### CONFORMITY DECLARATION

MANUFACTURER 'S NAME	MYRRA S.A.
Adress	2 Boulevard de la Haye
	ZA « Gustave Effeil »
	F-77600 Bussy Saint georges
Product	Encapsulated SMPS
Type Designation	47xxx Series

Declare under sole responsibility compliance of the products:

47121-47122-47123-47124-47125-47126-47151-47152-47153-47154-47155-47156-47157 47114-47133-47134-47136-47163-47164-47166 (VDE report 4003434) 47243-471244-47245-47246-47247 47152-47254-47255-47257-47258

### Low Voltage Directive

### 2006/95/EC

#### Applied harmonized standards

EN61558-1 (second édition) +A1 : 2009 EN61558-2-16 : 2009 (first édition)

Full compliance with the standards listed above proves the conformity of the designated product with the provisions of the above –mentioned EC Directive

Bussy St Georges, le 26/04/2012	Dir.Technique: J P March	_
<u>Dubby of Coorges , 10 20,0 112012</u>	Africant	_
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## **UL TEST REPORT AND PROCEDURE**

Standard:	UL 60950-1, 2nd Edition, 2011-12-19 (Information Technology Equipment - Safety - Part 1: General Requirements) CSA C22.2 No. 60950-1-07, 2nd Edition, 2011-12 (Information Technology Equipment - Safety - Part 1: General Requirements)
Certification Type:	Component Recognition
CCN:	QQGQ2, QQGQ8 (Power Supplies for Information Technology Equipment Including Electrical Business Equipment)
Product:	Switch mode power supply unit
Model:	47121, 47122, 47123, 47124, 47124SLI, 47125, 47126, 47151, 47152, 47153, 47154, 47155, 47156, 47157
Rating:	Input:100-240V ~ , 50/60Hz, 0.2A. Output: model 47121: 3.3 Vdc, 2.5 W; model 47122: 5 Vdc, 2.75 W; model 47123: 9 Vdc, 2.5 W; model 47124: 12 Vdc, 2.5 W; model 47124SLI: 12 Vdc, 2.5 W; model 47125: 15 Vdc, 2.5 W; model 47126: 24 Vdc, 2.5 W; model 47151: 3.3 Vdc, 4.5 W; model 47151: 3.3 Vdc, 4.5 W; model 47154: 12 Vdc, 5 W; model 47155: 15 Vdc, 5 W; model 47155: 15 Vdc, 5 W; model 47156: 24 Vdc, 5 W; model 47157: 3.8 Vdc, 4.5 W.
Applicant Name and Address:	ZHONGSHAN MYRRA ELECTRONIC CO LTD XIAOLAN INDUSTRIAL ZONE XIAOLAN TOWN ZHONGSHAN GUANGDONG 528415 CHINA

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

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UL authorizes the applicant to reproduce the latest pages of the referenced Test Report consisting of the first page of the Specific Technical Criteria through to the end of the Conditions of Acceptability.

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

Prepared by: John Zhang

Reviewed by: Lucio Cinelli

#### Supporting Documentation

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

- A. Authorization The Authorization page may include additional Factory Identification Code markings.
- B. Generic Inspection Instructions
  - i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.
  - ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.
  - iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

#### Product Description

The subject equipment is an AC-DC switching mode building-in power supply. It consists of switching type transformer, bridging capacitor, and other components, filled by adhesive compound, and then housed with plastic enclosure.

#### Model Differences

All models are similar with each other, except for transformer secondary windings, output ratings, and model designation.

Models 47124 and 47124SLI are identical, except for enclosure size and transformer size. See Enclosure 7-01 for details.

#### **Technical Considerations**

- Equipment mobility : for building-in
- Connection to the mains : to be determined in end product
- Operating condition : continuous
- Access location : to be determined in end product
- Over voltage category (OVC) : OVC II
- Mains supply tolerance (%) or absolute mains supply values : +10%, -10%
- Tested for IT power systems : No
- IT testing, phase-phase voltage (V) : --
- Class of equipment : Class II (double insulated)

- Considered current rating of protective device as part of the building installation (A) : 20 A
- Pollution degree (PD) : PD 2
- IP protection class : IP X0
- Altitude of operation (m) : up to 2000
- Altitude of test laboratory (m) : Not exceeded 2000
- Mass of equipment (kg) : Approx. 0.033
- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 70 degree C for models 47121, 47122, 47123, 47124, 47124SLI, 47125, 47126; 50 degree C for models 47151, 47152, 47153, 47154, 47155, 47156, 47157.
- The product is intended for use on the following power systems: TN
- The following accessible locations (with circuit/schematic designation) are within a limited current circuit: C5A secondary
- The following circuit locations (with circuit/schematic designation) were investigated as a limited power source (LPS): all outputs
- The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual.

