



**TRI-MAG, Inc.**  
 your POWER Specialists

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# DZ300 SERIES

## 300 Watts with PFC

### UNIVERSAL INPUT



#### GENERAL SPECIFICATIONS

Input Voltage..... 90VAC to 264VAC  
 Input Frequency..... 47Hz to 63Hz  
 Inrush Current (cold)..... Less than 30A at  
 110VAC or 60A at 220VAC cold start, 25°C  
 Operating Temperature..... 0 to 70°C  
 Storage Temperature..... - 20°C to  
 85°C  
 Cooling..... Free Air Convection  
 Efficiency.....80-90% Typical  
 Holdup Time.....>20ms  
 Overvoltage Type..... Latch off  
 Overload Protection..... Auto-recovery

#### Safety:

Designed in full compliance with.....UL 60950  
 CSA 22.2 #234  
 TUV EN60950

EMI.....EN55022 "B"  
 Harmonics.....EN61000-3-2 class D  
 EMS.....EN61000-4-2,-3,-4,-5,-6,-8,-11

#### DESCRIPTION

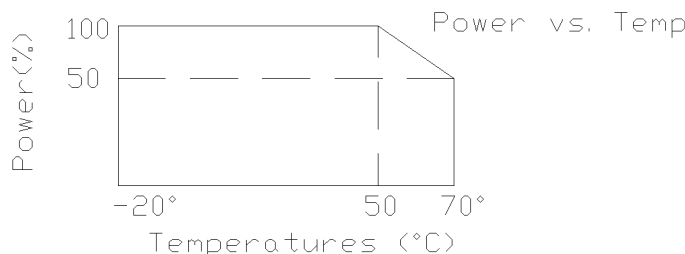
DZ300 series are 300W with active PFC in U shape chassis power supply. With soft-switching topology, low-profile height fits 1.6" constraints, high efficiency and high density in 4.2 W/in<sup>2</sup>.

#### FEATURES

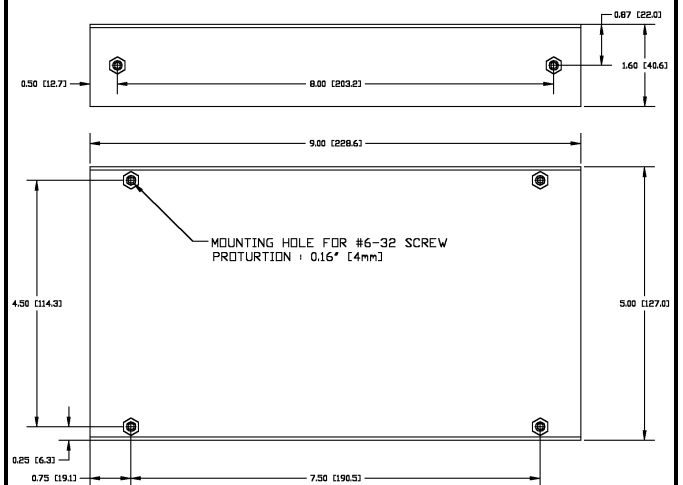
- EMI FCC Class B
- Power Factor Correction
- No Minimum Load Required
- Single and Multiple Output
- Universal input 90VAC to 264VAC

#### APPLICATIONS

- Computer Peripherals
- Telecommunications
- Tape Drives
- Test Instrumentation Product
- Data Acquisition
- Medical



#### MECHANICAL SPECIFICATIONS



#### Note:

1. Dimension shown in inch [mm] as above.
2. Size:  
5.0" X 9.0" X 1.6"  
[127mm X 228.6mm X 43mm]
3. Connectors:  
AC Input: Terminal Blocks (See 2nd page for complete connectors listing)  
DC Output: Terminal Blocks  
Remote Sense and LED Molex 5045-02A or equivalent



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### OUTPUT SPECIFICATIONS

| Model                    | Watts | Voltage (Vdc) | Load (A) |      |      | Tolerance<br>± | Ripple & Noise | Regulation |      |
|--------------------------|-------|---------------|----------|------|------|----------------|----------------|------------|------|
|                          |       |               | Min.     | Rate | Peak |                |                | Line       | Load |
| DZ300-2EU<br>DZ300-2EC   | 300   | +5V           | 0        | 32   | 45   | 1%             | 50 mV          | ± 1%       | ± 1% |
|                          |       | +12V          | 0        | 10   | 14   | 5%             | 100 mV         | ± 1%       | ± 1% |
|                          |       | -12V          | 0        | 1    | 2    | 5%             | 100 mV         | ± 1%       | ± 1% |
| DZ300-19EU<br>DZ300-19EC | 300   | +3.3V         | 0        | 30   | 40   | 3%             | 50 mV          | ± 1%       | ± 1% |
|                          |       | +5V           | 0        | 20   | 25   | 5%             | 50 mV          | ± 1%       | ± 1% |
|                          |       | +12V          | 0        | 8    | 10   | 5%             | 100 mV         | ± 1%       | ± 5% |
| DZ300-6EU<br>DZ300-6EC   | 300   | +5V           | 0        | 55   | 70   | 1%             | 50 mV          | ± 1%       | ±1%  |
| DZ300-7EU<br>DZ300-7EC   |       | 300           | +12V     | 0    | 25   | 30             | 2%             | 100 mV     | ±1%  |
| DZ300-12EU<br>DZ300-12EC | 300   | +24V          | 0        | 12   | 15   | 3%             | 200 mV         | ±1%        | ±1%  |
|                          |       | +5V           | 0        | 2    | -    | 2%             | 50 mV          | ±1%        | ±1%  |
| DZ300-20EU<br>DZ300-20EC | 300   | +48V          | 0        | 6.25 | 8    | 0.5%           | 200 mV         | ±1%        | ±1%  |
|                          |       | +5V           | 0        | 2    | -    | 2%             | 50 mV          | ±1%        | ±1%  |

**Note:** Contact factory for Safety Agency Approved status.

- Each output can provide up to peak load temporarily. Continuous staying in more than rated load is not allowed.
- At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
- Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
- Load regulation is defined by changing ±40% of measured output load from 60% rated load.
- The ripple and noise is measured by using 15MHz bandwidth limited oscilloscope and terminated each output with a 0.47 μF capacitor at rated load and nominal line.
- Hold up time is measured from the end of the last charging pulse to the time which the main output drops down to 95% output voltage at rated load and nominal line.
- Efficiency is measured at rated load.