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EU DECLARATION OF CONFORMITY

EFE300M Series

We, TDK-Lambda UK Limited, of Kingsley Avenue, Ilfracombe, Devon, EX34 8ES declare under our sole responsibility that the TDK-Lambda EFE300M 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:

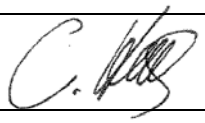
Low Voltage Directive	2014/35/EU
EMC Directive	2014/30/EU
RoHS Directive	2011/65/EU
RoHS Directive (EU)	2015/863

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)	EN62368-1:2014 + AC:2017 + A11:2017
Electromagnetic Compatibility (EMC)	EN61000-6-3:2007 + A1:2011 EN61000-6-2:2005 EN61204-3:2000 EN55024:2010 EN55032:2015

Our representative in the EU is TDK-Lambda Germany GmbH, located at Karl-Bold-Str. 40, 77885 Achern, Germany.

Note: The EMC performance of a component power supply will be affected by the final installation, compliance to the stated EMC standards and conformance to the EMC Directive must be confirmed after installation by the final equipment manufacturer. For guidance with respect to test conditions please visit our website at https://emea.lambda.tdk.com/EMC_Guidance or contact your local TDK-Lambda sales office.

Name of Authorized Signatory	Christopher Haas
Signature of Authorized Signatory	
Position of Authorized Signatory	Head of Quality & Compliance Europe
Date	8th December 2020
Date when first CE marked	2nd February 2009
Place where signed	Achern, Germany

PRODUCTS COVERED SHEETS FOR THE EFE300M SERIES.

Input Parameters:

Standard	60601-1	60950-1 & 62368-1	61010-1
Nominal input voltage	100-240Vac	100-240Vac or 133-318Vdc**	100-240Vac
Input voltage range	90*-264Vac	90*-264Vac or 120-350Vdc**	90*-264Vac
Input frequency range	45-63Hz	45-440Hz or DC**	45-440Hz
Maximum Input Current	4.9A rms	4.9A rms or 3.5A DC**	4.9A rms
Maximum Input Current (400W peak power for 10 second maximum)	6.4A rms	6.4A rms or 4.4A DC**	6.4A rms
Inrush Current	<40A AT 25°C	<40A AT 25°C	<40A AT 25°C

* Channel 1 output is linearly dated from 90Vac to 85Vac, 4W per volt to 280W.
** DC ratings are for specific 60950-1, 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 deg C.

EFE300M or -EFE300M models as described below:
(May be prefixed by NS - # / where # may be any characters indicating non safety related model differences)
Products may additionally be marked with U5x or Y5x where x can be any characters indicating non-safety related model differences excluding itemized models shown below.

May be prefixed by SP followed by / or – (SP represents a sales code)

Unit Configuration Code: EFE300Mxy-a-b-cdef-ghijk
Where:

x= Nothing or J for Japanese models (may have non-safety differences).
Y= Blank for Y2 capacitors from output to earth, P for Y1 capacitors from output to earth.
a= Channel 1 output Voltage: see Ch1 in the outputs table below, adjustment range column.
b= Standby voltage: see standby voltage table below or 0 for omitted
c= HN for Open frame, no fan, with 12V / 1A fan supply. HU for U chassis, no fan, with 12V / 1A fan supply. HC for Cover + chassis, no fan, with 12V / 1A fan supply. EC for Cover + chassis, end fan (temp controlled). NN for Open frame, no fan, no fan supply. NU for U chassis, no fan, no fan supply. NC for Cover + chassis, no fan, no fan supply. CN for Open frame, no fan, with 12V / 0.25A fan supply. CU for U chassis, no fan, with 12V / 0.25A fan supply. CC for Cover + chassis, no fan, with 12V / 0.25A fan supply.
d= M for Molex input connector or equivalent, J for JST connector or equivalent.
e= D for dual fused input or L for single fuse in the live line.
f= S for standard Leakage, L for low Leakage, R for reduced Leakage, T for tiny Leakage. *
g= Y for Oring FET included or N for nothing.
h= E for enable, T for inhibit, N for no inhibit, no enable.
i= Nothing for horizontal output connector, -V for vertical output connector, -S for screw terminal
j= 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).
k= Nothing or -x where x is 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.

