

File E116994
Project 90SC14984

1990-11-07

REPORT

ON

COMPONENT - POWER SUPPLIES,
MEDICAL AND DENTAL EQUIPMENT

CONDOR D C POWER SUPPLIES INC.
Oxnard, California

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DESCRIPTION

PRODUCT COVERED:

COMPONENT - Medical Linear Power Supplies, Models MB5-3-OVP-A, MB12-1.7-A, MB15-1.5-A, MB24-1.2-A, MB28-1-A, MC5-6-OVP-A, MC12-3.4-A, MC15-3-A, MC24-2.4.A, MC28-2-A, MAA15-0.8-A, MAA512-A, MAA524-A, MBB15-1.5-A, MBB512-A, MBB524-A, MTAA-16W-A, MBAA-40W-A, MCP1249 **and MCP1799**.

ELECTRICAL RATINGS:

Input: 100/120/215/230-240 V ac, 50/60 Hz,
Input currents vary by model. See table below.

<u>Model #</u>	<u>Input Currents</u>			
	<u>100 V ac</u>	<u>120 V ac</u>	<u>215 V ac</u>	<u>230-240 V ac</u>
MB5-3-OVP-A	0.75	0.6	0.4	0.4
MB12-1.7-A	0.75	0.6	0.4	0.4
MB15-1.5.A	0.75	0.75	0.4	0.4
MB24-1.2-A	0.8	0.65	0.4	0.4
MB28-1-A	0.8	0.75	0.4	0.4
MC5-6-OVP-A	1.1	0.9	0.5	0.5
MC12-3.4-A	1.2	1.0	0.6	0.5
MC15-3-A	1.3	1.1	0.6	0.6
MC24-2.4-A	1.4	1.2	0.7	0.6
MC28-2-A	1.4	1.2	0.7	0.6
MAA15-0.8-A	0.77	0.65	0.35	0.33
MAA512-A	0.75	0.75	0.4	0.4
MAA524-A	0.7	0.6	0.3	0.3
MBB15-1.5-A	0.65	0.56	0.31	0.28
MBB512-A	1.2	1.0	0.6	0.5
MBB524-A	1.2	1.1	0.6	0.5
MTAA-16W-A	0.7	0.6	0.3	0.3
MBAA-40W-A	1.3	1.1	0.6	0.6
MCP1249	1.4	1.2	0.2	0.6
MCP1799	0.75	0.6	0.4	0.4

Output: Maximum output power for each unit is defined below.
Output power is derated 10% for 50Hz operation.

Model	Volts	Amps, 60 Hz	Amps, 50 Hz	Max Watts
MB5-3-OVP-A	5	3.0	2.7	15.0
MB12-1.7-A	12	1.7	1.53	20.4
MB15-1.5-A	15	1.5	1.35	22.5
MB24-1.2-A	24	1.2	1.08	28.8
MB28-1-A	28	1.0	0.9	28.0
MC5-6-OVP-A	5	6.0	5.4	30.0
MC12-3.4-A	12	3.4	3.06	40.8
MC15-3-A	15	3.0	2.7	45.0
MC24-2.4-A	24	2.4	2.16	57.6
MC28-2-A	28	2.0	1.8	56.0
MAA15-0.8-A	±15	1.0	0.9	30.0
	±12	0.8	0.72	19.2
MAA512-A	5	2.0	1.8	17.5
	9 to 15	0.5	0.45	---
MAA524-A	5	2.0	1.8	17.2
	18 TO 24	0.3	.27	---
MBB15-1.5-A	15	1.5	1.35	22.5
MBB512-A	5	3.0	2.7	33.75
	9 to 15	1.25	1.125	---
MBB524-A	5	3.0	2.7	29.2
	18 TO 24	0.8	0.72	---
MTAA-16W-A	5	2.0	1.8	22.0
	±12 to ±15	0.4	0.36	---
MBAA-40W-A	5	3.0	2.7	39.0
	±15	0.8	0.72	---
	±12	1.0	0.9	---
MCP1249	26	2.0	1.8	52.0
MCP1799	6.5	1.4	1.26	9.1

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

For use in product where the acceptability of the combination is determined by Underwriters Laboratories Inc.

* This product was evaluated to the **First** Edition of the Standard For Medical Electrical Equipment, Part 1: General Requirements for Safety, UL **60601-1**. An insulation diagram is provided as Ill. 1, the manufacturer's installation instructions is provided as Ills. 2 and the transformer information diagram is provided as Ills. 3 **and 4**.

