



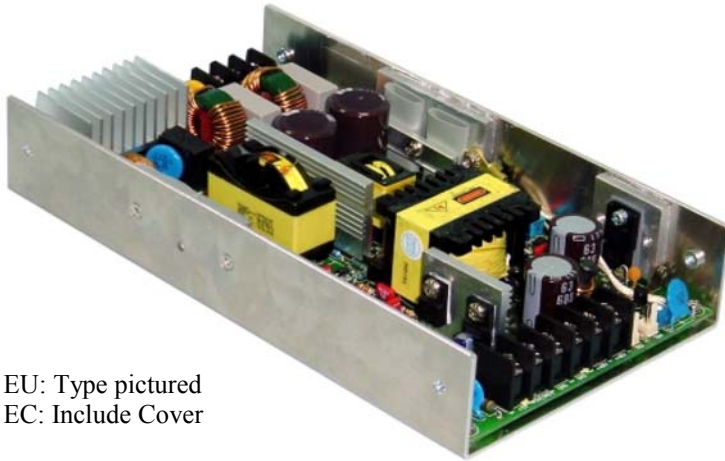
**TRI-MAG, Inc.**  
*your* POWER Specialists

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# DZ300 SERIES

## 300 Watts with PFC

### UNIVERSAL INPUT



EU: Type pictured  
 EC: Include Cover

#### DESCRIPTION

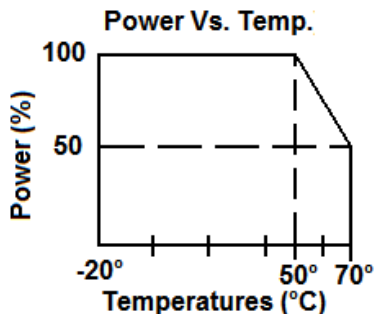
DZ300 series are 300W with active PFC in U shape chassis power supply. With soft-switching topology, low-profile height fits 1.6" constraints, high efficiency and high density in 4.2 W/in<sup>2</sup>.

#### FEATURES

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

#### APPLICATIONS

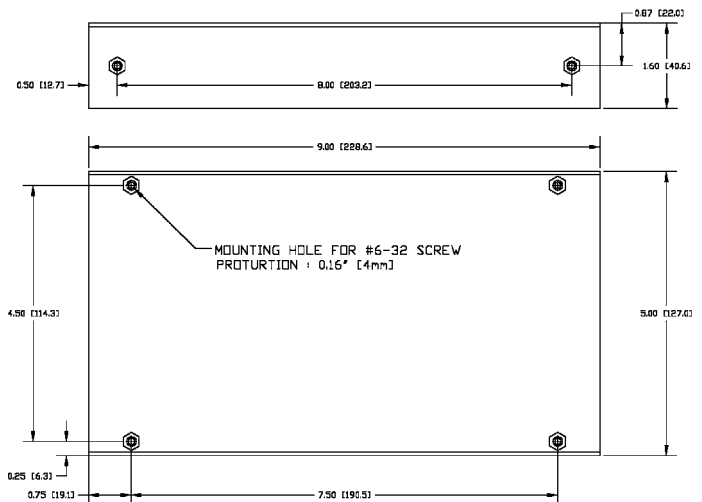
- Computer Peripherals
- Telecommunications
- Tape Drives
- Test Instrumentation Product
- Data Acquisition



#### GENERAL SPECIFICATIONS

Input Voltage.....	90VAC to 264VAC
Input Frequency.....	47Hz to 63Hz
Power Factor.....	>0.95
Inrush Current (cold).....	Less than 30A at 110VAC or 60A at 220VAC 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.....	Free Air Convection for 300W 18CFM for 360W
Efficiency.....	80-90% Typical
Holdup Time.....	>20ms
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 TUV EN60950-1
EMI.....	FCC "B" EN55022 "B"
Harmonics.....	EN61000-3-2 class D
EMS.....	EN61000-4-2,-3,-4,-5,-6,-8,-11

#### 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 40.6mm]
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 ±	Ripple & Noise	Regulation	
			Min.	Rate	Peak			Line	Load
DZ300-1EU DZ300-1EC	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 DZ300-19EC	300	+3.3V	0	20	30	3%	50 mV	± 1%	± 1%
		+5V	0	20	30	5%	50 mV	± 1%	± 1%
		+12V	0	8	10	5%	100 mV	± 1%	± 5%
DZ300-6EU DZ300-6EC	300	+5V	0	60	72	1%	50 mV	± 1%	±1%
DZ300-7EU DZ300-7EC	300	+12V	0	25	30	2%	100 mV	±1%	±1%
		+5V	0	2	-	2%	50 mV	±1%	±1%
DZ300-12EU DZ300-12EC	300	+24V	0	12	14.6	3%	200 mV	±1%	±1%
		+5V	0	2	-	2%	50 mV	±1%	±1%
DZ300-20EU DZ300-20EC	300	+48V	0	6.25	7.3	0.5%	200 mV	±1%	±1%
		+5V	0	2	-	2%	50 mV	±1%	±1%
DZ300-8EU DZ300-8EC	300	+15V	0	20	23	2%	150 mV	±1%	±1%
		+12V	0	0.5	-	2%	50 mV	±1%	±1%
DZ300-18EU DZ300-18EC	300	+3.3V	0	70	90	1%	50 mV	± 1%	±1%
DZ300-8EU(V1) DZ300-8EC(V1)	300	+15V	0	20	23	2%	150 mV	±1%	±1%
		+5V	0	2.0	-	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.

### DZ300 SERIES 300 WATT — PIN ASSIGNMENT

Pin Model	1	2	3	4	5	6	7	8	9	10	11	12
DZ300-1EU	+5V	+5V	+5V	COM	COM	COM	COM	COM	+12V	+12V		
DZ300-19EU			+12V	COM+12V	+5V	+3.3V	COM+5V	COM+3.3V				
DZ300-6EU	+5V	+5V	+5V	COM	COM	COM	COM	COM	COM	+5V	+5V	+5V
DZ300-7EU	+12V	+12V	+12V	COM	COM	COM	COM+5V	+5V				
DZ300-12EU	+24V	+24V	COM	COM	COM+5V	+5V						
DZ300-20EU	+48V	+48V	COM	COM	COM+5V	+5V						
DZ300-8EU	+15V	+15V	+15V	COM	COM	COM	COM+12V	+12V				
DZ300-18EU	+3.3V	COM	RS+	ON/OFF	P.S.	RS-						
DZ300-8EU(V1)	+15V	+15V	+15V	COM	COM	COM	COM+5V	+5V				

\* P.S. = POWER SHARING, RS+ = REMOTE SENSE +, RS- = REMOTE SENSE -