TDK-Lambda

Doc 60825

C2 : Elec. Cap. 100 μF

		ISS 10 55567	
MOD-STD	DWG No.	LA001-01-01	

EFE300J

SPECIFICATIONS

	МО	DEL	EFE300J-12-CNJDS	EFE300J-24-CNJDS	REV				
	ITEMS		EFE300J-12-ECJDS	EFE300J-24-ECJDS					
1	Nominal Output Voltage		/ 12	24					
2	Maximum Output Current		A 25	12.5					
3	Nominal Output Power	1	V	300					
4	Peak Output Power	1	400 for 10 seconds max						
5	Efficiency (Typ.)	(*1)	6	85 / 90(100V/230V)					
6	Input Voltage Range	(*2)	90 - 265 VAC(47-63Hz)						
7	Input Current	(*1)	A	3.5 / 1.5(100V/230V)					
8	In-rush Current (Typ.)	(*1)	20A peak at Cold Start(Ta=25°C)						
9	Power Factor	(*1)	0.9 min(100V/230V)						
10	Output Voltage Accuracy	0	+/-1 (At 50% Load,25°C)						
11	Output Voltage Range		Not Adjustable (Factory Fixed)						
12	Maximum Ripple & Noise	(*3) n	V 180	360					
13	Maximum Line Regulation (*3)(*4) n	V 60	120					
14	Maximum Load Regulation (*3)(*5) n	V 150	300					
15	Temperature Regulation	(*3)	6	+/-2% (0°C - +50°C)					
16	Over Current Protection	(*6)	Steady State: 101% - 120%, 10s Peak power: 135%-160% Refer to instruction manual						
17	Over Voltage Protection	(*7)	- 120% - 145	120% - 145% (Inverter shutdown method)					
18	Hold-up Time (Typ)		-	16ms at 75% Load					
19	Leakage Current	(*8)		1.5mA Max					
20	Parallel Operation		-						
22	Operating Temperature	(*9)	- 0°C - +70°C (0-+50°C	0°C - +70°C (0-+50°C:100%, Derate -2.5%/°C : +50°C-+70°C)					
23	Operating Humidity		- 30 - 9	30 - 95%RH (Non-Condensing)					
24	Storage Temperature		-40°C - +70°C (12 Month Max)						
25	Storage Humidity		10 - 95%RH (Non-Condensing)						
26	Cooling		- Open Frame Model(Open Frame Model(CN) : Forced Air Cooling (System air Cooling): 2m/s					
	-		With Chassis/Fan M	With Chassis/Fan Model(EC) :Forced Air Cooling (By internal Blower)					
27	Withstand Voltage	*10)	Input-Earth : 2.25kVDC, Input-Output : 4.25kVDC for 1min.						
			- Output-	Earth : 200VDC for 1min.					
28	Isolation Resistance		Output to Earth 200VDC more than 100MOhm (25°C,70%RH)						
29	Vibration		- At No Operati	At No Operating, 10-500Hz (Sweep for 6min.)					
			- 19.6m/s ²	Constant, X,Y,Z 2 hour each					
30	Shock		- +/- 3Shoc	+/- 3Shocks X,Y,Z Each 294m/s2 (11ms Halfsine)					
31	Safety -		 Approved by UL60950-1, CSA 	Approved by UL60950-1, CSA60950-1 (cUL), IEC60950-1(EN60950-1: CB and Certificate)					
32	Conducted Emission		- Designed to meet EN55011/EN55022-B, FCC-B, VCCI-B						
33	Radiated Emission		Designed to meet EN55011/EN55022-A, FCC-A, VCCI-A						
34	Immunity		Designed to meet IEC61000-4-2(Level 4), -3(Level 3), -4(Level 4),						
			-5(Level 3), -6	(Level 3), -8(Level 4), -11(Class3),-14(Class3)					
35	Weight (Typ.)		g C	N:320 EC:575					
36	Size (W x H x D)	n	m CN:76.2 x 34 x 12	CN:76.2 x 34 x 127, EC:84.4x40.6x162(Refer to Outline Drawing)					
=NC	DTES=		*Read instruction manual carefully, b	*Read instruction manual carefully, before using the power supply unit.					
*1.	1. Ta=25°C, nominal output voltage and maximum output power.								
*2.	For cases where conformance to variou	is safety	specs (UL, CSA, EN) are required, to be dea	scribed as 100 - 240VAC(50/60Hz).					
*3.	Please refer to Fig. A for measurement	of line a	t load regulation and ripple voltage.	Fig. A Measuring Point					
*4.	90 - 265VAC, constant load.			150mm for Ripple & Noise.					
*5.	*5. No load-Full load, constant input voltage.								
*6.	*6. Hiccup with automatic recovery.								
The Power Supply is self protected for over current by advanced digital technology.									
*7. OVP circuit will shut the output down, manual reset (Re power on).									
*8. Measured by the each measuring method of UL, CSA, EN.									
*9. Ratings Vo and Line/Load Regulation.									
	- Derating at standard mounting. Refer to output derating curve(LA001-01-02).								

- Derating at standard mounting. Refer to output derating curve(LA001-01-02_).
 Load (%) is percent of maximum output power or maximum output current, whichever is greater. *10. For details Refer to Hipot test spec. (LA001-01-03_)

EFE300J

MOD-STD DWG No. LA

OUTPUT DERATING



TDK-Lambda

MOD-STD DWG No. LA001-01-03



EFE300J is fully approved by UL60950-1, CSA60950-1, EN60950-1.

However, due to avoid unnecessary damage for Y-Caps, the test method is recommended as below.

EFE300J Hi-pot Test

(Component might damage/degrade: C12,C13,C14,C4 and C15)

1. When Customer incomming Test (Routine Test) Time Duration 2-5sec

EFE No-Frame model(CN) test Pri-Sec Full Voltage (4.25kVDC)

EFE: Chassis/Fan Model(EC) Pri-Sec Basic Full Voltage (2.25kVDC)





GND is connected by Chassis

2. When inside Customer equipment (Routine Test) Time duration 2-5sec. Note: Please take care for the Y-Capacitors which connected in customer equipment as well.





When UL Application (Type Test)
 Removing components C12,C13,C14,C4 and C15 is recommended.
 Note: Please consult with safety engineer



