



Ref. Certif. No.

**SI-3236**

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

DC/DC Converter

Name and address of the applicant  
Nom et adresse du demandeur

TRACO ELECTRONIC AG  
Jenatschstrasse 1, CH-8002 Zürich, Switzerland

Name and address of the manufacturer  
Nom et adresse du fabricant

TRACO ELECTRONIC AG  
Jenatschstrasse 1, CH-8002 Zürich, Switzerland

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

[Redacted factory address]

Note: When more than one factory, please report on page 2  
Note: Lorsque il y a plus d'une usine, veuillez utiliser la 2<sup>ème</sup> page

Ratings and principal characteristics  
Valeurs nominales et caractéristiques principales

See pages from 2 to 9.

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

TRACO POWER

Type of Manufacturer's Testing Laboratories used  
Type de programme du laboratoire d'essais constructeur

/

Model / Type Ref.  
Ref. De type

See pages from 2 to 9.

Additional information (if necessary may also be reported on page 2)  
Les informations complémentaires (si nécessaire, peuvent être indiqués sur la 2<sup>ème</sup> page

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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

IEC60950-1:2005(2nd Ed.)+A1:2009

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

T223-0071/12

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



Slovenski institut za kakovost in meroslovje  
Slovenian Institute of Quality and Metrology  
Tržaška c. 2, SI-1000 Ljubljana, Slovenia  
Product Certification Body is accredited by Slovenian Accreditation, Reg. No.: CP-001

Date: 2012-03-12

Signature: Alja Pregl

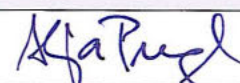
## Ratings and principal characteristics, Model / Type Ref.

THL 3WI series

| Traco Power model name | Input voltage range   | Rated input current [mA] | Output voltage [Vdc] | Output current [mA] |
|------------------------|-----------------------|--------------------------|----------------------|---------------------|
| THL 3-2410WI           | nominal:<br>24 Vdc    | 110                      | 3,3                  | 600                 |
| THL 3-2411WI           |                       | 160                      | 5,0                  | 600                 |
| THL 3-2412WI           | range:<br>9 – 36 Vdc  | 160                      | 12                   | 250                 |
| THL 3-2413WI           |                       | 160                      | 15                   | 200                 |
| THL 3-2415WI           |                       | 160                      | 24                   | 125                 |
| THL 3-2421WI           |                       | 160                      | ±5                   | ±300                |
| THL 3-2422WI           |                       | 160                      | ±12                  | ±125                |
| THL 3-2423WI           | input fuse:<br>1500mA | 160                      | ±15                  | ±100                |
| THL 3-4810WI           | nominal:<br>48 Vdc    | 55                       | 3,3                  | 600                 |
| THL 3-4811WI           |                       | 80                       | 5,0                  | 600                 |
| THL 3-4812WI           | range:<br>18 – 75 Vdc | 80                       | 12                   | 250                 |
| THL 3-4813WI           |                       | 80                       | 15                   | 200                 |
| THL 3-4815WI           |                       | 80                       | 24                   | 125                 |
| THL 3-4821WI           |                       | 80                       | ±5                   | ±300                |
| THL 3-4822WI           |                       | 80                       | ±12                  | ±125                |
| THL 3-4823WI           | input fuse:<br>800mA  | 80                       | ±15                  | ±100                |

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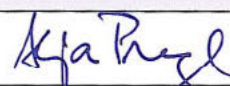


