

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST
CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE)
CB SCHEME

SYSTEME CEI D'ACCEPTATION MUTUELLE DE
CERTIFICATS D'ESSAIS DES EQUIPEMENTS
ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE

CERTIFICAT D'ESSAI OC

Product
Produit

Component Power Supply

Name and address of the applicant
Nom et adresse du demandeur

Astec International Ltd.
16th & 17th Floors, Lu Plaza, 2 Wing Yip Street
Kwun Tong, Kowloon, Hong Kong

Name and address of the manufacturer
Nom et adresse du fabricant

Same as Applicant

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

See page 2 of CB Certificate
 Additional Information on page 2

Note: When more than one factory, please report on page 2
Note: Lorsque il y plus d'une usine, veuillez utiliser la 2^{ème} page

Ratings and principal characteristics
Valeurs nominales et caractéristiques principales

See pages 3 and 4 of CB Certificate

Trademark (if any)
Marque de fabrique (si elle existe)



Model / Type Ref.
Ref. De type

MP6-XXX-XXX-XXX-XXX-XXX-XX
(X and - refer to model configuration on page 4 of CB certificate)

Additional information (if necessary may also be reported
on page 2)
Les informations complémentaires (si nécessaire,, peuvent
être indiqués sur la 2^{ème} page

Prepared under SMT procedures - SMT-004

 Additional Information on page 2

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

PUBLICATION	EDITION
IEC 60950-1	1 st (2001)
Including National Deviations of AR, AT, AU, BE, BR, CA, CH, CN, CZ, DE, DK, ES, FI, FR, GB, GR, HU, IE, IL, IN, IT, JP, KE, KR, MY, NL, NO, NZ, PL, PT, RU, SE, SG, SI, SK, TR, UA, US, and Common Modifications per CB Bulletin 109A (2005)	

As shown in the Test Report Ref. No. which forms part of
this Certificate
Comme indiqué dans le Rapport d'essais numéro de
référence qui constitue partie de ce Certificat

CB 163661-1020142 (-1821012)

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



CSA International
178 Rexdale Boulevard
Toronto, ON M9W 1R3

Date: August 10, 2006

Signature: Tiki Wong, P. Eng.



Ref. Certif. No.

CA/7797/CSA

<p><u>Factory</u> Astec Power Philippines Inc. Main Avenue, Corner Road "J", Cavite Export Processing Zone, Rosario, Cavite, Philippines</p>	<p><u>Factory</u> Astec Electronics Company Ltd. Emerson Industrial Park, Feng Tang Road Fu Yong Town, Ba' oan District, Shenzhen City, Guangdong, People's Republic of China</p>
<p><u>Factory</u> Ultimate Renaissance Ltd. Unit 18-19 Woodside Road South Marston Park Swindon, Wiltshire SN3 4WA United Kingdom</p>	<p><u>Factory</u> Arrow Electronics Inc. 1955 East Sky Harbor Circle N. Phoenix, AZ 85034 USA</p>
<p><u>Factory</u> Norvell Electronics 2251 Chennault Drive, Carrollton, Texas 75006 USA</p>	<p><u>Factory</u> Alvic Power Systems Div of Cosmos Power (Singapore) PTE Ltd. #05-01, Lipo Factory, 621 Aljunied Rd., Singapore 389834</p>
<p><u>Factory</u> Fortec Electronic Vertriebs AG Lechwiesenstrasse 9, 86899 Landsberg, Germany</p>	<p><u>Factory</u> All American 48376 Milmont Drive, Fremont, CA 94538</p>

Rating and Principal Characteristics

Model	Input	Output (dc)	Level
MP6-XXX-XXX-XXX-XXX-XXX-XX (See model configuration on page 4 of CB Certificate)	AC 100-240V, 10A, 50/60/400Hz	Refer to model configuration	See Note 1
	AC 200-240V, 10A, 50/60/400Hz	1.5-60V, 800W max	See Note 1

At input AC100-240V:

Maximum continuous output power is 600W at 50 deg C maximum and 300W at 70 deg C maximum. With rear air exhaust option, maximum continuous output power is 600W at 40 deg C. Total loading of dual output modules not to exceed 144W and total loading of triple output modules not to exceed 36W.

At input AC200-240V:

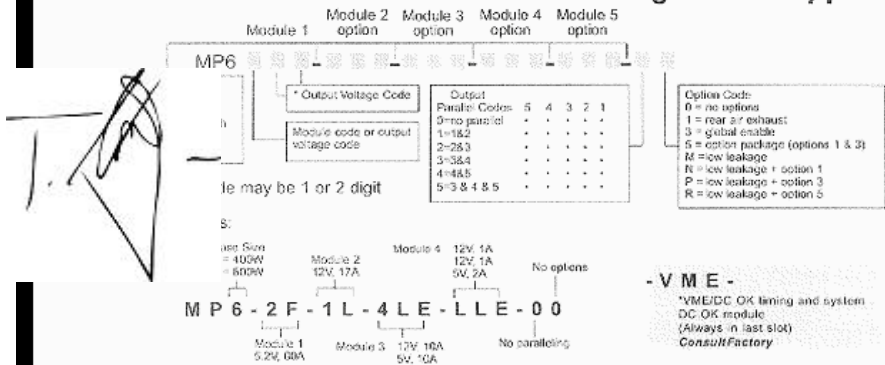
Maximum continuous output power is 800W at 50°C maximum and 400W at 70°C maximum and 800W at 40°C with rear air exhaust fan.

