## THE NEW MODELS OF JBW POWER SUPPLIES FROM KEPCO

## HIGHER POWER

 LOWER COST

Now you don't have to give up reliability, features or support to meet your bill of material cost targets. Kepco's Series JBW are low cost $5 \mathrm{~V}, 12 \mathrm{~V}, 15 \mathrm{~V}$ and 24 V power supplies priced at about $\$ .50$ per watt, even in sample quantities. They are reliable PC cardstyle single output power supplies offering OEMs 75,100 and 150 watts of $d-c$ power. JBW feature wide range input ( $85-265 \mathrm{~V}$ a-c), active PFC (Power Factor Correction) and carry the CE Mark and all safety agency recognitions, plus they are RoHS compliant. The JBW power supplies have on-board filtering meeting FCC Class B conducted emissions compliance and feature overvoltage and overcurrent protection. Full output power operation is guaranteed from $-10 \mathrm{to}+50^{\circ} \mathrm{C}$ with convection cooling. (No forced air cooling is required.)
The JBW series comes with a full 1 year warranty supported by Kepco, a name known and trusted in the power supply industry for 60 years.
Please visit www.kepcopower.com/jbw.htm to check out the full specifications of our new JBW models as well as our lower power JBW 10, 15, 30 and 50W models and order a sample unit on-line. To see full specifications on our related multi-output MTW series of 15, 30 and 60W power supplies, visit www.kepcopower.com/mtw.htm or give us or your local representative a call. We look forward to hearing from you.

RoHS Compliant
JBW MODEL TABLE

|  | OUTPUT | SETTING TOLERANCE | ADJUSTMENT RANGE | OVP RANGE | OUTPUT CURRENT (Max) | CURRENT LIMIT | SWITCHING FREQUENCY RIPPLE | NOISE(1) | EFFICIENCY (\%) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| model | Volts |  | Volts | Volts | Amps | Amps | mV p-p | mV p-p | 100 a -c | 240 Va -c |
| 75 WATT MODELS |  |  |  |  |  |  |  |  |  |  |
| JBW 5-15K | 5 | $\pm 0.25 \mathrm{~V}$ | 4.5-5.5 | 5.75-6.9 | 15.0 | 15.8 | 80 | 120 | 75 | 79 |
| JBW 12-6.3K | 12 | $\pm 0.6 \mathrm{~V}$ | 10.8-13.2 | 13.8-16.8 | 6.3 | 6.6 | 120 | 150 | 78 | 81 |
| JBW 15-5.0K | 15 | $\pm 0.75 \mathrm{~V}$ | 13.5-16.5 | 17.2-21.0 | 5.0 | 5.2 | 120 | 150 | 79 | 81 |
| JBW 24-3.2K | 24 | $\pm 1.2 \mathrm{~V}$ | 21.6-26.4 | 27.6-33.6 | 3.2(2) | 4.4 | 120 | 150 | 82 | 84 |
| 100 WATT MODELS |  |  |  |  |  |  |  |  |  |  |
| JBW 5-20K | 5 | $\pm 0.25 \mathrm{~V}$ | 4.5-5.5 | 5.75-6.9 | 20.0 | 21.0 | 80 | 120 | 78 | 80 |
| JBW 12-8.5K | 12 | $\pm 0.6 \mathrm{~V}$ | 10.8-13.2 | 13.8-16.8 | 8.5 | 10.6 | 120 | 150 | 80 | 82 |
| JBW 15-6.7K | 15 | $\pm 0.75 \mathrm{~V}$ | 13.5-16.5 | 17.2-21.0 | 6.7 | 8.38 | 120 | 150 | 80 | 82 |
| JBW 24-4.3K | 24 | $\pm 1.2 \mathrm{~V}$ | 21.6-26.4 | 27.6-33.6 | 4.3(3) | 5.38 | 120 | 150 | 82 | 85 |
| 150 WATT MODELS |  |  |  |  |  |  |  |  |  |  |
| JBW 5-30K | 5 | $\pm 0.25 \mathrm{~V}$ | 4.5-5.5 | 5.75-6.9 | 30.0 | 31.5 | 80 | 120 | 78 | 80 |
| JBW 12-12K | 12 | $\pm 0.6 \mathrm{~V}$ | 10.8-13.2 | 13.8-16.8 | 12.5 | 15.7 | 120 | 150 | 81 | 83 |
| JBW 15-10K | 15 | $\pm 0.75 \mathrm{~V}$ | 13.5-16.5 | 17.2-21.0 | 10.0 | 12.5 | 120 | 150 | 81 | 83 |
| JBW 24-6.3K | 24 | $\pm 1.2 \mathrm{~V}$ | 21.6-26.4 | 27.6-33.6 | 6.3(4) | 7.87 | 120 | 150 | 82 | 84 |

