



## Certificate of Conformity

- (1)
- (2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – **UKSI 2016:1107 (as amended)**
- (3) Certificate Number

**EPS 22 UKEX 1 176 X**

**Revision 0**

- (4) Equipment: Power Supply (built-in):  
TIB 080-112EX, TIB 080-124EX, TIB 080-148EX, TIB 120-112EX, TIB 120-124EX,  
TIB 120-148EX, TIB 240-124EX, TIB 240-148EX, TIB 480-124EX, TIB 480-148EX,  
TIB 240-124SP/EX, TIB 480-124SP/EX
- (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 United Kingdom Limited 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 Schedule 1 of UKSI 2016:1107 (as amended). The examination and test results are recorded in the confidential documentation under the reference number 20TH0357.
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:

**EN IEC 60079-0:2018**

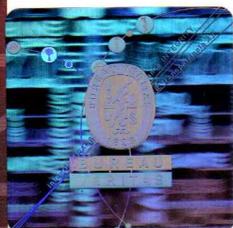
**EN 60079-15:2010**

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

**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 UKSI 2016:1107 (as amended). Further requirements 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:

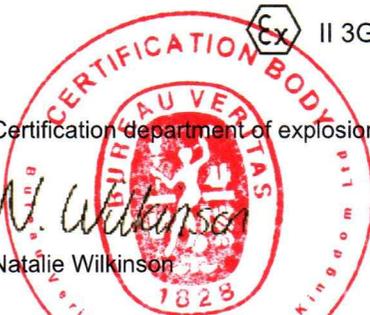
 II 3G Ex ec nC IIC T3/T4 Gc



Certification department of explosion protection

Warrington, 28-07.2022

  
Natalie Wilkinson



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(13)

## Annex

(14) **Certificate of Conformity EPS 22 UKEX 1 176 X**

Revision 0

(15) Description of equipment:

The TIB EX family of next generation DIN rail mounted power supplies feature high efficiency operation of up to 90% - 95% enabling a slim design with alternative side-mounting for flat panels (DC OK indicator on both front and side panel).

These products are certified to UL Hazloc Class 1 / Div 2, and UKEX (EN IEC 60079-0, EN 60079-7, EN (IEC) 60079-15) for operation in hazardous locations.

These convection cooled power supplies have a -40°C to +60°C full load operating temperature range. 150% peak power for up to 4 seconds which is ideal for stepper motors, solenoids or actuators.

The TIB EX series has an important Back Power Immunity feature that helps protect against shutdown or malfunction with loads such as inductors and decelerating motors that can feed voltage back to the power supply. Outputs are radio-interference-suppressed to impede radiation at long output lines which reduces the common mode current to within limits of telecommunication ports.

The series operate with a high-power factor of up to 99% which also minimizes inrush current. Additional qualifications include IEC/EN/UL 60950-1, UL 508 and CB Report with EMC compliance to IEC/EN 61000-6-2 and IEC/EN 61000-6-3. Further additional qualifications of the power supplies series are listed under IEC/EN/UL61010-1, including IEC/EN/UL 61010-2-201.

Revision 0: Initial issue.

Electrical data:

<p><b>TIB 080-112EX</b>  Input:  AC 100–240V   2–0.9 A   45–65Hz  DC 100–250V   1.0 – 0.39A  Output:  DC 12V   6.7A  Derate linearly above +60 °C at a rate of 2%/°C  Ambient temperature range: -40 °C to +70 °C</p>	<p><b>TIB 080-124EX</b>  Input:  AC 100–240V   2–0.9A   45–65Hz  DC 100–250V   1.0–0.39A  Output:  DC 24V   3.4A  Derate linearly above +60 °C at a rate of 2%/°C  Ambient temperature range: -40 °C to +70 °C</p>
<p><b>TIB 080-148EX</b>  Input:  AC 100–240V   2–0.9A   45–65Hz  DC 100–250V   1.0–0.39A  Output:  DC 48V   1.7A  Derate linearly above +60 °C at a rate of 2%/°C  Ambient temperature range: -40 °C to +70 °C</p>	<p><b>TIB 120-112EX</b>  Input:  AC 100–240V   1.5–0.78A   45–65Hz  DC 100–250V   1.40–0.56A  Output:  DC 12V   10A  Derate linearly above +60 °C at a rate of 2%/°C  Ambient temperature range: -40 °C to +70 °C</p>
<p><b>TIB 120-124EX</b>  Input:  AC 100–240V   1.5–0.78A   45–65Hz  DC 100–250V   1.40–0.56A  Output:  DC 24V   5A  Derate linearly above +60 °C at a rate of 2%/°C  Ambient temperature range: -40 °C to +70 °C</p>	<p><b>TIB 120-148EX</b>  Input:  AC 100–240V   1.5–0.78A   45–65Hz  DC 100–250V   1.40–0.56A  Output:  DC 48V   2.5A  Derate linearly above +60 °C at a rate of 2%/°C  Ambient temperature range: -40 °C to +70 °C</p>

