# Single-phase Power Controllers - Standard model

**S1PF-□-□-050**




232L x 120H x 93W

**S1PF-□-□-100**




220L x 154H x 142W

**S1PF-□-□-180**




243L x 154H x 142W

- High efficiency, small size, fast heat dissipation, High-precision temperature controller
- Insufficient phase protection, overheat protection and fuse burnout indicator
- Application with inductance load and resistance load
- CE certified

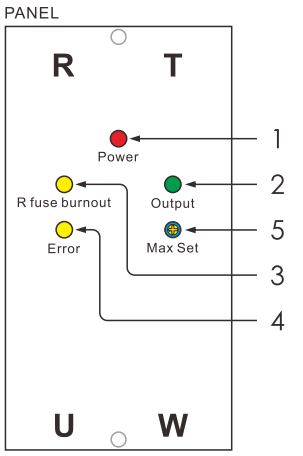
## SPECIFICATIONS

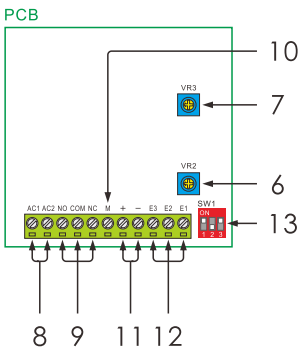
| | |
|---|---|
| MODEL | S1PF-□-□-□□□ |
| LOAD VOLTAGE | AC 220V, 380V, 415V, 440V, 480V 50/60Hz<br>AC 220~380V, 380~440V, 380~480V 50/60Hz |
| OPERATING VOLTAGE | AC 220V±10% 50/60Hz (110VAC order by user) |
| LOAD CURRENT | 20A, 30A, 40A, 50A, 60A, 80A, 100A, 125A, 160A, 180A, 200A |
| OUTPUT METHOD | Phase control |
| OUTPUT VOLTAGE RANGE | 0~100% |
| INPUT CONTROL SIGNAL | DC4~20mA / DC1~5V (DIP Switch) |
| FREQUENCY | 50/60Hz (DIP Switch) |
| FAILURE INDICATOR | Fuse burnout or overheat indicator |
| FAILURE OUTPUT CONTACT | 5A 250VAC resistive load (1a1b) |
| EXTERNAL VR | External VR (10K) |
| OVERHEAT PROTECTION | Automatic trip protection when overheated |
| FUSE BURNOUT DETECTION | Fuse burnout indicator |
| INSULATION RESISTANCE | 20MΩ or more between input terminals and case(ground) at DC 500V |
| DIELECTRIC STRENGTH | 2500VAC at 50/60Hz for 1 min between charged parts and noncharged parts |
| AMBIENT TEMPERATURE | -10℃~+50℃ |
| AMBIENT HUMIDITY | 45~90%RH |

## PARTS DESCRIPTION

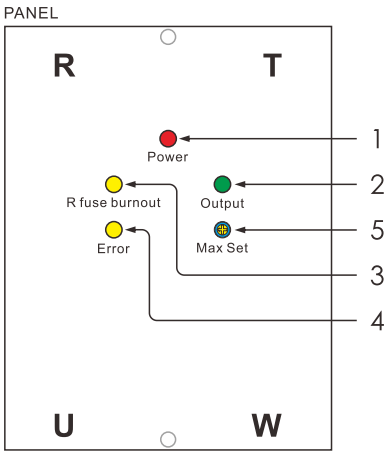
| SYMBOL | | NAME | FUNCTION | SYMBOL | | NAME | FUNCTION |
|---|---|---|---|---|---|---|---|
| Power | 1 | Power Indicator | When the operating power (AC1, AC2) is powered, Red indicator lights up. | AC1 AC2 | 8 | Operating power terminal | Input voltage AC 220V±10% 50/60Hz. |
| Output | 2 | Output Indicator | When the SCR is output, Green indicator lights up. | NO COM NC | 9 | Failure output contact terminal | Failure output contact: common terminal and normal open terminal and normal close terminal |
| R fuse burnout | 3 | Fuse burnout indicator | When fuse burnout, Yellow indicator lights up. | M | 10 | Controller output terminal | External VR control. Terminal M output DC 5V/100mA. SW1 must be set to 0~5V. |
| Error | 4 | Failure indicator | When overheat protection is activated, Yellow indicator lights up. | + − | 11 | Temperature Controller terminal | Connect the TC and the input signal must be set to 4~20mA. |
| Max Set | 5 | Output voltage adjustable | Adjust the output voltage according to user demand. | E3 E2 E1 | 12 | External VR terminal | Input signal adjustment range is 0~100%. When the VR on the panel is 0%, the external VR has no effect. Short E3 and E2 when external VR is no use. |
| VR2 | 6 | Adjusting of output basic | Adjust control signal reference | | | | |
| VR3 | 7 | Output voltage adjustable | Adjust the output voltage according to user demand. | SW1 | 13 | Input signal DIP switch | See the INPUT SIGNAL SETTING. |

