(1) # Certificate of Conformity

(2) Equipment and protective systems intended for use in potentially explosive atmospheres – **Directive 2014/34/EU**

(3) Certificate Number

EPS 12 ATEX 1 424 X **Revision 5**

(4) Equipment: Power Supply (built-in):
TSP 070-112EX; TSP 090-124EX; TSP 140-112EX; TSP 180-124EX; TSP 360-124EX;
TSP 600-124EX; TSP 090-148EX; TSP 180-148EX; TSP 360-148EX; TSP 600-148EX
(Models can be additionally marked with xxaaaaaa, where 'x' or 'a' can be any alphanumeric, blank or dash; no impact on safety)

(5) Manufacturer: Traco Power Solutions Ltd.

(6) Address: Whitemill Industrial Estate
Whitemill Road Wexford, Y35 YH66
Ireland

(7) This equipment and any acceptable variation thereto are specified in the annex to this Certificate of Conformity and the documentation therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH certifies based on a voluntary assessment that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive 2014/34/EU. The examination and test results are recorded in the confidential documentation under the reference number 06KFS159.

(9) Compliance with the essential health and safety requirements has been assured by compliance with:

EN IEC 60079-0:2018 **EN 60079-7:2015 + A1:2018**

EN 60079-15:2010 **EN IEC 60079-15:2019**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the annex to this certificate.

(11) This Certificate of Conformity relates only to the design and the construction of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture of this equipment and its placing on the market. Those requirements are not covered by this certificate.

(12) The marking of the equipment shall include the following:


II 3G Ex ec nC IIC T3/T4[1)] Gc

[1)] The unit is rated temperature class T4 (135 °C) for an ambient temperature of 40 °C at rated load and temperature class T3 for an ambient of 70 °C with derating.

Certification department of explosion protection

Tuerkheim, 2022-05-24

Ulrich Feike

(13) # Annex

(14) **Certificate of Conformity EPS 12 ATEX 1 424 X** **Revision 5**

(15) Description of equipment:

The EUT is a power supply for built-in use (DIN rail).

The TSP series comprises high performance DIN-rail mount power supplies designed for reliable operation under difficult factory floor conditions. High immunity against electrical disturbances and rugged metal casing make these modules the best choice to power sensitive loads in industrial process control systems, machine tools or other demanding industrial applications. They provide a DC-OK signal and external shut down function. Detachable screw terminal blocks make the connection easy.

This power supply line is accompanied by a wide range of function modules for reliable system solutions: Redundancy modules for true current sharing in parallel operation and for redundant systems. Battery controller modules to configure high reliable UPS systems for 12, 24 and 48 VDC. Selection of battery packs available. Buffer modules for protection against short time AC power loss. Maintenance free! No batteries required.
All devices are designed for installation in an enclosure providing protection against electrical, mechanical and fire hazards and are intended for general use such as in industrial control, process control, power distribution and instrumentation equipment.

Revision 5: Update to current version of standards used. Update of ExTR to current version. Change of type of protection from "nA" to "ec". Change of manufacturer's address. Minor editorial changes to manufacturer's documents. No tests performed.

Electrical data:

TSP 070-112EX Input: AC 100-240V | 2A-1A | 50/60Hz Output: DC 12V | 6A	**TSP 090-124Ex** Input: AC 100-240V | 2,1A-1A | 50/60Hz Output: DC 24V | 3.75A	**TSP 140-112EX** Input: AC 100-240AC | 4A-2A | 50/60Hz Output: DC 12V | 12A
TSP 180-124EX Input: AC 100-240V | 4A-2A | 50/60Hz Output: DC 24V | 7.5A	**TSP 360-124EX** Input: AC 100-240V | 6A-3A | 50/60Hz Output: DC 24V | 15A	**TSP 600-124EX** Input: AC 100-240V | 10A-5A | 50/60Hz Output: DC 24V | 25A
TSP 090-148EX Input: AC 100-240V | 2.1A-1A | 50/60Hz Output: DC 24V | 2A	**TSP 180-148EX** Input: AC 100-240V | 4A-2A | 50/60Hz Output: DC 48V | 2A	**TSP 360-148EX** Input: AC 100-240V | 6A-3A | 50/60Hz Output: DC 48V | 7.5A
TSP 600-148EX Input: AC 100-240V | 10A-5A | 50/60Hz Output: DC 48V | 12.5A		