#### Engineering Conditions of Acceptability

For use only in or with complete equipment where the acceptability of the combination is determined by UL LLC. When installed in an end-product, consideration must be given to the following:

- The following Production-Line tests are conducted for this product: Electric Strength
- The end-product Electric Strength Test is to be based upon a maximum working voltage of: Primary-SELV: 260 Vrms, 584 Vpk.
- The following secondary output circuits are SELV: All outputs
- The following secondary output circuits are at non-hazardous energy levels: All outputs
- The following secondary output circuits are Limited Current Circuits: C5A secondary

- The following secondary output circuits are supplied by a Limited Power Source: All outputs
- The power supply terminals and/or connectors are: Not investigated for field wiring
- The maximum investigated branch circuit rating is: 20 A
- The investigated Pollution Degree is: 2
- The following magnetic devices (e.g. transformers or inductor) are provided with an OBJY2 insulation system with the indicated rating greater than Class A (105°C): T1 (Class B)
- The following end-product enclosures are required: Mechanical, Fire, Electrical

Additional Information	
N/A	
Markings and instruction	ons
Clause Title	Marking or Instruction Details
Power rating - Ratings	Ratings (voltage, frequency/dc, current)
Power rating - Company identification	Listee's or Recognized company's name, Trade Name, Trademark or File Number
Power rating - Model	Model Number
Fuses - Non-operator access/soldered-in fuses	Unambiguous reference to service documentation for instructions for replacement of fuses replaceable only by service personnel
Limited Power Source Marking	"LPS" or "Limited Power Source." may be marked on unit.
Special Instructions to	UL Representative

Inspect the transformer(s) listed in Production-Line Testing Requirements (Electric Strength Test Special Constructions) per AA1.1- (C). When the tests are conducted at other location, Inspect test record and specification sheet provided by the component manufacturer. Verify the specification sheet indicates 100% routine test specified in Production-Line Testing Requirements (Electric Strength Test Special Constructions) be conducted at the component manufacturer.

Production-L	Production-Line Testing Requirements					
Electric Stre	ngth Test Special	Constructions	- Refer to Generic Inspe	ection I	nstructions, Pa	rt AC for
further inform	nation.					
		Removable		V		Test Time,
Model	Component	Parts	Test probe location	rms	V dc	S
All models	Transformer T1		Primary to secondary	min.	or min. 4242	at least 1 s
				300	Vdc	
				0		
				vac		
Earthing Cor	ntinuity Test Exer	nptions - This t	est is not required for th	e follo	wing models:	
All models						
Electric Stre	Electric Strength Test Exemptions - This test is not required for the following models:					
Electric Strength Test Component Exemptions - The following solid-state components may be						
disconnecte	d from the remain	nder of the circu	uitry during the performation	ance of	this test:	
Sample and	Sample and Test Specifics for Follow-Up Tests at UL					
						Test
Model	Component	Material	Test		Sample(s)	Specifics

Issue Date:	2012-02-20	Page 1 of 10	Report Reference #	E345767-A1-UI
	2012-03-14			

## **UL TEST REPORT AND PROCEDURE**

Standard: Certification Type: CCN:	UL 60950-1, 2nd Edition, 2007-03-27 (Information Technology Equipment - Safety - Part 1: General Requirements) CSA C22.2 No. 60950-1-07, 2nd Edition, 2007-03 (Information Technology Equipment - Safety - Part 1: General Requirements) Component Recognition QQGQ2, QQGQ8 (Power Supplies for Information Technology Equipment Including Electrical Business Equipment)
Product:	Switch mode power supply unit
Model:	47114, 47132, 47133, 47134, 47135, 47136, 47162, 47163, 47164, 47165, 47166.
Rating:	Input: 100-240 Vac, 50/60 Hz, 0.2 A. Output: model 47114: 12 Vdc, 2.4 W; model 47132: 5 Vdc, 2.5 W; model 47133: 9 Vdc, 3.2 W; model 47134: 12 Vdc, 3.2 W; model 47135: 18 Vdc, 3.2 W; model 47136: 24 Vdc, 3.2 W; model 47162: 5 Vdc, 4.5 W; model 47163: 9 Vdc, 5 W; model 47164: 12 Vdc, 5 W; model 47165: 18 Vdc, 5 W; model 47166: 24 Vdc, 5 W.
Applicant Name and Address:	ZHONGSHAN MYRRA ELECTRONIC CO LTD XIAOLAN INDUSTRIAL ZONE XIAOLAN TOWN ZHONGSHAN GUANGDONG 528415 CHINA