Notes:

- Output classification level may be 1, 3, 5 or 6 depending on model configuration.
 - "Level 1" is a CSA designation which denotes that outputs are either not suitable for, or have not been investigated for SELV.
 - "Level 3" is a CSA designation which denotes that outputs are SELV and non-hazardous energy level of less than 240VA.
 - "Level 5" is a CSA designation which denotes that outputs are SELV and exceed 240VA hazardous energy level.
 - "Level 6" is a CSA designation which denotes a multiple output power supply with outputs in any combination of Levels 1, 3 and 5. The individual output classification levels shall be marked adjacent to the output ratings.
- The subject power supplies consist of a front-end AC/DC converter and chassis and DC/DC converter modules, which are CSA approved and listed under the CB scheme.

MVP Series 400 to 600 Watts
Installation Instructions

Technical Description & Application Notes
Model Configuration Supplement



1. Example: 5V, 60A; Module Code - 2 E

2. Example: 5V, 10A; Module Code - 4 E L (always)

3. Example: 12V, 1A; 20V, 0.5A; 5V, 2A

Single Output 3-digit Code Selection Chart

Dual Output 3-digit Code Selection Chart

Triple Output 3-digit Code Selection Chart

Voltage Code	Voltage ±10%	Module Code		
		1 Takes up 1 Slot Current Max. (A)	2 Takes up 2 Slot Current Max. (A)	3 Takes up 3 Slot Current Max. (A)
A	2 V	35	60	120
B	2.2 V	35	60	120
C	3 V	35	60	120
D	3.3 V	35	60	120
E	5 V	35	60	120
F	5.2 V	35	60	115
G	5.5 V	34	58	109
H	6.0 V	23	42	78
I	8.0 V	20	36	68
J	10 V	18	32	60
K	11 V	17	31	54.5
L	12 V	17	30	50
M	14 V	14	21	49.5
N	15 V	14	20	39
O	18 V	11	19	33.3
P	20 V	10.5	18	30
Q	25 V	9.5	15	23.5
R	28 V	8.7	11	21.4
S	30 V	8.5	11	20
T	33 V	6.2	10.9	18.2
U	35 V	5.8	10	16.6
V	42 V	4.2	7.5	12.5
W	48 V	4.0	7.5	12.5
X	54 V	3.7	5.0	11
Y	60 V	3.5	5.0	10

Voltage Code	Voltage ±10%	Takes up 1 slot Current Max. (A)	
		V1	V2
A	2 V	-	10
B	2.2 V	-	10
C	3 V	-	10
D	3.3 V	-	10
E	5 V	10	10
F	5.2 V	-	10
G	5.5 V	-	10
H	6.0 V	-	10
I	8.0 V	4	4
J	10 V	4	4
K	11 V	4	4
L	12 V	4	4
M	14 V	4	4
N	15 V	4	4
O	18 V	-	-
P	20 V	-	-
Q	24 V	4	2
R	28 V	3	2

Voltage Code	Voltage ±10%	Takes up 1 slot Current Max. (A)		
		V1	V2	V3
A	2 V	-	-	2
B	2.2 V	-	-	2
C	3 V	-	-	2
D	3.3 V	-	-	2
E	5 V	-	-	2
F	5.2 V	-	-	2
G	5.5 V	-	-	2
H	6.0 V	-	-	2
I	8.0 V	1	1	1
J	10 V	1	1	1
K	11 V	1	1	1
L	12 V	1	1	1
M	14 V	1	1	1
N	15 V	1	1	1
O	18 V	1	1	1
P	20 V	-	0.5	0.5
Q	24 V	-	0.5	0.5
R	28 V	-	0.5	0.5

* Note: Total loading not to exceed 144 watts.

* Note: Total loading not to exceed 36 watts.

Voltage Code	Voltage Range	SINGLE OUTPUT MODULE MAXIMUM (A)			DUAL OUTPUT MODULE MAXIMUM (A)		TRIPLE OUTPUT MODULE MAXIMUM (A)		
		1	2	3	V1	V2	V1	V2	V3
Z	2.4 - 2.7	35	60	120	-	10	-	-	2
	3.5 - 4.5	35	60	120	-	10	-	-	2
	6.5 - 7.2	20	35	60	10	4	-	-	1
	8.5 - 9.0	18	32	60	10	4	-	-	1



* Char Z will represent one voltage range only within the module.

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

Date: August 10, 2006

Signature: Tiki Wong, P. Eng.