

DZ100 SERIES

100 Watts with PFC

UNIVERSAL INPUT



DESCRIPTION

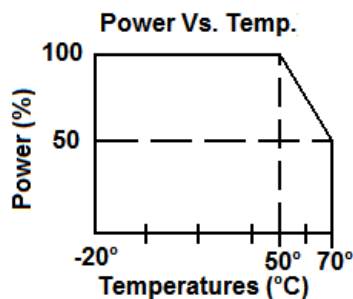
DZ100 series is a universal input multiple output power supply. The series is a 100 Watt power supply in the size of 3" x 5" with PFC and high density 6W/in³. The efficiency can reach up to 85-90% depending on model.

FEATURES

- EMI FCC Class B
- Power Factor Correction
- No Minimum Load Required
- Single and Multiple Output
- Universal input 90VAC to 260VAC

APPLICATIONS

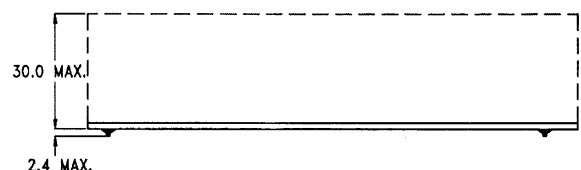
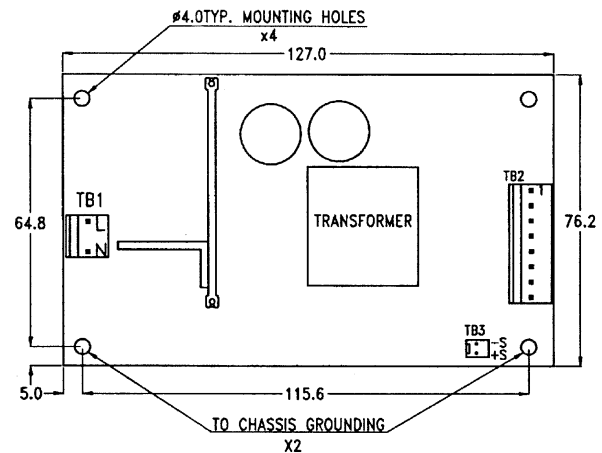
- Computer Peripherals
- Telecommunications
- Tape Drives
- Test Instrumentation Product
- Data Acquisition
- Medical



GENERAL SPECIFICATIONS

| | |
|---------------------------------------|--|
| Input Voltage..... | 90VAC to 264VAC |
| Input Frequency..... | 47Hz to 63Hz |
| Power Factor..... | >0.95 |
| Inrush Current (cold)..... | Less than 50A at 220VAC, 25°C |
| Operating Temperature..... | 0 to 70°C |
| Storage Temperature..... | -20°C to 85°C |
| Cooling..... | Free Air Convection for 100W 18CFM for 130W |
| Efficiency..... | 85-90% Typical |
| Holdup Time..... | >20ms at 115VAC |
| Oversoltage Type..... | Latch Off |
| Overload Protection..... | Auto Recovery |
| Short Circuit Protection..... | Auto Recovery |
| Designed in full compliance with..... | UL 60950-1 CSA 22.2 #234 EN60950-1 |
| EMI..... | EN55022 "B" FCC docket class "B" |
| Harmonics..... | EN61000-3-2 Class D |
| EMS..... | EN61000-4-2,-3,-4,-5,-6,-8,-11 |

MECHANICAL SPECIFICATIONS



Dimensions shown in mm as above. Tolerance: +/- 0.4mm.
 Size: DZ100-6,-7,-8,-9,-14,-18 DZ100-2,-3,-19
 127.0mm X 76.2mm X 30mm 127.0mm X 76.2mm X 32mm
 5" X 3" X 1.18" 5" X 3" X 1.26"

Connectors: AC input: Molex 5277-02A or equivalent
 DC output: Molex 5273 or equivalent
 Remote Sense: Molex 5045-02A or equivalent.