## THL 3 WISM series

| Traco Power model name | Input voltage range   | Rated input current [mA] | Output voltage [Vdc] | Output current [mA] |
|------------------------|-----------------------|--------------------------|----------------------|---------------------|
| THL 3-2410WISM         | nominal:<br>24 Vdc    | 110                      | 3,3                  | 600                 |
| THL 3-2411WISM         |                       | 160                      | 5,0                  | 600                 |
| THL 3-2412WISM         | range:<br>9 – 36 Vdc  | 160                      | 12                   | 250                 |
| THL 3-2413WISM         |                       | 160                      | 15                   | 200                 |
| THL 3-2415WISM         |                       | 160                      | 24                   | 125                 |
| THL 3-2421WISM         |                       | 160                      | ±5                   | ±300                |
| THL 3-2422WISM         |                       | 160                      | ±12                  | ±125                |
| THL 3-2423WISM         | input fuse:<br>1500mA | 160                      | ±15                  | ±100                |
| THL 3-4810WISM         | nominal:<br>48 Vdc    | 55                       | 3,3                  | 600                 |
| THL 3-4811WISM         |                       | 80                       | 5,0                  | 600                 |
| THL 3-4812WISM         | range:<br>18 – 75 Vdc | 80                       | 12                   | 250                 |
| THL 3-4813WISM         |                       | 80                       | 15                   | 200                 |
| THL 3-4815WISM         |                       | 80                       | 24                   | 125                 |
| THL 3-4821WISM         |                       | 80                       | ±5                   | ±300                |
| THL 3-4822WISM         |                       | 80                       | ±12                  | ±125                |
| THL 3-4823WISM         | input fuse:<br>800mA  | 80                       | ±15                  | ±100                |

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## THL 6WI series

| Traco Power model name | Input voltage range | Rated input current [mA] | Output voltage [Vdc] | Output current [mA] |
|------------------------|---------------------|--------------------------|----------------------|---------------------|
| THL 6-2410WI           | nominal:            | 260                      | 3,3                  | 1450                |
| THL 6-2411WI           | 24 Vdc              | 300                      | 5,0                  | 1200                |
| THL 6-2412WI           |                     | 300                      | 12                   | 500                 |
| THL 3-2413WI           | range:              | 300                      | 15                   | 400                 |
| THL 6-2415WI           | 9 – 36 Vdc          | 300                      | 24                   | 250                 |
| THL 6-2421WI           |                     | 300                      | ±5                   | ±600                |
| THL 6-2422WI           | input fuse:         | 300                      | ±12                  | ±250                |
| THL 6-2423WI           | 1500mA              | 300                      | ±15                  | ±200                |
| THL 6-4810WI           | nominal:            | 130                      | 3,3                  | 1450                |
| THL 6-4811WI           | 48 Vdc              | 150                      | 5,0                  | 1200                |
| THL 6-4812WI           |                     | 150                      | 12                   | 500                 |
| THL 6-4813WI           | range:              | 150                      | 15                   | 400                 |
| THL 6-4815WI           | 18 – 75 Vdc         | 150                      | 24                   | 250                 |
| THL 6-4821WI           |                     | 150                      | ±5                   | ±600                |
| THL 6-4822WI           | input fuse:         | 150                      | ±12                  | ±250                |
| THL 6-4823WI           | 750mA               | 150                      | ±15                  | ±200                |

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## THL 6WISM series

| Traco Power model name | Input voltage range | Rated input current [mA] | Output voltage [Vdc] | Output current [mA] |
|------------------------|---------------------|--------------------------|----------------------|---------------------|
| THL 6-2410WISM         | nominal:            | 260                      | 3,3                  | 1450                |
| THL 6-2411WISM         | 24 Vdc              | 300                      | 5,0                  | 1200                |
| THL 6-2412WISM         |                     | 300                      | 12                   | 500                 |
| THL 3-2413WISM         | range:              | 300                      | 15                   | 400                 |
| THL 6-2415WISM         | 9 – 36 Vdc          | 300                      | 24                   | 250                 |
| THL 6-2421WISM         |                     | 300                      | ±5                   | ±600                |
| THL 6-2422WISM         | input fuse:         | 300                      | ±12                  | ±250                |
| THL 6-2423WISM         | 1500mA              | 300                      | ±15                  | ±200                |
| THL 6-4810WISM         | nominal:            | 130                      | 3,3                  | 1450                |
| THL 6-4811WISM         | 48 Vdc              | 150                      | 5,0                  | 1200                |
| THL 6-4812WISM         |                     | 150                      | 12                   | 500                 |
| THL 6-4813WISM         | range:              | 150                      | 15                   | 400                 |
| THL 6-4815WISM         | 18 – 75 Vdc         | 150                      | 24                   | 250                 |
| THL 6-4821WISM         |                     | 150                      | ±5                   | ±600                |
| THL 6-4822WISM         | input fuse:         | 150                      | ±12                  | ±250                |
| THL 6-4823WISM         | 750mA               | 150                      | ±15                  | ±200                |

