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EU DECLARATION OF CONFORMITY

EFE300 Series

We, TDK-Lambda UK Limited, of Kingsley Avenue, Ilfracombe, Devon, EX34 8ES declare under our sole responsibility that the TDK-Lambda EFE300 series of power supplies, as detailed on the attached products covered sheets, complies with the provisions of the following European Directives and is eligible to bear the CE mark:

Low Voltage Directive 2014/35/EU (20 April 2016)

RoHS 2 Directive 2011/65/EU (8 June 2011)

Assurance of conformance of the described product with the provisions of the stated EC Directive is given through compliance to the following standards:

Electrical Safety (LVD) EN60950-1:2006 + A2:2013

Name of Authorized Signatory	Martin Southam
Signature of Authorized Signatory	
Position of Authorized Signatory	Marketing Director, TDK-Lambda EMEA
Date	20 April 2016
Date when first CE marked	19 December 2008
Place where signed	Ilfracombe, Devon, England

PRODUCTS COVERED

Unit Configuration Code:

EFE300x-a-bcde- f-g-hij

Where x = Nothing or J for Japanese models (may have non-safety differences)

a = Channel 1 Output Voltage: any voltage within the Adjustment Range for the Vout (nom) from the Output T Table below, e.g. 12.8 for 12.8V output (12Vout nom), 24.6 for 24.6V output (24Vout nom).

b = CN for Open Frame with fan output , CU for U chassis with fan output, CC for U chassis and cover with fan output, EC for U chassis and cover with fan.

c = M for molex input connector or equivalent, J for JST connector or equivalent

d = D for dual fused input or L for a single fuse in the live line.

e = S for Standard Leakage, L for Low Leakage, R for Reduced Leakage, T for Tiny Leakage.*

f = Nothing for horizontal output connector, V for vertical output connector.

g = Nothing for standard channel 1 output voltage, xD or xPD where D is for units with programmed negative load regulation, PD is for units with programmed positive load regulation, x is the voltage of the regulation in 100mVolts and is within the Output Adjustment range (example, 7D = 0.7V of negative load regulation, 24PD = 2.4V of positive load regulation).

hij = Three numbers from 0 to 9 which denotes various output voltage/current settings within the specified ranges of each output for a particular unit or blank for standard output settings. (may define non-safety related parameters/feature, e.g. reduced primary current limit, reduced OVP)

* At 440Hz, leakage current is > 3.5mA and therefore must be assessed in the end use application.

* L < 300uA leakage, R < 150uA leakage and T < 75uA leakage.

ELECTRICAL & THERMAL RATINGS:

Input Parameters

	60950-1	61010-1
Nominal Input Voltage Range	100 - 240V AC or 133 - 318VDC**	100-240V AC
Maximum Input Voltage Range	90* - 264V AC or 120 - 350VDC**	90*-264V AC
Input Frequency	45- 440Hz maximum or DC**	45-440Hz maximum
Maximum Input Current	4.7A rms or 3.8A DC**	4.7A rms
Maximum Input Current (400W peak power for 10 second maximum)	6.4A rms or 4.4A DC**	6.4A rms
Inrush Current	<20A at 25°C	<20A at 25°C

* PSU linearly derated from 90Vac to 85Vac 4W per volt to 280W

** DC input ratings are for 60950-1, specific Non-standards only.

All ratings apply for ambient temperatures up to 50°C. From 50 to 70°C the output power is derated at 2.5% per °C.

Output Parameters

Output Channel	Voltage out nom (V)	Adjustment Range (V)	Max Output Current (A)	Max Output Power (W)
CH1	12	11.4 – 13.2*	25	300 (400**)
	24	22.8 – 26.4*	12.5	300 (400**)
Fan output	12	Fixed	0.25	3

* Can be adjusted by +10%, -5% from nominal at the factory only

** Peak power of 400W for 10 seconds maximum, maximum rms power of 300W:

$$\sqrt{(peakpower^2 \times T1 + reducedpower^2 \times T2)/(T1 + T2)} \leq 300Wrms$$

where T1 = peakpower time on
and T2 = reducedpower time on

Maximum continuous power output 300W (excluding fan output)

Output limitations

All outputs are SELV.

All outputs have functional spacings to earth, and due consideration must be given to this in the end product design.