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EU DECLARATION OF CONFORMITY



MU Series

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

Low Voltage	Directive 2014/35/EU
EMC	Directive 2014/30/EU
RoHS	Directive 2011/65/EU (as amended by 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:2015
Electromagnetic Compatibility (EMC)	EN61000-6-3:2007 + A1:2011 EN61000-6-2:2005 EN61204-3:2000 EN55024:2010 EN55032:2015
Restriction of Hazardous Substances (RoHS)	EN63000:2018

Our representative in the EU is TDK-Lambda Germany GmbH, located at Karl-Bold-Str. 40, 77855 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.

MU Series Products Covered

Model Differences

The MU series consists of a 4 slot model (MU4), with each slot capable of fitting a single module. The MU4 is available as 600W or 800W depending on the input voltage. Global option and PMBus Standby Options may be fitted.

MU Models Nomenclature

zMUabcdef-ghi for modular configurations

Where	z	=	Blank for standard product NS# followed by / or – (where # may be any number of characters indicating non-safety related model differences) SP followed by / or – (SP represents a sales code)
	s	=	(Number of slots) 4 for MU4 models
	a	=	Cooling F for variable speed, forward air
	b	=	(Input connection) S for screw
	c	=	(Input fusing) D for dual AC fuse E for single AC fuse in the live line F for dual AC/DC fuses G for single AC/DC fuse in the +ve input line
	d	=	(Leakage current) L for 300uA R for 150uA
	e	=	(Primary option) Blank for none fitted E5H for global enable with 5V standby T5H for global inhibit with 5V standby Q5xxxxx for 5V PMbus (where x may be any number or letter)
	f	=	-CO for coating -COx for alternative coating (where x maybe any number) Blank for no coating

May be followed buy non-safety related changes/options:

-ghi

Where	ghi	=	Any 3 characters which may define non-safety related parameters/features, e.g reduced primary current limit, reduced OVP and coatings etc... Blank for standard unit
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Output modules
nomenclature:

Single Output Modules
vMcd

Where	v	=	Output voltage, may be 5, 12, 24 or 48
	M	=	SB (Module name)
	c	=	S for screw (Output terminal)
	d	=	See letter from Module Signal Option Table

Blanking plates

B/S

Where	B/S	=	Blanking plate
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Parallel output modules

vZxcd

Where	v	=	Output voltage
	Z	=	Paralleled modules using SB modules
	x	=	Number of slots. Refer to Parallel and Series Combination Tables
	c	=	S for screw (Output terminal)
	d	=	See letter from Module Signal Option Table

Series output modules

vYxcd

Where	v	=	Output voltage
	Y	=	Series modules using SB modules
	x	=	Number of slots. Refer to Parallel and Series Combination Tables
	c	=	S for screw (Output terminal)
	d	=	See letter from Module Signal Option Table

**Series connected
Paralleled modules**

vHxcd

Where	v	=	Output voltage
	H	=	Series connected parallel SB
	x	=	Number of slots. Refer to Parallel and Series Combination Tables
	c	=	S for screw (Output terminal)
	d	=	See letter from Module Signal Option Table

Units may be marked with a Product Code: KMUxy where x is the number of available slots and y may be any number of characters and K is a prefix that is used for a product code. This is an internal code only and is not part of the model nomenclature.

Additional information

- 600W and 800W AC input PSU Models are identical in hardware, the only difference is the input rating, so that the end application use will determine input rating to be used depending on the output required

- 600W and 800W DC input PSU Models are identical in hardware, the only difference is input rating, so that the end application use will determine input rating to be used depending on the output required.

Module Signal Option Table

Table 1: x – module signal options (Remote sense built in to option)					
Letter (x)	Module / output enable	Module / output inhibit	Module / output good (inc LED)	Share bus for paralleling	Remote Sense
L	Option not fitted				
B	No	No	No	No	Yes
C	Yes	No	No	No	Yes
D	No	Yes	No	No	Yes
F	Yes	No	Yes	No	Yes
G	No	Yes	Yes	No	Yes
H	Yes	No	Yes	Yes	Yes
J	No	Yes	Yes	Yes	Yes

Parallel and Series Combination Tables

Series connection number of slots.

Qty of modules	Using series SB modules	Slots
1	SB	1
2	YC	2

Limitations of use:

1. Output voltage is the combined series modules voltage.
2. Module limitations apply to series modules.

Parallel connection number of slots

Slots	Number of parallel SB modules	Module name
2	2	ZC
3	3	ZT

See ratings in Module output ratings table below

Series connection of parallel connected modules

Module	Qty	Slots	Module name
ZC	2	4	HC

Input parameters

MU4

Input voltage range 100 - 240Vac, 144 - 318Vdc (200 - 240Vac, 278 - 318Vdc)*

Input voltage range inc tolerances 85 - 264Vac, 130 - 350Vdc (180 - 264Vac, 250 - 350Vdc)*

Input frequency range 47 - 63Hz or dc

Maximum input current 8A rms or 6A dc (6A rms or 4.1A dc)*

* Input details for 800W models.

Maximum ambient 70°C, total output power and module output power de-rated by 2.5% per °C above 50°C

Output parameters

Module	Note	Slots	Channel	Vout (Nom)	Range (V)	Output current (A) Max	Output power (W) Max	Hazardous energy
SB	-	1	1	5	3.3-6	30	150	No
SB	-	1	1	12	6-15	20	240	Yes
SB	-	1	1	24	15-30	10	240	Yes
SB	-	1	1	48	30-52	5	240	Yes

Series modules

Refer to the table below for series module Energy Source Classification and SELV classification.

Only two modules may be fitted in series.

Modules must be of the same type and the voltage split evenly between modules.

Module Code	Slots	Number of Outputs	Module Description	ES1/ SELV (Voltage range used)	ES2 Non-SELV (Voltage range used)	ES3 NON-SELV (Voltage range used)
SB	1	1	Single module	3.3-6V 6-15V 15-30V	30-52V	-
YC	2	1	Modules connected in series	6.6-12V 12-30V	>30-60V	>60-104V

If the total voltage of outputs connected in series exceeds the ES1/SELV limit then all outputs must be considered Non-SELV/ES2 or ES3 as appropriate.

Outputs that are either Non-SELV or ES2/ES3 are hazardous and must not be made user accessible. Consideration must be given to service engineers making inadvertent contact with the output terminals in the end equipment.

MU Series Signature Page

Name of Authorized Signatory	Christopher Haas
Signature of Authorized Signatory	
Position of Authorized Signatory	Head of Quality & Compliance Europe
Date	1 st August 2022
Date when this CE declaration first issued	9 th May 2022
Date when this UKCA declaration first issued	9 th May 2022
Place where signed	Achern, Germany

This declaration is signed for and on behalf of TDK-Lambda