

# DLP240 Specifications

DLP

ITEMS/UNITS		MODEL	DLP240-24-1	
Input	Voltage Range	(*2) V	AC85 - 265 or DC120 - 370	
	Frequency	(*2) Hz	47-63	
	Power Factor (typ)	(*1)	0.99 / 0.95	
	Efficiency (100/230VAC)(typ)(*1)	%	82 / 86	
	Current (100/230VAC)(typ)(*1)	A	3.0 / 1.3	
	Inrush Current (100/230VAC)(typ)(*3)	A	20 / 45, Ta=25°C, cold start	
	Leakage Current	(*9) mA	Less than 0.75	
Output	Nominal Voltage	VDC	24	
	Maximum Current	A	10	
	Maximum Power	W	240	
	Maximum Line Regulation(*4)(*5)	mV	120	
	Maximum Load Regulation(*4)(*6)	mV	192	
	Temperature Coefficient		Less than 0.05%/°C	
	Maximum Ripple & Noise (0≤Ta≤60°C)(*4)	mVp-p	240	
	Maximum Ripple & Noise (-10≤Ta<0°C)(*4)	mVp-p	360	
	Hold-up Time (100/230VAC)(*1)	ms	20 / 30	
	Voltage Adjustable Range	VDC	21.6 - 28	
	Function	Over Current Protection (*7)	A	>10.5
		Over Voltage Protection (*8)	V	30.0 - 35.0
Parallel Operation			-	
Series Operation			Possible	
Environment	Operating Temperature (*10)	°C	85VAC - 170VAC : -10 to +60, Convection: -10 to +50 (100%); 60 (60%) 170VAC - 265VAC : -10 to +70, Convection: -10 to +55 (100%); 70 (60%)	
	Storage Temperature	°C	- 30 to +85	
	Operating Humidity	%RH	30 - 90 (No dewdrop)	
	Storage Humidity	%RH	10 - 95 (No dewdrop)	
	Vibration		At no operating and with DIN RAIL 10~55Hz (sweep for 1min) 9.8m/s <sup>2</sup> constant, X, Y, Z each 1hour	
	Shock (In package)		Less than 196m/s <sup>2</sup>	
	Cooling		Convection cooling	
Isolation	Withstand Voltage		Input - Output : 3.0kVAC, Input - FG : 2.0kVAC (20mA) for 1min Output - FG : 500VAC (100mA) for 1min.	
	Isolation Resistance		More than 100MΩ at Ta=25°C and 70%RH, Output - FG : 500VDC	
Standards	Safety Standards		Approved by UL60950-1, CSA C22.2 No.60950, EN60950-1, UL508, CSA C22.2 No.14-M95, EN50178 CATEGORY III (Primary), Built to meet DENAN	
	PFHC		Built to meet IEC61000-3-2	
	EMI		Built to meet VCCI-B, FCC-ClassB, EN55011/EN55022-B	
	Immunity		Built to meet IEC61000-6-2 (IEC61000-4-2,-3,-4,-5,-6,-8,-11)	
Mechanical	Weight (typ)	g	1000	
	Size (W x H x D)	mm	120 x 97 x 110 (Refer to outline drawing)	

(\*1) At 100/230VAC and maximum output power, Ta=25°C .

(\*2) For cases where conformance to various safety specs (UL, CSA, EN) are required, to be described as 100-240VAC, 50/60Hz on name plate.

(\*3) Not applicable for the in-rush current to Noise Filter for less than 0.2ms.

(\*4) Please refer to Fig A for measurement of line & load regulation and output ripple voltage. (Measure with JEITA RC-9131 probe.)

(\*5) 85-265VAC, constant load.

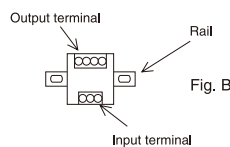
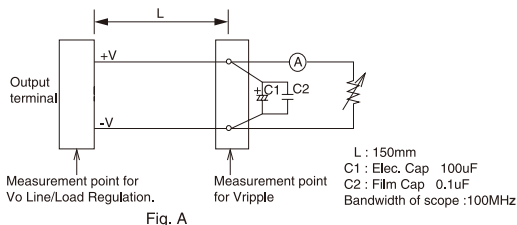
(\*6) No load - full load (maximum power), constant input voltage.

(\*7) Constant current limit with automatic recovery. Avoid to operate at overload or dead short for more than 30 seconds.

(\*8) OVP circuit will shutdown output, manual reset. (Re power on.)

(\*9) Measured by each measuring method of UL, CSA, EN and DENAN (at 60Hz).

(\*10) At standard mounting method, Fig B.  
- Load(%) is percent of maximum output load (Item2 and 3), do not exceed derating in both maximum output current and power.  
- For standard mounting, refer to derating curve.



