

DESCRIPTION

PRODUCT COVERED:

USR, CNR - Component Power **Supplies, Models "YH" and "YV"** model series, followed by two digit numeric, one alpha character, two digit numeric and may or may not be followed by a dash and the letter 'G' or additional alpha/numeric characters denoting non-safety critical options. See "NOMENCLATURE BREAKDOWN AND ELECTRICAL RATINGS."

Models SPDEMC60V, SPDEMC50V and SPDEMC40H, may be followed by a dash and a two-digit number. Model name may be followed by "G" indicating non-safety critical option.

GENERAL:

The products covered by this Report are dc/dc converters intended to supply dc output power. They are provided with input and output pins for connection to their nominal rated dc source of supply. All components are intended to be mounted on printed wiring boards.

NOMENCLATURE AND ELECTRICAL RATINGS:

Typical Model Designation (**YV and YH Series**):

$\frac{YV}{I}$	$\frac{12}{II}$	$\frac{T}{III}$	$\frac{25}{IV}$	$-\frac{0}{V}$
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I - Model Series:

YV

II - Input Voltage Rating

12 = 10 - 14 Volts dc, 12 Volts dc nominal

09 = 7 - 13.8 Volts dc, 9 Volts dc nominal(**YV09T60**)**5 - 13.8 Volts dc 9 Volts dc nominal (YV09T50 and YH09T40)**

III - Mounting Scheme

T = Through Hole

IV - Output Current Rating

25 = 25 A

40 = 40 A**50 = 50 A**

60 = 60 A

V - Options Suffix: - X = May be followed by a dash (-) and suffix letters and/or numbers denoting non-safety-critical options (Unless described otherwise in the report) such as, but not limited to, open frame, positive or negative shut down, non-standard pin configuration, etc.

Note: 1) YV12 model output voltage can be programmed from 0.8 V to 5.5 V dc.

*2) **YV09T60 model** output voltage can be programmed from 0.6 V to 3.63 V dc.3) **YV09T50 and YH09T40 models** output voltage can be programmed from 0.6 V to 3.3 Vdc.**Models SPDEMC Ratings:**

Model	Input (dc)	Output (dc)	
	V	V	A
SPDEMC60V	10-13.8	0.6-3.63	60
SPDEMC50V	10-13.8	0.6-3.3	50
SPDEMC40H	10-13.8	0.6-3.3	40

*

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

Use - For use only in (or with) complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Special Considerations - The following items are considerations that were used when evaluating this product.

USR/CNR indicates investigation to the U.S. and Canadian (Bi-National) Standard for Safety of Information Technology Equipment, Including Electrical Business Equipment, CAN/CSA C22.2, No. 60950-1-03 * UL 60950-1, First Edition, which are based on IEC 60950-1, First Edition.

Conditions of Acceptability - When installed in the end product, consideration shall be given to the following:

1. Unit is intended to be supplied from an isolated secondary circuit and has been evaluated for functional insulation between the input and output circuits.
2. The input and output connectors (pins) are suitable for factory wiring only.
3. The unit has been evaluated for use in a Pollution Degree 2 environment.
- *4. Abnormal and Component Failure Tests were conducted with the power supply input protected by a 25 A, 32 Vdc fuse **for YV12 models and three 15 A, 125 Vdc fuses for YV09 and YH09 models**. If a fuse rated greater than **the above** is used, additional testing may be required.
5. The power supply was submitted and tested for a manufacturer's recommended Tc maximum temperature, as described below.

Model YV12 - The maximum temperature is 110°C and located on Q500/Q501 drain.

Model **YV09T60** - The maximum temperature is 125°C and located on Q100/Q101/Q106/Q107/Q119/Q120.

Model YV09T50 and YH09T40 - The maximum temperature is 120C and located on Q120 case.

6. If the input meets all of the requirements for SELV, or TNV-2, the outputs may be considered SELV. Output voltages remain within SELV limits, even with internally-generated non-SELV voltages, if any.
7. The output voltage of the unit is programmable. Testing conducted at worse case output.