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## THL 10WI series

| Traco Power model name | Input voltage range   | Rated input current [mA] | Output voltage [Vdc] | Output current [mA] |
|------------------------|-----------------------|--------------------------|----------------------|---------------------|
| THL 10-2410WI          | nominal:<br>24 Vdc    | 400                      | 3,3                  | 2200                |
| THL 10-24110WI         |                       | 500                      | 5,0                  | 2000                |
| THL 10-2411WI          |                       | 500                      | 5,1                  | 2000                |
| THL 10-2412WI          | range:<br>9 – 36 Vdc  | 500                      | 12                   | 830                 |
| THL 10-2413WI          |                       | 500                      | 15                   | 660                 |
| THL 10-2415WI          |                       | 500                      | 24                   | 410                 |
| THL 10-2421WI          | input fuse:<br>2000mA | 500                      | ±5                   | ±1000               |
| THL 10-2422WI          |                       | 500                      | ±12                  | ±410                |
| THL 10-2423WI          |                       | 500                      | ±15                  | ±330                |
| THL 10-4810WI          | nominal:<br>48 Vdc    | 200                      | 3,3                  | 2200                |
| THL 10-48110WI         |                       | 250                      | 5,0                  | 2000                |
| THL 10-4811WI          |                       | 250                      | 5,1                  | 2000                |
| THL 10-4812WI          | range:<br>18 – 75 Vdc | 250                      | 12                   | 830                 |
| THL 10-4813WI          |                       | 250                      | 15                   | 660                 |
| THL 10-4815WI          |                       | 250                      | 24                   | 410                 |
| THL 10-4821WI          | input fuse:<br>1000mA | 250                      | ±5                   | ±1000               |
| THL 10-4822WI          |                       | 250                      | ±12                  | ±410                |
| THL 10-4823WI          |                       | 250                      | ±15                  | ±330                |

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## THL 10WI-HS (with heatsink) series

| Traco Power model name | Input voltage range   | Rated input current [mA] | Output voltage [Vdc] | Output current [mA] |
|------------------------|-----------------------|--------------------------|----------------------|---------------------|
| THL 10-2410WI-HS       | nominal:<br>24 Vdc    | 400                      | 3,3                  | 2200                |
| THL 10-2411WI-HS       |                       | 500                      | 5,0                  | 2000                |
| THL 10-2412WI-HS       | range:<br>9 – 36 Vdc  | 500                      | 5,1                  | 2000                |
| THL 10-2413WI-HS       |                       | 500                      | 12                   | 830                 |
| THL 10-2415WI-HS       |                       | 500                      | 15                   | 660                 |
| THL 10-2421WI-HS       |                       | 500                      | 24                   | 410                 |
| THL 10-2422WI-HS       | input fuse:<br>2000mA | 500                      | ±5                   | ±1000               |
| THL 10-2423WI-HS       |                       | 500                      | ±12                  | ±410                |
| THL 10-2423WI-HS       |                       | 500                      | ±15                  | ±330                |
| THL 10-4810WI-HS       | nominal:<br>48 Vdc    | 200                      | 3,3                  | 2200                |
| THL 10-4811WI-HS       |                       | 250                      | 5,0                  | 2000                |
| THL 10-4812WI-HS       | range:<br>18 – 75 Vdc | 250                      | 5,1                  | 2000                |
| THL 10-4813WI-HS       |                       | 250                      | 12                   | 830                 |
| THL 10-4815WI-HS       |                       | 250                      | 15                   | 660                 |
| THL 10-4821WI-HS       |                       | 250                      | 24                   | 410                 |
| THL 10-4822WI-HS       | input fuse:<br>1000mA | 250                      | ±5                   | ±1000               |
| THL 10-4823WI-HS       |                       | 250                      | ±12                  | ±410                |
| THL 10-4823WI-HS       |                       | 250                      | ±15                  | ±330                |

