



Ref. Certif. No.

DE 3 - 4606

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST
CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE)
CB SCHEMESYSTEME CEI D'ACCEPTATION MUTUELLE DE
CERTIFICATS D'ESSAIS DES EQUIPEMENTS
ELECTRIQUES (IECEE) METHODE OC**CB TEST CERTIFICATE
CERTIFICAT D'ESSAI OC**

Product
Produit

Name and address of the applicant
Nom et adresse du demandeur

Name and address of the manufacturer
Nom et adresse du fabricant

Name and address of the factory
Nom et adresse de l'usine

Rating and principal characteristics
Valeurs nominales et caractéristiques principales

Trade mark (if any)
Marque de fabrique (si elle existe)

Type of Manufacturer's Testing Laboratories used
Type de programme du laboratoire d'essais constructeur

Model/type Ref.
Ref. de type

Switching power supply unit
(Component - AC/DC Switching Power Supply)

SL Power Electronics, Corp.
6050 King Drive Bldg A
Ventura CA 93003, USA

SL Power Electronics, Corp., 6050 King Drive Bldg A, Ventura CA
93003, USA

SL Power Electronics S.A. de C.V., Colonia: Parque Industrial
EX-XXI B.C., Circuito Siglo XXI # 2205, 21254 Mexicali, MEXICO
For further information please see attachment

Rated Input: 100-240 VAC, 50/60 Hz, 1.3 A max
Protection Class: I
Rated Outputs: See attachment
For further information please see attachment.

Condor

SMT

GPM41-X Series, where X is any number from 5 through 28,
which represents the output voltage rating. May be
followed by suffix -XXX, where XXX may be any number
from 001 thru 999 to indicate value added configurations
that have no impact on safety and/or suffix G to indicate
RoHS version. MSP1579, MSP1579G, MSP1675 and
MSP1675G.

The risk management requirements of the standard were not
addressed.

IEC 60601-1:2005

SI1201030-000

Additional information (if necessary)
Information complémentaire (si nécessaire)

A sample of the product was tested and found
to be in conformity with
Un échantillon de ce produit a été essayé et a été
considéré conforme à la
as shown in the Test Report Ref. No.
which form part of this certificate
comme indiqué dans le Rapport d'essais numéro
de référence qui constitue une partie de ce
certificat

This CB Test Certificate is issued by the National Certification Body
Ce Certificat d'essai OC est établi par l'Organisme **National de Certification**

Date, 2012-04-27
CB 12 04 59743 100

A. C. Young-Taylor



TUV SÜD Product Service GmbH · Certification Body · Ridlerstrasse 65 · D-80339 München

Product Service

Additional factory information:

Name and address of the factory (76551)
Nom et adresse de l'usine

SL Power Electronics S.A. de C.V.
 Colonia: Parque Industrial EX-XXI B.C.
 Circuito Siglo XXI # 2205
 21254 Mexicali
 MEXICO

(76079)

SL Power Electronics (Xianghe) Corp.
 Developing Zone
 Anping Economic & Technical
 Hebei
 065402 Xianghe,
 PEOPLE'S REPUBLIC OF CHINA

General product information:

The MSP1579, MSP1579G, MSP1675, MSP1675G and GPM41 Series power supplies are Class I type open-frame AC/DC switch mode power supplies, designed for building-in to an end-product.

Model Differences:

The power supplies are similar to each other and differ only in minor component changes in the secondary circuit and the number of secondary windings turns and gage for T2 to accommodate for the different output voltage and amps.

Summary of testing:

All applicable tests comply with the requirements except for the following:

EMC requirement must be addressed at end use.

Outputs:

Model	Voltage	Current	Watts
GPM41-5	+5 Vdc	6.0 A	30
GPM41-12	+12 Vdc	3.3 A	40
GPM41-15	+15 Vdc	2.7 A	40
GPM41-24	+24 Vdc	1.7 A	40
GPM41-28	+28 Vdc	1.4 A	40
MSP1579, MSP1579G	+16.5 Vdc	2.4 A	40
MSP1675, MSP1675G	+15 Vdc	2.7 A	40

Date: 2012-04-27
 Project: SI1201030-000
 CB 12 24 59743 100
 Page 2 of 4



Product Service

TÜV SÜD Product Service GmbH • Certification Body • Ridlerstrasse 65 • D-80339 München


**GPM41 SERIES
INSTALLATION INSTRUCTIONS**


MODEL NUMBERS: GPM41-X, where X represents the output voltage which may be any number from 5 thru 28. May be followed by suffix -XXX where XXX may be any number from 001 thru 999 to indicate value added configurations that have no impact on safety and/or suffix G to indicate compliance to RoHS.

RATINGS:

Input: 100-240 V ac, 1.3 A, 50/60 Hz.

Output: 5 Vdc minimum, 28 Vdc maximum,
6.0 A maximum, 1.4 A minimum,
40 W maximum. (GPM41-5 rated to 30 W max.),
or see table for standard output voltage models.

