

## 300W / 400W, 3 x 5" / 3 x 6" Power Supplies

### Features

- ◆ High Efficiency
- ◆ Active Power Factor Correction
- ◆ Universal Input (90 - 264VAC)
- ◆ High peak loading capability
- ◆ Suitable for 1U applications
- ◆ Full Digital Control
- ◆ Low Profile



### Key Market Segments & Applications



Specifications		EFE300	EFE400
Input Voltage range	-	90 - 264VAC	
Input Frequency	-	45 - 63Hz, 440Hz with reduced PFC	
Inrush Current (3)	A	<20A	<30A
Power Factor Harmonics	-	EN61000-3-2 Compliant (0.97 typical)	
Voltage Setting Range	-	5% to +10% (Chosen at time of ordering)	
Voltage Setting Accuracy	-	±1% at 50% load	
Total Regulation	-	< 4% with 90 - 264VAC input change and 0-100% load change	
Ripple & Noise	mV	<1.5% pk-pk	
Efficiency	-	90% typical	
Minimum Load	A	None	
Overcurrent Protection	-	Automatic recovery upon overload removal	
Overvoltage Protection	V	Cycle AC line to reset	
Overtemperature Protection	-	Yes	
Hold Up Time (Typ)	ms	>16ms at 90VAC input, 75% load	
Leakage Current (max)	mA	1.5mA at 264VAC, 63Hz	
Fan Supply	-	12V 0.25A (Available if no fan option selected)	
Remote Sense	-	None	
Operating Temperature (2)	°C	0 to +70°C. Derate linearly to 50% load from 50°C to 70°C	
Storage Temperature	°C	-40 to +85°C	
Humidity (non condensing)	-	5 - 95% RH	
Cooling	-	Forced air, 2m/s from input to output (approximately 10CFM)	
Isolation	-	Input to Ground 2.3kVDC, Input to Output 4.3kVDC, Output to Ground 200VDC	
Vibration (non operating)	-	2G, 10-500Hz (sweep & endurance at resonance) in all 3 planes. MIL-STD-810E, Method 516.5, Pro I, IV, V	
Shock	-	30G per IEC68-2-27, MIL-STD-810E, Method 514.4, Pro 1, Cat 1, 9.	
Safety Agency Approvals*	-	UL60950-1, CSA22.2 No 60950-1, EN60950-1, EN61010-1, IEC61010-1, CE for LVD	
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8, -11, -12, -14	
Conducted Emissions & Flicker	-	EN55011, EN55022 Class B (per CISPR.11/22), EN61000-3-3	
Radiated Emissions	-	EN55011, EN55022 Class B (per CISPR.11/22)	
Weight (open frame or enclosed)	g	310g or 550g	430g or 650g
Size (Open frame style) (1)	in	3 x 5 x 1.34"	3 x 6 x 1.34"
Warranty	yrs	Five Years (4)	

(1) Including underside component leads

(2) -20°C cold start

(3) At 25°C, 230VAC and cold start

(4) Three years for products built before Aug 1, 2011

Model Selector							
Product Code	Part Description	Style	Output Voltage (V)	Output Current (A)	Average Output Power (W)	Peak Output Current (A) <sup>(5)</sup>	Peak Output Power (W) <sup>(5)</sup>
U2Y002G	EFE300-12-CNMDs	Open Frame	12	25.0	300	33.30	400
U2Y003H	EFE300-12-ECMDS	With Fan	12	25.0	300	33.30	400
U4Y002H	EFE400-12-CNMDs	Open Frame	12	33.3	400	44.17	530
U4Y003J	EFE400-12-ECMDS	With Fan	12	33.3	400	44.17	530
U2Y005K	EFE300-24-CNMDs	Open Frame	24	12.5	300	16.70	400
U2Y006L	EFE300-24-ECMDS	With Fan	24	12.5	300	16.70	400
U4Y005L	EFE400-24-CNMDs	Open Frame	24	16.7	400	22.08	530
U4Y006M	EFE400-24-ECMDS	With Fan	24	16.7	400	22.08	530

(5) For up to 10s without exceeding Average Output Power rating      Note: The EFE300M is also available with 28V, 48V and 50V

### Outline Drawing

**J1**

PIN	□□NN□□□□N
1	□AR□□
2	N□□ □□NN□□□□
3	□IV□
4	N□□ □□NN□□□□
5	N□U□RA□

**J2**  
TOP ROW: 0V  
BOTTOM ROW: +V

**J3**

PIN	□□NN□□□□N
1	0V
2	□V
3	□□ N□□ □□NN□□□□

**MATING PARTS (MOLEX OR EQUIVALENT)**

□□NN□□□□R	□□USIN□	□RI□P PIN
□1	09-50-8051	08-52-0113
□2	□□F□300□ 39-01-2105 □□F□400□ 39-01-2145	34476-3112
□3	02201-3037	08-50-0032

**OPEN FRAME**

### Options

Part Description Suffix	U Chassis	Cover	Internal Fan
-CNMDS	N	N	N
-CUMDS	Y	N	N
-CCMDS	Y	Y	N
-ECMDS	Y	Y	Y

### Other Industrial Products

NV Series	175 to 900W 1U power supply 1-8 outputs
ZPSA	40 to 60W 2 x 4" single output power supplies
ZWS/ZWSPAF	5 to 240W single output power supplies

For Additional Information, please visit [us.tdk-lambda.com/lp/products/efe-series.htm](http://us.tdk-lambda.com/lp/products/efe-series.htm)

