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## EU DECLARATION OF CONFORMITY



NV175 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)	EN 62368-1:2014/AC:2015
Electromagnetic Compatibility (EMC)	EN 61000-6-3:2007 + A1:2011 EN 61000-6-2:2005 EN 61204-3:2000 EN 55024:2010 EN 55032:2015
Restriction of Hazardous Substances (RoHS)	EN 63000:2018

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](https://emea.lambda.tdk.com/EMC_Guidance) or contact your local TDK-Lambda sales office.

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## UK DECLARATION OF CONFORMITY



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Electrical Equipment (Safety) Regulations 2016

Electromagnetic Compatibility Regulations 2016

Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment Regulations 2012

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

Electrical Safety	EN 62368-1:2014/AC:2015
Electromagnetic Compatibility (EMC)	EN 61000-6-3:2007 + A1:2011 EN 61000-6-2:2005 EN 61204-3:2000 EN 55024:2010 EN 55032:2015
Restriction of Hazardous Substances (RoHS)	EN 63000:2018

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 Regulation must be confirmed after installation by the final equipment manufacturer. For guidance with respect to test conditions please visit our website [https://emea.lambda.tdk.com/EMC\\_Guidance](https://emea.lambda.tdk.com/EMC_Guidance) or contact your local TDK-Lambda sales office.

## NV175 Series Products Covered

NV175 or NV-175 models as described below:

Units may be marked with a Product Code: K1x or Q1x where x may be any number of letters and/or numbers 0 to 9.

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

Code may be followed by –SP to indicate “Special Price”.

Unit Configuration Code:

NVx-abcde-f-g-h-ijk

where:

x = 1 for 175

a = Number of Outputs : 1, 2, 3 or 4

b = Channel 1 Output Voltage†: 5, T, F, E or G

c = Channel 2 Output Voltage†: 1, 2, 3, 5, 5L, 7, F or 0

d = Channel 3 Output Voltage†: 3L, 5L, 7, TL, FL, T, F, G followed by Y for negative output or 0

e = Channel 4 Output Voltage†: 3H, 5H, 7, T, F, TH, FH, 0H (fan only channel 4 output) followed by V for variable output followed by P for positive output or 0

f = Global Option : N for 5V version, N1 for 12V version, N2 for 13.5V version, N3 for 5V version with ATX compatibility, N4 for 12V version with ATX compatibility, N5 for 13.5V version with ATX, N6 for 12-13.5V version, N7 for 12-13.5V version with ATX or nothing for no Global Option present

g = U for U chassis, C for U chassis and cover, F for U chassis and cover with fan, I for U chassis and cover with fan and IEC inlet or nothing for Open Frame

h = Blank is the standard upright output connector, R is for the right angle output connector, H is for high altitude, HR is for high altitude with right angle output connector, M is for IEC60601-1, MR is for IEC60601-1 spacings with right angle connector

ijk = Three numbers from 0 to 9 which denotes various output voltages and currents within the specified ranges of each output for a particular unit or blank for standard output settings

† Table1: Output Voltage Cross Reference

Designation	Output Voltage
0	Omit output
A	1.5
1	1.8
B	2
2	2.7
3	3.3
5	5
7	7
T	12
F	15
E	18
G	24

Output channels and Global Options ratings are in accordance with the following table subject to variations and limitations of use below:

Output Channel	Designation	Vout	Adj. Range	Output Current
CH1	5	5	5 - 5.5	25A
	T	12	12 - 15.5	15A
	F	15	12 - 15.5	15A
	E	18	16 - 20	10A
	G	24	24 - 28.5	7.5A
CH2	1	1.8	0.9 - 3.8	15A
	2	2.7	2.5 - 3.8	15A
	3	3.3	2.5 - 3.8	15A
CH2 (CH1 12V)	5	5	3.3 - 5.5	10A

