

1601 N. CLANCY CT. VISALIA, CA 93291 PH: (559) 651-2222 FAX: (559) 651-0188 http://www.tri-mag.com sales@tri-mag.com

# DZ150 SERIES 150 Watts with PFC

For Medical and Industrial Applications



# **DESCRIPTION**

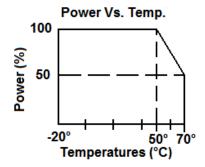
DZ150 series are 150W with active PFC in U shape chassis power supply. With soft-switching topology, low-profile height fits 1U constraints, high efficiency and high density in 4.0 W/in². 220W peak rating for 8 seconds.

#### **FEATURES**

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

# **APPLICATIONS**

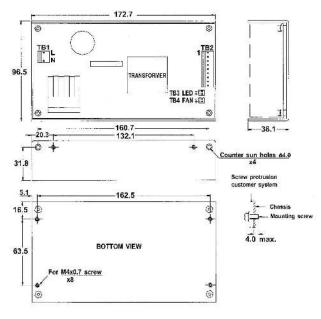
- Computer Peripherals
- Telecommunications
- Tape Drives
- Test Instrumentation Product
- Data Acquisition
- Medical



# GENERAL SPECIFICATIONS

Input Voltage	90VAC to 264VAC
Input Frequency	47Hz to 63Hz
Power Factor	
Inrush Current (cold)	
	t 230VAC cold start, 25°C
Operating Temperature	0 to 70°C
	De-rated $2.5\%$ /°C >50°C
Storage Temperature	–20°C to 85°C
Cooling	
Efficiency	
Holdup Time	
Overvoltage Type	Latch off
Overload Protection	
Short Circuit Protection	Auto-recovery
Earth Leakage	300µ Max @ 240VAC
Designed in full compliance v	vith. UL 60950-1,
	UL60601-1
CSA	A 22.2 #60950-1 No.601.1
	EN60950-1, EN60601-1
EMIFCC "B",E1	
Harmonics	
EMSEN61	1000-4-2,-3,-4,-5,-6,-8,-11

#### **MECHANICAL SPECIFICATIONS**



- Dimension shown in mm as above.
- 2. Size: 3.8" X 6.8" X 1.5"

[96.5mm X 172.7mm X 38.1mm]

. Connectors: AC Input: Molex 5277-02A or equivalent
DC Output: Molex 5277-12A for Quad output 5277-10A for other
Fan: Molex 5045-02A or equivalent

Remote Sense: Molex 5045-02A or equivalent

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OUTPUT SPECIFICATIONS										
Model	Watts	Voltage	I	Load (A)	)	Tolerance	Ripple	Regulation		
		(Vdc)	Min.	Rate	Peak	±	& Noise	Line	Load	
DZ150-1EU DZ150-1EC	150	+5V +12V -12V	0 0 0	10 7 0.5	20 15 -	1% 5% 5%	50 mV 120 mV 120 mV	± 1% ± 1% ± 1%	± 1% ± 5% ± 5%	
DZ150-19EU DZ150-19EC	150	+3.3V +5V +12V -12V	0 0 0 0	10 8 3.5 0.5	15 10 - -	3% 2% 5% 5%	50 mV 50 mV 120 mV 120 mV	± 1% ± 1% ± 1% ± 1%	± 3% ± 3% ± 5% ± 5%	
DZ150-12EU DZ150-12EC	150	+5V +12V	0	10 7	20 15	1% 5%	50 mV 120 mV	± 1% ±1%	±1% ±1%	
DZ150-6EU DZ150-6EC	150	+5V	0	28	-	1%	50 mV	±1%	±1%	
DZ150-7EU DZ150-7EC	150	+12V +5V	0	12 2	18 -	1% 2%	120 mV 50 mV	±1% ±1%	±1% ±1%	
DZ150-7EU-1 DZ150-7EC-1	150	+12V	0	12.5	18	1%	120 mV	±1%	±1%	
DZ150-8EU DZ150-8EC	150	+15V +5V	0	9.6 2	14 -	5%	200 mV	±1%	±1%	
DZ150-8EU-1 DZ150-8EC-1	150	+15V	0	10	14	1%	150 mV	±1%	±1%	
DZ150-9EU DZ150-9EC	150	+24V +5V	0	6 2	8.8	1% 2%	200 mV 50 mV	±1% ±1%	±1% ±1%	
DZ150-9EU-1 DZ150-9EC-1	150	+24V	0	6.5	8.8	1%	240 mV	±1%	±1%	
DZ150-14EU DZ150-14EC	150	+48V	0	3.2	4.6	1%	480 mV	±1%	±1%	
DZ150-11EU DZ150-11EC	150	+5V +24V +12V -12V	0 0 0 0	8 3 2 0.5	18 7 - -	2% 5% 5% 5%	50 mV 240 mV 120 mV 120 mV	±1% ±1% ±1% ±1%	±3% ±3% ±5% ±5%	