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

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UL authorizes the applicant to reproduce the latest pages of the referenced Test Report consisting of the first page of the Specific Technical Criteria through to the end of the Conditions of Acceptability.

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

Prepared by: John Zhang

Reviewed by: Glenn Liu

#### Supporting Documentation

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

- A. Authorization The Authorization page may include additional Factory Identification Code markings.
- B. Generic Inspection Instructions
  - i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.
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  - iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

#### Product Description

The subject equipment is an AC-DC switching mode building-in power supply. It consists of switching type transformer, bridging capacitor, and other components, filled by adhesive compound, and then housed with plastic enclosure.

#### Model Differences

All models are similar with each other, except for transformer secondary windings, output ratings, and model designation.

See Enclosure 7-01 for details.

#### **Technical Considerations**

- Equipment mobility : for building-in
- Connection to the mains : to be determined in end product
- Operating condition : continuous
- Access location : to be determined in end product
- Over voltage category (OVC) : OVC II
- Mains supply tolerance (%) or absolute mains supply values : +10%, -10%
- Tested for IT power systems : No
- IT testing, phase-phase voltage (V) : N/A
- Class of equipment : Class II (double insulated)
- Considered current rating (A) : 20

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- Pollution degree (PD) : PD 2
- IP protection class : IP X0
- Altitude of operation (m) : up to 2000
- Altitude of test laboratory (m) : <2000
- Mass of equipment (kg) : approx. 0.033
- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 50 degree C for models 47162, 47163, 47164, 47165, 47166;, 70 degree C for models 47114, 47132, 47133, 47134, 47135, 47136.
- The product is intended for use on the following power systems: TN
- The following accessible locations (with circuit/schematic designation) are within a limited current circuit: C5A secondary
- The following circuit locations (with circuit/schematic designation) were investigated as a limited power source (LPS): output.
- The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual

#### **Engineering Conditions of Acceptability**

For use only in or with complete equipment where the acceptability of the combination is determined by UL LLC. When installed in an end-product, consideration must be given to the following:

- The following Production-Line tests are conducted for this product: Electric Strength
- The end-product Electric Strength Test is to be based upon a maximum working voltage of: Primary-SELV: 255 Vrms, 528 Vpk.
- The following secondary output circuits are SELV: All outputs
- The following secondary output circuits are at non-hazardous energy levels: All outputs
- The following secondary output circuits are Limited Current Circuits: C5A secondary
- The following secondary output circuits are supplied by a Limited Power Source: all outputs

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	2012-03-14			

- The power supply terminals and/or connectors are: Suitable for factory wiring only
- The maximum investigated branch circuit rating is: 20 A
- The investigated Pollution Degree is: 2
- The following magnetic devices (e.g. transformers or inductor) are provided with an OBJY2 insulation system with the indicated rating greater than Class A (105°C): T1 (Class B)
- The following end-product enclosures are required: Mechanical, Fire, Electrical

#### **Additional Information**

Correction with review:

Remove Class II symbol in Marking and Instructions requirement.

Markings and instructions			
Clause Title	Marking or Instruction Details		
Power rating - Company identification	Listee's or Recognized company's name, Trade Name, Trademark or File Number		
Power rating - Model	Model Number		
Power rating - Ratings	Ratings (voltage, frequency/dc, current)		

#### **Special Instructions to UL Representative**

Inspect the transformer(s) listed in Production-Line Testing Requirements (Electric Strength Test Special Constructions) per AA1.1- (C). When the tests are conducted at other location, Inspect test record and specification sheet provided by the component manufacturer. Verify the specification sheet indicates 100% routine test specified in Production-Line Testing Requirements (Electric Strength Test Special Constructions) be conducted at the component manufacturer.

