

Single Phase Plug-in SCR Power Controller



The 470 Series true power controllers are used when it is difficult to measure the process variable or where power regulation is critical. They control mean-squared load voltage or current or power ($V \times I$). Many selectable inputs, firing options and control modes are available. The model 260 diagnostic unit is available for commissioning and troubleshooting.

Ordering codes

| | | | | | | |
|---|---|----|----|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 00 | | | |

1 2 Basic Product

| Model | Current | Notes |
|-------|---------|--------------|
| 470 | 113 | 75A max |
| 471 | 117 | 125A max * |
| 471 | 110 | 150A max * † |
| 472 | 000 | Driver only |

* Fan cooled (23VA)

† Requires external fuseholder and fuse -see page 3-47.

Higher current units available using Driver and external SCRs. Consult Eurotherm Controls.

3 Voltage

| | |
|----|-----------|
| 10 | 110 volts |
| 11 | 115 volts |
| 12 | 220 volts |
| 13 | 240 volts |
| 22 | 380 volts |
| 23 | 415 volts |
| 28 | 440 volts |
| 15 | 480 volts |
| 29 | 500 volts |

4 Auxiliary Supply

| | |
|----|--------------------------|
| 19 | 115 and 230V |
| 43 | 380, 400V, 415V and 230V |
| 47 | 440 and 230V |
| 44 | 500 and 230V |

5 Nominal Current

| | | |
|-----|---------------|-----------|
| 081 | 15A | Model 470 |
| 082 | 25A | Model 470 |
| 083 | 40A | Model 470 |
| 062 | 55A | Model 470 |
| 113 | 75A | Model 470 |
| 114 | 100A | Model 471 |
| 117 | 125A | Model 471 |
| 100 | 150A | Model 471 |
| 000 | External scrs | Model 472 |

Features

- 15–150 amps, 500Vac max.
- selectable input
- selectable firing mode
- partial load failure detection
- true power control

Specifications

Dimensions:

470 249H x 170W x 236D mm, 3.5kg

471 282H x 170W x 236D mm, 5kg

472 249H x 115W x 236D mm, 2.5kg

Load type:

resistive (fixed or variable), transformer coupled or inductive

Inputs:

DC Voltage: 0-5V, 1-5V, 0-10V, input impedance >100K Ω

DC Current: 0-5mA, 0-10mA, 0-20mA, 4-20mA, input impedance 250 Ω

Firing mode:

single cycle, fast cycle, fast cycle with soft start, slow cycle, phase angle (with current limit)

Operating temperature:

0 to 45°C

6 Input Signal

| | |
|-----|---------|
| 008 | 0-5VDC |
| 068 | 1-5VDC |
| 060 | 0-10VDC |
| 069 | 0-5mA |
| 071 | 0-10mA |
| 072 | 0-20mA |
| 073 | 4-20mA |

8 Control Mode

| | |
|----|-----------------------------|
| 28 | True Power ($V \times I$) |
| 26 | V^2 |
| 29 | I^2 |

9 Language

| | |
|-----|---------|
| ENG | English |
| FRA | French |
| GER | German |

10 Options

| | |
|----|---|
| 55 | Current Limit (Phase Angle or Phase Angle Start only) |
| 83 | PLF closed in alarm (open as standard) |
| 69 | 60Hz |
| 76 | No backplate |

Fuses internal except for 150A unit, see pages 3-47 to 3-49.