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DZ150 SERIES 150WATT— PIN ASSIGNMENT												
Pin	1	2	3	4	5	6	7	8	9	10	11	12
DZ150-1EU/EC	-12V	+5V	+5V	+5V	COM	COM	COM	COM	COM	+12V	+12V	+12V
DZ150-19EU/EC	+12V	-12V	+3.3V	+3.3V	+3.3V	COM	COM	COM	COM	COM	+5V	+5V
DZ150-12EU/EC	N/C	+5V	+5V	+5V	COM	COM	COM	COM	COM	+12V	+12V	+12V
DZ150-6EU/EC	+5V	+5V	+5V	+5V	+5V	+5V	COM	COM	COM	COM	COM	COM
DZ150-7EU/EC	+5V	COM	COM	COM	COM	+12V	+12V	+12V	+12V			
DZ150-7EU/EC-1	N/C	COM	COM	COM	COM	+12V	+12V	+12V	+12V			
DZ150-8EU/EC	+5V	COM	COM	COM	COM	+15V	+15V	+15V	+15V			
DZ150-8EU/EC-1	N/C	COM	COM	COM	COM	+15V	+15V	+15V	+15V			
DZ150-9EU/EC	+5V	COM	COM	COM	COM	+24V	+24V	+24V	+24V			
DZ150-9EU/EC-1	N/C	COM	COM	COM	COM	+24V	+24V	+24V	+24V			
DZ150-14EU/EC	N/C	COM	COM	COM	COM	+48V	+48V	+48V	+48V			
DZ150-11EU/EC	+12V	-12V	+5V	+5V	+5V	COM	COM	COM	COM	COM	COM	+24V

NOTE: Enclosed (EC) is available

Note: Contact factory for Safety Agency Approved status.

- 1. Each output can provide up to peak load temporarily. Continuous operation at greater than rated load is not allowed.
- 2. At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
- 3. Line regulation is defined by changing  $\pm 10\%$  of input voltage from nominal line at rated load.
- 4. Load regulation is defined by changing  $\pm 40\%$  of measured output load from 60% rated load.
- 5. 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.
- 6. 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.
- 7. Efficiency is measured at rated and nominal load.

#### OTHER POWER SUPPLIES FOR MEDICAL APPLICATIONS

- 1. Desktop Style
  - A. DT430M-5 (30 Watts, +12VDC)
  - B. DT450M-6 (50 Watts, +24VDC)
- 2. "U" shape and Enclosed
  - A. DZ200M-9EU or EC

200 Watts, 24V convection cooled 250 Watts with 18 CFM forces air dimension: 4.2" x 8.0" x 1/5" (106.7mm x 203.2mm x 38.1mm)

B. UV480PM-4

80 Watts, +5V @ 12.0A and +12V @ 1.0A

dimension: 3.3" x 5.25" x 1.5" (83.82mm x 133.35mm x 38.1mm)

3. Detailed Specification is available