Condition of Acceptability - When installed in the end-use equipment, the following are among the considerations to be made:

1. This component has been judged on the basis of the required spacings in the **First** Edition of the Standards for Medical Electrical Equipment, Part 1: General Requirements for Safety, UL **60601-1**, which covers the end use product for which the component is designed.
2. The component shall be installed in compliance with the enclosure, mounting, spacing, casualty, markings and segregation requirements of the end-use application.
3. Leakage current testing should be repeated in the end product application.
4. Consideration should be given to measuring the temperature on power electronic components and transformer windings when the power supply is installed in the end-use equipment.
5. The input/output connectors are not acceptable for field connections, they are only intended for connection to mating connectors of internal wiring inside the end-use machine.
6. The Temperature Test was performed in a raised ambient of 50°C.
7. The component should be properly bonded to ground in the end-use equipment.
8. The output circuits have not been evaluated for direct patient connection (Type B, BF or CF).
9. The main isolation transformer, T1, complies with Class **B (130°C)** limits, except for MB24-1.2-A, MB28-1-A, MAA15-0.8-A, MTAA-16W-A, MC24-2.4-A, **and MCP1799**, which comply with Class **F (155°C)** limits.
10. The power supply was evaluated as Reinforced Insulation between primary and secondary; Basic Insulation between primary to ground.
11. This power supply has been evaluated as Class I, continuous operation, ordinary equipment and has not been evaluated for use in the presence of a flammable anaesthetic mixture with air, oxygen, or nitrous oxide.
12. Double fusing in the end-product should be considered since primary fusing of both sides on the mains supply lines was not provided.

File E116994
Project 90SC13193

1990-11-29

REPORT

ON

COMPONENT - POWER SUPPLIES,
MEDICAL AND DENTAL EQUIPMENT

CONDOR D C POWER SUPPLIES INC.
Oxnard, California

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DESCRIPTION

PRODUCT COVERED:

COMPONENT - Medical Linear Power Supplies, Models MD5-12/OVP-A, MD12-6.8-A, MD15-6-A, MS24-4.8-A, MD28-4-A, MCC15-3-A, MCC512-A, MCC524-A, MCAA-60W-A, MCBB-75W-A, MCP1279.

ELECTRICAL RATINGS:

Input: 100/120/215/230-240 V ac, 50/60 Hz,
Input currents vary by model. See table below.

<u>Model #</u>	<u>Input Currents</u>			
	<u>100 V ac</u>	<u>120 V ac</u>	<u>215 V ac</u>	<u>230-240 V ac</u>
MD5-12/OVP-A	2.3	1.9	1.0	1.0
MD12-6.8-A	2.8	2.4	1.3	1.2
MD15-6-A	2.8	2.4	1.3	1.2
MD24-4.8-A	2.8	2.4	1.3	1.2
MD28-4-A	2.5	2.1	1.2	1.1
MCC15-3-A	3.0	2.8	1.5	1.4
MCC512-A	2.5	2.2	1.2	1.1
MCC524-A	2.4	2.1	1.2	1.0
MCAA-60W-A	3.0	2.8	1.5	1.4
MCBB-75W-A	2.3	2.0	1.1	1.0
MCP1279	2.5	2.1	1.2	1.1

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Output: Maximum output power for each unit is defined below.
Output power is derated 10% for 50 Hz operation.

Model	Volts	Amps, 60 Hz	Amps, 50 Hz	Max Watts
MD5-12/OVP-A	5	12.0	10.8	60
MD12-6.8-A	12	6.8	6.12	81.6
MD15-6-A	15	6.0	5.4	90.0
MD24-4.8-A	24	4.8	4.32	115.2
MD28-4-A	28	4.0	3.6	112.0
MCC15-3-A	±15	3.0	2.7	90
	±12	3.4	3.06	81.6
MCC512-A	5	6.0	5.4	67.5
	9 TO 15	2.5	2.25	---
MCC524-A	5	6.0	5.4	78.0
	18 TO 24	2.0	1.8	---
MCAA-60W-A	5	6.0	5.4	54.0
	±15	0.8	0.72	---
	±12	1.0	0.9	---
MCBB-75W-A	5	6.0	5.4	74.5
	±15	1.5	1.35	---
	±12	1.71	1.54	---
MCP1279	28	4.0	3.6	112

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

For use in product where the acceptability of the combination is determined by Underwriters Laboratories Inc.

This product was evaluated to the Second Edition of the Standard For Medical Electrical Equipment, Part 1: General Requirements for Safety, UL 2601-1. An insulation diagram is provided as Ill. 1, the manufacturer's installation instructions is provided as Ills. 2 and the transformer information diagram is provided as Ills. 3.

Conditions of Acceptability - When installed in the end-use equipment, the following are among the considerations to be made:

1. This component has been judged on the basis of the required spacings in the Second Edition of the Standards for Medical Electrical Equipment, Part 1: General Requirements for Safety, UL 2601-1, which covers the end use product for which the component is designed.

