

## Single Output Industrial Power Supplies

### Features

- ◆ 5 Year Warranty
- ◆ Power factor Corrected
- ◆ Approved to UL508
- ◆ Universal Input (85 - 265VAC)
- ◆ 200% Peak power capable (JWS-P models)
- ◆ Level B EMI

### Key Market Segments & Applications

- ◆ Factory Automation Process Control, NC-Machining, Automotive, Packaging Equipment, Chemical Processing, Robots



**Not recommended for new designs - see HWS series**

| Specifications                |     |                                                                                                          |       |                  |                          |                      |                          |
|-------------------------------|-----|----------------------------------------------------------------------------------------------------------|-------|------------------|--------------------------|----------------------|--------------------------|
| Model                         |     | JWS50                                                                                                    | JWS75 | JWS70P<br>JWS100 | JWS120P<br>JWS150        | JWS240P<br>JWS300    | JWS480P<br>JWS600        |
| Input Voltage range           | -   | 85 - 265VAC (47 - 63Hz) or 120 - 330VDC (no DC input on JWS-P)                                           |       |                  |                          |                      |                          |
| Inrush Current (100 / 200VAC) | A   | 14 / 28                                                                                                  |       |                  | 25 / 50                  | 20 / 40              |                          |
| Power Factor                  | -   | Meets EN61000-3-2                                                                                        |       |                  |                          |                      |                          |
| Temperature Coefficient       | -   | <0.02%/°C                                                                                                |       |                  |                          |                      |                          |
| Overcurrent Protection        | -   | >105%                                                                                                    |       |                  |                          |                      |                          |
| Overvoltage Protection        | V   | Yes                                                                                                      |       |                  |                          |                      |                          |
| Hold Up Time (Typ)            | ms  | 20                                                                                                       |       |                  |                          |                      |                          |
| Leakage Current (max)         | mA  | 0.75                                                                                                     |       |                  |                          |                      |                          |
| Remote Sense                  | -   | No                                                                                                       |       |                  | Yes                      |                      |                          |
| Remote On / Off               | -   | Not Available                                                                                            |       |                  |                          |                      | Standard                 |
| AC Power Fail                 | -   | Not Available                                                                                            |       |                  |                          |                      | Standard                 |
| Parallel Connection           | -   | Not Available                                                                                            |       |                  |                          |                      | Avail. JWS300 & 600 only |
| Operating Temperature         | -   | See derating table                                                                                       |       |                  |                          |                      |                          |
| Storage Temperature           | °C  | -30 to +85°C                                                                                             |       |                  |                          |                      |                          |
| Operating Humidity (1)        | -   | 30 - 90% RH (10 - 90% RH on JWS300 & 600 only)                                                           |       |                  |                          |                      |                          |
| Storage Humidity (1)          | -   | 10 - 95% RH                                                                                              |       |                  |                          |                      |                          |
| Cooling                       | -   | JWS50 - JWS150 Convection, JWS240 - JWS600 Internal fan                                                  |       |                  |                          |                      |                          |
| Withstand Voltage             | -   | Input to Ground 2kVAC (20mA), Input to Output 3kVAC (20mA)<br>Output to Ground 500VAC (100mA) for 1 min. |       |                  |                          |                      |                          |
| Isolation Resistance          | -   | >100M at 25C & 70%RH, Output to Ground 500VDC                                                            |       |                  |                          |                      |                          |
| Vibration (non operating)     | -   | 10 - 55Hz (1 minute sweep), 19.6m/s <sup>2</sup> constant X, Y, Z 1 hour                                 |       |                  |                          |                      |                          |
| Shock                         | -   | < 196.1 m/s <sup>2</sup>                                                                                 |       |                  |                          |                      |                          |
| Safety Agency Approvals       | -   | UL508                                                                                                    |       |                  |                          |                      |                          |
| Conducted & Radiated          | EMI | EN55011 / EN55022-B, FCC Class B, VCCI-B                                                                 |       |                  |                          |                      |                          |
| Weight (Typ)                  | g   | 400                                                                                                      | 500   | 700              | 900                      | 1900                 | 3000                     |
| Recommended EMI Filter        | -   | MAW1202-22                                                                                               |       |                  | MAW1202-22<br>MAW1203-22 | MAW1205-22<br>MB1210 | MB1210<br>MB1216         |
| Size (WxHxD)                  | mm  | See sheet 2                                                                                              |       |                  |                          |                      |                          |
| Cover                         | -   | Standard                                                                                                 |       |                  |                          |                      |                          |
| Warranty                      | -   | Five Years                                                                                               |       |                  |                          |                      |                          |

