

(1) EC TYPE-EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 94/9/EC**
- (3) EC Type-Examination Certificate Number

TÜV 13 ATEX 7440 X

- (4) **Equipment:** Light alloy Terminal Box, LTB*
- (5) **Manufacturer:** Shomal Eng & Mfg (PIROOZ) Co.
- (6) **Address:** C2 Ave. Salmanshahr Industrial Park
Salmanshahr, Mazandaran-Iran
- (7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland Zertifizierungsstelle for ex-protected products of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies 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 atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report 557/Ex440.00/13

- (9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN 60079-0: 2009

EN 60079-7: 2007

EN 60079-31: 2009

except the requirements, which are listed under item (18).

- (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 schedule to this certificate.
- (11) This EC-Type-Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.
- (12) The marking of the equipment shall include the following:



II 2 G D Ex e IIC T6 Gb

IIIC Ex tb IIIC T85°C Db

TÜV Rheinland ExNB for explosion protected equipment

Cologne, 2014-04-30

Dipl.-Ing. Klauspeter Grafli

This EC-Type-Examination Certificate without signature and stamp shall not be valid.
This EC-Type-Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the TÜV Rheinland Notified Body of TÜV Rheinland Industrie Service GmbH, Am Grauen Stein 51105 Köln
Tel. +49 (0) 221 806-0 Fax. + 49 (0) 221 806 114

(13) Annex to

(14) **EC-Type Examination Certificate**
TÜV 13 ATEX 7440 X

(15) **Description of equipment**

15.1 Equipment and type:

LTB – Light-alloy terminal box.

LTB* where “*” is a space holder for following types:

120	220	260
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Type designation

The enclosures differ in size.

15.2 Description

General product information

Increased safety enclosures and combustible dust protected terminal boxes in Aluminium Alloy material incorporating certified components. In three sizes.

15.3 Technical Data

LTB	L [mm]	W [mm]	H [mm]
120	120	122	82
220	220	122	82
260	260	160	91

Size

LTB	Maximum allowed power dissipation [W]	
	-20°C ≤ Ta ≤ 40°C	-30°C ≤ Ta ≤ 55°C
	T6/T85°C	T6/T85°C
120	6,7	4,1
220	10,9	6,8
260	16	10

Enclosure power dissipation

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List of certified devices and components

Gerät / Device	Typ / Type	Ex-Kenn-zeichnung / Marking	Bescheinig.Nr./ Certificate no.	IP-Schutzart/ IP protection
Terminal	various	Ex e	KEMA 98ATEX1651U	
Terminal	various	Ex e	KEMA 98ATEX1786U	
Terminal	various	Ex e	KEMA 04ATEX2265U	
Terminal	various	Ex e	KEMA 98ATEX1685U	
Terminal	various	Ex e	KEMA 97ATEX1798U	
Terminal	various	Ex e	KEMA 97ATEX2521U	
Breather Drain	CV	various	Sira 10ATEX3279U	
Breather Drain	CT	various	Sira 10ATEX1288U	
Breather	BD-U	various	Sira 08ATEX1240U	

Certified devices and components

 (16) **Test-Report No.** 557/Ex440.00/13

Parts of the device, which already fulfill the requirements for the category, were not approved and assessed by TÜV Rheinland Industrie Service (e.g.xxxx).

The applicability and assembly of mechanical and electrical parts and components were assessed and approved by TÜV Rheinland Industrie Service with respect to the requirements of explosion protection.

 (17) **Special Conditions for safe use**

1. Suitable certified cable glands or blanking elements, that sustain the type of protection and IP66, must be used.
2. If a breather is equipped, the lower IP rating is used instead.
3. Temperature requirement must match with the O-ring Material used for breather devices.
4. Refer to specific component certificate.
5. The insulation of conductors must match with temperature requirements.
6. Ambient temperature $-20^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$ or $-30^{\circ}\text{C} \leq T_a \leq 55^{\circ}\text{C}$.

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(18) **Basic Safety and Health Requirements**

Covered by afore mentioned standard

TÜV Rheinland ExNB für explosion protected equipment

Cologne, 2014-04-30


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