2. The component shall be installed in compliance with the enclosure, mounting, spacing, casualty, markings and segregation requirements of the end-use application.
3. Leakage current testing should be repeated in the end product application.
4. Consideration should be given to measuring the temperature on power electronic components and transformer windings when the power supply is installed in the end-use equipment.
5. The input/output connectors are not acceptable for field connections, they are only intended for connection to mating connectors of internal wiring inside the end-use machine.
6. The Temperature Test was performed in a raised ambient of 50°C.
7. The component should be properly bonded to ground in the end-use equipment.
8. The output circuits have not been evaluated for direct patient connection (Type B, BF or CF).
9. The main isolation transformer, T1, complies with Class 130 limits, except for MD24-4.8, MD28-4-A AND MCP1279 which comply with Class 155 limits.
10. The power supply was evaluated as Reinforced Insulation between primary and secondary; Basic Insulation between primary to ground.
11. This power supply has been evaluated as Class I, continuous operation, ordinary equipment and has not been evaluated for use in the presence of a flammable anaesthetic mixture with air, oxygen, or nitrous oxide.
12. Double fusing in the end-product should be considered since primary fusing of both sides on the mains supply lines was not provided.



CSA INTERNATIONAL

Certificate of Compliance

Certificate: 1231873 (LR 46516C)

Master Contract: 150684

Project: 1566321

Date Issued: 2004/06/14

Issued to: Condor D.C. Power Supplies Inc.

2311 Statham Pky
Oxnard, California 93033
USA

Attention: Mr. Dave Hemphill

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US'



Issued by: Mohamed Omran, P. Eng.

Authorized by: Shane Stevenson, Product Group Manager

PRODUCTS

CLASS 5311 20 - POWER SUPPLIES - Component Type - For Use in Medical Equipment

CLASS 5311 96 - POWER SUPPLIES - Component Acceptance - Certified to US Standards

· Medical Linear Power Supplies, input rated 100/120/215/230-240V ac, 50/60 Hz, input currents vary by model, see table below: All models are L3M1.

MB5-3-OVP-A, MB12-1.7-A, MB15-1.5-A, MB24-1.2-A, MB28-1-A, MC5-6-OVP-A, MC12-3.4-A, MC15-3-A, MC24-2.4-A, MC28-2-A, MAA15-0.8-A, MAA512-A, MAA524-A, MBB512-A, MBB524-A, MTAA-16W-A, MBAA-40W-A, MCP1799.

The 'C' and 'US' indicators adjacent to the CSA Mark signify that the product has been evaluated to the applicable CSA and ANSI/UL Standards, for use in Canada and the U.S., respectively. This 'US' indicator includes products eligible to bear the 'NRTL' indicator. NRTL, i.e. National Recognized Testing Laboratory, is a designation granted by the U.S. Occupational Safety and Health Administration (OSHA) to laboratories which have been recognized to perform certification to U.S. Standards.



Certificate: 1231873 (LR 46516C)

Master Contract: 150684

Project: 1566321

Date Issued: 2004/06/14

For Input and Output ratings refer to report.

Note:

Equipment is suitable for rated ambient of 50 °C.

APPLICABLE REQUIREMENTS

CAN/CSA Std C22.2 No. 601.1-M90 - Medical Electrical Equipment

UL Std 60601-1 1st Edition - Medical Electrical equipment, Part1: General Requirements for Safety



Supplement to Certificate of Compliance

Certificate: 1231873

Master Contract: 150684

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description
1566321	2004/06/14	Update Report 1231873 to Add New Model Designation MCP1799.

History

1231873	2001/08/07	Original Certification.
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MASTER CONTRACT: 150684 (LR 46516C)

REPORT: 1231873

Edition 1: August 7, 2001; Project 1231873 - Vancouver
Issued by Shane Stevenson, AScT.; Reviewed by Orest Ewanchyna, P. Eng.

Edition 2: **June 14, 2004; Project 1566321 - Vancouver**
Issued by Mohamed Omran, P. Eng.; Reviewed by Melinda Falez, P. Eng.

Pages Added/Replaced: All, Report Reissued

Illustrations replaced: Illustration 1

Illustrations Added: Ill. 19

Contents: Certificate of Compliance - Pages 1 to 2
Supplement to Certificate of Compliance - Page 1
Description and Tests - Pages 1 to 8
Figures: 1 to 5
Illustrations: 1 to 19

PRODUCTS

CLASS 5311 20 – POWER SUPPLIES – For Use in Medical equipment

CLASS 5311 96 – POWER SUPPLIES – Component Acceptance – Certified to US Standards

Component Power Supply for use in Medical Equipment, where the suitability of the combination is to be determined by CSA International.

Medical Linear Power Supplies, input rated 100/120/215/230-240V ac, 50/60 Hz, input currents vary by model, see table below: All models are L3M1.

