

COPY



Product Service

Attestation of Conformity

No. N8 10 03 50514 031

Holder of Certificate: **Netbit Electronics Ltd.**

Unit 1602 Malaysia Building,
50 Gloucester Rd., Wanchai
HONG KONG

Product: **Switch mode power supplies**

Model(s): **ZTESA12020001**

Parameters:

Rated voltage:	200-240 V
Rated frequency:	50/60 Hz
Rated current:	0,6 A
Rated output voltage:	12 V d.c.
Rated output current:	2000 mA
Protection class:	II
Degree of protection:	IPX0

Tested according to: EN 60950-1:2006

This Attestation of Conformity is issued on a voluntary basis according to the Low Voltage Directive 2006/95/EC relating to electrical equipment designed for use within certain voltage limits. It confirms that the listed equipment complies with the principal protection requirements of the directive. It refers only to the particular sample submitted for testing and certification. See also notes overleaf.

Test report no.: 6421010030701



Date, 2010-03-17

(Signature)
(Shaochang Liu)



After preparation of the necessary technical documentation as well as the EC conformity declaration the required CE marking can be affixed on the product. Other relevant directives have to be observed.



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Aufbauübersicht für Elektrogeräte und Maschinen

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Auftraggeber / Applicant:

Netbit Electronics Ltd.

Unit 1602 Malaysia Building 50 Gloucester Rd., Wangchai, Hong Kong

Fertigungsstätte / Production facility:

1. Kuantech (Shenzhen) Co., Ltd.

6th Honghua Road, Gongming Town, Baoan District, Shenzhen, People's Republic of China

2. Kuantech (Beihai) Co., Ltd.

12th Weisan Road, Beihai Industrial Park, Beihai City, Guangxi, People's Republic of China

Geräteart / Type of equipment:

Switch mode power supply

Typenbezeichnung / Type/model:

ZTESA12020001, KSAP0201200200HEC, KSAP020xxxxyyyHE, KSAP020xxxxyyyHK (xxx=120-240, yyyy=0001-0200)

Seriennr. / Serial no.:

N/A

Nennspannung / Frequenz / Rated voltage/frequency:

100-240V, 50/60Hz (KSAP0201200200HEC, KSAP020xxxxyyyHE, KSAP020xxxxyyyHK)
200-240V, 50/60Hz (ZTESA12020001)

Nennaufnahme / Nennstrom / Rated input power/current:

0,6A

Rated output:

12,0-24,0V d.c., 10-2000mA

Anschlußdaten-Pneumatik / Connection to pneumatic power:

N/A

Anschlußdaten-Wasser / Connection to water installation:

N/A

Gewicht / weight:

Approx. 152g

Lärmemission / noise emission (dB A):

N/A

Ausführung / Construction:

Ortsfest

Stationary

Ortsveränderlich

Portable

Handgerät

Hand-held

Einbaugerät

Open-frame

Schutzklasse / Protection class:

Schutzklasse I:

Schutzleiteranschluß

PE-connection

Schutzklasse II:

Schutzisoliert

Double insulation

Schutzklasse III:

Schutzkleinspannung/
interne Stromversorgung

SELV/internally
powered

Schutzart / Degree of protection against liquids:

IPX0

Anschlußart / Supply connection:

Feste Anschlußleitung

Non detachable cord

Fester Anschluß

Permanent connection

Gerätesteckvorrichtung

Appliance inlet

Direct plug-in equipment

Netzbetriebsart / Rated operation:

Dauerbetrieb

Continuous operation

Aussetzbetrieb

Intermittent operation

Kurzzeitbetrieb

Short time operation

Material: a) Gehäuse / Enclosure See following page

b) Leiterplatten / p.c.b. See following page

Zusätzliche Angaben für Laser, Klassifizierung nach EN 60825

Additional information for Laser equipment, classification according to EN 60825

Klasse / Class: N/A

Wellenlänge / Wavelength: N/A

Pulsdauer / Pulse duration: N/A

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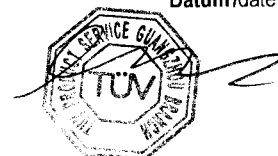
Ort / place: Guangzhou

