



TDK-Lambda UK Limited
Kingsley Avenue, Ilfracombe
Devon, EX34 8ES, United Kingdom
Tel: +44 (0) 1271 856600
Fax: +44 (0) 1271 864894
www.uk.tdk-lambda.com

EU DECLARATION OF CONFORMITY

Sirius 250 / CS 250 Series

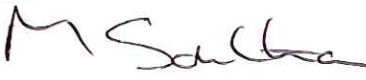
We, TDK-Lambda UK Limited, of Kingsley Avenue, Ilfracombe, Devon, EX34 8ES declare under our sole responsibility that the TDK-Lambda Sirius 250 / CS 250 series of power supplies, as detailed on the attached products covered sheets, complies with the provisions of the following European Directives and 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 January 1999
Place where signed	Ilfracombe, Devon, England

PRODUCTS COVERED SHEETS FOR THE SIRIUS 250 / CS250 SERIES.

Model numbering nomenclature:

Sirius 250abcde, CS250abcde series

Where abcde defines the model configuration:

(May be prefixed by NS - # / where # may be any number of characters indicating non safety related model differences). Products may additionally be marked with H2x or J2x where x can be any number of characters indicating non-safety related model differences.

a = EI for End fans with switched IEC input connector or EIF for End fans with double pole fused IEC input connector or EIR for Reverse air end fans, with switched IEC input connector or EIFR for Reverse air end fans, with double pole fused IEC input connector or EM for End fans with 3 pin header (Molex type) input connector or TM for Top fan with 3 pin header (Molex type) input connector or NM for External forced air cooling (open ended cover fitted) with 3 pin header or (Molex type) input connector or LM for Open frame and external forced air cooling with 3 pin header (Molex type) input connector. Maybe followed by -.

b = ML for Medium Leakage or LL for Low Leakage or RL for Reduced Leakage or TL for Tiny Leakage or Nothing for standard Class B filter

c = † for applicable base board single output voltage or †† for applicable base board dual output voltage.

d = may be followed by up to two of the following: @ followed by A, B, C, L or N or @/@ followed by D, E, F, G, H, J or M, where @ = applicable single output module voltage @/@ = applicable dual output module voltage, letter = output module fitted

e = may be followed by: B/S where B/S = blanking plate.

Permissible output voltage values

Single output base board	Output Voltage
†	5 - 5.7
††	23 - 28
Dual output base board	Output Voltage
††	5.0-5.7 / 2.7-3.5
†††	5.0-5.7 / 11-16
Single A module	Output Voltage
@	4.5-5.5
Single B module	Output Voltage
@	9-16
Single C module	Output Voltage
@	16-30
Single L module	Output Voltage
@	1.8-3.9
Single N module	Output Voltage
@	9-16
Dual D module	Output Voltage
@/@	4.5-5.5 / 2.7-3.9
Dual E module	Output Voltage
@/@	4.5-5.5 / 9-16
Dual F module	Output Voltage
@/@	4.5-5.5 / 16-28
Dual G module	Output Voltage
@/@	9-16 / 9-16
Dual H module	Output Voltage
@/@	9-16 / 16-28
Dual J module	Output Voltage
@/@	16-28 / 16-28
Dual M module	Output Voltage
@/@	4.5-5.5 / 4.5-5.5

Input Parameters

Standard	AC
Nominal input voltage	94.5 - 240 Vac
Input voltage range	85 - 264Vac
Input frequency range	47 - 63Hz
Maximum input current	5A rms

All ratings apply for ambient temperatures up to 50°C.

Ampere Turns: 75 maximum [Ampere turns is the sum of (output amps x secondary turns) for all outputs].

Output Parameters

Base Board Outputs:

Model	(V)	(A)	Sec. Turns	S/C (A) (*2)
CS250 5	5.0-5.7	35(*1)	1	80
CS250 24	23-28	10(*1)	4	20
CS2505/3	5.0-5.7 / 2.7-3.5	35(*1) / 16	1 / 1	80/80
CS2505/12	5.0-5.7 / 11-16	35(*1) / 8	1 / 4	80/20

Module Outputs:

Module	(V)	(A)	Sec. Turns	S/C (A) (*2)
A	4.5-5.5	10	2	40
B	9-16	8	4	20
C	16-28	4	8	10
D	4.5-5.5 / 2.7-3.9	5 / 5	2 / 2	40 / 40
E	4.5-5.5 / 9-16	5 / 4	2 / 4	40 / 20
F	4.5-5.5 / 16-28	5 / 2	2 / 7	40 / 11.5
G	9-16 / 9-16	4.5 / 4.5	4 / 4	20 / 20
H	9-16 / 16-28	4 / 2	4 / 7	20 / 11.5
J	16-30 / 16-28	2 / 2	7 / 7	11.5 / 11.5
L	1.8-3.9	10	2	40
M	4.5-5.5 / 4.5-5.5	5 / 5	2 / 2	40 / 40
N	9-16	8	4	20

*1 = A minimum load of 10% is required on these outputs.

*2 = Maximum current if output is short circuited, within 1 minute current limit changes to 'hiccup' mode to give a lower average current.

Output Limitations

The Sirius 250 series is designed to provide a max output power of 250W at nominal output voltages. The following procedure must be used to ensure the PSU is operated within its ratings:

- Calculate user power for each module (volts x amps).
- Add all the individual module powers together. The total power must not exceed the value given in the following tables.
- Calculate secondary transformer turns x amps for each module. (See outputs table for transformer secondary turns).
- Add all the module turns x amps together and this must not exceed 75AT.
- If necessary reduce the loading until the conditions are met, i.e. power and ampere-turns maxima.