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Model No	Input Currents			
	100 Vac	120 Vac	215 Vac	230-240 Vac
MB5-3-OVP-A	0.75	0.6	0.4	0.4
MB12-1.7-A	0.75	0.6	0.4	0.4
MB15-1.5-A	0.75	0.75	0.4	0.4
MB24-1.2-A	0.8	0.65	0.4	0.4
MB28-1-A	0.8	0.75	0.4	0.4
MC5-6-OVP-A	1.1	0.9	0.5	0.5
MC12-3.4-A	1.2	1.0	0.6	0.5
MC15-3-A	1.3	1.1	0.6	0.6
MC24-2.4-A	1.4	1.2	0.7	0.6
MC28-2-A	1.4	1.2	0.7	0.6
MAA15-0.8-A	0.77	0.65	0.35	0.33
MAA512-A	0.75	0.75	0.4	0.4
MAA524-A	0.7	0.6	0.3	0.3
MBB15-1.5-A	0.65	0.56	0.31	0.28
MBB512-A	1.2	1.0	0.6	0.5
MBB524-A	1.2	1.1	0.6	0.5
MTAA-16W-A	0.7	0.6	0.3	0.3
MBAA-40W-A	1.3	1.1	0.6	0.6
MCP1799	0.6	0.5	0.3	0.3

Output: Maximum output power for each unit is defined below. Output power is derated 10% for 50Hz operation.

Model	Volts	Amps, 60Hz	Amps, 50Hz	Max Watts
MB5-3-OVP-A	5	3.0	2.7	15.0
MB12-1.7-A	12	1.7	1.53	20.4
MB15-1.5-A	15	1.5	1.35	22.5
MB24-1.2-A	24	1.2	1.08	28.8
MB28-1-A	28	1.0	0.9	28.0
MC5-6-OVP-A	5	6.0	5.4	30.0
MC12-3.4-A	12	3.4	3.06	40.8
MC15-3-A	15	3.0	2.7	45.0
MC24-2.4-A	24	2.4	2.16	57.6
MC28-2-A	28	2	1.8	56.0
MAA15-0.8-A	±15	1.0	0.9	30.0
	±12	0.8	0.72	19.2
MAA512-A	5	2.0	1.8	17.5
	9 to 15	0.5	0.45	---
MAA524-A	5	2.0	1.8	17.2
	18 TO 24	0.3	.27	---
MBB15-1.5-A	15	1.5	1.35	22.5
MBB512-A	5	3.0	2.7	33.75
	9 to 15	1.25	1.125	---
MBB524-A	5	3.0	2.7	29.2
	18 TO 24	0.8	0.72	---
MTAA-16W-A	5	2.0	1.8	22.0
	±12 to ±15	0.4	0.36	---
MBAA-40W-A	5	3.0	2.7	39.0
	±15	0.8	0.72	---
	±12	1.0	0.9	---
MCP1799	6.5	1.4	1.26	9.1

APPLICABLE REQUIREMENTS

- CAN/CSA Standard C22.2 No. 601.1-M90 - Medical Electrical Equipment
UL Standard 60601-1 1st Edition - Medical Electrical equipment, Part 1: General Requirements for Safety

CONDITION OF ACCEPTABILITY

When installed in the end-use equipment, the following are among the considerations to be made:

1. This component has been judged on the basis of the required spacings in the Second Edition of the Standards for Medical Electrical Equipment, Part 1: General Requirements for Safety, UL 2601-1, which covers the end use product for which the component is designed.
2. The component shall be installed in compliance with the enclosure, mounting, spacing, casualty, markings and segregation requirements of the end-use application.
3. Leakage current testing should be repeated in the end product application.
4. Consideration should be given to measuring the temperature on power electronic components and transformer windings when the power supply is installed in the end-use equipment.
5. The input/output connectors are not acceptable for field connections, they are only intended for connection to mating connectors of internal wiring inside the end-use machine.
6. The Temperature Test was performed in a raised ambient of 50°C.
7. The component should be properly bonded to ground in the end-use equipment.
8. The output circuits have not been evaluated for direct patient connection (Type B, BF or CF).
9. The main isolation transformer, T1, complies with Class 130 limits, except for MB24-1.2-A, MB28-1-A, MAA15-0.8-A, MTAA-16W-A, MC24-2.4-A, and MCP1799, which comply with Class 155 limits.
10. The power supply was evaluated as Reinforced Insulation between primary and secondary; Basic Insulation between primary to ground.
11. This power supply has been evaluated as Class I, continuous operation, ordinary equipment and has not been evaluated for use in the presence of a flammable anaesthetic mixture with air, oxygen, or nitrous oxide.
12. Double fusing in the end-product should be considered since primary fusing of both sides on the mains supply lines was not provided.