Issue Date:	2012-02-20	Page 5 of 10	Report Reference #	E345767-A1-UL
	2012-03-14			

Production-L	ine Testing Requ	irements				
Electric Stren	ngth Test Special nation.	Constructions	- Refer to Generic Inspe	ection Inst	ructions,	Part AC for
		Removable		V		Test Time,
Model	Component	Parts	Test probe location	rms	V dc	S
All models in this report	Transformer T1		Primary to Secondary	300 0	4242	min. 1
Earthing Con	tinuity Test Exem	ptions - This t	est is not required for th	e followir	ig models	<u>:</u>
All models in t	his report					
Electric Strer	ngth Test Exempti	ions - This test	t is not required for the f	ollowing	models:	
Electric Strength Test Component Exemptions - The following solid-state components may be disconnected from the remainder of the circuitry during the performance of this test:						
N/A						
Sample and Test Specifics for Follow-Up Tests at UL						
Model	Component	Material	Test	Sa	mple(s)	Test Specifics

## **UL TEST REPORT AND PROCEDURE**

Standard: Certification Type:	UL 60950-1, 2nd Edition, 2011-12-19 (Information Technology Equipment - Safety - Part 1: General Requirements) CSA C22.2 No. 60950-1-07, 2nd Edition, 2011-12 (Information Technology Equipment - Safety - Part 1: General Requirements) Component Recognition
CCN:	QQGQ2, QQGQ8 (Power Supplies for Information Technology Equipment Including Electrical Business Equipment)
Product:	Switch mode power supply unit
Model:	47243, 47244, 47245, 47246, 47247
Rating:	Input:100-240V ~ , 50/60Hz, 0.2A. Output: Model 47243: 10.5Vdc, 4W, 7.0Vdc, 0.7W, with Tma=50 degree C; 10.5Vdc, 3.3W, 7.0Vdc, 0.7W, with Tma=60 degree C. Model 47244: 15Vdc, 4.5W, 7.0Vdc, 0.5W, with Tma=50 degree C; 15Vdc, 3.5W, 7.0Vdc, 0.5W, with Tma=60 degree C. Model 47245: 12Vdc, 1.6W, 5.5Vdc, 1.6W, with Tma=70 degree C. Model 47246: 12Vdc, 2.0W, 5.0Vdc, 2.0W, with Tma=60 degree C. Model 47247: 15Vdc, 2.0W, -15Vdc, 2.0W, with Tma=60 degree C. See Enclosure 7-01 for details.
Applicant Name and Address:	ZHONGSHAN MYRRA ELECTRONIC CO LTD XIAOLAN INDUSTRIAL ZONE XIAOLAN TOWN ZHONGSHAN GUANGDONG 528415 CHINA

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Prepared by: John Zhang

Reviewed by: Lorenzo lorio

#### Supporting Documentation

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#### **Product Description**

The subject equipment is an AC-DC switching mode building-in power supply. It consists of switching type transformer, bridging capacitor, and other components, filled by adhesive compound, and then housed with plastic enclosure.

#### Model Differences

All models are similar with each other, except for transformer secondary windings, output ratings, and model designation.

See Enclosure 7-01 for details.

#### **Technical Considerations**

- Equipment mobility : for building-in
- Connection to the mains : to be determined in end product
- Operating condition : continuous
- Access location : to be determined in end product
- Over voltage category (OVC) : OVC II
- Mains supply tolerance (%) or absolute mains supply values : +10%, -10%
- Tested for IT power systems : No
- IT testing, phase-phase voltage (V) : --
- Class of equipment : Class II (double insulated)

- Considered current rating of protective device as part of the building installation (A) : 20 A
- Pollution degree (PD) : PD 2
- IP protection class : IP X0
- Altitude of operation (m) : up to 2000
- Altitude of test laboratory (m) : Not exceeded 2000
- Mass of equipment (kg) : Approx. 0.033
- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 50/60 degree C for models 47243, 47244; 60 degree C for model 47246, 47247; 70 degree C for model 47245
- The product is intended for use on the following power systems: TN
- The following accessible locations (with circuit/schematic designation) are within a limited current circuit: C4A secondary
- The following circuit locations (with circuit/schematic designation) were investigated as a limited power source (LPS): all outputs
- The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual.

