



Certificate Number: 0428203-7

Date: 2023-03-24

UL CONDITIONS OF ACCEPTABILITY

Company Name: TRACO ELECTRONIC AG

File-CCN: E188913-QQJQ2, QQJQ8

Product Description: Switching power supply

Models:

TPI 65-105(a), TPI 65-112(a), TPI 65-115(a), TPI 65-124(a), TPI 65-136(a), TPI 65-148(a), TPI 65-153(a)

(a) - Stands for 6 variables, each variable may be A through Z, 0 through 9, "-", "(", ")", ".", "/" or blank.

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 equipment is suitable for direct connection to: AC mains supply.
- The power supply terminals and/or connectors are: Suitable for factory wiring only
- The maximum investigated branch circuit rating is: 20 A (AC input)
- The investigated Pollution Degree is: 2
- The following secondary output circuits are ES1: All outputs.
- The following output circuits are at PS3 energy levels: All internal circuits
- 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): TX1 (Class B)
- The following input terminals/connectors must be connected to the end-product supply neutral: Neutral pin of connector (CON1)
- The end-product Electric Strength Test is to be based upon a maximum working voltage of: Primary-secondary: 273 Vrms, 680 Vpk.
- The metal chassis, floating PWB trace and screw are considered as floating parts, that should be kept basic insulation from primary/secondary parts in end-product.
- The need for suitable Electrical enclosure (for ES safeguard), fire enclosure (for PS safeguard), mechanical enclosure (for MS safeguard), and safeguard for thermal burn injury (for TS safeguard) are to be evaluated and provided in the end-use equipment.
- The suitability of the connections (including spacing, permanent connection to ac mains, disconnect device, screw size, terminal), and performance test (including Thermal Test, Capacitance Discharge Test, Touch Current Test) shall be considered in the end product.

- The enclosure requirement (including openings requirement and necessary mechanical tests, accessibility) shall be evaluated in the end product.
- Models TPI 65-105(a), TPI 65-112(a), TPI 65-115(a), TPI 65-124(a), TPI 65-136(a), TPI 65-148(a), TPI 65-153(a) is defined as OVC II and operated at altitude up to 5000 m.

Technical Consideration

- Considered current rating of protective device as part of the building installation (A) : 20 A
- The product is intended for use on the following power systems: TN
- The means of connection to the mains supply is: Evaluated in end product
- The equipment disconnect device is considered to be: Evaluated in end product
- Mains supply tolerance (%) or absolute mains supply values : +10%, -10% (Manufacturer declared) (for AC input)
- The product was submitted and evaluated for use at the maximum ambient temperature (T_{ma}) permitted by the manufacturer's specification of: See below table.

For TPI 65-105(a), TPI 65-112(a), TPI 65-115(a), TPI 65-124(a), TPI 65-136(a), TPI 65-148(a), TPI 65-153(a):

Rated Voltage	Ambient Temperature (°C)								
	Open frame type				Enclosed type				Potting type
	Single model series	Dual model series	Triple model series	DS / TS model series	Single model series	Dual model series	Triple model series	DS / TS model series	Single model series
100-240Vac	55	45	50	55	50	45	45	55	40

- The ambient temperature of all models per manufacturer's requests see below:

For TPI 65-105(a), TPI 65-112(a), TPI 65-115(a), TPI 65-124(a), TPI 65-136(a), TPI 65-148(a), TPI 65-153(a):

Test Voltage	Ambient Temperature (°C)						
	Open frame type			Enclosed type			Potting type
	Single model series	Dual and DS model series	Triple and TS model series	Single model series	Dual and DS model series	Triple and TS model series	Single model series
100 Vac	55	45	50	55	45	50	45
115 Vac	65	50	55	55	50	55	50
230 Vac	65	60	60	65	60	60	60
264 Vac	65	60	60	65	60	60	60

Ratings:

Models	Input Rating
TPI 65-105(a), TPI 65-112(a), TPI 65-115(a), TPI 65-124(a), TPI 65-136(a), TPI 65-148(a), TPI 65-153(a)	1.6-0.9A

Models	PCB	TX1	Output Rating	
			Voltage VDC	Current A
TPI 65-105(a)	P1 or P1A	X1 or X1A or X1B	5	10
TPI 65-112(a)	P2 or P2A	X3 or X3A or X3B	12	5.42
TPI 65-115(a)	P2 or P2A	X3 or X3A or X3B	15	4.34
TPI 65-124(a)	P2 or P2A	X4 or X4A or X4B	24	2.71
TPI 65-136(a)	P2 or P2A	X5 or X5A or X5B	36	1.81
TPI 65-148(a)	P2 or P2A	X6 or X6A or X6B	48	1.36
TPI 65-153(a)	P2 or P2A	X6 or X6A or X6B	53	1.24

Nomenclature:

(a) - Stands for 6 variables, each variable may be A through Z, 0 through 9, "-", "(", ")", ".", "/" or blank.