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**Revision 0**

Electrical data: (continued)

<p><b><u>TIB 240-124EX</u></b>  Input:  AC 100–240V   2.89–1.27A   45–65Hz  DC 100–250V   2.85–1.10A  Output:  DC 24V   10A  Derate linearly above +60 °C at a rate of 2%/°C  Ambient temperature range: -40 °C to +70 °C</p>	<p><b><u>TIB 240-148EX</u></b>  Input:  AC 100–240V   2.89–1.27A   45–65Hz  DC 100–250V   2.85–1.10A  Output:  DC 48V   5A  Derate linearly above +60 °C at a rate of 2%/°C  Ambient temperature range: -40 °C to +70 °C</p>
<p><b><u>TIB 480-124Ex</u></b>  Input:  AC 100–240V   5.8–2.5A   45–65Hz  DC 100–250V   5.65–2.20A  Output:  DC 24V   20A  Derate linearly above +60 °C at a rate of 2%/°C  Derate linearly above +55 °C at a rate of 1.7%/°C  (Vin: 100VDC - 350VDC)  Ambient temperature range: -40 °C to +70 °C</p>	<p><b><u>TIB 480-148EX</u></b>  Input:  AC 100–240V   5.8– 2.5A   45–65Hz  DC 100–250V   5.65–2.20A  Output:  DC 48V   10A  Derate linearly above +55 °C at a rate of 1.4%/°C  (Vin: 85–132V)  Derate linearly above +60 °C at a rate of 2%/°C  (Vin: 132–264V)  Derate linearly above +55 °C at a rate of 1.7%/°C.  (Vin: 110VDC - 350VDC)  Ambient temperature range: -40 °C to +70 °C</p>
<p><b><u>TIB 240-124SP/EX</u></b>  Input:  AC 100–240V   2.89–1.27A   45–65Hz  DC 100–250V   2.85–1.10A  Output:  DC 24V   10A  Derate linearly above +60 °C at a rate of 2%/°C  Ambient temperature range: -40 °C to +70 °C</p>	<p><b><u>TIB 480-124SP/EX</u></b>  Input:  AC 100–240V   5.8–2.5A   45–65Hz  DC 100–250V   5.65–2.20A  Output:  DC 24V   20A  Derate linearly above +60 °C at a rate of 2%/°C  Derate linearly above +55 °C at a rate of 1.7%/°C  (Vin: 100VDC - 350VDC)  Ambient temperature range: -40 °C to +70 °C</p>

(16) Reference number: 20TH0357

(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.
- Do not operate voltage adjustment unless the area is known to be non-hazardous.
- PE conductor must be connected to apparatus (input terminal).
- Ambient temperature range is  $-40\text{ °C} < T_{\text{amb}} < +70\text{ °C}$ ; derating conditions must be considered. Temperature classification T3 / T4 depending on model and input voltage. For details refer to user manual.

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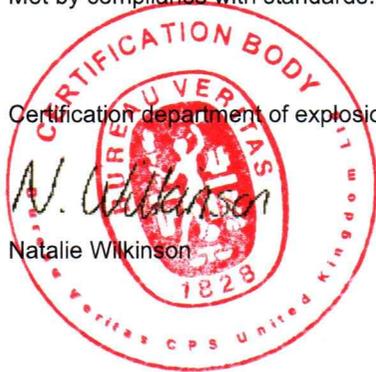
Revision 0

(18) Essential health and safety requirements:

Met by compliance with standards.

Certification department of explosion protection

Warrington, 28-07-2022



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