#### **Engineering Conditions of Acceptability**

For use only in or with complete equipment where the acceptability of the combination is determined by UL LLC. When installed in an end-product, consideration must be given to the following:

- The following Production-Line tests are conducted for this product: Electric Strength
- The end-product Electric Strength Test is to be based upon a maximum working voltage of: Primary-SELV: 259 Vrms, 588 Vpk.
- The following secondary output circuits are SELV: All outputs
- The following secondary output circuits are at non-hazardous energy levels: All outputs
- The following secondary output circuits are Limited Current Circuits: C4A secondary

- The following secondary output circuits are supplied by a Limited Power Source: All outputs
- The power supply terminals and/or connectors are: Not investigated for field wiring
- The maximum investigated branch circuit rating is: 20 A
- The investigated Pollution Degree is: 2
- The following magnetic devices (e.g. transformers or inductor) are provided with an OBJY2 insulation system with the indicated rating greater than Class A (105°C): T1 (Class B)
- The following end-product enclosures are required: Mechanical, Fire, Electrical

Additional Information				
N/A				
Markings and instructions				
Clause Title	Marking or Instruction Details			
Power rating - Ratings	Ratings (voltage, frequency/dc, current)			
Power rating - Company identification	Listee's or Recognized company's name, Trade Name, Trademark or File Number			
Power rating - Model	Model Number			
Fuses - Non-operator access/soldered-in fuses	Unambiguous reference to service documentation for instructions for replacement of fuses replaceable only by service personnel			
Limited Power Source Marking	"LPS" or "Limited Power Source." may be marked on unit.			
Special Instructions to	UL Representative			

Inspect the transformer(s) listed in Production-Line Testing Requirements (Electric Strength Test Special Constructions) per AA1.1- (C). When the tests are conducted at other location, Inspect test record and specification sheet provided by the component manufacturer. Verify the specification sheet indicates 100% routine test specified in Production-Line Testing Requirements (Electric Strength Test Special Constructions) be conducted at the component manufacturer.

Production-Line Testing Requirements						
Electric Strength Test Special Constructions - Refer to Generic Inspection Instructions, Part AC for						
further inform	mation.					
		Removable		V		Test Time,
Model	Component	Parts	Test probe location	rms	V dc	S
All models	Transformer T1		Primary to secondary	min. 300 0 Vac	or min. 4242 Vdc	at least 1 s
Earthing Cor	ntinuity Test Exe	<u>mptions - This</u>	test is not required for th	e follo	wing models:	
All models						
Electric Strength Test Exemptions - This test is not required for the following models:						
Electric Strength Test Component Exemptions - The following solid-state components may be disconnected from the remainder of the circuitry during the performance of this test:						
Sample and Test Specifics for Follow-Up Tests at UL						
Model	Component	Material	Test		Sample(s)	Test Specifics

## **UL TEST REPORT AND PROCEDURE**

Standard:	UL 60950-1, 2nd Edition, 2011-12-19 (Information Technology Equipment - Safety - Part 1: General Requirements) CSA C22.2 No. 60950-1-07, 2nd Edition, 2011-12 (Information Technology Equipment - Safety - Part 1: General Requirements)
Certification Type:	Component Recognition
CCN:	QQGQ2, QQGQ8 (Power Supplies for Information Technology Equipment Including Electrical Business Equipment)
Product:	Switch mode power supply unit
Model:	47252, 47254, 47255, 47257, 47258
Rating:	Input:100-240V ~ , 50/60Hz, 0.2A. Output: Model 47252: 5.0Vdc, 1.75W, 5.0Vdc, 1.75W; Model 47254: 12Vdc, 2.0W, 12Vdc, 2.0W; Model 47255: 15Vdc, 2.0W, 15Vdc, 2.0W; Model 47257: 5.0Vdc, 2.0W, 12Vdc, 2.0W; Model 47258: 18Vdc, 2.8W, 8.0Vdc, 1.2W. See Enclosure 7-01 for details.
Applicant Name and Address:	ZHONGSHAN MYRRA ELECTRONIC CO LTD XIAOLAN INDUSTRIAL ZONE XIAOLAN TOWN ZHONGSHAN GUANGDONG 528415 CHINA

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Prepared by: John Zhang

Reviewed by: Benjamin Mapes

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#### **Product Description**

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#### Model Differences

All models are similar with each other, except for transformer secondary windings, output ratings, and model designation.

See Enclosure 7-01 for details.