OUTPUT SPECIFICATIONS

| Model | Watts | Voltage (Vdc) | Load (A) | | | Tolerance ± | Ripple & Noise | Regulation | |
|----------|-------|---------------|----------|------|------|----------------|----------------|------------|------|
| | | | Min. | Rate | Peak | | | Line | Load |
| DZ100-6 | 100 | +5V | 0 | 20 | 26 | 1% | 50 mV | 0.5% | ±1% |
| DZ100-7 | 100 | +12V | 0 | 9 | 10.8 | 1% | 120 mV | 0.5% | ±1% |
| DZ100-8 | 100 | +15V | 0 | 7 | 8.7 | 1% | 120 mV | 0.5% | ±1% |
| DZ100-9 | 100 | +24V | 0 | 4.5 | 5.4 | 1% | 200 mV | 0.5% | ±1% |
| DZ100-2 | 100 | +5V | 0 | 11.5 | 15 | 1% | 50 mV | 0.5% | ±1% |
| | | +12V | 0 | 3 | 5 | 5% | 100 mV | 0.5% | ±5% |
| | | -12V | 0 | 0.5 | 1 | 5% | 100 mV | 0.5% | ±5% |
| DZ100-19 | 100 | +3.3V | 0 | 10 | 15 | 3% | 50 mV | 0.5% | +1% |
| | | +5V | 0 | 8 | 10 | 5% | 50 mV | 0.5% | ±5% |
| | | +12V | 0 | 0.5 | 1 | 5% | 100 mV | 0.5% | ±5% |
| DZ100-14 | 100 | +48V | 0 | 2.3 | 2.7 | 1% | 200 mV | 0.5% | ±1% |
| DZ100-18 | 100 | +3.3V | 0 | 25 | 30 | 1% | 50 mV | 0.5% | ±1% |
| DZ100-3 | 100 | +5V | 0 | 7.0 | 10 | 1% | 50 mV | 0.5% | +1% |
| | | +12V | 0 | 8.0 | 10 | 5% | 120 mV | 0.5% | ±5% |

Note: Contact factory for Safety Agency Approved status.

- Each output can provide up to peak load temporarily. Continuous operation at greater 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. Each output is terminated 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 when the main output drops down to 95% output voltage at rated load and nominal line.
- Efficiency is measured at rated load.

DZ100 SERIES 100 WATT—PIN ASSIGNMENT

| Model \ Pin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-------------|-------|-------|-------|-----|-----|-----|-----|------|------|------|
| DZ100-2 | +5V | +5V | +5V | COM | COM | COM | COM | +12V | -12V | |
| DZ100-6 | +5V | +5V | +5V | COM | COM | COM | | | | |
| DZ100-7 | +12V | +12V | +12V | COM | COM | COM | | | | |
| DZ100-8 | +15V | +15V | +15V | COM | COM | COM | | | | |
| DZ100-9 | +24V | +24V | +24V | COM | COM | COM | | | | |
| DZ100-14 | +48V | +48V | +48V | COM | COM | COM | | | | |
| DZ100-18 | +3.3V | +3.3V | +3.3V | COM | COM | COM | | | | |
| DZ100-19 | +3.3V | +3.3V | COM | COM | COM | COM | COM | +5V | +5V | +12V |
| DZ100-3 | +12V | +12V | COM | COM | COM | COM | +5V | +5V | | |

ENCLOSURES (optional)

Note: Package options are available for this series, EU type (U shape) and EC type (Enclosed)

EC

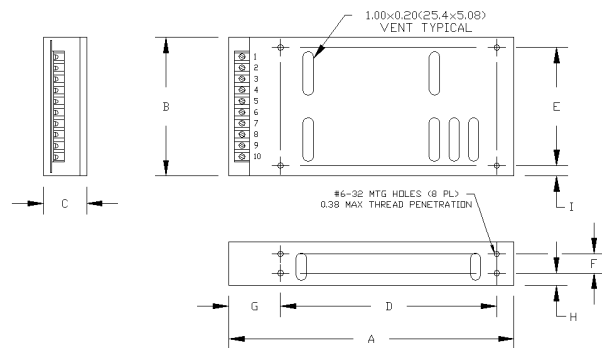


EU

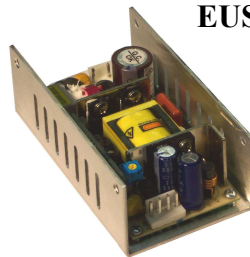


*Note DZ065 pictured in chassis

| Figure | Inches | (mm) |
|--------|--------|-------|
| A | 6.22 | 158 |
| B | 3.66 | 93 |
| C | 1.45 | 36.8 |
| D | 5.00 | 127 |
| E | 1.93 | 49 |
| F | 0.79 | 20 |
| G | 0.79 | 20 |
| H | 0.28 | 7.11 |
| I | 0.86 | 21.8 |
| J | 4.00 | 101.6 |

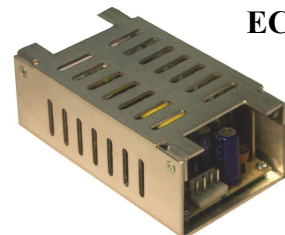


EUS



*Note DY040 pictured in chassis

ECS



Our Standard power supplies, the DZ100 Series, can be installed into a fully enclosed chassis or in a 'U' shape chassis as an option. These options offer two mounting planes. The fully enclosed option helps to reduce radiated noise.