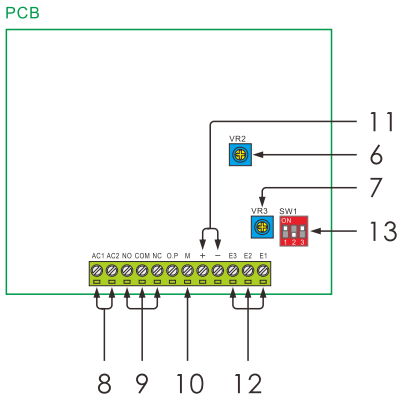
S1PF-□-□-020 /030 /040 /050




S1PF-□-□-060 /080 /100 /125 /160 /180 /200



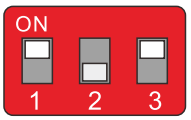




## WEIGHT

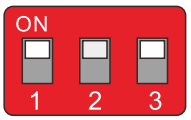
| S1PF-□-□-020 /030 /040 /050 | S1PF-□-□-060 /080 /100 | S1PF-□-□-125 /160 /180 /200 |
|---|---|---|
| Approx. 1700g | Approx. 2900g | Approx. 3200g |

## INPUT SINGNAL SETING

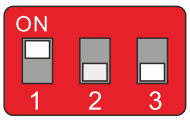
**SW1:**



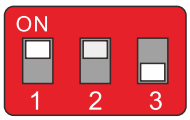

4~20mA, 60Hz, Soft start 8s (Default)