Output parameters:

O/P Channel	Vout nom (V).	Range (V)	Max O/P (A)	Max O/P (W)
CH1	12	11.4 - 13.2*	25	300 (400**)
	24	22.8 - 26.4*	12.5	300 (400**)
	28	27 - 32*	10.72	300 (400**)

	40	36 - 42*	7.5	300 (350***)
	48	47 - 50*	6.25	300 (350***)
	50	50.1 - 54*	6.0	300 (350***)
Standby	5	Fixed	2	10
	12	Fixed	1	12
	13.5	Fixed	1	13.5
Fan output	12	Fixed	0.25	3
	12	Fixed	1	12

* Can be adjusted from nominal at the factory only.
** Peak power of 400W for 10 seconds maximum, maximum rms power of 300W:
*** Peak power of 350W for 10 seconds maximum, in any 1 minute cycle, maximum rms power of 300W:

Where T1 = peak power time on
T2 = reduced power time on

Maximum continuous power output 300W (excluding fan output)

Output Limitations

All standard outputs are ES1 up to and including 40V. Voltage variants above the 40V variant are ES2 and must not be accessible to an end operator.
All outputs have basic spacings to earth, and due consideration must be given to this in the end product design, except for Y50029# which has functional spacings to earth.

Non Standard models.

Model: Y5J008# (where # can be any letter) or EFE300MJ-12.1-5-008 or EFE300MJ-12.1-5-008-SGP
Maximum outputs: 12.1V, 21.49A, plus 5V, 2A standby.
Maximum ambient: As standard model.
Orientations: As standard model.
Comments: Fan speed is controlled at 6600rpm up to and between 45 to 50 degrees C ambient after which the fan resumes its normal nominal voltage rating. Can be fitted with or without fan guard.

Model: Y5J006# (where # can be any letter) or EFE300MJ-12-5-006.
Maximum outputs: 11.4V to 13.2V*, 25A, (300W max) plus 5V, 2A standby.
Maximum ambient: As standard model.
Orientations: As standard model.
Comments: Longer version than standard model to accommodate additional reservoir capacitor for a greater hold up time.

Model: Y5J015# (where # can be any letter) or EFE300MJ-12.1-5-009 or EFE300MJ-12.1-5-009-SGP
Maximum outputs: 12.1V, 24.79A plus 5V, 2A standby.
Main output may also be 11.4 to 13.2V at 25A max. Limited to 300W max.
Maximum ambient: As standard model.
Orientations: As standard model.
Comments: Model is the same as Y5J008# but is a NN.

Model Y50016# (where # can be any letter), NS-TLA/EFE300M-48.5-12-HNMDL-YE-V
Maximum outputs: 47-54V, 6.25A 300W max, plus 12V, 1A standby plus 12V, 1A fan output.
Maximum ambient: As standard model.
Orientations: As standard model.
Comments: OCP raised by 5% compared to the standard model.

Model Y50018# (where # can be any letter), NS-TLG/EFE300M-54-5-ECMDL-YT
Maximum outputs: 54V 5.5A, plus 5V, 2A standby.
Maximum ambient: As standard model.
Orientations: As standard model.
Comments: Extended U chassis with non-standard OVP to maintain SELV

Model Y50029# (where # can be any letter except E). EFE300M-13-5-HNMDS-NT-S/NS-TLA
Maximum outputs: As standard model
Maximum ambient: As standard model.
Orientations: As standard model.
Comments: Elongated PWB to accommodate additional filtering components.

Model Y50029E. EFE300M-13-5-HNMDS-NT-S/NS-TLA
Maximum outputs: As standard model
Maximum ambient: As standard model.
Orientations: As standard model.
Comments: Based on Y50029# but with a larger value boost cap, up to a maximum of 220 micro-farads, for better hold up time.