Product Service

CERTIFICATE

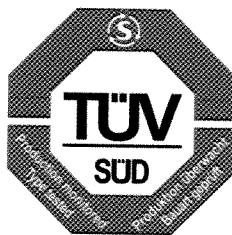
No. B 08 04 24238 01042

Holder of Certificate: **Power-One, Inc.**



740 Calle Plano
Camarillo, CA 93012-8583
USA

Production Facility(ies): 59929, 41950
Certification Mark:



Product: **AC-DC and DC-DC converters
DC/DC Converters**

Model(s): **YV and YH Series followed by two digit numeric, one alpha character two digit numeric and may or may not be followed by a dash and the letter 'G' or additional alpha/numeric characters denoting non-safety critical options. Models SPDEMC60V, SPDEMC50V and SPDEMC40H maybe followed by a dash and a two digit number. Model name maybe followed by "G" indicating non-safety critical option.**

Parameters:

Rated Input Voltage:	10 – 14 V or 7 – 13.8 V or 5 – 13.8 V (model depended see attachment)
Rated DC Output Voltage:	0.8 – 5.5 V or 0.6 – 3.63 V or 0.6 – 3.3 V (model depended see attachment)
Rated Output Current:	25 A or 40 A or 50 A or 60 A (model depended see attachment)
Temperature, Ambient:	110°C or 120 °C or 125°C (model depended see attachment)

See attachment for additional details

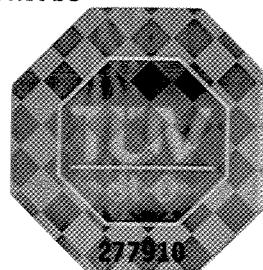
Tested according to: EN 60950-1/A11:2004

The product was tested on a voluntary basis and complies with the 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.: 095-700105-200

Date, 2008-04-10

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Product Service

**ATTACHMENT TO CERTIFICATE NO. B 08 04 24238 01042
FOR POWER-ONE, INC**

These models are component type switch mode type dc to dc converters designed to be soldered on to printed circuit boards or plugged into end-user sockets. These converters are designed to be connected to a source of supply which is an isolated secondary circuit or battery. The input should be either SELV or TNV-2 though other sources of input may be considered with further investigation in the end-use equipment.

ELECT ELECTRICAL RATINGS:

Typical Model Designation:

$\frac{YV}{I} \frac{12}{II} \frac{T}{III} \frac{25}{IV} \frac{-0}{V}$

I - Model Series:

YV, YH

II - Input Voltage Rating

12 = 10 - 14 Volts dc, 12 Volts dc nominal
 09 = 7 - 13.8 Volts dc, 9 Volts dc nominal (YV09T60)
 5 - 13.8 Volts dc, 9 Volts dc nominal (YV09T50, YH09T40)

III - Mounting Scheme

T = Through Hole

IV - Output Current Rating

25 = 25 A
 40 = 40 A
 50 = 50 A
 60 = 60 A (YV09 models only)

V - Options Suffix: - X = May be followed by a dash (-) and suffix letters and/or numbers denoting non-safety-critical options (Unless described otherwise in the report) such as, but not limited to, open frame, positive or negative shut down, non-standard pin configuration, etc.

- Note: 1) YV12 models output voltage can be programmed from 0.8 V to 5.5 V dc.
 2) YV09T60 models output voltage can be programmed from 0.6 V to 3.63 V dc.
 3) YV09T50 and YH09T40 models output voltage can be programmed from 0.6 V to 3.3 V dc.

Models SPDEMC Ratings:

Model	Input, DC		Output, DC	
	V		V	A
SPDEMC60V	10-13.8		0.6 -3.63	60
SPDECM50V	10-13.8		0.6 -3.3	50
SPDECM50V	10-13.8		0.6 -3.3	40

Reference test report No.: 095-700105-200

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Date: 2008-04-10



Product Service

**ATTACHMENT TO CERTIFICATE NO. B 08 04 24238 01042
FOR POWER-ONE, INC**

Special Considerations- The following items are considerations that were used when evaluating these products.

All models are intended for building-in, to be soldered onto a PWB or plugged in to special end-user socket.

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

1. Unit is intended to be supplied from an isolated secondary circuit and has been evaluated for functional insulation between the input and output circuits.
2. The unit has been evaluated for use in a Pollution Degree 2 environment.
3. Abnormal and Component Failure Tests were conducted with the power supply input protected by a 25 A, 32 Vdc fuse for YV12 models and three 15 A, 125 Vdc fuse for YV09 and YH09 models. If a fuse rated greater than the above is used, additional testing may be required .
4. The power supply was submitted and tested for a manufacturer's recommended Tc maximum temperature, as described below.
 Model YV12 - The maximum temperature is 110°C and located on Q500/Q501 drain.
 Model YV09T60 - The maximum temperature is 125°C and located on Q100/Q101/Q106/Q107/Q119/Q120.
 Model YV09T50 and YH09T40 - The maximum temperature is 120°C and located on Q120 case.
5. If the input meets all of the requirements for SELV, or TNV-2, the outputs may be considered SELV. Output voltages remain within SELV limits, even with internally-generated non-SELV voltages, if any.
6. The output voltage of the unit is programmable. Testing conducted at worse case output.

