

C1ZF

Single Phase Solid State Relays

- Industrial Solid State Relays
- DIN Rail Mounted
- Conservative Thermal Design
- Up to 120 Amp Ratings
- Up to 600 VAC Operational Voltage
- Integrated Heatsink
- Zero Crossover Switching to Minimize Electronic Noise
- AC & DC Voltage Input Signals
- Alarms for Load/Line Interrupt
- Overtemperature Alarm
- Digital PNP Alarm Output Signal for Logic-Gated Devices
- cULus Listed
- CE Marked
- EAC Marked
- LED Status Indicator
- IP20 Touch Protection Cover



Description

The C1ZF Series of solid state relays are an ideal, low cost power control solution for switching resistive loads found applications in such as furnaces, ovens, heat treating, injection molding, thermoforming, press platens, commercial food equipment, semiconductor, lighting and drying, just to name a few.

The C1ZF Series power controllers feature a rugged, industrial design, touch-safe exterior and conservative, continuous service amperage ratings at 40°C ambient. They are available in both AC and DC Voltage logic input command signals and employ zero crossover firing (gated to turn on and off at zero voltage), which keeps unwanted RFI (Radio Frequency Interference) to a minimum. Each controller comes complete with integrated heatsink, SCR thermal protection with LED indication and is USA & Canadian UL listed, carries CE conformity, and EAC conformity. Optional alarms are available for over temperature as well as load and line interrupt conditions.

The C1ZF offers a digital PNP alarm output signal for logic-gated devices such as PLCs. The C1ZF Series controller manages single phase loads up to 120 Amps and up to 600 VAC.

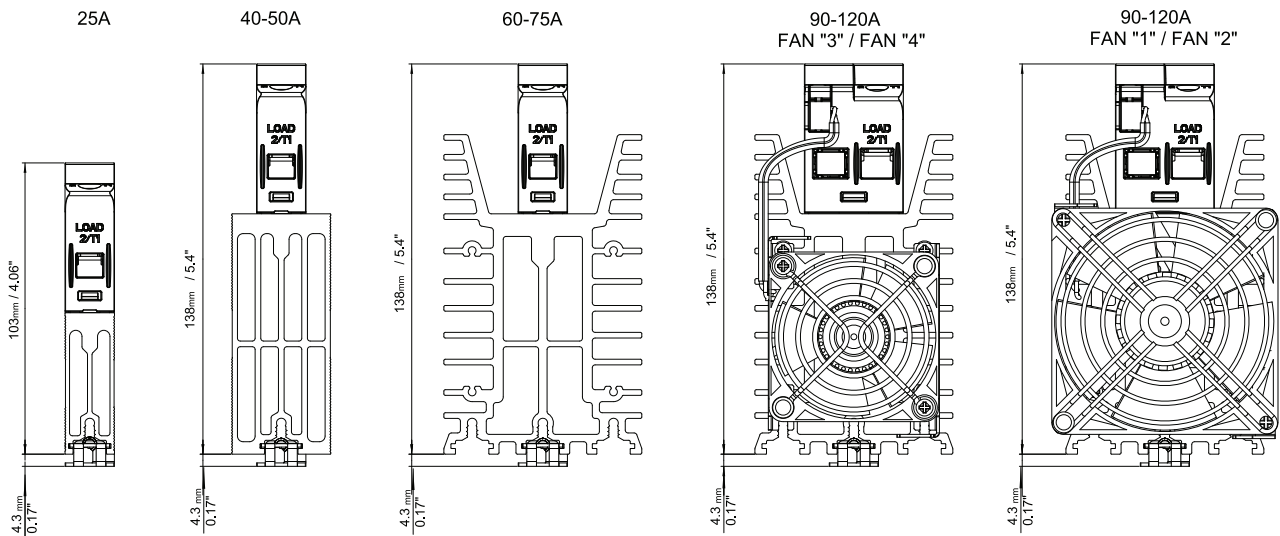
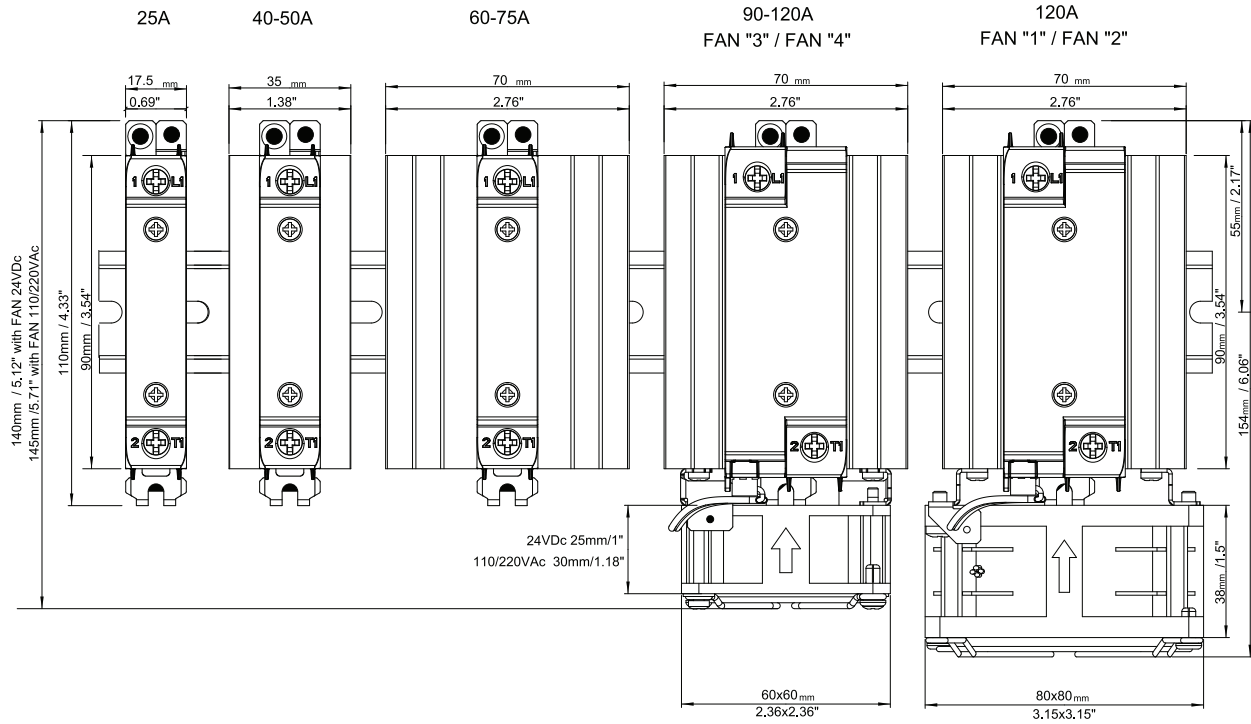
Applications