CH2 (CH1 15V)	5	5	3.3 - 5.5	10A
CH2 (CH1 24V)	5L	5	Fixed	2A
	5	5	3.3 - 5.5	8A
	7	7	5.5 - 8	5.5A
	F	15	12-15.5	6A
CH3	7	+/-7	7 - 8	5A
	T	+/-12	12 - 15	5A
	F	+/-15	12 - 15	5A
	G	+/-24	18 - 24.5	2.5A
	3L	+/-3.3	Fixed	2A
	5L	+/-5	Fixed	2A
	TL	+/-12	Fixed	2A
	FL	+/-15	Fixed	2A
CH4	3H	+/-3.3	Fixed	2A
	5H	+/-5	Fixed	2A
	7	+/-7	7 - 8	1A
	T	+/-12	Fixed	1A
	F	+/-15	Fixed	1A
	TH	+/-12	Fixed	2A
	FH	+/-15	Fixed	2A
	THV	+/-12	12 - 15	2A
	FHV	+/-15	12 - 15	2A
CH4 (fan output)	OH	-	-	-
Global Option	N	5	Fixed	2A
	N1	12	Fixed	1A
	N2	13.5	Fixed	1A
	N3	5(ATX)	Fixed	2A
	N4	12(ATX)	Fixed	1A
	N5	13.5(ATX)	Fixed	1A
	N6	12	12-13.5*	1A
	N7	12(ATX)	12-13.5*	1A

Channels 1 and 2 combined output currents must not exceed 25A

\*Can only be set at the factory.

#### Variations and limitations of use:

All NV175 or NV-175 PSUs can output 180W except 5V channel 1 models which can output 175W. These power ratings are for channels 1 to 4. The global option output can be run in addition to the channel 1 to 4 maximum power outputs.

Units with channel 1 T and G outputs (no other channels fitted) have a peak power output of 200W including the global option with the following duty cycles:

In any 5 minutes 30% at 200W followed by 70% at 171W (average 180W)

In any 5 minutes 20% at 200W followed by 80% at 175W (average 180W)

Options -H and -HR meet spacings for 5000m.

Options -M and -MR meet IEC60601-1 Edition 2 Reinforced spacing's with the following limitations (interpolated creepage spacings):

Channel 1 cannot be 5V model (T1 and T2 with foils)

Channel 2 cannot be fitted

Cannot be global option variants

#### Fan versions:

Channel 1 with G output, 25V maximum with 5V channel 2 maximum output current of 7A.

Channel 1 with G output, 25V maximum with 7V channel 2 maximum output current of 5.5A.

Channel 1 with G output, 5L channel 2 maximum output current 1.8A.

Channel 2 with T and F outputs, channel 2 maximum output current of 9A.

Channel 4 maximum output current of 1.5A

Model NV1-1G000 (with or without global option or -M/-MR option) may also be run with Channel 1 output voltage range 22.5V to 28V with maximum current of 7.5A and maximum power of 180W

Model NV1-1G000 (with or without -M option) may also be run at 80Vac to 264Vac input, output: 24V to 28V at 6.25A maximum current and 150W maximum power.

Model NV1-1G000-M operation to 4000m. (IEC/EN60601-1 3<sup>rd</sup> ed only)

The products listed in the following table are typical examples:

Model	CH1	CH2	CH3	CH4	Global Option
NV1-453FF	5V/25A	3.3V/15A	15V/5A	15V/1A	-
NV1-4G5FFH-N3	24V/7.5A	5V/8A	15V/5A	15V/2A	5V/2A
NV1-350TT-N	5V/25A	-	12V/5A	12V/1A	5V/2A
NV1-453TT-N1	5V/25A	3.3V/15A	12V/5A	12V/1A	12V/1A
NV1-250T0-N2	5V/25A	-	12V/5A	-	13.5V/1A

**Custom Models:**

All ratings as per standard models unless otherwise stated.

Model: NS-LAM/NV1-453TTH-N2-H-C (K10035)

Rated to 4600m altitude

Input voltage range from 90Vac to 264Vac

Model: NS-LAMF/NV1-4G5TTH-F (K10066)

5L low current channel 2 fitted.

Channel 2 rated: 5V, 1.4A

## NV175 Series Signature Page

Name of Authorized Signatory	Christopher Haas
Signature of Authorized Signatory	
Position of Authorized Signatory	Head of Quality & Compliance Europe
Date	23 September 2021
Date when this CE declaration first issued	29 September 2004
Date when this UKCA declaration first issued	6 April 2021
Place where signed	Achern, Germany

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