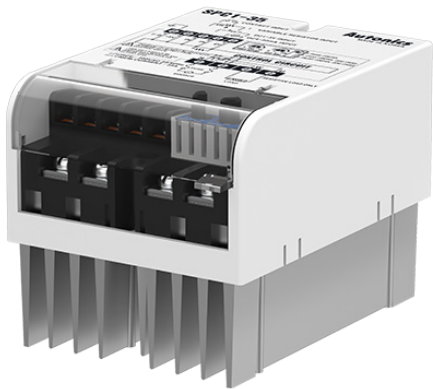


# Single-Phase Power Controllers



## SPC Series CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

### Features

- Various and simple input specification
  - DC 4 - 20 mA, 1 - 5 VDC≡, External 24 VDC≡
  - External adjuster (1 kΩ)
  - External contact (ON / OFF)
- Various function
  - Out ADJ (output limit) function
  - Soft Start function (except for ON/OFF control type)
  - Out display function
  - 50 / 60 Hz automatic converting function
- Various control by mode switches
  - Phase control
  - Cycle control (zero cross turn-on)
  - ON/OFF control (zero cross turn-on)

### Product Components

- Product
- Instruction manual
- Bolt × 2

### Specifications

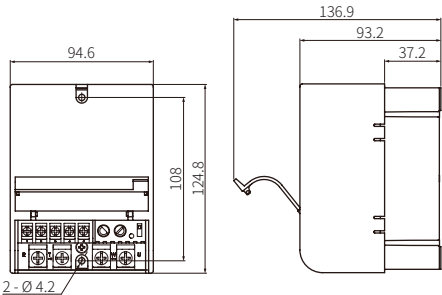
| Model              | SPC1-35                                                                                                                                              | SPC1-50 |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Control phase      | Single-phase                                                                                                                                         |         |
| Rated load current | 35 A                                                                                                                                                 | 50 A    |
| Indicator          | Output indicator (red)                                                                                                                               |         |
| Control input      | 1 - 5 VDC≡, DC 4 - 20 mA (250 Ω), ON / OFF (external contact or 24 VDC≡), external adjuster (1 kΩ), output limit input (front output limit adjuster) |         |
| Cooling method     | Natural air cooling                                                                                                                                  |         |
| Control circuit    | MICOM control method                                                                                                                                 |         |
| Unit weight        | ≈ 1 kg                                                                                                                                               |         |
| Approval           | ERC                                                                                                                                                  |         |

| Control method | Phase control   | Cycle control | ON/OFF control |
|----------------|-----------------|---------------|----------------|
| Control mode   | Normal          | Fixed cycle   | -              |
| Applied load   | Resistance load |               |                |
| Output range   | 0 to 98 %       | 0 to 100 %    | 0 / 100 %      |

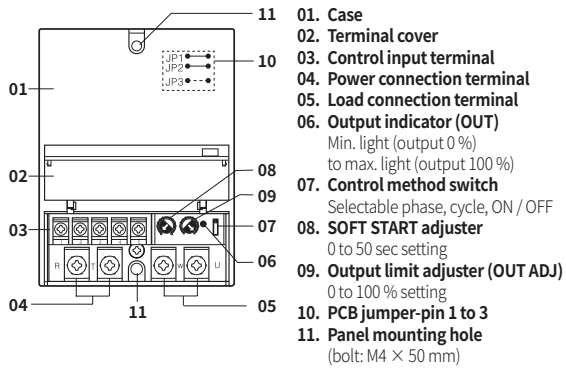
|                         |                                                                                                       |  |  |
|-------------------------|-------------------------------------------------------------------------------------------------------|--|--|
| Power supply            | 220 VAC~ ± 10 % 50 / 60Hz ± 1 Hz                                                                      |  |  |
| Min. load current       | 5 % of rated load current                                                                             |  |  |
| Insulation resistance   | 100 MΩ (500 VDC≡ megger)                                                                              |  |  |
| Dielectric strength     | 2000 VAC~ 50 / 60 Hz for 1 min                                                                        |  |  |
| Noise immunity          | ± 2 kV square wave noise (pulse width: 1 μs) by the noise simulator                                   |  |  |
| Vibration               | 0.75 mm double amplitude at frequency of 10 to 55 Hz (for 1 min) in each X, Y, Z direction for 1 hour |  |  |
| Vibration (malfunction) | 0.5 mm double amplitude at frequency of 10 to 55 Hz (for 1 min) in each X, Y, Z direction for 10 min  |  |  |
| Shock                   | 300 m/s <sup>2</sup> (≈ 30 G) in each X, Y, Z direction for 3 times                                   |  |  |
| Shock (malfunction)     | 100 m/s <sup>2</sup> (≈ 10 G) in each X, Y, Z direction for 3 times                                   |  |  |
| Ambient temperature     | 0 to 50 °C, storage: -25 to 65 °C (no freezing or condensation)                                       |  |  |
| Ambient humidity        | 35 to 85 %RH, storage: 35 to 85 %RH (no freezing or condensation)                                     |  |  |
| Wiring spec.            | Rated load current 35 A: AWG 16 to 8<br>Rated load current 50 A: AWG 8 to 6                           |  |  |

### Dimensions

- Unit: mm, For the detailed drawings, follow the Autonics website.



## Unit Descriptions

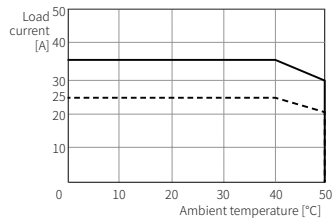


## Derating Curve



01) Two mounting holes and terminal blocks are the same height

### ■ SPC1-35



### ■ SPC1-50

