



Certificate Number: 031609X1-17

Date: 2013-03-14

UL CONDITIONS OF ACCEPTABILITY

Company Name: TRACO ELECTRONIC AG

File-CCN: E188913-QQGQ2/QQGQ8

Product Description: N/A

Models: TMLM 04103, TMLM 04105, TMLM 04108, TMLM 04109, TMLM 04112, TMLM 04115, TMLM 04124, TMLM 04253, TMLM 04285, TMLM 04225

Conditions Of Acceptability: For use only in or with complete equipment where the acceptability of the combination is determined by UL LLC. When installed in an end-product, consideration must be given to the following:

The end-product Electric Strength Test is to be based upon a maximum working voltage of: Primary-SELV: 263 Vrms, 517 Vpk for Model TMLM.

The following secondary output circuits are SELV: All outputs of all models.

The following secondary output circuits are at non-hazardous energy levels: All outputs of all models.

The following output terminals were referenced to earth during performance testing: DC Return.

The power supply terminals and/or connectors are: Suitable for factory wiring only.

The maximum investigated branch circuit rating is: 20 A.

The investigated Pollution Degree is: 2.

The following input terminals/connectors must be connected to the end-product supply neutral: Input neutral.

The following magnetic devices (e.g. transformers or inductor) are provided with an OBJY2 insulation system with the indicated rating greater than Class A (105°C): Transformer T1 (Class B).

The following end-product enclosures are required: Mechanical, Fire, Electrical.

The equipment is suitable for direct connection to: AC mains supply.

Ratings:

I/P:

100-240 Vac, 0.1-0.08 A, 47-63 Hz for Models TMLM 04103, TMLM 04105, TMLM 04108, TMLM 04109, TMLM 04112, TMLM 04115, TMLM 04124, TMLM 04253, TMLM 04285, TMLM 04225

Nomenclature: N/A



Certificate Number: 1108051-5

Date: 2013-03-14

UL CONDITIONS OF ACCEPTABILITY

Company Name: TRACO ELECTRONIC AG

File-CCN: E188913-QQGQ2/QQGQ8

Product Description: AC to DC Power Converter

Models: TMLM 05103, TMLM 05105, TMLM 05112, TMLM 05115, TMLM 05124

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

1. This component has been judged on the basis of the required spacings in the Standard for Safety of Information Technology Equipment, CAN/CSA C22.2 No. 60950-1 and UL 60950-1 First Edition, which would cover the component itself if submitted for Listing.
2. The product is tested on a 20 A branch circuit. If used on a branch circuit greater than this, additional testing may be necessary.
3. All secondary output circuits are SELV and are not hazardous energy levels.
4. The terminal pins are suitable for factory wiring only.
5. Magnetic devices (e.g. transformer) employ a Class B (130°C), Line Choke employ a Class A (105°C) insulation system.
6. The maximum working voltage present is 246 V rms, 536 V pk from PRI to earth. The electric strength tests in the end-product shall be based on this value.
7. The equipment has been evaluated for use in a Pollution Degree 2 environment.

Ratings:

Input: 100-240 V ac, 50/60 Hz, 0.15 A

Input: 100-240VAC, 47-63Hz, 0.75A

Output:

<u>Model</u>	<u>Output</u>	
	<u>Vdc</u>	<u>A</u>
TMLM 05103	3.3	1.25
TMLM 05105	5	1.0
TMLM 05112	12	0.42
TMLM 05115	15	0.333
TMLM 05124	24	0.23

Nomenclature: N/A



Certificate Number: 111203X1-2

Date: 2013-03-14

UL CONDITIONS OF ACCEPTABILITY

Company Name: TRACO ELECTRONIC AG

File-CCN: E188913-QQGQ2/QQGQ8

Product Description:

Models: TMLM 10103, TMLM 10105, TMLM 10112, TMLM 10115, TMLM 10124

Conditions Of Acceptability: For use only in or with complete equipment where the acceptability of the combination is determined by UL LLC. When installed in an end-product, consideration must be given to the following:

The end-product Electric Strength Test is to be based upon a maximum working voltage of: 300 Vrms, 536 Vpk.

The following secondary output circuits are SELV: All output.

The following secondary output circuits are at non-hazardous energy levels: All outputs.

The power supply terminals and/or connectors are: Suitable for factory wiring only.

The maximum investigated branch circuit rating is: 20 A.

The investigated Pollution Degree is: 2.

The following end-product enclosures are required: Mechanical, Fire, Electrical.

A fuse connected in the line phase and in series with the VDR shall be evaluated by end-use product.

Ratings: N/A

Nomenclature: N/A



Certificate Number: 071309X1-18

Date: 2013-03-14

UL CONDITIONS OF ACCEPTABILITY

Company Name: TRACO ELECTRONIC AG

File-CCN: E188913-QQGQ2/QQGQ8

Product Description:

Models: TMLM 20103, TMLM 20105, TMLM 20112, TMLM 20115, TMLM 20124

Conditions Of Acceptability: For use only in or with complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc. When installed in an end-product, consideration must be given to the following:

The following Production-Line tests are conducted for this product: Electric Strength.

The end-product Electric Strength Test is to be based upon a maximum working voltage of: Primary-Earthed Dead Metal: 267 Vrms, 584 Vpk, Primary-SELV: 266 Vrms, 574 Vpk.

The following secondary output circuits are SELV: Output for all Models.

The following secondary output circuits are at non-hazardous energy levels: Output for all Models.

The following output terminals were referenced to earth during performance testing: DC Return (T1 Pin 6-7).

The power supply terminals and/or connectors are: Suitable for factory wiring only.

The maximum investigated branch circuit rating is: 20 A.

The investigated Pollution Degree is: 2.

The following input terminals/connectors must be connected to the end-product supply neutral: Input neutral.

The following magnetic devices (e.g. transformers or inductor) are provided with an OBJY2 insulation system with the indicated rating greater than Class A (105°C): Transformer T1 (Class B).

The following end-product enclosures are required: Mechanical, Fire, Electrical.

The equipment is suitable for direct connection to: AC mains supply

Ratings:

I/P: 100-240 Vac, 47-63 Hz, 385 mA/250 mA.

Nomenclature: N/A