(1) Non condensing

## Model Selector

| Model          | Voltage | Adjustment Range | Max Current | Avg. Current | Peak Current | Load Reg mV | Line Reg mV | Ripple Noise mV | Efficiency (typ) % |
|----------------|---------|------------------|-------------|--------------|--------------|-------------|-------------|-----------------|--------------------|
| JWS50-24/508   | 24V     | 21.6 - 26.4      | 2.2         | -            | -            | 150         | 96          | 150             | 79                 |
| JWS70P-24/508  | 24V     | 21.6 - 26.4      | -           | 3            | 6            | 192         | 96          | 240             | 80                 |
| JWS75-24/508   | 24V     | 21.6 - 26.4      | 3.2         | -            | -            | 150         | 96          | 150             | 79                 |
| JWS100-24/508  | 24V     | 21.6 - 26.4      | 4.5         | -            | -            | 150         | 96          | 150             | 79                 |
| JWS120P-24/508 | 24V     | 21.6 - 26.4      | -           | 5            | 10           | 192         | 96          | 240             | 80                 |
| JWS150-24/508  | 24V     | 21.6 - 26.4      | 6.5         | -            | -            | 150         | 96          | 150             | 80                 |
| JWS240P-24/508 | 24V     | 21.6 - 28.8      | -           | 10           | 20           | 192         | 96          | 240             | 80                 |
| JWS300-24/508  | 24V     | 21.6 - 28.8      | 14          | -            | -            | 144         | 96          | 150             | 80                 |
| JWS480P-24/508 | 24V     | 21.6 - 28.8      | -           | 20           | 40           | 192         | 96          | 240             | 80                 |
| JWS600-24/508  | 24V     | 21.6 - 28.8      | 27          | -            | -            | 144         | 96          | 150             | 82                 |

Note 1: Peak current for up to 10 seconds with a 50% duty cycle

## Model Derating\*

| Model          | 40°C | 45°C | 50°C | 55°C | 60°C | 65°C |
|----------------|------|------|------|------|------|------|
| JWS50-24/508   | 100% | 100% | 80%  | 60%  | -    | -    |
| JWS70P-24/508  | 100% | 100% | 100% | 80%  | 60%  | -    |
| JWS75-24/508   | 100% | 80%  | 60%  | -    | -    | -    |
| JWS100-24/508  | 100% | 100% | 100% | 60%  | -    | -    |
| JWS120P-24/508 | 100% | 100% | 100% | 80%  | 60%  | -    |
| JWS150-24/508  | 100% | 100% | 100% | 60%  | -    | -    |
| JWS240P-24/508 | 100% | 100% | 100% | 85%  | 70%  | 55%  |
| JWS300-24/508  | 100% | 100% | 100% | 85%  | 70%  | 55%  |
| JWS480P-24/508 | 100% | 100% | 100% | 85%  | 70%  | 55%  |
| JWS600-24/508  | 100% | 100% | 100% | 85%  | 70%  | 55%  |

\* % of full power rating at specified temperature

## Dimensions Table

|                 | Height (H) | Width (W) | Depth (D) |
|-----------------|------------|-----------|-----------|
| JWS50           | 1.45"      | 3.35"     | 6.25"     |
| JWS75           | 1.65"      | 3.62"     | 6.88"     |
| JWS70P, JWS100  | 1.97"      | 3.62"     | 7.40"     |
| JWS120P, JWS150 | 2.56"      | 3.62"     | 7.80"     |
| JWS240P, JWS300 | 3.62"      | 4.72"     | 7.48"     |
| JWS480P, JWS600 | 3.62"      | 6.29"     | 7.90"     |

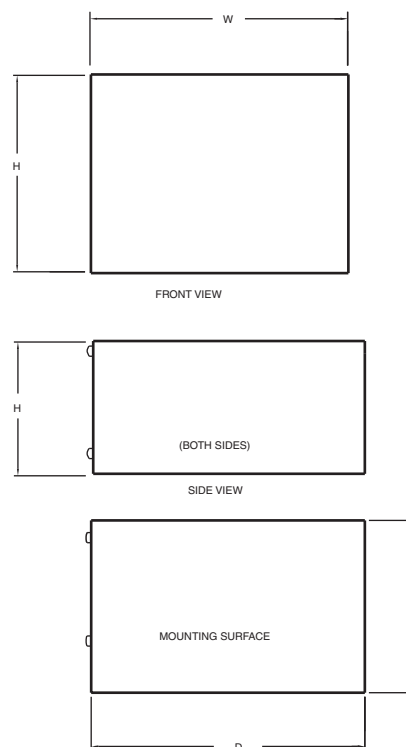
## Other Industrial Products

|                  |                                     |
|------------------|-------------------------------------|
| HWS              | 15 to 1500W Single output           |
| JWS, JWS-P & JWT | 50 to 600W Single and triple output |
| LZSa             | 500 to 1500W Single output          |
| JFS              | 500 to 2000W Single output          |
| DLP/DSP/DPP      | 10 to 480W DIN Rail Mount           |

For Additional Information, please visit  
[us.tdk-lambda.com/lp/products/jws-series.htm](http://us.tdk-lambda.com/lp/products/jws-series.htm)



## JWS Outline Drawing



See website for detailed drawing.

**Not recommended for new designs - see HWS series**