Datasheet No. 1

Certificate of Conformity EPS 12 ATEX 1 424 X **Revision 5**

Ratings					
Model	U_{in}	I_{in}	U_{out}	I_{out} (@ 40 °C)	P_{out} (@ 40 °C)
TSP 070-112EX	100-240Vac[1] (85-264Vac)**	2A – 1A	12Vdc (12-14Vdc)***	6A	72W
TSP 090-124EX	100-240Vac[1] (85-264Vac)**	2.1A – 1A	24Vdc (24-28Vdc)***	3.75A	90W
TSP 140-112EX	100-240Vac[2] (85-264Vac)**	4A – 2A	12Vdc (12-14Vdc)***	12A	144W
TSP 180-124EX	100-240Vac[2] (85-264Vac)**	4A – 2A	24Vdc (24-28Vdc)***	7.5A	180W
TSP 360-124EX	100-240Vac[2] (85-264Vac)**	6A – 3A	24Vdc (24-28Vdc)***	15A	360W
TSP 600-124EX	100-240Vac[2] (85-264Vac)**	10A – 5A	24Vdc (24-28Vdc)***	25A	600W
TSP 090-148EX	100-240Vac[1] (85-264Vac)**	2.1A – 1A	48Vdc (48-56Vdc)***	2A	96W
TSP 180-148EX	100-240Vac[2] (85-264Vac)**	4A – 2A	48Vdc (48-56Vdc)***	4A	192W
TSP 360-148EX	100-240Vac[2] (85-264Vac)**	6A – 3A	48Vdc (48-56Vdc)***	7.5A	360W
TSP 600-148EX	100-240Vac[2] (85-264Vac)**	10A – 5A	48Vdc (48-56Vdc)***	12.5A	600W

Comments:
[1] alternatively the unit might be marked with: AC 115/230V or AC 115–240V.
[2] alternatively the unit might be marked with AC 100-120/220-240V.
**mains supply tolerance
***adjustable
Suffix "xx" may be used for all models and can be any letter or digit; no safety relevant meaning.

AMBIENT DERATING (output power in %):

TSP 070-112EX:	90% @ 50 °C	78% @ 60 °C	53% @ 70 °C
TSP 090-124EX:	85% @ 50 °C	65% @ 60 °C	45% @ 70 °C
TSP 140-112EX:	90% @ 50 °C	78% @ 60 °C	53% @ 70 °C
TSP 180-124EX:	85% @ 50 °C	65% @ 60 °C	45% @ 70 °C
TSP 360-124EX:	85% @ 50 °C	65% @ 60 °C	45% @ 70 °C
TSP 600-124EX:	92% @ 50 °C	80% @ 60 °C	45% @ 70 °C
TSP 090-148EX:	85% @ 50 °C	65% @ 60 °C	45% @ 70 °C
TSP 180-148EX:	85% @ 50 °C	65% @ 60 °C	45% @ 70 °C
TSP 360-148EX:	85% @ 50 °C	65% @ 60 °C	45% @ 70 °C
TSP 600-148EX:	92% @ 50 °C	80% @ 60 °C	45% @ 70 °C

INPUT VOLTAGE DERATING (output power in %):

All models:	55% @ 85Vac
All models:	90% @ 90Vac

(16) Reference number: 06KFS159

(17) Special conditions for safe use:

- The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP54 in accordance with EN IEC 60079-0 and EN IEC 60079-15.
- The equipment shall only be used in an area of not more than pollution degree 2, as defined in EN 60664-1.
- Special ambient temperature range: -25 °C to +70 °C
- Output power derating conditions at high ambient temperatures must be considered above +40 °C. The unit is rated Temperature class T4 (+135 °C) for an ambient temperature of 40 °C at rated load and temperature class T3 for an ambient of +70 °C with derating.

(18) Essential health and safety requirements:

Met by compliance with standards.

ZERTIFIZIERUNGSSTELLE BUREAU VERITAS 1828 Bureau Veritas CPS Germany GmbH

Certification department of explosion protection Tuerkheim, 2022-05-24

Ulrich Feike