#### **Technical Considerations**

- Equipment mobility : for building-in
- Connection to the mains : to be determined in end product
- Operating condition : continuous
- Access location : to be determined in end product
- Over voltage category (OVC) : OVC II
- Mains supply tolerance (%) or absolute mains supply values : +10%, -10%
- Tested for IT power systems : No
- IT testing, phase-phase voltage (V) : --
- Class of equipment : Class II (double insulated)

- Considered current rating of protective device as part of the building installation (A) : 20 A
- Pollution degree (PD) : PD 2
- IP protection class : IP X0
- Altitude of operation (m) : up to 2000 m
- Altitude of test laboratory (m) : Not exceeded 2000 m
- Mass of equipment (kg) : Approx. 0.033 kg
- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 60 degree C
- The product is intended for use on the following power systems: TN
- The following accessible locations (with circuit/schematic designation) are within a limited current circuit: C4A secondary
- The following circuit locations (with circuit/schematic designation) were investigated as a limited power source (LPS): all outputs
- The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual.

#### **Engineering Conditions of Acceptability**

For use only in or with complete equipment where the acceptability of the combination is determined by UL LLC. When installed in an end-product, consideration must be given to the following:

- The following Production-Line tests are conducted for this product: Electric Strength
- The end-product Electric Strength Test is to be based upon a maximum working voltage of: Primary-SELV: 248 Vrms, 584 Vpk.
- The following secondary output circuits are SELV: All outputs
- The following secondary output circuits are at non-hazardous energy levels: All outputs
- The following secondary output circuits are Limited Current Circuits: C4A secondary

- The following secondary output circuits are supplied by a Limited Power Source: All outputs
- The power supply terminals and/or connectors are: Not investigated for field wiring
- The maximum investigated branch circuit rating is: 20 A
- The investigated Pollution Degree is: 2
- The following magnetic devices (e.g. transformers or inductor) are provided with an OBJY2 insulation system with the indicated rating greater than Class A (105°C): T1 (Class B)
- The following end-product enclosures are required: Mechanical, Fire, Electrical

Additional Information				
N/A				
Markings and instructions				
Clause Title	Marking or Instruction Details			
Power rating - Ratings	Ratings (voltage, frequency/dc, current)			
Power rating - Company identification	Listee's or Recognized company's name, Trade Name, Trademark or File Number			
Power rating - Model	Model Number			
Fuses - Non-operator access/soldered-in fuses	Unambiguous reference to service documentation for instructions for replacement of fuses replaceable only by service personnel			
Limited Power Source Marking	"LPS" or "Limited Power Source." may be marked on unit.			
Special Instructions to UL Representative				

Inspect the transformer(s) listed in Production-Line Testing Requirements (Electric Strength Test Special Constructions) per AA1.1- (C). When the tests are conducted at other location, Inspect test record and specification sheet provided by the component manufacturer. Verify the specification sheet indicates 100% routine test specified in Production-Line Testing Requirements (Electric Strength Test Special Constructions) be conducted at the component manufacturer.

Production-Line Testing Requirements						
Electric Strength Test Special Constructions - Refer to Generic Inspection Instructions, Part AC for						
further inform	mation.					
		Removable		V		Test Time,
Model	Component	Parts	Test probe location	rms	V dc	S
All models	Transformer T1		Primary to secondary	min. 300 0 Vac	or min. 4242 Vdc	at least 1 s
Earthing Cor	<u>ntinuity Test Exer</u>	<u>mptions - This t</u>	test is not required for th	e follo	wing models:	
All models						
Electric Strength Test Exemptions - This test is not required for the following models:						
Electric Strength Test Component Exemptions - The following solid-state components may be disconnected from the remainder of the circuitry during the performance of this test:						
Sample and Test Specifics for Follow-Up Tests at UL						
Model	Component	Material	Test		Sample(s)	Test Specifics



## ZEICHENGENEHMIGUNG MARKS APPROVAL

Myrra S.A. 2 Bd. de la haye Z.A. de Bussy St. Georges 77607 BUSSY ST. GEORGES FRANCE

ist berechtigt, für ihr Produkt / is authorized to use for their product

Netzgerät *Power supply unit* Switch mode power supply unit (IP00)

die hier abgebildeten markenrechtlich geschützten Zeichen für die ab Blatt 2 aufgeführten Typen zu benutzen / the legally protected Marks as shown below for the types referred to on page 2 ff.