Datum / date: 2010-03-11

Projektleiter / Project engineer: Eddy Luo

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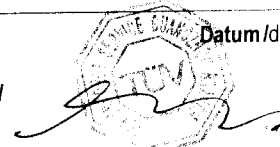
Bauteil/ Kind of component	Hersteller/ Manufacturer	Angaben über Typ, Stromstärke, Leistung, Transformatorspezifikationsnummer, Isolationsklasse/ Information about type, current, power, transformer specification number, insulating class	Prüfzeichen von Test mark from (VDE, BSI, UL etc.)
1. Fuse(F1)	Walter	ICP, AC 250V, T6,3A, Low breaking capacity	VDE, UL E56092
(alternative)	Conquer	PTU, AC 250V, T6,3A, Low breaking capacity	VDE, UL E82636
2. Fuse Resistor (F2)	KHX	Type: FKN, 2Ω, 2W	Tested with appliance
(alternative)	VIS	Type: FRT-2W, 2Ω, 2W	UL E306093
(alternative)	Changsheng	Type: RXF21-2W, 2Ω, 2W	VDE, UL E306095
3. PVC Tubing for F2	DAE CHANG ELECCOM CO LTD	DC-3, 105°C, 300V	UL E120268
4. Bleeder resistor (R21, R24)	Various	1M Ω, tolerance 5%, 1/4W	---
5. Varistor(MOV)	Littlefuse	MOV-471KD14 or SAS-471KD14, AC 300V, 40/085/56	VDE, UL E162455
(alternative)	THINKING	TVR14471K, AC 300V, 40/085/56	VDE, UL E173642
(alternative)	WALSIN	471K14D, AC 300V, 40/085/42	VDE, UL E172311
(alternative)	Ceramate	GNR 14D471K, AC 300V, 40/085/56	VDE, UL E166389
(alternative)	Littlefuse	MOV-681KD14 or SAS-681KD14, AC 420V, 40/085/56	VDE, UL E162455
(alternative)	THINKING	TVR14681K, AC 420V, 40/085/56	VDE, UL E173642
(alternative)	WALSIN	681K14D, AC420V, 40/085/42	VDE, UL E172311
(alternative)	Ceramate	GNR 14D681K, AC 300V, 40/085/56	VDE, UL E166389
6. Thermal Link	Aupo	A8-5A or B8-5A, 5A, 250V, 150°C	VDE, UL E14084
(alternative)	Set	Y7, 5A, 250V, 150°C	VDE, UL E214712
7. X Capacitor (CX)	Carli	MPX, AC275V, X2, Max. 0,22μF, 40/100/21/C	VDE, UL
(alternative)	Dain	MPX, AC275V, X2, Max. 0,22μF, 40/100/21/C	VDE, UL
(alternative)	Jinghao	CBB62B, AC280V, X2, Max. 0,22uF, 40/110/56/C	VDE, UL

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(alternative)	Zhongxing	MKP61, AC275V, X2, Max. 0,22uF, 40/100/21/C	VDE, UL
8. Bridge resistor (RA, RB, RC, RD, RE) (optional)	Various	5M-50MΩ, tolerance 5%, 1/4W	---
9. Line filter(L1)	Kuantech	30C024140-00A, EE-10, Min. 12mH, Ø0,23mm/68TX2	---
10. Rectifier (BD)	Various	Min. 1A, Min. 600V	---
11. Storage capacitor(C2)	Various	Max. 33µF, 400V, 105°C	---
12. Y capacitor(C7)	Success	SE, AC 250V, Y1, Max. 1000pF, 30/125/56/C	VDE, UL
(alternative)	Jya-Nay	JN, AC 250V, Y1, Max. 1000pF, 25/125/21/A	VDE, UL
(alternative)	Teruixiang	TY, AC 400V, Y1, Max. 1000pF, 25/125/21/C	VDE, UL
(alternative)	Haohua	CT7, AC 250V, Y1, Max. 1000pF, 30/125/56/C	VDE, UL
13. Transformer(T1)	Kuantech	T020 C 0001, EE-22, Class B (for model output voltage from 12,0-18,0V)	Tested with appliance
(alternative)	Kuantech	T020 C 0002, EE-22, Class B (for model output voltage from 18,1-24,0V)	Tested with appliance
14. Optocoupler (U2)	Everlight	EL817, AC 250V, Dti between I/P and O/P = 0,5mm	N,S,D,FI
(alternative)	Fairchild	H11A817, AC 250V, Dti between I/P and O/P >1,0mm	VDE,UL
(alternative)	Lite-On	LTV817, AC250V, Dti between I/P and O/P= 0,8mm	VDE,UL
(alternative)	COSMO	KP1010, AC250V, Dti between I/P and O/P 0,5mm or more	VDE,UL
(alternative)	Bright LED	BPC817, AC 250V, Dti between I/P and O/P 0,4mm or more	VDE,UL

