

# Solid State Power Controls

PCA models for AC outputs  
PCD models for DC outputs

Ohmitrol Power and Motor Speed Controls are solid state units which provide an infinitely smooth power control over their entire voltage range. An integral internal trimmer on some models allows customization of the control to a specific application by a simple turn of a screwdriver.

Power and motor speed controls are extremely versatile from an AC source; either AC or DC outputs are possible with the appropriate model. Model PCA, AC output, has applications to control heaters (both resistive and infrared) and motors such as universal and shaded pole, and can replace transformers. Model PCD, DC output, can be used to control shunt and series wound, universal, compound and permanent magnet motors, magnetic clutches, brakes, etc.

## FEATURES

- AC and DC output types
- Component styles
- On-Off switch built in
- Internal trimmer on PCA and PCD models
- Adjustable control range

## SPECIFICATIONS

**Output:** PCA models have an AC output. PCD models have two DC outputs: one output from an AC source is rectified DC at approximately full line voltage, the other output is variable or controlled DC. (DC models have terminals at the rear of the unit which accept quick connectors.)

**Adjustable control range:** On PCA and PCD models an internal trimmer allows the starting point of the control voltage to be set anywhere within the stated trimmer voltage range with a screwdriver.

**Armature current:** For PCD models, 500 mA min. for proper operation.

**NOTE:** For panel mount use under full power output conditions, the face of the control must be in contact with a metal panel. For optimum heat dissipation, a thermal-conducting compound must be applied to the face of the power control prior to mounting.



PCA/PCD Style

| Model   | Load (watts)       | Input (volts) | Frequency (Hz) | Output range (VAC, nom.) | Trimmer range (volts) |
|---|--------------------|---------------|----------------|--------------------------|-----------------------|
| <b>Component style (Ohmitrol) 2.03" x 1.77" x 1.75" (51.6 x 45.0 x 44.5 mm)</b> |                    |               |                |                          |                       |
| + PCA1000   | 1000W 8.3A AC      | 120VAC        | 60HZ           | 0-120VAC                 | 10-50V                |
| ✓ PCA1050   | 15A AC             | 120VAC        | 60HZ           | 0-120VAC                 | 10-75V                |
| ✦ PCA1100   | 1000W 8.3A AC      | 120VAC        | 50HZ           | 0-120VAC                 | 10-50V                |
| + PCA1020   | 2000W 8.3A AC      | 240VAC        | 60HZ           | 0-240VAC                 | 20-100V               |
| ✦ PCA1120   | 2000W 8.3A AC      | 240VAC        | 50HZ           | 0-240VAC                 | 20-100V               |
| <b>2.03" x 2.77" x 1.75" (51.6 x 70.4 x 44.5 mm)</b>                            |                    |               |                |                          |                       |
| ✓ PCD1000   | 3.5A DC to 6.0A DC | 120VAC        | 60HZ           | 0-120VDC                 | 10-50V                |
| ✦ PCD1100   | 3.5A DC to 6.0A DC | 120VAC        | 50HZ           | 0-120VDC                 | 10-50V                |
| ✦ PCD1020   | 3.5A DC to 6.0A DC | 240VAC        | 60HZ           | 0-240VDC                 | 20-100V               |
| ✦ PCD1120   | 3.5A DC to 6.0A DC | 240VAC        | 50HZ           | 0-240VDC                 | 20-100V               |
| + = Most popular standard values  |                    |               |                |                          |                       |
| ✓ = Standard values   |                    |               |                |                          |                       |
| ✦ = Non-standard values subject to minimum handling charge per item             |                    |               |                |                          |                       |

See page 78 for knobs, dials, and other hardware