(1) 0 to $100 \%$ load, 0 to $50^{\circ} \mathrm{C}$, tested with $100 \mu \mathrm{~F}$ electrolytic and $0.1 \mu \mathrm{~F}$ film capacitors across the load, connected to the power supply via 5.9 inches ( 150 mm ) wires. $\begin{array}{lll}\text { (2) } 4.2 \mathrm{~A} \text { peak, } t \leq 10 \text { seconds. } & \text { (3) } 5.0 \mathrm{~A} \text { peak, } t \leq 10 \text { seconds. } & \text { (4) } 7.5 \mathrm{~A} \text { peak, } t \leq 10 \text { seconds. }\end{array}$

SINCE 1946

DERATING PLOTS AND MOUNTING DIRECTIONS

- INPUT VOLTAGE:
$85-265 \mathrm{~V}$ a-c ( 0 to $100 \%$ load, -10 to $60^{\circ} \mathrm{C}$ ); $120-370 \mathrm{~V}$ d-c.
- INPUT SOURCE FREQUENCY:

Nominal $50 / 60 \mathrm{~Hz}$; Range $47-66 \mathrm{~Hz}$. (Above 66 Hz to 440 Hz the leakage current exceeds the VDE safety specification limit.)

- INPUT PROTECTION: Input Fuse value 5A, 250V.
- POWER FACTOR: 0.99 typ. at 100 V a-c, 0.95 typ. at 240 V a-c.
- LOAD CAPACITANCE: acceptable output capacitor 30,000 F max.
- STABILIZATION:

Source Effect: (85 to 265V a-c) 0.4\% max.
Load Effect: measured at sensing terminals (0\% to $100 \%$ load change) $0.8 \%$ max.

Temperature Effect: (-10 to $50^{\circ} \mathrm{C}$ ) $1.0 \%$ max.
Combined Effect: 2.0\% max. (4\% typical for overshoot at start-up).
Time Effect or Drift: ( $1 / 2$ to 8 hr . at $25^{\circ} \mathrm{C}$ ) $0.4 \%$ max.

- OVERVOLTAGE PROTECTION (OVP): Fixed, factory set. See Model Table. Latching will occur.
- OVERCURRENT: Square type, output voltage returns to rated level upon removal of cause of malfunction (long term overcurrent could damage units).
- OPERATING TEMPERATURE: $-10^{\circ}$ to $60^{\circ} \mathrm{C}$ (start up at $-20^{\circ} \mathrm{C}$. Cooling by natural convection. See Derating Plots.
- WITHSTAND VOLTAGE: (at 5 to $35^{\circ} \mathrm{C}$ ambient, 45 to $85 \%$ relative humidity, cutout current 10 mA ): Between input and output terminals, 3000 V a-c for 1 minute. Between input terminals and ground, 2000 V a-c for 1 minute. Between output terminals and ground, 500 V a-c for 1 minute.
- SAFETY: UL 60950-1.c and TUV Rheinland EN60950-1 (ambient temp $50^{\circ} \mathrm{C}$ max.) CE marked per the Low Voltage Directive (LVD), EN60950.
- EMC - EMISSIONS:

Conducted Noise 0.15 MHz to 30 MHz ; FCC Class B, VCCI-B, EN55011-B, EN55022-B.
Input Harmonics (on a-c mains) 0 to 2 KHz EN 61000-3-2.

- EMC - IMMUNITY: Designed to meet EN 50082-2. ESD: EN 61000-4-2 Level 4, normal operation.
Radiated Field Noise: EN 61000-4-3 Level 3, normal operation. Electrical Fast Transient/Burst (EFT): EN 61000-4-4 Level 3, normal operation.
Surge: EN 61000-4-5 Level 4, no damage.
Conducted Noise: EN 61000-4-6 Level 3, normal operation.
Power Frequency Magnetic Field: EN 61000-4-8 Level 4, normal operation.
Interruptions and Voltage Dips, Short Variations:
EN 61000-4-11, normal operation.
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THE POWER SUPPLIER ${ }^{\text {TM }}$ SINCE 1946
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FIGURE 2
Derating Curve: 150W Models

OUTLINE DIMENSIONAL DRAWINGS
Fractional dimensions in light face type are in inches, dimensions in parentheses are in millimeters.


