



Ref. Certif. No.

DE 3 - 57726

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

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

### CB TEST CERTIFICATE CERTIFICAT D'ESSAI OC

Product  
Produit

DC converter  
DC/DC Converter

Name and address of the applicant  
Nom et adresse du demandeur

SynQor Inc.  
155 Swanson Road  
Boxborough, MA 01719-1316, USA

Name and address of the manufacturer  
Nom et adresse du fabricant

SynQor Inc., 155 Swanson Road, Boxborough, MA 01719-1316,  
USA

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

SynQor Inc., 155 Swanson Road, Boxborough, MA 01719-1316,  
USA

Rating and principal characteristics  
Valeurs nominales et caractéristiques principales

Rated Input Voltage: 35-75 V DC  
Rated Output Voltage: 3.3 V DC  
Rated Output Current: 30 A  
(see attachment for additional rating information,  
and License Conditions)

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

SynQor

Model/type Ref.  
Ref. de type

PQ-048033HNA30XXXX  
(See attachments for additional model information)

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

TMP Procedure

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  
090-805441-000

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, 2008-07-17  
CB 08 07 34962 047

Joseph Janelunas



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

Product Service

**Typical Model Designation:**

<u>PQ</u>	<u>48</u>	<u>033</u>	<u>H</u>	<u>N</u>	<u>A</u>	<u>30</u>	<u>XX</u>	<u>X</u>	<u>X</u>
I	II	III	IV	V	VI	VII	VIII	IX	X

**I – Model Series:**  
(Listed values only)

PQ = Power Qor, Single output  
 DQ = Dual Power Qors, Dual Output  
 BQ = Bus Qor, Single Output  
 SQ = Isolated Bus Qor

Nominal

**II – Input Voltage:**  
(Listed values only)  
 (2 Digits for single output,  
 1 digit for dual output)

48=48 V (35-75) V  
 24=24 V (18-36) V  
 60=48 V w/ 100 V Transient operation (PQ and BQ) (35-75) V  
 65=48 V w/ 100 V Transient operation (PQ) (40-75) V  
 6=48 V w/ 100 V Transient operation (DQ) (35-75) V  
 4=48 V (DQ) (35-75) V  
 2=24 V (DQ) (18-36) V  
 55=48 V (35-55) V  
 50=48 V (42-53) V  
 51=42-55 V  
 40=48 V (18-75) V  
 30=18-60 V

Nominal

**III – Output Voltage:**

All values up to 540 =54.0 Vdc maximum (single output)  
 (3 digits for single output or 15=15Vdc (dual output), 4 digits for dual output)

**IV – Package size:**  
(Listed values only)

F – Full Brick  
 H – Half Brick  
 Q – Quarter Brick  
 E – Eighth Brick  
 S – Sixteenth Brick

**V – Performance (listed values only):**

N – Normal  
 P – Peta  
 T – Tera  
 G – Giga  
 M – Mega  
 K – Kilo  
 E – ExA  
 Z – Zeta

**VI – Heat Spreader:**  
(Listed are examples only)

A – Open Frame  
 B – Base plate  
 L – Open Frame Low Profile

**VII – Rated output current:**

All values limited to:  
(Single output) or  
 Rated output power

Half Bricks "HN" not to exceed 40=40 A  
 Half Bricks "HP, HT, HG, HM, HK, HE" not to exceed A0=100 A  
 (30=30A, 60=60A, etc)  
 HZ 50=50 A

(Dual-output)

Quarter Bricks not to exceed 60=60 A  
 Eighth Bricks not to exceed 30=30 A  
 Dual Quarter Bricks not to exceed 06=100 W  
 Full Brick not to exceed 26 A

**VIII – Options Suffix:**

Suffix letters and/or numbers denoting non-safety-critical options  
 Such as, but not limited to, positive or negative logic, pin configuration, etc.

**IX – Option Suffix**

S – Standard  
 C – 250V isolation capacitor

**X – Option Suffix**

G – Rohs

Date, 2008-07-17  
 CB 08 07 34962 047

Joseph Janeliunas



Product Service

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



Ref. Certif. No.

DE 3 - 57726

**Note:**

Rated output power for "HN" Half Bricks not to exceed 150 W.  
Rated output power for "HT, HG, HM, HK " Half Bricks not to exceed 165 W, except 26 V output which is 250W maximum and 52.5 V which is 200 W.  
Rated output power for the "HP" Half Bricks not to exceed 250 W  
Rated output power for Quarter Bricks not to exceed 300 W.  
Rated output power for eighth Brick not to exceed 100 W.  
Rated output power for the dual quarter bricks not to exceed 100 W  
Rated output power for "BQ" Quarter Bricks not exceed 300 W.  
Rated output power for "HE" not to exceed 360 W.  
Rated output power for Sixteenth Brick is 66 W and 25 A maximum.  
Rated output power for Eighth Brick BUS converter is 260 W maximum.  
Rated current for the full Brick not to exceed 26A  
(Rated output power = Nominal Output Voltage X Rated Output Current)  
Rated output power =for "HZ" not to exceed 50 A or 600 Watts.

**License Conditions:**

1. The units should be installed per the manufacturer's specification.
2. Maximum output power is specified over ambient temperatures and 100 LFM to 400 LFM airflow.
3. Abnormal and Component Failure Tests were conducted with the power supply input protected by a 3AG 20 A, 250 V fuse. If a fuse rated greater than 3AG 20 A is used, additional testing may be required.
4. If the input meets all of the requirements for SELV ( $V \leq 60$ ), the outputs may be considered SELV. Output voltages remain within SELV limits.
5. For baseplate or heatsink units, the maximum operating baseplate or heatsink temperature is 100°C.
6. \*\* Abnormal and component failure tests were conducted with the power supply input protected by a 8 A, 3AG, 250 V fuse. If a fuse greater than 8 A is used, additional testing may be required.
7. All models are intended to be supplied from an isolated secondary circuit and have been evaluated for basic insulation between the input and output circuits accept the Bus Qor series are non-isolated DC Converters.
8. These units are intended to be supplied from an isolated source of supply, such as a battery, or a source that meets the requirements for basic (ELV) or reinforced (SELV) insulation from primary (mains) circuitry, depending on output type desired.
9. The Output circuit of model PQ60525HTA meets all the requirements for ELV ( $V \leq 60$ ), the output may be considered ELV. Output voltages remain within ELV limits under normal operating conditions.
10. Full Brick Abnormal and Component Failure Tests were conducted with the power supply input protected by an AGC 30 A, 250 V fuse. If a fuse rated greater than AGC 30 A is used, additional testing may be required.

Date, 2008-07-17  
CB 08 07 34962 047

Joseph Janeliunas



Product Service

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