Certificate of Compliance

Certificate: 1231872

Master Contract: 150684 (LR 46516C)

Edition: 1

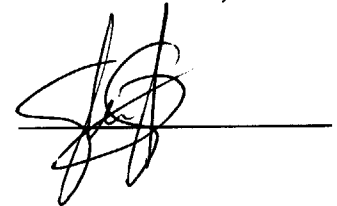
Date Issued: August 7, 2001

Issued to: **Condor D.C. Power Supplies Inc.**
 2311 Statham Parkway
 Oxnard CA 93033
 USA

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US'



Issued by: Shane Stevenson, AScT.



PRODUCTS

CLASS 5311 20 - POWER SUPPLIES - For Use in Medical Equipment
 CLASS 5311 96 - POWER SUPPLIES - Component Acceptance - Certified to US Standards

Component Power Supply for use in Medical Equipment, where the suitability of the combination is to be determined by CSA International.

- Medical Linear Power Supplies, input rated 100/120/215/230-240V ac, 50/60 Hz, input currents vary by model, see table below: All models are L3M1.

	Input Currents			
	100 Vac	120 Vac	215 Vac	230-240 Vac
MD5-12/OVP-A	2.3	1.9	1.0	1.0
MD12-6.8-A	2.8	2.4	1.3	1.2
MD15-6-A	2.8	2.4	1.3	1.2
MD24-4.8-A	2.8	2.4	1.3	1.2
MD28-4-A	2.5	2.1	1.2	1.1
MCC15-3-A	3.0	2.8	1.5	1.4
MCC512-A	2.5	2.2	1.2	1.1
MCC524-A	2.4	2.1	1.2	1.0
MCAA-60W-A	3.0	2.8	1.5	1.4
MCBB-75W-A	2.3	2.0	1.1	1.0
MCP323-A	1.7	1.4	0.8	0.7

The 'C' and 'US' indicators adjacent to the CSA Mark signify that the product has been evaluated to the applicable CSA and ANSI/UL Standards, for use in Canada and the U.S., respectively. This 'US' indicator includes products eligible to bear the 'NRTL' indicator. NRTL, i.e. National Recognized Testing Laboratory, is a designation granted by the U.S. Occupational Safety and Health Administration (OSHA) to laboratories which have been recognised to perform certification to U.S. Standards.



CSA INTERNATIONAL

Certificate: 1231872

Master Contract: 150684

(LR 46516C)

Edition: 1

Date: August 7, 2001

Output: Maximum output power for each unit is defined below. Output power is derated 10% for 50Hz operation.

Model	Volts	Amps, 60Hz	Amps, 50Hz	Max Watts
MD5-12/OVP-A	5	12.0	10.8	60
MD12-6.8-A	12	6.8	6.12	81.6
MD15-6-A	15	6.0	5.4	90
MD24-4.8-A	24	4.8	4.32	115.2
MD28-4-A	28	4.0	3.6	112
MCC15-3-A	±15	3.0	2.7	90.0
	±12	3.4	3.06	81.6
MCC512-A	5	6.0	5.4	67.5
	9 TO 15	2.5	2.25	---
MCC524-A	5	6.0	5.4	78
	18 TO 24	2.0	1.8	---
MCAA-60W-A	5	6.0	5.4	54
	±15	0.8	0.72	---
	±12	1.0	0.9	---
MCBB-75W-A	5	6	5.4	74.5
	±15	1.5	1.35	---
	±12	1.71	1.54	---
MCP323-A	5	2	1.8	
	12	4	3.6	

- Notes:
1. Maximum ambient temperature for continuous output specified in the table is 50°C.
 2. Maximum Relative Humidity 96%, no condensation.

Certificate: 1231872

Edition: 1

Master Contract: 150684
(LR 46516C)

Date: August 7, 2001

APPLICABLE REQUIREMENTS

CAN/CSA Standard C22.2 No. 601.1-M90 - Medical Electrical Equipment
UL Standard 2601-1 2nd Edition - Medical Electrical equipment, Part 1: General Requirements for Safety

CONDITION OF ACCEPTABILITY - When installed in the end-use equipment, the following are among the considerations to be made:

1. This component has been judged on the basis of the required spacings in the Second Edition of the Standards for Medical Electrical Equipment, Part 1: General Requirements for Safety, UL 2601-1, which covers the end use product for which the component is designed.
2. The component shall be installed in compliance with the enclosure, mounting, spacing, casualty, markings and segregation requirements of the end-use application.
3. Leakage current testing should be repeated in the end product application.
4. Consideration should be given to measuring the temperature on power electronic components and transformer windings when the power supply is installed in the end-use equipment.
5. The input/output connectors are not acceptable for field connections, they are only intended for connection to mating connectors of internal wiring inside the end-use machine.
6. The Temperature Test was performed in a raised ambient of 50°C.
7. The component should be properly bonded to ground in the end-use equipment.
8. The output circuits have not been evaluated for direct patient connection (Type B, BF or CF).
9. The main isolation transformer, T1, complies with Class 130 limits, except for MD24-4.8 and MD28-4-A, which comply with Class 155 limits.
10. The power supply was evaluated as Reinforced Insulation between primary and secondary; Basic Insulation between primary to ground.
11. This power supply has been evaluated as Class I, continuous operation, ordinary equipment and has not been evaluated for use in the presence of a flammable anaesthetic mixture with air, oxygen, or nitrous oxide.
12. Double fusing in the end-product should be considered since primary fusing of both sides on the mains supply lines was not provided.



