- Enclosure Heater for Anti-Condensation and Instrument Protection in Ambient Temperatures as low as 0˚F
- Disconnect Switch
- 1/16 or 1/4 DIN Process Controllers
- 1/16 or 1/4 DIN Hi-Limit Controllers
- Load Fusing

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Mini-SCR Power Control Panel *(cont'd.)*

Ordering Information

Model	Single Phase Zero Fired SCR Mini Power Control Panel
4168	cUL and UL Listed Single 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 (24"H x 20"W x 8"D), External Heat Sinks for Indoor/ Outdoor Applications, I^2t Fusing, and Shutdown Contactor. Options Include: Process and Hi-Limit Controllers, Ground Fault Monitoring, Main Disconnect Switch and Enclosure Heater.

Current @ 40°C (104°F)

Code	
3	30 Amp
6	65 Amp

Voltage

Code	
1	120 VAC
2	208 VAC
3	240 VAC
4	480 VAC
6	575/600 VAC

Process Controller Options

Code	
0	None (6 - 12 VDC Control Signal Customer Supplied)
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-C0SRA-04000 1/4 DIN Graphic Display, SSR, Relay, Retransmit, Ethernet
7	Customer Supplied Remote 4 - 20 mAdc, 0-10 VDC, 0-5 VDC

Overtemperature Controller Options

Code	
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

Options

Code	
0	None
1	Ground Fault Monitor & Shutdown incl. Illuminated Reset Switch**
2	Main Disconnect with Through Door Operator
3	Thermostat Controlled Enclosure Heater
4	Ground Fault Monitor & Main Disconnect Switch **
5	Main Disconnect Switch & Enclosure Heater
6	Ground Fault Monitor & Enclosure Heater **
7	Ground Fault Monitor, Main Disconnect Switch & Enclosure Heater **

Load Fusing Option*

Code	
Blank	None
9010(*)	8 Amps/Circuit (10 Amp fuse)
9015(*)	12 Amps/Circuit (15 Amp fuse)
9020(*)	16 Amps/Circuit (20 Amp fuse)
9025(*)	20 Amps/Circuit (25 Amp fuse)
9030(*)	24 Amps/Circuit (30 Amp fuse)
9035(*)	28 Amps/Circuit (35 Amp fuse)
9040(*)	32 Amps/Circuit (40 Amp fuse)
9045(*)	36 Amps/Circuit (45 Amp fuse)
9050(*)	40 Amps/Circuit (50 Amp fuse)
9060(*)	48 Amps/Circuit (60 Amp fuse)
9070(*)	56 Amps/Circuit (70 Amp fuse)
9080(*)	64 Amps/Circuit (80 Amp fuse)

4168-	6	4	2	2	0-	9025(3)	Typical Model Number

*Specify Number of Circuits (Maximum Three Circuits of Load Fusing).

**Ground Fault detection requires grounded supply.

Note:
- Total Amperage not to exceed panel rating
- Maximum 3 Circuits
- Contact Factory for fuse option price and enclosure size requirement

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

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Mini-SCR Power Control Panel *(cont'd.)*

In Stock:

Model	PCN
4268-34112	314739
4268-64112	314763

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

Code	Load Fusing Option
9010(*)	8 Amps/Circuit (10 Amp Fuse)
9015(*)	12 Amps/Circuit (15 Amp Fuse)
9020(*)	16 Amps/Circuit (20 Amp Fuse)
9025(*)	20 Amps/Circuit (25 Amp Fuse)
9030(*)	24 Amps/Circuit (30 Amp Fuse)
9035(*)	28 Amps/Circuit (35 Amp Fuse)
9040(*)	32 Amps/Circuit (40 Amp Fuse)
9045(*)	36 Amps/Circuit (45 Amp Fuse)
9050(*)	40 Amps/Circuit (50 Amp Fuse)
9060(*)	48 Amps/Circuit (60 Amp Fuse)
9070(*)	56 Amps/Circuit (70 Amp Fuse)
9080(*)	64 Amps/Circuit (80 Amp Fuse)

* Add -90XX(*) at end of part number
XX = Fuse Code
(*) = Number of Circuits

Note:
- Total Amperage not to exceed panel rating
- Maximum 3 Circuits
- Contact Factory for fuse option price and enclosure size requirement

Ordering Information

Model 4268 — **Three Phase Two-Leg Zero Fired SCR Mini Power Control Panel**

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 (24"H x 20"W x 8"D), External Heat Sinks for Indoor/Outdoor Applications, I²t Fusing, and Shutdown Contactor. Options Include: Process and Hi-Limit Controllers, Ground Fault Monitoring, Main Disconnect Switch and Enclosure Heater.

Code 3 — 30 Amp
Code 6 — 65 Amp

Code 2 — 208 VAC
Code 3 — 240 VAC
Code 4 — 480 VAC
Code 6 — 575/600 VAC

Code	Process Controller Options
0	None (6 - 12 VDC Control Signal Customer Supplied)
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-C0SRA-04000 1/4 DIN Graphic Display, SSR, Relay, Retransmit, Ethernet
7	Customer Supplied Remote 4 - 20 mAdc, 0-10 VDC, 0-5 VDC

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 incl. Illuminated Reset Switch**
2	Main Disconnect with Through Door Operator
3	Thermostat Controlled Enclosure Heater
4	Ground Fault Monitor & Main Disconnect Switch **
5	Main Disconnect Switch & Enclosure Heater
6	Ground Fault Monitor & Enclosure Heater **
7	Ground Fault Monitor, Main Disconnect Switch & Enclosure Heater **

Code	Load Fusing Option*
Blank	None
9010(*)	8 Amps/Circuit (10 Amp fuse)
9015(*)	12 Amps/Circuit (15 Amp fuse)
9020(*)	16 Amps/Circuit (20 Amp fuse)
9025(*)	20 Amps/Circuit (25 Amp fuse)
9030(*)	24 Amps/Circuit (30 Amp fuse)
9035(*)	28 Amps/Circuit (35 Amp fuse)
9040(*)	32 Amps/Circuit (40 Amp fuse)
9045(*)	36 Amps/Circuit (45 Amp fuse)
9050(*)	40 Amps/Circuit (50 Amp fuse)
9060(*)	48 Amps/Circuit (60 Amp fuse)
9070(*)	56 Amps/Circuit (70 Amp fuse)
9080(*)	64 Amps/Circuit (80 Amp fuse)

4268-	6	4	2	1	0-	9025(3)	Typical Model Number

*Specify Number of Circuits (Maximum Three Circuits of Load Fusing).
**Ground Fault detection requires grounded supply.

Note:
Stocked Panels may be used at 240 VAC by changing strapping of control power transformer.