



EU Type Examination Certificate CML 21ATEX21184X Issue 0

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment TX6630.35(.xx...) Series Power Supply Chassis
- 3 Manufacturer Trolex Ltd
- 4 Address Newby Road, Hazel Grove, Stockport, SK7 5DY, United Kingdom
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 6738671, Koopvaardijweg 32, 4906CV Oosterhout The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.

- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018 EN 60079-11:2012

10 The equipment shall be marked with the following:



[Ex ia Ma] I

Ta= -20°C to +70°C

R C Marshall Operations Manager





11 Description

The TX6630.35(.xx...) Series Power Supply Chassis is an AC to DC convert powered from a 110 or 230 Vac supply, comprising of a transformer, bridge rectifier, smoothing capacitors with current limiting resistors and voltage clamping zener diodes limiting the output.

Power Supply Chassis TX663*.35(.xx...)

1 – 7.5 V,

5–7.5 V,

2 – 12 V,

6 – 12 V,

The TX6630.35(.xx...) Series Power Supply Chassis are powered from an 110Vac or 230Vac mains supply and provide an intrinsically safe nominal 7.5Vdc or 12Vdc output. The TX6630 Series Power Supply Chassis consists of a constant voltage transformer, smoothing capacitor, bridge rectifier and current limiting resistors mounted upon a steel backplate; output clamping zener diodes are mounted on a heatsink insulated from, but attached to, the backplate. Optionally, the TX6630 Series Power Supply Chassis may include up to four additional relays mounted on one large or two small PCBs depending upon the version. Terminals are provided for connection to the mains supply (voltage is selected by a switch or wire link), intrinsically safe dc output and, if fitted, the relay coils and switching contacts. The TX6630 Series Power Supply Chassis are intended to be located in an IP20 enclosure in the non-hazardous area, or in an appropriately certified flameproof enclosure in the hazardous area

Terminal block TB1: (L, N)

Um = 121 Vrms for the nominal 110 V AC input Um = 253 Vrms for the nominal 230 V AC input

TX6632/TX6636	TX6631/TX6635
Uo = 14.4 V	$U_o = 9 V$
lo = 2.37 A	I _o = 3.47 A
Po = 9.84 W	P _o = 12.5 W
Ci = 0	C _i = 0
Li = 0	$L_i = 0$
Co = 20 μF	C _o = 1000 μF
Lo = 100 μH	$L_o = 54 \ \mu H$
$Lo/Ro = 54 \ \mu H/\Omega$	$L_0/R_0 = 48 \ \mu H/\Omega$

Terminals 1, 2

Optional relay boards (RL1 - RL4)

Ui = 14.4 V (terminals 4, 6, 8 and 10 wrt 2) Um = 250 Vac (terminals 11-13, 14-16, 17-19 and 20-22)





If the TX6630.35(.xx...) Series Power Supply Chassis is in the safe area then it is housed in an IP 20 enclosure, if it is to be installed within a hazardous area then it is to be installed within the certified flameproof enclosure.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	22 Apr 2022	R14664B/00	Issue of Prime Certificate

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. Where the product incorporates certified parts or safety critical components the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
- ii. All Mains Transformers shall satisfy the following routine Dielectric Strength test requirements of EN 60079-11 CL 11.2:
 - 2,500 Vrms between primary and secondary windings;1,000 Vrms between all windings and screen or core;1,500 Vrms between secondary and all other windings.

14 Specific Conditions of Use (Special Conditions)

The following conditions relate to safe installation and/or use of the equipment.

- i. When the apparatus is installed within a potentially explosive atmosphere, an additional alternative type of protection as listed in EN IEC 60079-0 must be provided and installed in accordance with the requirements of EN 60079-25.
- ii. When the equipment is installed in the safe area, it must be installed in an enclosure providing a degree of protection of not less than IP 20 and installed in accordance with the requirements of EN 60079-25.

Certificate Annex

Certificate NumberCML 21ATEX21184XEquipmentTX6630.35(.xx...) Series Power Supply ChassisManufacturerTrolex Ltd



The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
P5111-202	1 of 1	А	22 Apr 2022	General Arrangement
P5111-202-01	1 of 1	В	22 Apr 2022	General Arrangement
P5111.203	1 to 3	А	22 Apr 2022	PCB Artwork (Ralux relay version)
P5111.13	1 of 1	F	22 Apr 2022	Constant Voltage Transformer
P5111.05	1 to 1	С	22 Apr 2022	General Arrangement
P5111.210	1 to 1	А	22 Apr 2022	Relay Certification Details
P5111.206	1 to 3	С	22 Apr 2022	PCB Artwork (Finder relay version)
P5111.232	1 to 3	В	22 Apr 2022	PCB – Bottom Layer
P5111.53	1 of 1	Е	22 Apr 2022	Circuit Diagram
P5111.201	1 of 1	А	22 Apr 2022	Circuit Diagram
P5111.110	1 of 1	В	22 Apr 2022	Relay
P5111.89	1 of 1	А	22 Apr 2022	PCB Artwork
P5111.2010	1 of 1	А	22 Apr 2022	ATEX Label Drawing TX6631.35
P5111.2011	1 of 1	А	22 Apr 2022	ATEX Label Drawing TX6632.35
P5111.2012	1 of 1	А	22 Apr 2022	ATEX Label Drawing TX6635.35
P5111.2013	1 of 1	А	22 Apr 2022	ATEX Label Drawing TX6636.35