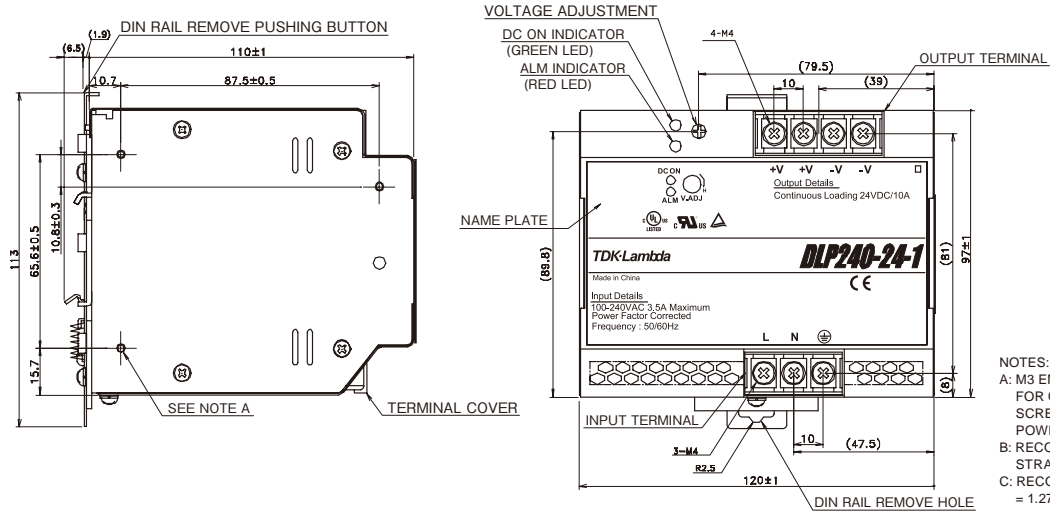
Recommended EMC Filter



RSEN-2006  
Please refer to "TDK-Lambda EMC Filters" catalog.

# Outline Drawing

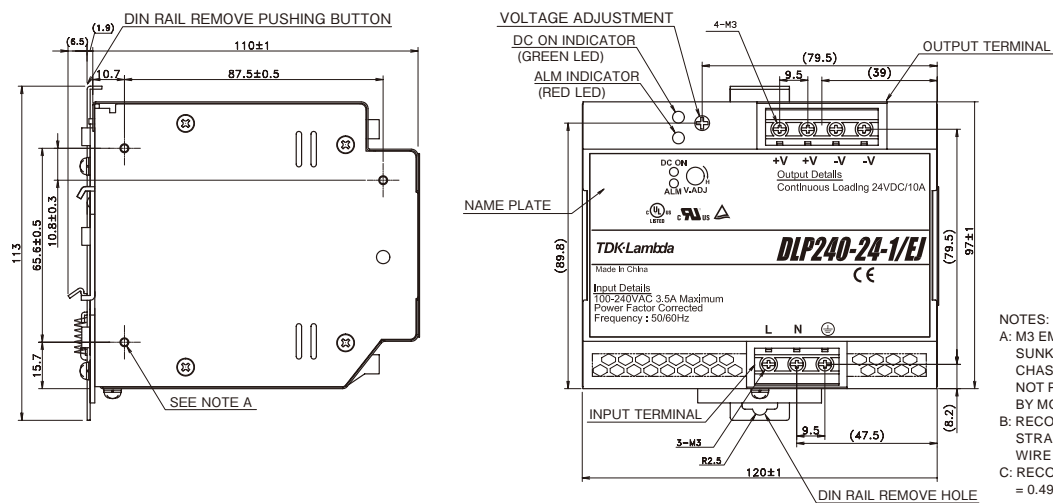
## [DLP240] (Block Terminal)



**NOTES:**  
 A: M3 EMBOSSED TAPPED HOLES(6) ARE FOR CUSTOMER CHASSIS MOUNTING. SCREWS MUST NOT PROTRUDE INTO POWER SUPPLY BY MORE THAN 4mm.  
 B: RECOMMENDED WIRE = SOLID AND STRANDED AWG12-20 (0.5-3.5mm<sup>2</sup>)  
 C: RECOMMENDED SCREW TORQUE = 1.27N·m

(unit : mm)

## [DLP240/EJ] (European Terminal)



**NOTES:**  
 A: M3 EMBOSSED TAPPED & COUNTER-SUNK HOLES(6) ARE FOR CUSTOMER CHASSIS MOUNTING. SCREWS MUST NOT PROTRUDE INTO POWER SUPPLY BY MORE THAN 4mm.  
 B: RECOMMENDED WIRE = SOLID AND STRANDED AWG12-20 (0.5-3.5mm<sup>2</sup>) WIRE STRIP LENGTH = 6-7mm  
 C: RECOMMENDED SCREW TORQUE = 0.49N·m

(unit : mm)

# Output Derating