Geprüft und zertifiziert nach / Tested and certified according to

DIN EN 61558-1 (VDE 0570 Teil 1):2006-07; EN 61558-1:2005-11 DIN EN 61558-1/A1 (VDE 0570 Teil 1/A1):2009-11; EN 61558-1/A1:2009-03 DIN EN 61558-2-16 (VDE 0570 Teil 2-16):2010-07; EN 61558-2-16:2009-12

VDE Prüf- und Zertifizierungsinstitut GmbH VDE Testing and Certification Institute Zertifizierungsstelle / Certification

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Aktenzeichen: 1398300-3310-0009 / 171143 *File ref.:* Ausweis-Nr. 40034334 Blatt 1

 
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 40034334
 Blatt

 Certificate No.
 Page

 Weitere Bedingungen siehe Rückseite und Folgeblätter / further conditions see overleaf and following pages
 Folgeblätter /

Offenbach, 2012-02-03 (letzte Änderung/updated 2012-09-06)

http://www.vde.com/zertifikat http://www.vde.com/certificate



Ausweis-Nr. / Blatt / Certificate No. page 40034334 2

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 2012-09-06
 2012-02-03

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#### Netzgerät *Power supply unit* Switch mode power supply unit (IP00)

Typ(en) / Type(s):

<ol> <li>47114</li> <li>Type series 47132-47136</li> <li>Type series 47162-47166</li> <li>47124SLI</li> <li>Type series 47121-47126</li> <li>Type series 47151-47157</li> <li>Type series 47243-47247</li> </ol>	(Appendix No. 01 - 03) (Appendix No. 01 - 03) (Appendix No. 01 - 03) (Appendix No. 04 - 06) (Appendix No. 04 - 06) (Appendix No. 04 - 06) (Appendix No. 04, 05, 07)
Warenzeichen Trademark	myrra
Bemessungsspannung primär Rated voltage primary	AC 100-240V
Bemessungsfrequenz Rated frequency	50/60 Hz
Bemessungsleistung Rated output	2,4 W Für / for 1) 2,5 Wmax. 3,2 W Für / for 2) 4,5 Wmax. 5 W Für / for 3) 2,5 W Für / for 4) 2,5 Wmax. 2,75 W Für / for 5) 4,5 Wmax. 5 W Für / for 6) 3,2 Wmax. 5 W Für / for 7)

Fortsetzung siehe Blatt 3 / continued on page 3

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Bemessungsspannung sekundär Rated voltage secondary	DC 12 V (SELV) Für / for 1), 4) DC 5 V24 V (SELV) Für / for 2), 3)
	DC 3,3 V24 V (SELV) Für / for 5), 6) SEC 1: DC 5 V15 V (SELV) SEC 2 : DC 5,5 V15 V (SELV) Anmerkung/remark: SEK1 und SEK2 haben die selbe Masse (sind nicht voneinander getrennt) SEC1 and SEC2 have the same ground (they are not separated) Für / for 7) (Einzelheiten siehe Anlagen / details see Appendices) Für / for 1), 2), 3), 4), 5), 6), 7)
Bemessungsstrom sekundär Rated current secondary	siehe Anlagen / see Appendices
Bemessungsumgebungstemperatur Rated ambient temperature	siehe Anlagen / see Appendices
Kurzschlussfestigkeit Short circuit protection	bedingt kurzschlussfest non-inherently short circuit proof
Schutzart Degree of protection	IP 00
Aufbau und Ausführung Construction and design	Vergossene Schaltnetzteile (IP00), mit der gleichen Grundfläche wie El30 Transformator Encapsulated switch mode power supply unit (IP00), with the same footprint as El30 transformer. Verstärkte und / oder doppelte Isolierung zwischen Primär und Sekundärseite Reinforce and/or double insulation between primary circuit and secondary circuit.