Reference test report No.: 095-700105-200

Date: 2008-04-10



Ref. Certif. No.

DE 3 - 55682M2

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

AC-DC and DC-DC converters
(DC/DC Converters)

Name and address of the applicant
Nom et adresse du demandeur

Power-One, Inc.
740 Calle Plano
Camarillo, CA 93012-8583, USA

Name and address of the manufacturer
Nom et adresse du fabricant

Power-One, Inc., 740 Calle Plano, Camarillo, CA 93012-8583, USA

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

Power-One, LTD, Autopista Las Americas Km.22, Zona Franca Las Americas, 11606 Santo Domingo, DOMINICAN REPUBLIC
For further information please see attachment

Rating and principal characteristics
Valeurs nominales et caractéristiques principales

Model depended
Input Voltage, DC: 10-14 V or 7-13.8 V or 5-13.8 V
Input Type: SELV or TNV-2
Output Voltage, DC: 0.8-5.5 V or 0.6-3.63 V or 0.6-3.3 V
Output Current, DC: 25 A, 40 A, 50 A or 60 A
Temperature, Ambient: 110°C or 120 °C or 125°C
See Attachment for Additional Details.

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

Power-One

Model/type Ref.
Ref. de type

YV Series, YH Series and
Models SPDEMC60V, SPDEMC50V, SPDEMC40H.
For further information please see attachment.

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

SMT

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

IEC 60950-1:2001

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

TÜV SÜD Product Service
095-700105-200

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, 2008-04-16
CB 08 04 24238 01043

William Wenthold



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

Product Service

Additional factory information:

Name and address of the factory (41950) BCM Electronics Corporation SDN BHD
Nom et adresse de l'usine Plot 21, Jalan Hi-Tech 4, Kulim Hi-tech Park,
 Phase 1, 09000 Kulim, Kedah Darulaman,
 Malaysia

YV Series, YH Series – TYPICAL MODEL DESIGNATION and ASSOCIATED RATINGS:

	$\frac{YV}{I}$	$\frac{12}{II}$	$\frac{T}{III}$	$\frac{25}{IV}$	-	$\frac{0}{V}$
I – Model Series:				YV Series, YH Series		
II – Input Voltage Rating:		12 = 10 - 14 Volts dc, 12 Volts dc nominal 09 = 7 - 13.8 Volts dc, 9 Volts dc nominal (YV09T60) 5 - 13.8 Volts dc, 9 Volts dc nominal (YV09T50, YH09T40)				
III – Mounting Scheme:			T = Through Hole			
IV – Output Current Rating:			25 = 25 A 40 = 40 A 50 = 50 A 60 = 60 A (YV09 models only)			
V – Options Suffix:				- X = May be followed by a dash (-) and suffix letters and/or numbers denoting non-safety-critical options (Unless described otherwise in the report) such as, but not limited to, open frame, positive or negative shut down, non-standard pin configuration, etc.		

YV and YH Series followed by two digit numeric, one alpha character two digit numeric and may or may not be followed by a dash and the letter 'G' or additional alpha/numeric characters denoting non-safety critical options.

- Note: 1) YV12 models output voltage can be programmed from 0.8 V to 5.5 V dc.
 2) YV09T60 models output voltage can be programmed from 0.6 V to 3.63 V dc.
 3) YV09T50 and YH09T40 models output voltage can be programmed from 0.6 V to 3.3 V dc.

SPDEMC MODELS – RATINGS:

Model	Input, DC	Output, DC	
	V	V	A
SPDEMC60V	10-13.8	0.6 -3.63	60
SPDECM50V	10-13.8	0.6 -3.3	50
SPDECM50V	10-13.8	0.6 -3.3	40

Models SPDEMC60V, SPDEMC50V and SPDEMC40H maybe followed by dash and a two digit number. Model name maybe followed by "G" indicating non-safety critical option.

Date: 2008-04-16
 Report No.: 095-700105-200
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William A. Wenthold
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TÜV SÜD Product Service GmbH • Certification Body • Ridlerstrasse 65 • D-80399 München