

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

DY110 SERIES

110 Watts For Medical & Industrial Applications 160 Watts Peak Current



DESCRIPTION

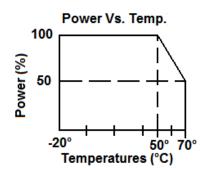
DY110 series is a universal input multiple output power supply. The series is a 110 Watt power supply in the size of 3.5"x 6" with a wattage density of 3.8W/in³. The efficiency can reach up to 78-87% depending on model.

FEATURES

- EMI FCC Class B
- No Minimum Load Required
- Single and Multiple Output
- Universal input 90VAC to 264VAC
- Low Leakage Current

APPLICATIONS

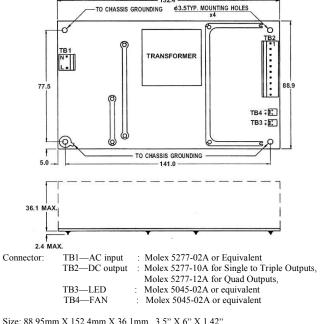
- Computer Peripherals
- Telecommunications
- Tape Drives
- Test Instrumentation Product
- Data Acquisition
- Medical & Dental



GENERAL SPECIFICATIONS

Input Voltage	90VAC to 264VAC
Input Frequency	
Inrush Current (cold)	Less than 30A at
	115VAC, 25°C
Operating Temperature	0 to 70°C
	de-rated 2.5%/°C >50°C
Storage Temperature	40°C to 85°C
Cooling	Free Air Convection
Efficiency	78% to 87%
	At rated load and 115Vac
Holdup Time	>16ms at 115VAC
Overvoltage Type	Latch Off
Overload Protection	
Short Circuit Protection	Auto recovery
Earth Leakage	<300μA
Designed in full compliance	with UL 60950-1,
	UL60601-1
	CSA 22.2 #60950-1,601.1
	EN60950-1,EN60601-1
EMIEl	N55022 "B", EN55011 "B"
	FCC docket class "B"
EMSEN6	51000-4-2,-3,-4,-5,-6,-8,-11
Harmonics	EN61000-3-2 Class A

MECHANICAL SPECIFICATIONS



Size: 88.95mm X 152.4mm X 36.1mm, 3.5" X 6" X 1.42" Mounting Holes: 77.5mm X 141, 3.05" X 5.55"



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OUTPUT SPECIFICATIONS											
Model	Watts	Voltage (Vdc)	Load (A)				Voltage	Ripple	Regulation		
			Min.	Rate	Max	Peak	Tolerance ±	& Noise Pk to Pk	Line	Load	
DY110-2	110	+5V +12V -12V	0 0 0	7 5 0.5	13 7	20 11 -	±1% ±5% ±5%	1% 1% 1%	±1% ±1% ±1%	±3% ±3% ±5%	
DY110-19	110	+3.3V +5V +12V -12V	0 0 0 0	10 8 2 0.2	12 10	12 10 -	±3% ±5% ±5% ±5%	50m vp-p 1% 1% 1%	±1% ±1% ±1% ±1%	±3% ±3% ±5% ±5%	
DY110-6	110	+5V	6	19		-	±1%	1%	±1%	±1%	
DY110-7	110	+12V +5V	0	8.5 1		13	±1% ±5%	1% 1%	±1% ±1%	±1% ±1%	
DY110-7-1	110	+12V	0	9		13	±1%	1%	±1%	±1%	
DY110-8	110	+15V +5V	0	7 1		10.5 1	±1% ±5%	1% 1%	±1% ±1%	±1% ±1%	
DY110-8-1	110	+15V	0	7		10.5	±1%	1%	±1%	±1%	
DY110-9	110	+24V +5V	0	4.5 1		6.5 1	±1% ±5%	1% 1%	±1% ±1%	±1% ±1%	
DY110-9-1	110	+24V	0.1	4.5		6.5	±1%	1%	±1%	±1%	
DY110-14	110	+48V	0	2.3		3.5	±1%	1%	±1%	±1%	
DY110-1	110	+5V +12V -12V -5V	0 0 0	6 5 0.5 0.5	13 7	20 11 -	±2% ±5% ±5% ±5%	1% 1% 1% 1%	±1% ±1% ±1% ±1%	±3% ±3% ±5% ±3%	
DY110-11	110	+5V +24V +12V -12V	0 0 0 0	6 2 2 0.3	10	15 5.5 -	±2% ±5% ±5% ±5%	1% 1% 1% 1%	±1% ±1% ±1% ±1%	±3% ±3% ±5% ±5%	

Note: Contact factory for Safety Agency Approved status.

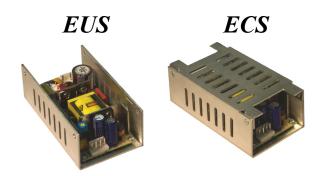
- 1. Each output can provide up to peak load temporarily. Continuous operation at greater than rated load is not allowed.
- 2. At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
- 3. Line regulation is defined by changing $\pm 10\%$ of input voltage from nominal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



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DY110 SERIES 110 WATT —— PIN ASSIGNMENTS												
Pin Model	1	2	3	4	5	6	7	8	9	10	11	12
DY110-1	+5V	+5V	+5V	GND	GND	GND	+12V	+12V	-12V	GND	-5V	NC
DY110-2	+5V	+5V	+5V	GND	GND	GND	+12V	+12V	-12V	NC		
DY110-6	+5V	+5V	+5V	+5V	GND	GND	GND	GND	NC	NC		
DY110-7	+12V	+12V	+12V	+12V	GND	GND	GND	GND	+5V	NC		
DY110-7-1	+12V	+12V	+12V	+12V	GND	GND	GND	GND	NC	NC		
DY110-8	+15V	+15V	+15V	+15V	GND	GND	GND	GND	+5V	NC		
DY110-8-1	+15V	+15V	+15V	+15V	GND	GND	GND	GND	NC	NC		
DY110-9	+24V	+24V	+24V	+24V	GND	GND	GND	GND	+5V	NC		
DY110-9-1	+24V	+24V	+24V	+24V	GND	GND	GND	GND	NC	NC		
DY110-14	+48V	+48V	+48V	+48V	GND	GND	GND	GND	NC	NC		
DY110-11	+5V	+5V	+5V	GND	GND	GND	+24V	+24V	+12V	GND	-12V	NC
DY110-19	+3.3V	+3.3V	+3.3V	GND	GND	GND	GND	GND	+5V	+5V	+12V	-12V

ENCLOSURES (optional)



Our Standard power supplies, the DY090 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.

Example Part Number: DY090-9ECS or DY090-9EUS

^{*}Note DY040 pictured in chassis