Fortsetzung siehe Blatt 4 / continued on page 4

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Isolierstoffklasse	<ul> <li>B, Anmerkung:</li> <li>Trotz Isolierstoffklasse B dürfen die Wicklungstemperaturen aller Schaltnetzteile der zugelassenen Serie im Normalbetrieb nach Abs. 14 die Grenze von</li> <li>91 ℃ (für 1), 2), 3))</li> <li>111 ℃ (für 4), 5), 6), 7))</li> <li>nicht überschreiten.</li> <li>Grund: siehe nachfolgend aufgeführte Prüftemperatur für die</li> </ul>
Insulation class	Zyklenprüfung nach Abs. 26.2.4.1. <i>B</i> , <i>Remark:</i> In spite of class <i>B</i> the temperature of all switch mode power supply unit of the series should not increase the max. winding temperature of 91 $\mathbb{C}$ (for 1), 2), 3)) 111 $\mathbb{C}$ (for 4), 5), 6), 7)) during the normal heating test acc. to clause 14. Reason: see the following test temperature of clause 26.2.4.1.
Verschmutzungsgrad	P1 nach Abschnitt 26.2.4.1 (Test B), für Anwendungen in P2 or P3 geeignet (Anmerkung: Zyklenprüfung 26.2.4.1, geprüft mit der nach Abs. 14 max. gemessenen Wicklungstemperatur + 10  K = 101  C oder 121 C)
Degree of pollution	P1 acc. to cls. 26.2.4.1 (Test B), for use in P2 or P3 environments (Remark: 26.2.4.1 cycling test, tested by the max. measured winding temperature acc. to clause $14 + 10$ $K = 101 \degree$ or $121 \degree$ )
Weitere Prüfbestimmung(en) Further standard(s)	DIN EN 60335-1:2010-11; EN 60335-1: 2002 + A1:2004 + A11:2004 + A12 :2006 + A2:2006 + A13:2008 + A14:2010; Abschnitt/clause 22.42, 24 and 30. DIN EN 60950-1:2011-11 + A12:2011-08; EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 Abschnitt/clause 1.5, 1.6, 1.7, 2.1, 2.2, 2.4, 2.5, 2.7, 2.9, 2.10, 4.5, 4.7, 5.2, 5.3 and Annex C
Weitere Angaben siehe Anlage Nr. Further information see appendix no.	1 - 7
Fortsetzung siehe Blatt 5 / continued on page 5	Ind Zertifizierungsinstitut GmbH * Testing and Certification Institute

Merianstrasse 28, D-63069 Offenbach

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This Marks Approval is a basis for the EC Declaration of Conformity and the CE Marking by the manufacturer or his agent and proves the conformity with the essential safety requirements of the EC Low-Voltage Directive 2006/95/EC including amendments.

VDE Prüf- und Zertifizierungsinstitut GmbH VDE Testing and Certification Institute Fachgebiet FG13 Section FG13

VDE Prüf- und Zertifizierungsinstitut GmbH \* Testing and Certification Institute

Dieser Zeichengenehmigungs-Ausweis bildet eine Grundlage für die EG-Konformitätserklärung und CE-Kennzeichnung durch den Hersteller oder dessen Bevollmächtigten und bescheinigt die Konformität mit den grundlegenden Schutzanforderungen der EG-Niederspannungsrichtlinie 2006/95/EG mit ihren Änderungen.

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Netzgerät *Power supply unit* Switch mode power supply unit (IP00)

Fertigungsstätte(n) Place(s) of manufacture

Referenz/Reference Myrra SA 30016393 Myrra SA Zhongshan Myrra Electronic Co Ltd. No.39-2 Industrial Road, Xiaolan Industrial Zone, Xiaolan Town 528415 ZHONGSHAN CITY Guangdong CHINA

VDE Prüf- und Zertifizierungsinstitut GmbH VDE Testing and Certification Institute Fachgebiet FG13 Section FG13

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## Genehmigung zum Benutzen des auf Seite 1 abgebildeten markenrechtlich geschützten Zeichens des VDE:

Grundlage für die Benutzung sind die Allgemeinen Geschäftsbedingungen (AGB) der VDE Prüf- und Zertifizierungsinstitut GmbH (www.vde.com\AGB-Institut). Das Recht zur Benutzung erstreckt sich nur auf die bezeichnete Firma mit den genannten Fertigungsstätten und die oben aufgeführten Produkte mit den zugeordneten Bezeichnungen. Die Fertigungsstätte muss so eingerichtet sein, dass eine gleichmäßige Herstellung der geprüften und zertifizierten Ausführung gewährleistet ist.

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Produkte, die das Biozid Dimethylfumarat (DMF) enthalten, dürfen gemäß der Kommissionsentscheidung 2009/251/EG nicht mehr in den Verkehr gebracht oder auf dem Markt bereitgestellt werden.

Der VDE-Zeichengenehmigungsausweis wird ausschließlich auf der ersten Seite unterzeichnet.

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The approval is valid as long as the VDE specifications are in force, on which the certification is based on, unless it is withdrawn according to the VDE Testing and Certification Procedure (PM102E).

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Products containing the biocide dimethylfumarate (DMF) may not be marketed or made available on the EC market according to the Commission Decision 2009/251/EC.

The approval is solely signed on the first page.