Supplement to Certificate of Compliance

Certificate: 1231872

Master Contract: 150684 (LR 46516C)

*The products listed, including the latest revision described below,
are eligible to be marked in accordance with the referenced Certificate.*

Product Certification History

Edition	Date	Description
1	August 7, 2001	Original Certification.



Product Service

CERTIFICATE

No. B 07 01 59743 023

Holder of Certificate: SL Power Electronics, Corp.



6050 King Drive Bldg A
Ventura CA 93003
USA

Production Facility(ies):

16784, 52962

Certification Mark:



Product:

**Linear power supply
AC/DC Linear Power Supplies**

Model(s):

MCP1799, MB5-3-OV-A, MB12-1.7-A, MB15-1.5-A,
MB24-1.2-A, MB28-1-A, MAA15-0.8-A, MAA512-A,
MAA524-A, MTAA-16W-A.

Models may be followed by suffix -XXX and/or G.
Suffix -XXX indicates value added configurations that
have no impact on safety which may be any number
from 001 thru 999, and G indicates compliance to RoHS.
(For further model information please see attachment)

Parameters:

Rated Input Voltage:	100/120/215/230-240Vac
Rated Frequency:	50 / 60 Hz
Rated Input Current:	See attachment
Rated DC Outputs:	See attachment
Protection Class:	I

See attachment for Conditions of Acceptability.

Tested according to: EN 60601-1/A13:1996

The product was tested on a voluntary basis and complies with the following essential requirements. The certification mark shown above can be affixed on the product. The certification mark must not be altered in any way. See also notes overleaf.

Test report no.: SI600002-117

Date, 2007-02-21

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Product Service

**ATTACHMENT TO CERTIFICATE NO. B 07 01 59743 023
FOR SL POWER ELECTRONICS, CORP.**

AC/DC LINEAR POWER SUPPLIES

Model Number: MCP1799, MB5-3-OV-A, MB12-1.7-A, MB15-1.5-A, MB24-1.2-A, MB28-1-A, MAA15-0.8-A, MAA512-A, MAA524-A, MTAA-16W-A

Models may be followed by suffix -XXX and/or G. Suffix -XXX indicates value added configurations that have no impact on safety which may be any number from 001 thru 999, and G indicates compliance to RoHS.

RATINGS:

Input: 100/120/215/230-240 VAC, 50/60 Hz
Derate output current 10% for operation at 50 Hz.
Refer to chassis marking for input current ratings.

Output: See table on Page 2.

Notes: 1. Maximum ambient temperature for continuous output specified in the table is 50°C.
2. Maximum Relative Humidity 96%, no condensation.

CLASSIFICATION: (5.1) Protection against electric shock = Class I
(In accordance with sub- (5.2) Degree of protection against electric shock = Signal output or intermediate
clause 5 of IEC 601-1) (5.3) Protection against harmful ingress of water = Ordinary (no protection)
(5.5) Have not been evaluated for use in the presence of a flammable anaesthetic
mixture with air, oxygen, or nitrous oxide. This evaluation is to be made on the
end equipment by the OEM.
(5.6) Mode of operation = Continuous

Report Reference Number: SI600002-117

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Date of Issue: 2007-02-21



Product Service

**ATTACHMENT TO CERTIFICATE NO. B 07 01 59743 023
FOR SL POWER ELECTRONICS, CORP.**

Output:

Model	Maximum output ratings 50°C Ambient	Secondary Fuse Rating	CSA Level
MB5-3-OV-A	5 V, 3 A	F1, F3 = 4 A / 125 V	3
MB12-1.7-A	12 V, 1.7 A	F1 = 3.5 A / 250 V	3
MB15-1.5-A	15 V, 1.5 A	F1 = 3.0 A / 250 V	3
MB24-1.2-A	24 V, 1.2 A	F1 = 2.25 A / 250 V	3
MB28-1-A	28 V, 1.0 A	F1 = 2.0 A / 250 V	3
MAA15-0.8-A	±12 V, 1 A or ±15 V, 1.5 A; or -5 V, 0.4 A	F4, F6 = 2.5 A / 250 V	3
MAA512-A	5 V, 2 A; 9-15 V, 0.5A	F1, F3 = 3 A / 250 V, F4 = 1.5 A / 250 V	3
MAA524-A	5 V, 3 A; 18-24 V, 0.8A	F1, F3 = 4 A / 125 V, F4, F6 = 1.5 A / 250 V	3
MTAA-16W-A	5 V, 2 A; ± 9-24 V, 0.4A; or -5 V, 0.4 A	F1, F3 = 3 A / 250 V, F4, F6 = 1 A / 250 V	3
MCP1799	6.5 V, 1.4 A		3

Report Reference Number: SI600002-117

Date of Issue: 2007-02-21

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CERTIFICATE

No. B 07 01 59743 024



Product Service

Holder of Certificate: SL Power Electronics, Corp.



