

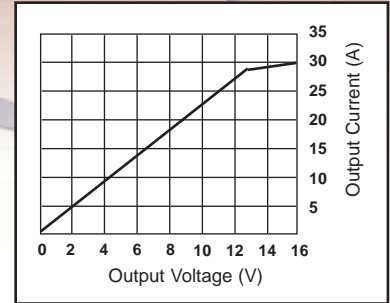


1690



1688A

# High Current DC Power Supplies



\* Graph showing the relationship the output voltage has on the output current.

B+K High Current DC Power Supplies are designed for continuous duty and are ideal for substituting car batteries. For servicing/demonstrating high-power car stereos, cellular phone products, camcorders, and ham radios. Hobbyists, retailers, and service shops use car batteries to power mobile equipment. Car batteries are heavy, leak acid, spark, can't tolerate shorted outputs, and must be recharged.

These Power Supplies provide their maximum current output continuously hour after hour without overheating. For more output, just connect two or more in parallel or series. These are the only high-current supplies in their price range built to withstand continuous duty!

## Model 1689, 1690 Regulated 28A DC Power Supply

The new B+K Precision Regulated 28A DC Power Supplies 1689 & 1690 offer multiple DC output terminals; two pairs of 3A, snap-in DC connectors are easily accessible on the front panel, and a pair of 28A screw-on DC output terminals are located on the rear panel. Both models provide their maximum current output continuously hour after hour without thermal drifting. They are ideal car battery substitutions for servicing or demonstrating high power car stereo, cellular phone products, or even ham radio.

- 1VDC to 15VDC Variable Output
- 28A Output at  $\geq 13.5$ VDC
- Overload protection
- High RFI stability
- Multiple DC Output Terminals.

## Models 1686A & 1688A Variable Voltage - 3 to 14 volts DC output

- 20 A guaranteed @ 13.8V (Model 1688A)
- 12 A guaranteed @ 13.8V (Model 1686A)
- Current limiting overload protection
- Over voltage protection
- Short circuit protection
- Reverse polarity protection
- Thermostatically controlled cooling fan
- Thermal protection
- Operates continuously at full load without overheating
- Connect two in parallel for more current
- Connect two in series for higher voltage

| Specifications        | models                                 |                                 |
|-----------------------|--|---------------------------------|
|                       | 1689                                   | 1690                            |
| DC Output MAX Ratings |  |                                 |
| Voltage               | 1-15V                                  |                                 |
| Current               | *28A (@13.8V)                          |                                 |
| Meter Accuracy        | 7% FS                                  | $\pm(0.2\% + 2 \text{ digits})$ |
| Line Regulation       | 5mV ( $\pm 2\%$ Load)                  |                                 |
| Load Regulation       | 50mV (0-100% Load)                     |                                 |
| Ripple & Noise (RMS)  | 5mV                                    |                                 |
| Operating Voltage     | 120 VAC, 60 Hz                         |                                 |
| Dimension (W x H x D) | 9.84 x 5.5 x 8.86" (250 x 140 x 225mm) |                                 |
| Weight                | 19.9 lbs. (9kg)                        |                                 |
| Display               | Precision Analog                       | Digital LED                     |

**One Year Warranty**

SUPPLIED: User Manual

| Specifications        | models   |   |
|-----------------------|--|---|
|                       | 1686A  | 1688A   |
| Output                |  |   |
| Output Voltage        | 3 to 14 VDC  |   |
| Output Current        | Proportional to Output Voltage   |   |
| DCV Output-Max DCA    | 3V - 2.5A<br>5V - 4.5A<br>9V - 7.5A<br>12V - 10A<br>13.8V - 12A<br>14V - 12A | 3V - 4.5A<br>5V - 7.5A<br>9V - 13A<br>12V - 20A<br>13.8V - 20A<br>14V - 20A |
| Line Regulation       | (108-132VAC) $\leq 0.8\%$  |   |
| Ripple and Noise      | $\leq 10\text{mVrms}$ .  |   |
| Metering              |  |   |
| Voltmeter Range       | 0-20V  | 0-30V   |
| Voltmeter Accuracy    | $\pm 7\%$ FS   |   |
| Ammeter Range         | 0-20A  | 0-30A   |
| Ammeter Accuracy      | $\pm 7\%$ FS   |   |
| General               |  |   |
| Power Requirements    | 120/220 VAC $\pm 10\%$ , 50/60 Hz.   |   |
| Power Consumption     | 400W   | 580W  |
| Operating Temperature | 32° to 104°F (0° to 40°C), $\leq 85\%$ R.H.                                  |   |
| Storage Temperature   | 5° to 158°F (-15° to 70°C), $\leq 75\%$ R.H.                                 |   |
| Dimensions (HxWxD)    | 8.1 x 4.5 x 10.6" (205 x 115 x 270mm)  |   |
| Weight                | 12.1 lbs. (5.5kg)  | 19.8lbs. (9kg)  |

**One Year Warranty**

SUPPLIED: Instruction Manual  
OPTIONAL: TL-30 Hook-up leads