- Thermoforming
- Plastic extrusion lines
- Injection molding
- Heat treatment
- Industrial ovens / furnaces
- Mold & dye heating/cooling control
- HVAC
- Packaging
- Textile production
- Rubber vulcanization equipment
- Driers, incubators and autoclaves
- Pharmaceutical and chemical processes
- Rapid resistive heat load switching

C1ZF

Single Phase Solid State Relays (cont'd.)

C1ZF Dimensions mm/in



Model	25A	40-50A	60-75A	90-120A
Weight	0.43lb / 194g	0.86lb / 388g	1.5lb / 688g	1.75lb / 796g

C1ZF

Single Phase Solid State Relays (*cont'd.*)

Ordering Information

To Order— Complete the Model Number using the Matrix provided.

Model Single Phase, Solid State Relay Power Controller - DIN Rail Mount

C1ZF The C1ZF Series are DIN Rail mounted, single-phase solid state relays with integrated heatsink for switching resistive loads in industrial applications. Standard features: Zero-voltage turn-on, LED input status indicator, internal over voltage protection (MOV), integrated SCR thermal protection with LED indication¹, two logic input control signals, operating voltage up to 600 VAC. Optional features: ¹Solid state switch or PNP Digital Signal alarm output during over-heated or interrupted line/load condition. Approvals: CE, UL, cUL

Code Current @ 104°F (40°C) Ambient, Continuous Service

25	25 Amps
40	40 Amps
50	50 Amps
60	60 Amps
75	75 Amps
90	90 Amps
120	120 Amps (requires fan choice from below)

Code Voltage

48	480 VAC (Range: 24 - 530 VAC)
60	600 VAC (Range: 24 - 660 VAC)

Code Input Control Signal

1	6 - 32 VDC
2	20 - 260 VAC/DC

Code Alarm Output (Note: Alarms only available on ≥ 50 Amp Models)

0	None	² External 24 VDC Power Supply is required to power the alarms
1*	Solid State Relay Switch (normally open)	
2*	Solid State Relay Switch (normally closed)	
3*	Digital Logic PNP Output (normally open)	
5	Solid State Relay Switch (normally closed)	

Code Fan (Required on 120 Amp Version Only)

0	No Fan (select for all models < 120 Amp)
1**	Fan (230 VAC Power Supply Requirement)
2**	Fan (120 VAC Power Supply Requirement)
3**	Fan (24VDC Power Supply Requirement)
4	Fan (24 VDC Internally Supplied)

Stocked Items

Model Number
C1ZF-025-60-100-00
C1ZF-050-60-100-00
C1ZF-075-60-100-00

C1ZF- 050- 48- 1 1 0 - 00 Typical Model Number

¹ Available only on models ≥ 50 Amps

² Some models may accept 24 VDC or 24 VAC. See optional Alarm Wiring details in manual

* Available only for models with 6-32 VDC input control signal

** Fan requires customer supplied voltage.

The following Chromalox Process Controllers offer a suitable 24 VDC power supply for the alarm option:

- 40 Series: 6040 / 8040 / 4040
- 50 Series: 6050 / 4050
- 60 Series: 6060
- 80 Series: 4080 / 4081 / 4082