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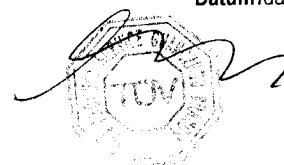
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15. Insulation tape(used in L1, T1)	YA HUA	PZ, 130°C	UL E165111
(alternative)	3M	1350#, 130°C	UL E17385
(alternative)	SYMBIO	35660, 130°C	UL E50292
16. Enclosure (thiceness min. 2,0mm)	SABIC INNOVATIVE PLASTICS CHINA CO LTD	PPHOX: SE100X(GG)(f1)(b), 94V-1, 95°C	UL E161723
(alternative)	SABIC INNOVATIVE PLASTICS CHINA CO LTD	PPHOX: SE1X(GG)(f1), 94V-1, 105°C	UL E161723
17. insulation sleeve/support of AC pin	SABIC INNOVATIVE PLASTICS CHINA CO LTD	PPHOX: SE1X(GG)(f1), 94V-1, 105°C	UL E161723
18. insulation film covering L/N plate	SABIC INNOVATIVE PLASTICS US L L C	FR6, 94V-0, 130°C, thickness 0,4mm	UL E61257
(alternative)	SABIC INNOVATIVE PLASTICS US L L C	FR700, 94V-0, 130°C, thickness 0,4mm	UL E61257
19. PCB (thickness 1,6mm)	Chih Hsien	50Z, 94V-0, 130°C	UL E105119
(alternative)	Various	94V-0, 130°C	UL
20. Output cord	Xinya	UL2468 or UL2464, AWG24-16, Min. 80°C	UL E170689
(alternative)	Herwell	UL2468 or UL2464, AWG24-16, Min. 80°C	UL E301305
(alternative)	Kuanway	UL2468 or UL2464, AWG24-16, Min. 80°C	UL E313723
21. Heat shrinkable tube	Shenzhen Woer Heat- Shrinkable Material Co Ltd	RSFR-X or RSFR-H, 600V, 125°C, VW-1	UL E203950
(alternative)	Various	600V, 125°C, VW-1	UL
22. Output Rectifier	Various	Min, 10A, Min 60V	---

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Material used in transformer T1:

Bobbin	CHANG CHUN	Phenolic: T375J, 94V-0, 150°C	UL E59481
(alternative)	SUMITOMO BAKELITE	Phenolic: PM-9820, PM-9830, 94V-0, 150°C	UL E41429
Primary winding wire (N1, N3) and feedback winding wire (N4)	DONG YANG	130°C	UL E102761
(alternative)	WA TAI	130°C	UL E243939
(alternative)	GOLDEN	130°C	UL E225143
(alternative)	PACIFIC	130°C	UL E84081
(alternative)	Tai-i	130°C	UL E85640
Secondary winding wire (N2)	TOTOKU	TIW-2, Reinforced insulation wire 130°C	VDE, UL
(alternative)	Furukawa	Type TEX-B or TEX-E, Reinforced insulation wire 130°C	VDE, UL
(alternative)	Gloden Ocean	Type XYW-B, Reinforced insulation wire 130°C	VDE, UL
(alternative)	Young Chang	Type STW-B, Reinforced insulation wire 130°C	VDE, UL
(alternative)	Hoi Luen	Type THL-B, Reinforced insulation wire 130°C	VDE, UL

Material used in L1:

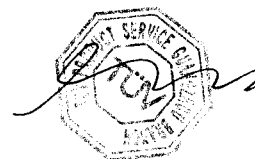
Magnet wire	DONG YANG	130°C	UL E102761
(alternative)	WA TAI	130°C	UL E243939
(alternative)	GOLDEN	130°C	UL E225143
(alternative)	PACIFIC	130°C	UL E84081
(alternative)	Tai-i	130°C	UL E85640
Bobbin	CHANG CHUN	Phenolic: T375J, 94V-0, 150°C	UL E59481

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(alternative)	SUMITOMO BAKELITE	Phenolic: PM-9820, PM-9830, 94V-0,150°C	UL E41429

Transformer details:		
	T020 C 0001 (For model 12,0-18,0V)	T020 C 0002 (For model 18,1-24,0V)
N1	Ø0,20mmX2/36Ts	Ø0,20mmX2/36Ts
N2	Ø0,45mmX2/12Ts	Ø0,55mm/18Ts
N3	Ø0,20mmX2/34Ts	Ø0,20mmX2/34Ts
N4	Ø0,20mmX2/15Ts	Ø0,15mmX2/16Ts
S1	0,025mmX8mm/1,1T	0,025mmX8mm/1,1T
Remark: Primary winding: N1, N3; Feedback winding: N4; Secondary winding: N2; Screen foil: S1		

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