



# Certificate of Compliance

**Certificate:** 2632968

**Master Contract:** 219759

**Project:** 2632968

**Date Issued:** June 6, 2013

**Issued to:** **Convertec Limited**  
**Whitemill Industrial Estate**  
**Wexford, Wexford**  
**Ireland**  
**Attention: Michael Carey**

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.*



*Eric Fortier*

**Issued by:** Eric Fortier, Eng.

## **PRODUCTS**

- CLASS 5311 91** - POWER SUPPLIES - Component Type(UL 60950-1-2nd Ed)Certified to U.S.Stds
- CLASS 5311 82** - POWER SUPPLIES - Cord-connected, Class 2 - Certified to US Standards
- CLASS 5311 02** - POWER SUPPLIES - Cord-connected, Class 2
- CLASS 5311 11** - POWER SUPPLIES - Component Type(CSA 60950-1-07-2nd Ed)

• Component type Power supplies\*, Class 2 limited output, double-insulated, Trademark Tracopower (TIW series) or Convertec Power Electronics (INWA series), Models and rating as follow ;

TIW 12-124 or INWA 024.005: Input: 100-240Vac; 0,33-0,14A; 50/60Hz ; Output: 24Vdc / 0,5A / 12W

TIW 12-115 or INWA 015.008: Input: 100-240Vac; 0,19-0,14A; 50/60Hz ; Output: 15Vdc / 0,8A / 12W

TIW 12-112 or INWA 012.010: Input: 100-240Vac; 0,23-0,15A; 50/60Hz ; Output: 12Vdc / 1,0A / 12W

TIW 06-103 or INWA 003.012: Input: 100-240Vac; 0,10-0,05A; 50/60Hz ; Output: 3,3Vdc / 1,2A / 4W



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TIW 06-105 or INWA 005.010: Input: 100-240Vac; 0,13-0,07A; 50/60Hz ; Output: 5Vdc / 1,0A / 5W

TIW 06-106 or INWA 006.010: Input: 100-240Vac; 0,15-0,08A; 50/60Hz ; Output: 6Vdc / 1,0A / 6W

TIW 24-112 or INWA 012.020: Input: 100-240Vac; 0,42-0,32A; 50/60Hz ; Output: 12Vdc / 2,0A / 24W

TIW 24-124 or INWA 024.010: Input: 100-240Vac; 0,45-0,30A; 50/60Hz ; Output: 24Vdc / 1,0A / 24W

\*Note:

- The unit was evaluated as a component (built-in) where the suitability of the combination must be determined with the end use product.

### **APPLICABLE REQUIREMENTS**

CAN/CSA-C22.2 No. 223-M91(R2008) Outputs	- Power Supplies with Extra-Low-Voltage Class 2
UL 1310 (6th Edition)	- Standard for Class 2 Power Units.
CAN/CSA-C22.2 No. 60950-1-07 +Am1:2011 General Requirements.	- Information Technology Equipment – Safety Part 1:
UL Std. 60950-1 (2nd Edition) +Am1:2011 General Requirements.	- Information Technology Equipment – Safety – Part 1:



## *Supplement to Certificate of Compliance*

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*The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.*

### **Product Certification History**

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<b>Project</b>	<b>Date</b>	<b>Description</b>
2632968	Jun 6, 2013	CSA c/us certification of component type SMPS, models: TIW Series and models: INWA Series. Also, addition of classes 5311 02/82 for Convertec Limited factory in Ireland.

**CONDITIONS of ACCEPTABILITIES :**

1. Markings as above appear on each unit or in the documentation as applicable.
2. The unit is for inside use only.
3. Fire, mechanical and electrical enclosure must be provided as part of the end product.
4. The product was evaluated for a maximum ambient of 50°C.
5. The disconnect device must be provided in the end product.
6. A protective device (ex; external fuse) must be provided in the end product.
7. Safety Instructions: Built in product, safety instructions are end product considerations
8. The AC input and DC (red/black) output connection should be verified within the end product.
9. The construction aspect and material for the external unit's enclosure is end product consideration.
10. Unit has been evaluated for use in a PD2, OC II environment and maximum altitude of 3000m.

**FACTORY TESTS**

Not applicable.

Production-line Dielectric Voltage-Withstand Test:

For Double Insulated Units (Class II) up to 250V not having exposed metal parts;

- (a) Only ac values are specified. As an alternative, the equivalent dc voltage (1.414 times the ac voltage) may be used.
- (b) The factory test may be done at existing room temperature.

Warning: The factory test(s) specified may present a hazard of injury to personnel and/or property and should only be performed by persons knowledgeable of such hazards and under conditions designed to minimize the possibility of injury.

Transformers:

Notes:

1. Transformer manufacturer's written agreement to conduct Dielectric Strength Test on 100 percent production will be acceptable.
2. No additional factory tests are required for Certified\* transformers or transformers in Certified\* power supplies.

For Safety Isolating Transformers in Grounded or Double Insulated Units: Each transformer before assembly into the equipment shall be subjected to the following dielectric strength tests for a period of one sec, without breakdown:

- i. For units rated less than 130V:  
2000V ac from primary to SELV secondaries  
1000V ac from primary to core (if core is floating or grounded)\*  
1000V ac from core to SELV/ELV secondaries (if core is floating or grounded)\*  
1000V ac from primary to ELV secondaries  
1000V ac from ELV secondaries to SELV secondaries.

Production-Line Earthing-Continuity Test.