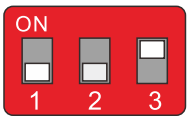

4~20mA, 50Hz, Soft start 8s



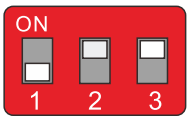

4~20mA, 60Hz, Soft stop



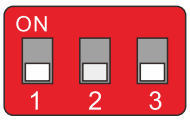

4~20mA, 50Hz, Soft stop



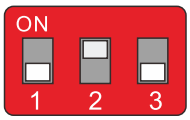

1~5V, 60Hz, Soft start 8s




1~5V, 50Hz, Soft start 8s

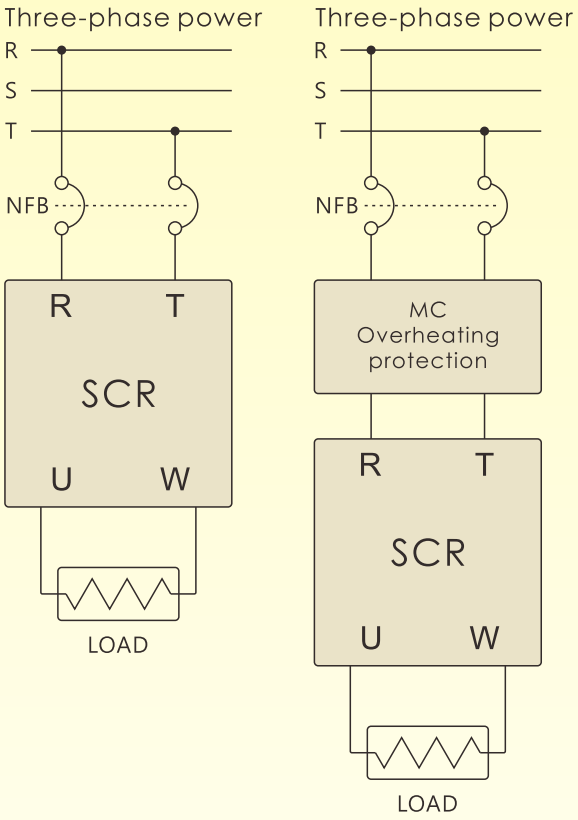



1~5V, 60Hz, Soft stop

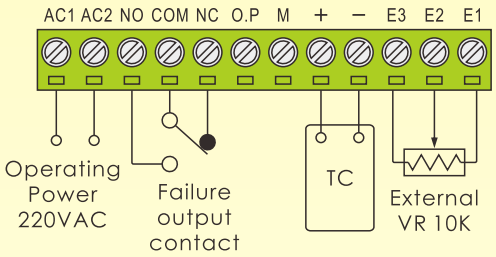



1~5V, 50Hz, Soft stop

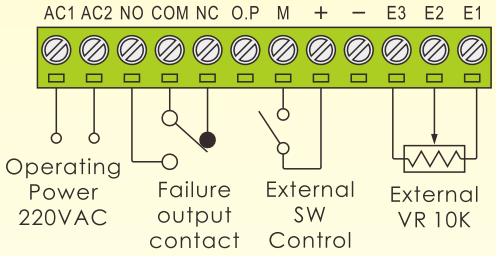
## CONNECTION DIAGRAMS



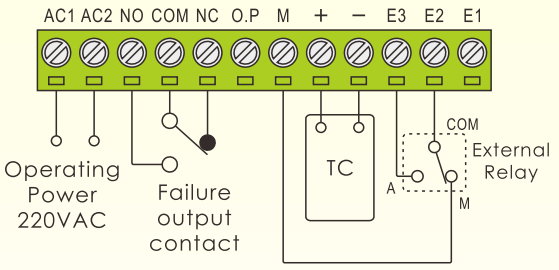

1. TC signal input, External VR control



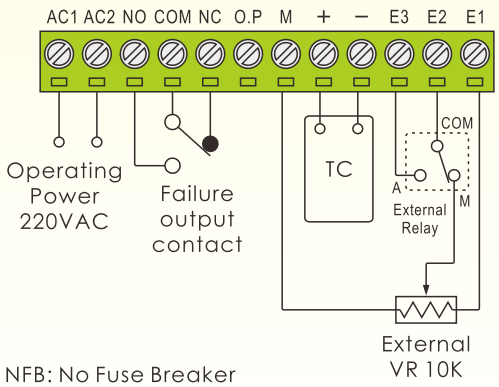

2. External SW control, External VR control



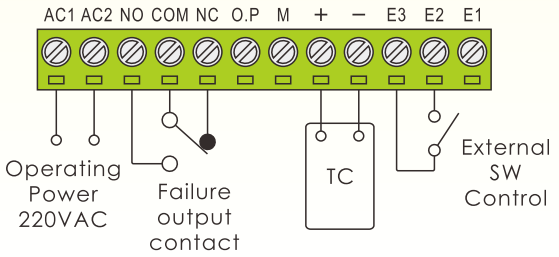

3. TC automatic control / Manual output control




4. TC automatic control / External VR control




5. TC signal input, External SW control

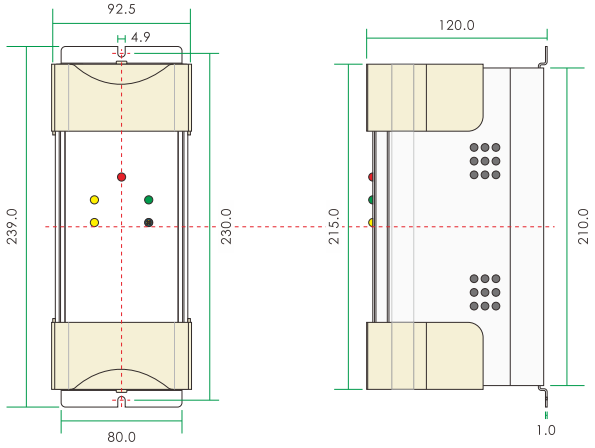



NFB: No Fuse Breaker
TC: Temperature Controller
A: Automatic(External relay)
M: Manual(External relay)

