



Certificate Number: 20051104-X2

Date: 2023-10-13

UL CONDITIONS OF ACCEPTABILITY

Company Name: TRACO ELECTRONIC AG

File-CCN: E188913 - QQJQ2, QQJQ8

Product Description: POWER SUPPLIES FOR USE WITH AUDIO/VIDEO, INFORMATION AND COMMUNICATION TECHNOLOGY EQUIPMENT – COMPONENT

Models: TEP 75-7210Wlaaaaaaaa (#), TEP 75-7211Wlaaaaaaaa (#), TEP 75-7212Wlaaaaaaaa (#), TEP 75-7213Wlaaaaaaaa (#), TEP 75-7215Wlaaaaaaaa (#), TEP 75-7216Wlaaaaaaaa (#), TEP 75-7218Wlaaaaaaaa (#)

Conditions Of Acceptability:

- The end-product Electric Strength Test is to be based upon a maximum working voltage of : Primary-SELV: 157 Vrms, /264 Vpk.
- The following secondary output circuits are SELV : Output
- The following secondary output circuits are at non-hazardous energy levels : Output
- The power supply terminals and/or connectors are : Suitable for factory wiring only.
- The investigated Pollution Degree is : 2
- The current rating of overcurrent protective device is to be evaluated in end-product. Abnormal Operating (Simulated Abnormal Operating Conditions) Test and Single Fault Conditions (Simulated Single Fault Conditions)Test were carried out with an External Fuse rated 5 A. Tests should be repeated in end-product if differently rated overcurrent protective device is used.
- The DC/DC Converter was tested for an input voltage of 43 V dc or 160 V dc with no tolerance. If used outside this voltage, additional testing may be required.
- The DC/DC Converter was evaluated for Electric Strength 3000 Vac / 4242 Vdc between Input and Output as declared by manufacturer.
- The following components require special consideration during end-product Thermal (Heating) tests due to the indicated maximum temperature measurements during component-level testing: Metal Baseplate Outside near Transformer (T1) (70°C)
- External Circuit - not Mains connected (ES3)
- The output of DC/DC Converter were evaluated for PS3 and ES1 (for Models "z"= 3P3, 05, 12, 15, 24 or 28).
- The output of DC/DC Converter were evaluated for PS3 and ES2 (for Models "z" = 48).

Ratings: N/A

Nomenclature: (#) - "a" may be any alphanumeric character, punctuation mark or blank.

Certificate Number: 20191120- X3

File-CCN: E188913 - QQJQ2, QQJQ8

Product Description: POWER SUPPLIES FOR USE WITH AUDIO/VIDEO, INFORMATION AND COMMUNICATION TECHNOLOGY EQUIPMENT - COMPONENT

Models: THN 30-2411BWIR(a), THN 30-4811BWIR(a), THN 30-7211BWIR(a)

Conditions Of Acceptability:

- The following output circuits are at ES1 energy levels : Output
- The following output circuits are at PS3 energy levels : Output
- The terminals of the DC-DC Converter are only suitable for factory wiring only.
- The need for suitable electrical enclosure (for ES safeguard), fire enclosure (for PS safeguard), and safeguard for thermal burn injury (for TS safeguard) is to be evaluated and provided (if necessary) in the end-product.
- The DC/DC Converter was evaluated for Functional Insulation and is intended to be installed in an isolated (non-mains) ES3 or ES2 circuit which is separated from a.c. mains circuit by Double or Reinforced Insulation.
- The DC/DC Converters were tested with an external Slow Blow Fuse. If used on a protection circuit greater than this, addition testing maybe necessary. Maximum of 6 A for Models **THN 30-2411BWIR** / Maximum 3 A for Models **THN 30-4811BWIR** / Maximum 1 A for Models and **THN 30-7211BWIR**
- The DC/DC Converters were tested for an input voltage of 9 to 160 V d.c. with no tolerance.
- All circuits were evaluated as secondary hazardous voltage level with Functional Insulation, and it is necessary that Basic Insulation shall be considered in the end-product. Electric Strength Test voltage of 2250 V d.c. was conducted between input and output for PCB Layout Types A, B, C, D, E, and K by manufacturer's request. Type A using for all single output Model **THN 30-2411BWIR, THN 30-4811BWIR**. Type C is alternate for single output Model **THN 30-2411BWIR, THN 30-4811BWIR**.
- All circuits were evaluated as secondary hazardous voltage level with Functional Insulation, and it is necessary that Basic Insulation shall be considered in the end-product. Electric Strength Test voltage of 3000 V d.c. was conducted between input and output; 1,600 V d.c. for input pin and metal chassis for PCB Layout Types F, G, H, I, J, and L by manufacturer's request. Type J for single output Models **THN 30-7211BWIR**.
- External Fan used for Models **THN 30-2411BWIR(a), THN 30-4811BWIR(a), THN 30-7211BWIR(a)**.

Ratings: N/A

Nomenclature: (a)- stands for 6 variables, each variable may be A through Z, 0 through 9, dash, any punctuation marks or blank.