

# Certificate of Compliance

**Certificate:** 1918381

**Master Contract:** 226037

**Project:** 2100728

**Date Issued:** December 5, 2008

**Issued to:** TRACO Electronic AG  
Jenatschstrasse 1  
Zurich, Zurich 8027  
Switzerland  
**Attention:**

*The products listed below are eligible to bear the CSA Mark shown  
with adjacent indicators 'C' and 'US'*



**Issued by:** Jupiter Huang

  
**Authorized by:** Hans Pan  
Area Director, Asia

## PRODUCTS

CLASS 5311 07 - POWER SUPPLIES - Component Type (CSA 60950-1-03)

CLASS 5311 87 - POWER SUPPLIES - Component Type - Certified to US Stds. (CSA 60950-1-03/UL 60950-1, First Edition, NRTL Program)

• DC to DC Converters\*, PCB Mount, Models:

- THB 3-05xx: Input: 4,5 – 9,0Vdc / 820mA, Output: See 'xx' values below.
- THB 3-12xx: Input: 9 – 18Vdc / 320mA, Output: See 'xx' values below.
- THB 3-24xx: Input: 18 – 36Vdc / 155mA, Output: See 'xx' values below.
- THB 3-48xx: Input: 36 – 75Vdc / 80mA, Output: See 'xx' values below.
  
- TEN 3-24xxWI: Input: 9 – 36Vdc / 150mA, Output: See 'xx' values below.
- TEN 3-48xxWI: Input: 18 – 75Vdc / 75mA, Output: See 'xx' values below.
- TES 5-12xx: Input: 9 – 18Vdc / 500mA, Output: See 'xx' values below.
- TES 5-24xx: Input: 18 – 36Vdc / 250mA, Output: See 'xx' values below.
- TES 5-48xx: Input: 36 – 75Vdc / 125mA, Output: See 'xx' values below.

**Certificate:** 1918381

**Master Contract:** 226037

Series	xx value	Output Rating
THB 3	11	5Vdc / 600mA
	12	12Vdc / 250mA
	15	24Vdc / 125mA
	22	+12Vdc / +125mA
	23	+15Vdc / +100mA

Series	xx value	Output Rating
TEN 3 WI	10	3,3Vdc / 750mA
	11	5Vdc / 600mA
	12	12Vdc / 250mA
	13	15Vdc / 200mA
	22	+12Vdc / +125mA
	23	+15Vdc / +100mA

Series	xx value	Output Rating
TES 5	10	3,3Vdc / 1200mA
	11	5Vdc / 1000mA
	12	12Vdc / 420mA
	13	15Vdc / 335mA
	21	+5Vdc / +500mA
	22	+12Vdc / +210mA
	23	+15Vdc / +165mA

**\*Notes:**

- Units were evaluated as components where the suitability of the combination with the host equipment shall be re-evaluated.
- The equipment has been evaluated for use in a Pollution Degree 1 or 2 and over voltage category II environment.
- A suitable Electrical and Fire enclosure shall be provided.
- The product is specified for maximum ambient of 70°C
- Dielectric insulation for TEN 3WI and TES 5 (Basic between Input-Output): 1500Vac.
- Dielectric insulation for THB 3 (Reinforced between Input-Output): 4000Vac.

**APPLICABLE REQUIREMENTS**

CAN/CSA-C22.2 No. 60950-1-03

- Information Technology Equipment – Safety – Part 1: General requirements.

UL 60950-1 (1<sup>st</sup> Edition)

- Information Technology Equipment – Safety – Part 1: General requirements.

## *Supplement to Certificate of Compliance*

**Certificate:** 1918381

**Master Contract:** 226037

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

### **Product Certification History**

---

<b>Project</b>	<b>Date</b>	<b>Description</b>
2100728	December 5, 2008	Include alternative material to models TES 5 and TEN 3-WI series
1918381	June 27, 2007	Original Certification