6050 King Drive Bldg A
Ventura CA 93003
USA

Production Facility(ies): 16784, 52962

Certification Mark:



Product: Linear power supply
AC/DC Linear Power Supplies

Model(s): MC5-6-OV-A, MC12-3.4-A, MC15-3-A, MC24-2.4-A,
MC28-2-A, MBB15-1.5-A, MBB512-A,
MBB524-A, MBAA-40-A.
Models may be followed by suffix -XXX and/or G.
Suffix -XXX indicates value added configurations that
have no impact on safety which may be any number
from 001 thru 999, and G indicates compliance to RoHS.
(For further model information please see attachment)

Parameters:

Rated Input Voltage:	100/120/215/230-240Vac
Rated Frequency:	50 / 60 Hz
Rated Input Current:	See attachment
Rated DC Outputs:	See attachment
Protection Class:	I

See attachment for Conditions of Acceptability.

Tested according to: EN 60601-1/A13:1996

The product was tested on a voluntary basis and complies with the following essential requirements. The certification mark shown above can be affixed on the product. The certification mark must not be altered in any way. See also notes overleaf.

Test report no.: SI600002-120

Date, 2007-02-21

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Product Service

**ATTACHMENT TO CERTIFICATE NO. B 07 01 59743 024
FOR SL POWER ELECTRONICS, CORP.**

AC/DC LINEAR POWER SUPPLIES

Model Number: MC5-6-OV-A, MC12-3.4-A, MC15-3-A, MC24-2.4-A, MC28-2-A, MBB15-1.5-A, MBB512-A, MBB524-A, MBAA-40-A

Models may be followed by suffix -XXX and/or G. Suffix -XXX indicates value added configurations that have no impact on safety which may be any number from 001 thru 999, and G indicates compliance to RoHS.

RATINGS:


Input: 100/120/215/230-240 VAC, 50/60 Hz
Derate output current 10% for operation at 50 Hz.
Refer to chassis marking for input current ratings.

Output: See table on Page 2.

Notes: 1. Maximum ambient temperature for continuous output specified in the table is 50°C.
2. Maximum Relative Humidity 96%, no condensation.

CLASSIFICATION: (5.1) Protection against electric shock = Class I
(In accordance with sub- (5.2) Degree of protection against electric shock = Signal output or intermediate
clause 5 of IEC 601-1) (5.3) Protection against harmful ingress of water = Ordinary (no protection)
(5.5) Have not been evaluated for use in the presence of a flammable anaesthetic
mixture with air, oxygen, or nitrous oxide. This evaluation is to be made on the
end equipment by the OEM.
(5.6) Mode of operation = Continuous

Report Reference Number: SI600002-120


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Date of Issue: 2007-02-21



Product Service

**ATTACHMENT TO CERTIFICATE NO. B 07 01 59743 024
FOR SL POWER ELECTRONICS, CORP.**

Output:

Model	Maximum output ratings 50°C Ambient	Secondary Fuse Rating	CSA Level
MC5-6-OV-A	5 V, 6 A	F1, F3 = 7 A / 125 V	3
MC12-3.4-A	12 V, 3.4 A	F1, F3 = 4 A / 125 V	3
MC15-3-A	15 V, 3 A	F1, F3 = 3.5 A / 250 V	3
MC24-2.4-A	24 V, 2.4 A	F1, F2 = 2.25 A / 250 V	3
MC28-2-A	28 V, 2.0 A	F1 = 4.0 A / 125 V	3
MBB15-1.5-A	±12 V, 1.7 A; or ±15 V, 1.5 A; or -5 V, 0.7 A	F4, F6 = 3.5 A / 250 V	3
MBB512-A	5 V, 3 A; 9-15 V, 1.25 A	F1, F3 = 4 A / 125 V, F4, F6 = 2 A / 250 V	3
MBB524-A	5 V, 3 A; 18-24 V, 0.8A	F1, F3 = 4 A / 125 V, F4, F6 = 1.5 A / 250 V	3
MBAA-40-A	5 V, 3 A; ± 12 V, 1 A; or ±15 V, 0.8 A; or -5 V, 0.4 A	F1, F3 = 4 A / 125 V, F4, F6 = 2.5 A / 250 V	3

Report Reference Number: SI600002-120

[Signature]
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Date of Issue: 2007-02-21



Product Service

CERTIFICATE

No. B 07 01 59743 025

Holder of Certificate: SL Power Electronics, Corp.