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## THL 20WI series

| Traco Power model name | Input voltage range   | Rated input current [mA] | Output voltage [Vdc] | Output current [mA] |
|------------------------|-----------------------|--------------------------|----------------------|---------------------|
| THL 20-2410WI          | nominal:<br>24 Vdc    | 700                      | 3,3                  | 4500                |
| THL 20-2411WI          |                       | 940                      | 5,0                  | 4000                |
| THL 20-2412WI          |                       | 940                      | 12                   | 1670                |
| THL 20-2413WI          | range:<br>9 – 36 Vdc  | 940                      | 15                   | 1340                |
| THL 20-2415WI          |                       | 940                      | 24                   | 835                 |
| THL 20-2422WI          | input fuse:<br>5000mA | 940                      | ±12                  | ±835                |
| THL 20-2423WI          |                       | 940                      | ±15                  | ±670                |
| THL 20-4810WI          | nominal:<br>48 Vdc    | 350                      | 3,3                  | 4500                |
| THL 20-4811WI          |                       | 470                      | 5,0                  | 4000                |
| THL 20-4812WI          |                       | 470                      | 12                   | 1670                |
| THL 20-4813WI          | range:<br>18 – 75 Vdc | 470                      | 15                   | 1340                |
| THL 20-4815WI          |                       | 470                      | 24                   | 835                 |
| THL 20-4822WI          | input fuse:<br>2500mA | 470                      | ±12                  | ±835                |
| THL 20-4823WI          |                       | 470                      | ±15                  | ±670                |

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## THL 20WI-HS (with heatsink) series

| Traco Power model name | Input voltage range | Rated input current [mA] | Output voltage [Vdc] | Output current [mA] |
|------------------------|---------------------|--------------------------|----------------------|---------------------|
| THL 20-2410WI-HS       | nominal:            | 700                      | 3,3                  | 4500                |
| THL 20-2411WI-HS       | 24 Vdc              | 940                      | 5,0                  | 4000                |
| THL 20-2412WI-HS       |                     | 940                      | 12                   | 1670                |
| THL 20-2413WI-HS       | range:              | 940                      | 15                   | 1340                |
| THL 20-2415WI-HS       | 9 – 36 Vdc          | 940                      | 24                   | 835                 |
| THL 20-2422WI-HS       | input fuse:         | 940                      | ±12                  | ±835                |
| THL 20-2423WI-HS       | 5000mA              | 940                      | ±15                  | ±670                |
| THL 20-4810WI-HS       | nominal:            | 350                      | 3,3                  | 4500                |
| THL 20-4811WI-HS       | 48 Vdc              | 470                      | 5,0                  | 4000                |
| THL 20-4812WI-HS       |                     | 470                      | 12                   | 1670                |
| THL 20-4813WI-HS       | range:              | 470                      | 15                   | 1340                |
| THL 20-4815WI-HS       | 18 – 75 Vdc         | 470                      | 24                   | 835                 |
| THL 20-4822WI-HS       | input fuse:         | 470                      | ±12                  | ±835                |
| THL 20-4823WI-HS       | 2500mA              | 470                      | ±15                  | ±670                |

Additional information (if necessary)

Information complémentaire (si nécessaire)

Date: 2012-03-12

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