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EU DECLARATION OF CONFORMITY

NV100 Series

We, TDK-Lambda UK Limited, of Kingsley Avenue, Ilfracombe, Devon, EX34 8ES declare under our sole responsibility that the TDK-Lambda NV100 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
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)	EN60950-1:2006 + A2:2013
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Our representative in the EU is TDK-Lambda Germany GmbH, located at Karl-Bold-Str. 40, 77885 Achern, Germany.

Name of Authorized Signatory	Christopher Haas
Signature of Authorized Signatory	
Position of Authorized Signatory	Technical Manager and Head of Quality & Compliance, TDK-Lambda Germany GmbH
Date	22 nd October 2019
Date series first CE marked	26 th June 2007
Place where signed	Achern, Germany

NV100 PRODUCTS COVERED

NV100 or NV-100 models as described below:

Units may be marked with a Product Code: U1x or Y1x where x may be any number of characters.

Unit Configuration Code may be prefixed by NS # followed by / or - (where # may be any number of characters indicating non- safety related model differences).

Unit Configuration Code:

NVx-abcde-f-g

Where:

x	=	A1 (NVA1 for NV100 or NV-100 series)
a	=	Number of Outputs: 4
b	=	Channel 1 Output Voltage†: 5, E or G
c	=	Channel 2 Output Voltage†: 3 or 5
d	=	Channel 3 Output Voltage†: T, F, G or K
e	=	Channel 4 Output Voltage†: T or F followed by P for positive output, or 0 for no output
f	=	U for U chassis, C for U chassis and cover or nothing for Open Frame
g	=	R for right angle connector

† Table1: Output Voltage Cross Reference

Designation	Nominal Output Voltage
3	3.3
5	5
T	12
F	15
E	18
G	24 or 24.5
K	36

ELECTRICAL AND THERMAL RATINGS:

Input parameters

NV100

	AC	DC
Nominal Input Voltage	100 - 240 Vac	133 - 318Vdc*
Input Voltage Range	90 - 264Vac	120 - 350Vdc*
Input Frequency Range	45 - 440Hz	DC*
Maximum Input Current	1.7A rms	1.2Adc*

*Dc ratings are for specific non-standard models only.

All ratings apply for ambient temperatures up to 50°C. From 50 to 70°C the total output power and the module current ratings are both derated at 2.5% per deg C. Maximum ambient 50°C for still air.

There are five standard NV100 models with output parameters shown in the tables below:

Model: NVA1-453GF (can be followed by P, -U, -C or -R)

Output Channel	Voltage designation	Vout	Adjustment Range V	Output Current
CH1	5	5	4.75 - 5.25	10A
CH2	3	3.3	3.14 - 3.46	8A
CH3	G	24.5	Fixed*	1.5A
CH4	F	15	Fixed*	1A

Model: NVA1-453FF (can be followed by P, -U, -C or -R)

Output Channel	Voltage designation	Vout	Adjustment Range V	Output Current
CH1	5	5	4.75 - 5.25	10A
CH2	3	3.3	3.14 - 3.46	8A
CH3	F	15	Fixed*	3A
CH4	F	15	Fixed*	1A

Model: NVA1-453TT (can be followed by P, -U, -C or -R)

Output Channel	Voltage designation	Vout	Adjustment Range V	Output Current
CH1	5	5	4.75 - 5.25	10A
CH2	3	3.3	3.14 - 3.46	8A
CH3	T	12	Fixed*	3A
CH4	T	12	Fixed*	1A

Model: NVA1-4G5TT (can be followed by P, -U, -C or -R)

Output Channel	Voltage designation	Vout	Adjustment Range V	Output Current
CH1	G	24	23 - 25	4A
CH2	5	5	3.3 - 5.5	5A
CH3	T	12	Fixed*	3A
CH4	T	12	Fixed*	1A

Model: NVA1-4G5FF (can be followed by P, -U, -C or -R)

Output Channel	Voltage designation	Vout	Adjustment Range V	Output Current
CH1	G	24	23 - 25	4A
CH2	5	5	3.3 - 5.5	5A
CH3	F	15	Fixed*	3A
CH4	F	15	Fixed*	1A

*Channels 3 and 4 output voltage may vary +/-10% depending on channel 1 output voltage and current settings.

Variations and limitations of use:

All NV100 PSUs can output 100W. These power ratings are for channels 1 to 4.

Natural convection rating limited to 50W total output power with any channel at 50% max output current.

Natural convection cannot have -C option (cover fitted).

100W output can be achieved with 2m/s forced air from input to output. The rules below for "Cooling for Unit" must be adhered to for all methods of cooling, including natural convection.

Channel 1 & 2 combined power must not exceed 60W for 5V channel 1 models.

Non-standard NV100 model:

Model: Y10001A (NVA1-3E5K0, can be followed by -U, -C or -R)

Output Channel	Voltage designation	Vout	Adjustment Range V	Output Current
CH1	E	17.25	17.25 - 17.75	3A
CH2	5	5.15	5.15 - 5.90	4A
CH3	K	34.5	Fixed*	2A
CH4	0	-	-	-

*Channel 3 output voltage may vary +4.5%, -1.5% depending on channel 1 output voltage and current settings.

Variations and limitations of use for NV100 model Y10001A:

Unit can output 110W. These power ratings are for channels 1 to 3.

No natural convection rating for this unit.

Channel 1 & 2 combined power must not exceed 70W.

110W output can be achieved with 2m/s forced air from input to output. The rules below for "Cooling for Unit" must be adhered to for all methods of cooling.

Operating temperature from 0°C to 45°C.

ENVIRONMENTAL PARAMETERS

Operation

Temperature:	0 to 50°C
Humidity:	5 to 95% RH, non-condensing
Air Pressure:	70kPa to 106kPa
Altitude:	-200m to 3000m

Storage and Transportation

Temperature:	-40°C to +85°C
Humidity:	5 to 95% RH, non-condensing
Air Pressure:	54kPa to 106kPa
Altitude:	-200m to 5000m

Mounting Aspects

Orientations:	All except base PCB uppermost
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