Model	Output	Watts
GPM41-5	+5 V dc 6.0 A	30
GPM41-12	+12 V dc 3.3 A	40
GPM41-15	+15 V dc 2.7 A	40
GPM41-24	+24 V dc 1.7 A	40
GPM41-28	+28 V dc 1.4 A	40

- Notes:
1. Maximum ambient temperature for rated output is 50 °C.
 2. Maximum Relative Humidity 96 %, no condensation.
 3. Storage: -40 to +85 °C. Units should be allowed to warm-up under non-condensing conditions before application of power.

SAFETY COMPLIANCE STANDARDS: All models are Certified to be in compliance with the applicable requirements of UL 60601-1, CSA 22.2 No. 601.1, IEC/EN 60601-1 2nd Ed., and ANSI/AAMI ES60601-1:2005, CSA C22.2 No. 60601-1:08, IEC/EN 60601-1 3rd Ed.

CLASSIFICATION: Protection against electric shock = Class 1
Degree of protection against electric shock = Signal output or intermediate
Protection against harmful ingress of water = Ordinary (no protection)
Not suitable for use in the presence of flammable anesthetic mixture
Mode of operation = Continuous

CE SAFETY DECLARATION: SL Power Electronics Corp. (SLPE) declares under our sole responsibility that all models listed above are in conformity with the applicable requirements of EN 60950-1 following the provisions of the Low Voltage Directive 2006/95/EC.

OVERCURRENT PROTECTION: External overcurrent protection must be provided in the end application. IEC 60601-1 requires that both supply leads (phase and neutral) be protected against overcurrent. A 2.5 A 250 V rated fuse with an I²t rating ≥ 20 is recommended. The fuse current rating must not exceed 2.5 A. The fuses must meet the requirements of IEC 60601-1 and be acceptable for the country in which the host equipment is to be installed.

WARNING! RISK OF FIRE! A blown fuse is an indication of catastrophic failure of circuit component(s). Repair must be performed by SLPE authorized personnel.

WARNING! SHOCK HAZARD! Dangcrous voltages are present on some components, printed wiring traces and heatsinks.



GROUNDING: Protection Class I requires that the ground terminal be bonded to Protective Earth in the end application. Using this terminal for the primary system earthing terminal is not recommended. The Power Supply may be attached to system ground by soldering a grounded wire directly to a .098 inch hole marked with a ground symbol near T1. Alternatively, #4 screws (max 0.22 inch head diameter) and metal spacers (3/16 inch diameter, 1/4 inch minimum length) should be used to mount the power supply to grounded metal surfaces (Protective Earth). When mounting surfaces are not grounded or spacers are non-metallic, electrically connect the two metallic mounting pads on the pwb together.

OUTPUTS: The output is intended for Signal Output and Intermediate Circuits only. The output is not acceptable for patient connection without additional isolation. The DC output is SEI.V under normal and single fault conditions.

OVERVOLTAGE PROTECTION: The output is monitored for an overvoltage condition. In some applications where an overvoltage condition could result in a hazard as defined in applicable safety standards, redundant or additional overvoltage protection may be required. Consult factory for details.

DIELECTRIC STRENGTH TEST CAUTION: When performing Dielectric Strength Tests, catastrophic failure of the unit may result if a Dielectric Strength test voltage greater than 1800 V ac is applied between primary and secondary circuits. The components providing isolation from primary to secondary cannot be tested while installed in the power supply without overstressing basic (primary to ground) insulation. All isolating components are individually 100 % tested at 4800 V ac prior to installation.

ISOLATION / MEANS OF PROTECTION (MOP): The creepage distance between primary and ground is 4 mm minimum (1 MOOP); between primary and secondary circuits is 8 mm minimum (2 MOOP). Secondary to ground creepage is not defined or controlled. The output common is bypassed to ground using a 0.001 μ F 1 kV capacitor. The required creepage and clearance distances from primary circuits to ground and secondary circuits must be maintained after installation to preserve the intended safety.

TEMPERATURES: The maximum operating temperatures of certain safety components, as defined in the applicable safety standards, must not be exceeded after installation to preserve the intended safety. The output power, ambient air temperature and the availability, amount, direction and/or restriction of airflow influence the temperatures of these components.

EXPLANATION OF SYMBOLS	
	Alternating Current
	Direct Current
	Attention, Consult Accompanying Documents
	Attention, Dangerous Voltages
	Earth (Ground)

CONNECTIONS

J1 Pin	AC Input
1	Line
2	Neutral

J2 Pin	DC Output
1	Output (+)
2	Output (+)
3	Common
4	Common

MATING CONNECTORS	
J1	AMP Housing 640250-2 Contact 640706-1
J2	AMP Housing 640250-4 Contact 640706-1

CAUTION: Do not exceed 5 A per contact.

SLPE will not be liable for the safety, reliability or performance of these power supplies if a) any changes, modifications or repairs are carried out by other than authorized agents of SLPE, or b) the installation of the supply is not in accordance with these installation instructions and the applicable UL, CSA, ANSI/AAMI ES, and IEC/EN safety standards.

41-34227-0021 Rev. H 2012/01/24

Page 2 of 2

Date: 2012-04-27
Project: SI1201030-000
CB 12 24 59743 100
Page 4 of 4

Anthony Taylor



Product Service

TÜV SÜD Product Service GmbH • Certification Body • Ridlerstrasse 65 • D-80339 München