# CHROMALOX Control Panels

### 4168 & 4268 Mini-SCR Power Control Panel

CHROMALOX

WHC

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





### 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



SWHC



10610 CONTROL PLACE DALLAS, TEXAS 75238

Description

proven reliability.

DIN 4080 only).

communications.

enclosure heater.

The 4168/4268 Mini-SCR Power Control Panels are a convenient, economical solution

designed to control most process heating

applications that require precise temperature

Augmented process and high limit controllers

as well as the optional design features provide

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

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

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

the user with the flexibility to meet countless application needs. The temperature and

control, maximum operating efficiency and

MAIN: 214-340-7500 TOLL FREE: 800-687-2220 SALES@SWHC.COM SWHC.COM

## CHROMALOX Control Panels

# 4168 & 4268 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 instal- lation, 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 <sup>2</sup> t Fusing, an Shutdown Contactor. Options Include: Process and Hi-Limit Controllers, Ground Fault Monitoring, Main Disconnect Switch and Enclosure Heater.									
	Code	Current @ 40°C (104°F)								
	3 6	30 Am	P							
		65 Am Code								
		1 2	Voltage       120 VAC       208 VAC							
		3	240 V							
		4 6	480 VAC 575/600 VAC							
		ľ	-	Code Process Controller Options						
			0	None	ne (6 - 12 VDC Control Signal Customer Supplied)					
			1 2	6040-	SR0000	1/16 DIN SS	R, Relay			
			3	4040-	SR0000	1/4 DIN SSR	R, Relay, Retransmit , RS485 , Relay			
			4				, Relay, Retransmit, RS485, Remote Setpoint			
			5 7				V Graphic Display, SSR, Relay, Retransmit, Ethernet 4 - 20 mAdc, 0-10 VDC, 0-5 VDC			
				Code			ontroller Options			
				0	None	-				
				1 2			N Fixed 5A Relay, Relay IN Fixed 5A Relay, Relay, Retransmit, RS485			
				3			I Fixed 5A Relay, Relay			
				4			I Fixed 5A Relay, Relay, Retransmit, RS485			
					Code	Options				
					0 1	None Ground Fa	ult Monitor & Shutdown incl. Illuminated Reset Switch**			
					2	Main Disc	onnect with Through Door Operator			
					3 4 5 6 7		at Controlled Enclosure Heater Jult Monitor & Main Disconnect Switch **			
							onnect Switch & Enclosure Heater			
							ult Monitor & Enclosure Heater **			
						Heater **	ult Monitor, Main Disconnect Switch & Enclosure			
						Code	Load Fusing Option*			
						Blank	None			
						9010(*)	8 Amps/Circuit (10 Amp fuse)			
						9015(*) 9020(*)	12 Amps/Circuit (15 Amp fuse) 16 Amps/Circuit (20 Amp fuse)			
						9025(*í)	20 Amps/Circuit (25 Amp fuse)			
						9030(*) 9035(*)	24 Amps/Circuit (30 Amp fuse) 28 Amps/Circuit (35 Amp fuse)			
						9040(*)	32 Amps/Circuit (40 Amp fuse)			
						9045(*)	36 Amps/Circuit (45 Amp fuse)			
						9050(*) 9060(*)	40 Amps/Circuit (50 Amp fuse) 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:

SOUTHWEST HEATER & CONTROLS

(SWHC)

- · 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.



# 4168 & 4268 Mini-SCR Power Control Panel (cont'd.)

PCN
314739
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(* <u>)</u>	56 Amps/Circuit (70 Amp Fuse)
9080(* <u>)</u>	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

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Model	Three	Phase T	wo-Le	g Zero F	ired SCI	R Mini Powe	r Control Panel		
4268	CUL and UL Listed Three Phase SCR Power Control Panel. Features: Factory pre-wired for quick instal- lation, 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 <sup>2</sup> t Fusing, and Shutdown Contactor. Options Include: Process and Hi-Limit Controllers, Ground Fault Monitoring, Main Disconnect Switch and Enclosure Heater.								
	Code Current @ 40°C (104°F)								
	3 6	2 3 4 6	voltage						
			208 VAC 240 VAC 480 VAC 575/600 VAC						
			Code 0 1	None	(6 - 12 \	oller Options /DC Control Signal Customer Supplied) 1/16 DIN SSR, Relay			
			2 3 4	6040- 4040-	SRA100 SR0000	1/16 DIN SS 1/4 DIN SSR	R, Relay, Retransmit , RS485		
			57	4080- Custo	COSRA-( mer Sup	14000 1/4 DIN Graphic Display, SSR, Relay, Retransmit, Ethernet plied Remote 4 - 20 mAdc, 0-10 VDC, 0-5 VDC mperature Controller Options			
				Code 0 1 2 3 4	None 6050-1 6050-1 4050-1	R000 1/16 D RA10 1/16 D R000 1/4 DI	IN Fixed 5A Relay, Relay IN Fixed 5A Relay, Relay, Retransmit, RS485 V Fixed 5A Relay, Relay V Fixed 5A Relay, Relay		
					Code	Options			
					0 1 2 3 4 5 6 7	Main Disc Thermost Ground Fa Main Disc Ground Fa	ult Monitor & Shutdown incl. Illuminated Reset Switch* onnect with Through Door Operator at Controlled Enclosure Heater ult Monitor & Main Disconnect Switch ** onnect Switch & Enclosure Heater ault Monitor & Enclosure Heater ** ault Monitor, Main Disconnect Switch & Enclosure		
					1	Code	Load Fusing Option*		
						Blank 9010(*) 9020(*) 9025(*) 9030(*) 9035(*) 9040(*) 9040(*) 9050(*) 9050(*) 9070(*)	None 8 Amps/Circuit (10 Amp fuse) 12 Amps/Circuit (15 Amp fuse) 16 Amps/Circuit (20 Amp fuse) 20 Amps/Circuit (25 Amp fuse) 24 Amps/Circuit (30 Amp fuse) 32 Amps/Circuit (35 Amp fuse) 36 Amps/Circuit (40 Amp fuse) 36 Amps/Circuit (50 Amp fuse) 40 Amps/Circuit (50 Amp fuse) 56 Amps/Circuit (70 Amp fuse) 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.



