DESCRIPTION

PRODUCT COVERED:

* COMPONENT, Switching Power Supply, Model GLM110 followed by suffixes -12, -15, -24, -212, -215, or -524 or MSP1683. May or may not be followed by -L or -LC.

ELECTRICAL RATINGS:

Input: 100-240 V ac, 50/60 Hz, 2.9 A.
Outputs: Maximum output power is 75 W with convection cooling; 110 W with airflow specified below.

				0 CFM 75 Watts Max	26 CFM 110 Watts Max
	MODEL	Output	Volts	Amps	Amps
	GLM110-12	#1	12	6.3	9.1
*	MSP1683	#1	12	6.3	9.1
	GLM110-15	#1	15	5.0	7.3
	GLM110-24	#1	24	3.2	4.6
	GLM110-212	#1	+12	6.3	9.1
		#2	-12	2.5	3.0
	GLM110-215	#1	+15	6.3	7.3
		#2	-15	2.5	3.0
	GLM110-524	#1	+24	3.2	4.6
		#2	+5	1.5	2.0

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 and the manufacturer's installation instructions is provided as Ills. 2-3.

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. 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.

4. 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.

5. The output circuits have not been evaluated for direct patient connection (Type B, BF or CF).

6. The component should be properly bonded to ground in the end-use equipment.

7. The Temperature Test was performed in a raised ambient of 50°C.

8. The main isolation transformer, T3, complies with Class 155 limits.

9. Leakage current testing should be repeated in the end product application.

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.

13. The grounding trace on the pwb has not been evaluated as the Protective Earthing path for any metal parts accessible in the end product. However, the grounding path was subjected to the Earthing Test per Clause 18 (25 A for 5 seconds) with acceptable results.

CSA INTERNATIONAL

Certificate of Compliance

Certificate Number: LR 46516-308C

Revision: LR 46516-308C

Date Issued: October 12, 1999

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

Issued by: Shane Stevenson, AScT.

Signature: for S.S.

PRODUCTS

5311 03 - POWER SUPPLIES - Component Type

Component power supplies for use with Information Processing and Business Equipment, where the suitability of the combination is to be determined by the Canadian Standards Association.

- Model GLC110-12, (Level 3), input rated 100-240 V, 50/60 Hz, 3.1 A; dc output rated 12 V/9.1 A
- Model GLC110-15, (Level 3), input rated 100-240 V, 50/60 Hz, 3.1 A; dc output rated 15 V/7.3 A
- Model GLC110-24, (Level 3), input rated 100-240 V, 50/60 Hz, 3.1 A; dc output rated 24 V/4.6 A
- Model GLC110-212, (Level 3), input rated 100-240 V, 50/60 Hz, 3.1 A; dc output rated +12 V/9.1 A, -12 V/3 A.
- Model GLC110-215, (Level 3), input rated 100-240 V, 50/60 Hz, 3.1 A; dc output rated +15 V/7.3 A, -15 V/3 A.
- Model GLC110-524, (Level 3), input rated 100-240 V, 50/60 Hz, 3.1 A; dc output rated +5 V/2 A, +24 V/4.6 A.

Notes:

1. Maximum output power is 75 W with convection cooling; 110 W with 26 cfm airflow.
2. Maximum ambient temperature for rated out is 50°C.

Certificate No: LR 46516-308C

CSA INTERNATIONAL

Date: October 12, 1999

Revision: LR 46516-308C

CLASS 5311 20 - POWER SUPPLIES - Component Type

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

- Model GLM110-12 , (Level 3), input rated 100-240 V, 50/60 Hz, 3.1 A; dc output rated 12 V/9.1 A.
- Model GLM110-15, (Level 3), input rated 100-240 V, 50/60 Hz, 3.1A; dc output rated 15 V/7.3 A.
- Model GLM110-24, (Level 3), input rated 100-240 V, 50/60 Hz, 3.1 A; dc output rated 24 V/4.6 A.
- Model GLM110-212, (Level 3), input rated 100-240 V, 50/60 Hz, 3.1 A; dc output rated +12 V/9.1 A, -12 V/3 A.
- Model GLM110-215, (Level 3), input rated 100-240 V, 50/60 Hz, 3.1 A; dc output rated +15 V/7.3 A, -15 V/3 A.
- Model GLM110-524, (Level 3), input rated 100-240 V, 50/60 Hz, 3.1 A; dc output rated +5 V/2 A, +24 V/4.6 A.

Notes:

1. Maximum output power is 75 W with convection cooling; 110 W with 26 cfm airflow.
2. Maximum ambient temperature for rated output is 50°C.
3. All outputs are intended for Signal Output and Intermediate Circuits only. The output is not acceptable for patient connection without additional isolation.
4. The outputs are SELV during normal and single fault conditions.
5. The isolation voltage from primary to secondary is 4000 V ac. The creepage distance between primary and secondary circuits is 8 mm minimum.
6. External overcurrent protection on the Neutral side of the line is required.

APPLICABLE REQUIREMENTS

CSA Std C22.2 No 0-M1991	-	General Requirements – Canadian Electrical Code, Part II
0.4-M1982	-	Bonding and Grounding of Electrical Equipment (Protective Grounding)
950-95 3rd Ed	-	Safety of Information Technology Equipment
601.1-M90	-	Medical Electrical Equipment
TIL CA-08	-	Power Supplies for use in Medical Electrical Equipment

Certificate

No: BL 99 09 14549 161

TÜV PRODUCT SERVICE

Condor DC Power Supplies Inc.

2311 Statham Parkway
Oxnard, CA 93033
USA

with production facilities
16784

is authorized to label the following products with the
certification mark E or L
as shown in the certification mark list. See also notes overleaf.

Product:	**Netzgeräte für med. Verwendung** **Switching power supply unit**
Model:	**GLM110-12, GLM110-15, GLM110-24** **GLM110-212, GLM110-215, GLM110-524**

Parameters:

Rate Input Voltage:	100 - 240 VAC
Rated Frequency:	50/60 Hz
Rated Input Current:	2.9 A
Rated Output Voltage:	See Attachment
Rated Output Current:	See Attachment
Protection Class:	I

The product meets the relevant safety requirements and was tested according to (report no.: SM1I973401):

EN60601-1:1990+A1:1993+A2:1995

Released with the above certificate number by the certification body of TÜV PRODUCT SERVICE GMBH.

R - (BL 99 08 14549 158)

C. Ruther

Department: SDGMED / CLR

Date: 09-20-99

TÜV
PRODUCT SERVICE

Attachment to Condor DC Power Supplies Certificate BL 99 08 14549 161

Model	Output	Volts	0 CFM 75 Watts Max Amps	26 CFM 110 Watts Max Amps
GLM110-12	#1	12	6.3	9.1
GLM110-15	#1	15	5.0	7.3
GLM110-24	#1	24	3.2	4.6
GLM110-212	#1	+12	6.3	9.1
	#2	-12	2.5	3.0
GLM110-215	#1	+15	5.0	7.3
	#2	-15	2.5	3.0
GLM110-524	#1	+24	3.2	4.6
	#2	+5	1.5	2.0

Notes:
1. Maximum ambient temperature for rated output current is 50°C.
2. Maximum Operating Relative Humidity 96%, no condensation.

C. Rutter
September 20, 1999

Project SM1I-9734-01