6050 King Drive Bldg A
Ventura CA 93003
USA

Production Facility(ies):

16784, 52962

Certification Mark:



Product:

**Linear power supply
AC/DC Linear Power Supplies**

Model(s):

MD5-12/OV-A, MD12-6.8-A, MD15-6-A, MD24-4.8-A,
MD28-4-A, MCC15-3-A, MCC512-A, MCC524-A,
MCAA-60W-A, MCBB-75W-A.

Models may be followed by suffix -XXX and/or G.
Suffix -XXX indicates value added configurations that
have no impact on safety which may be any number
from 001 thru 999, and G indicates compliance to RoHS.
(For further model information please see attachment)

Parameters:

Rated Input Voltage:	100/120/215/230-240Vac
Rated Frequency:	50 / 60 Hz
Rated Input Current:	See attachment
Rated DC Outputs:	See attachment
Protection Class:	I

See attachment for Conditions of Acceptability.

Tested according to: EN 60601-1/A13:1996

The product was tested on a voluntary basis and complies with the following essential requirements. The certification mark shown above can be affixed on the product. The certification mark must not be altered in any way. See also notes overleaf.

Test report no.: SI600002-121

Date, 2007-02-21

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Product Service

**ATTACHMENT TO CERTIFICATE NO. B 07 01 59743 025
FOR SL POWER ELECTRONICS, CORP.**

AC/DC LINEAR POWER SUPPLIES

Model Number: MD5-12/OV-A, MD12-6.8-A, MD15-6-A, MD24-4.8-A, MD28-4-A, MCC15-3-A, MCC512-A, MCC524-A, MCAA-60W-A, MCBB-75W-A;

Models may be followed by suffix -XXX and/or G. Suffix -XXX indicates value added configurations that have no impact on safety which may be any number from 001 thru 999, and G indicates compliance to RoHS.

RATINGS:

Input: 100/120/215/230-240 VAC, 50/60 Hz
Derate output current 10% for operation at 50 Hz.
Refer to chassis marking for input current ratings.

Output: See table on Page 2.

Notes: 1. Maximum ambient temperature for continuous output specified in the table is 50°C.
2. Maximum Relative Humidity 96%, no condensation.

CLASSIFICATION: (5.1) Protection against electric shock = Class I
(In accordance with sub- (5.2) Degree of protection against electric shock = Signal output or intermediate
clause 5 of IEC 601-1) (5.3) Protection against harmful ingress of water = Ordinary (no protection)
(5.5) Have not been evaluated for use in the presence of a flammable anaesthetic
mixture with air, oxygen, or nitrous oxide. This evaluation is to be made on the
end equipment by the OEM.
(5.6) Mode of operation = Continuous

Report Reference Number: SI600002-121

Date of Issue: 2007-02-21

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Product Service

**ATTACHMENT TO CERTIFICATE NO. B 07 01 59743 025
FOR SL POWER ELECTRONICS, CORP.**

Output:

Model	Maximum output ratings 50°C Ambient	Secondary Fuse Rating	CSA Level
MD5-12/OV-A	5 V, 12 A	F1, F2, F5, F6 = 7 A / 125 V	3
MD12-6.8-A	12 V, 6.8 A	F1, F2, F5, F6 = 5 A / 125 V	3
MD15-6-A	15 V, 6 A	F1, F2, F5, F6 = 4 A / 125 V	3
MD24-4.8-A	24 V, 4.8 A	F1, F2 = 5 A / 250 V	3
MD28-4-A	28 V, 4 A	F1, F2 = 4.0 A / 125 V	3
MCC15-3-A	±12 V, 3.4 A; or ±15 V, 3 A; or -5 V, 1.4 A	F4, F6 = 7 A / 125 V	3
MCC512-A	5 V, 4 A; 9-15 V, 2.5 A	F1, F3 = 7 A / 125 V, F4, F6 = 3.5 A / 250 V	3
MCC524-A	5 V, 4 A (6 A with 14 cfm airflow); 18-24 V, 2 A	F1, F3 = 4 A / 125 V, F4, F6 = 3 A / 250 V	3
MCAA-60W-A	5 V, 6 A; ± 12 V, 1 A; or ±15 V, 0.8 A; or -5 V, 0.4 A	F1, F3 = 7 A / 125 V, F4, F6 = 2 A / 250 V	3
MCBB-75W-A	5 V, 6 A; ± 12 V, 1.7 A; or ±15 V, 1.5 A; or -5 V, 0.7 A	F1, F3 = 7 A / 125 V, F4, F6 = 3.5 A / 250 V	3

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