## DIMENSIONS

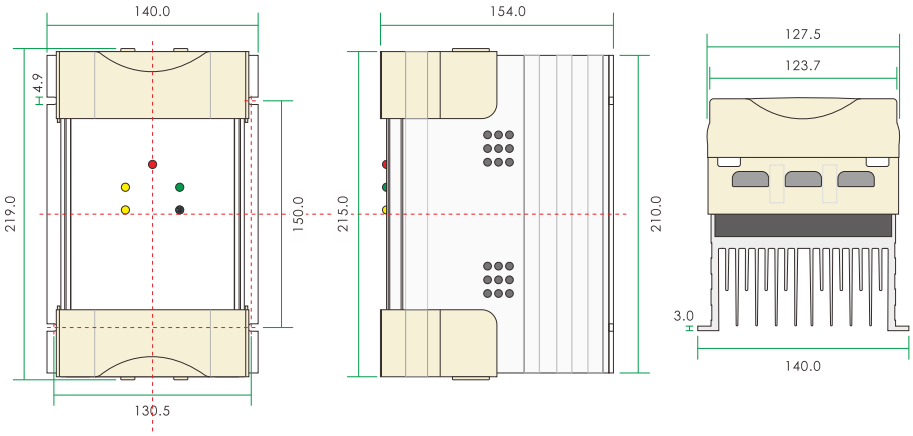
S1PF-□-□-026 / 030 / 040 / 050



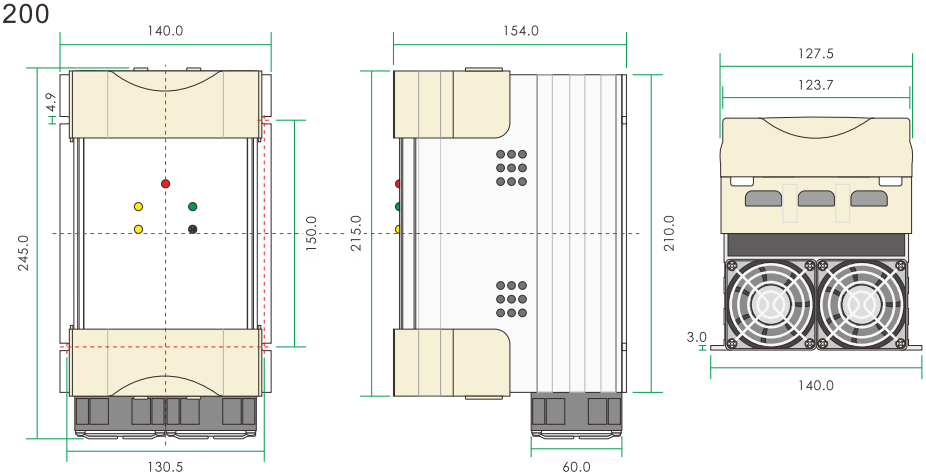

S1PF-□-□-060 / 080 / 100




S1PF-□-□-125 / 160 / 180 / 200




Units: mm

## ORDER INFOMATION

| TYPE | LOAD VOLTAGE | OPERATING VOLTAGE | LOAD CURRENT |
|---|---|---|---|
| S1PF | — 2 | — 2 | — 0 2 0 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 220VAC | 6 | 480VAC | 1 | 110VAC | 020 | 20A | 060 | 60A | 160 | 160A | 400 | 400A |
| 3 | 380VAC | A | 220~380VAC | 2 | 220VAC | 030 | 30A | 080 | 80A | 180 | 180A | 500 | 500A |
| 4 | 415VAC | B | 380~440VAC | 3 | 380VAC | 040 | 40A | 100 | 100A | 200 | 200A | 600 | 600A |
| 5 | 440VAC | C | 380~480VAC | 4 | 440VAC | 050 | 50A | 125 | 125A | 300 | 300A | | |