

# Certificato di esame UE del tipo

## EU-type examination certificate ATEX n. **ECM 16 ATEX-B 281 X**

Rilasciato ai sensi della direttiva 2014/34/UE – Allegato III - Modulo B  
Issued according to 2014/34/EU Directive – Annex III - Module B



### Richiedente

#### Applicant

Ragione Sociale

Company Name

Indirizzo

Address

Luogo di produzione

Place of production

Apparecchiatura

Equipment

Shomal Engineering & Manufacturing Company (Pirooz) (SEMC) Co.

No. 5, 2nd Baharestan St. Pasdaran Ave. Tehran, Iran

Salmanshahr Industrial Park Salmanshahr, Mazandaran Iran

Florescent light fitting  
FLB220(2x18W), FLB 240(2x36W), FLC140, FLC240  
both Electronic & Electromagnetic Ballasts

Modo di protezione

Type of protection

“Ex d” “Ex t”

Questa apparecchiatura o sistema di protezione e le sue eventuali varianti accettate sono descritte nel presente Certificato e nell'allegato dello stesso.

This equipment or protective system and any acceptable variation thereto are described in this Certificate and its Annex.

L'ECM, Organismo Notificato n° 1282 in conformità all'art. 17 della Direttiva 2014/34/UE del Parlamento europeo e del Consiglio del 26 febbraio 2014, certifica che questa apparecchiatura o sistema di protezione verificata secondo la procedura di cui all'allegato III, Modulo B, è conforme ai requisiti essenziali di sicurezza e salute per il progetto e la costruzione di apparecchiature e sistemi di protezione destinati ad essere utilizzati in atmosfere potenzialmente esplosive, definiti nell'allegato II della Direttiva. Le verifiche ed i risultati di prova sono registrati nel rapporto EPIL a carattere riservato n°

ECM, Notified Body No. 1282 in accordance with Article. 17 of Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014, certifies that this equipment or protective system was tested according to the procedure set out in Annex III, Module B, complies with the essential health and safety requirements for the project and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II of the Directive. The examination and test results are recorded in confidential EPIL test reports No.: EPIL EXTR 00802-1-0, EPIL EXTR 00802-1-1

EPIL EXTR 00802-1-0, EPIL EXTR 00802-1-1  
I requisiti essenziali di sicurezza e salute sono assicurati dalla rispondenza alle Norme applicate: EN 60079-0:2013, EN 60079-1:2014, EN 60079-31:2014, IEC 60529:2013

The essential health and safety requirements are assured by compliance with applied Standard: EN 60079-0:2013, EN 60079-1:2014, EN 60079-31:2014, IEC 60529:2013

Questo Certificato di esame UE del tipo è relativo soltanto al progetto, all'esame ed alle prove dell'apparecchiatura o sistema di protezione specificato in accordo con la Direttiva 2014/34/UE. Ulteriori requisiti di questa Direttiva si applicano al processo di produzione e fornitura dell'apparecchiatura o sistema di protezione: questi requisiti non sono oggetto del presente certificato.

This EU-type examination certificate relates only to the design, examination and tests specified equipment in accordance with Directive 2014/34/EU. Further requirements of the Directive shall be applied to the manufacturing process and supply condition: these requirements are not covered by this certificate.

L'apparecchiatura o il sistema di protezione deve riportare i seguenti contrassegni:

The equipment shall be marked with the following symbols:



II 2 GD

Ex d IIC T6 Gb

Ex t IIIC tb T 80°C Db IP66

Valsamoggia (BO)

Date - Date 30/12/2016



Firma autorizzata

Authorized signature

Amanda Payne  
(Deputy Manager)

Questo certificato, incluso l'allegato, può essere riprodotto solo integralmente e senza alcuna variazione.

This certificate, annex included, can only be reproduced in its entirety and without any change.





## Certificate Annex



Certificate No.: ATEX n. ECM 16 ATEX-B 281 X

Equipment: Florescent Light fittings (FLB220, 240 -FLC140, 240)

### 1- Schedule of limitations (Special Condition For Safe Use)

- The Florescent Light fittings are designed for ambient temperature of -30°C to +55°C.
- The equipment is submitted to Resistance to impact tests corresponding to the low risk of mechanical danger according to manufacturer request.

### 2- DESCRIPTION OF EQUIPMENT:

- The Lighting fittings series of FLB and FLC are manufactured of aluminum alloy with sealed high quality borosilicate glass tube as the enclosure of lighting fixture.
- The equipments are suitable for permanent installation
- The explosion protected luminaries consist of one flame proof "d" enclosure containing the source of light, lamp holder, ballast, other electrical apparatus, and the connection terminals.
- The protections/Ratings provided by the enclosure are:
  - Ex d IIC T6 Gb
  - Ex tb IIIC T80°C Db
- The lighting fittings offer robust structure for hazardous explosive areas of zones 1, 2, 21 and 22.
- FLC series can be connected through special bushing (flameproof "d" sealing fittings). to provide 2\*18 or 2\*36 versions.
- The lighting fitting structure provided with high resistance protection against corrosion by epoxy powder coating as standard finish and is applied through electrostatic method.
- All the fasteners and metallic parts of the equipments are provided from stainless steel, brass and galvanized material.
- The enclosure is provided with external and internal earth connections.

### Equipment Electrical characteristics/Types:

Rated Voltage (AC/DC)	230V-250V
Rated Power	18W, 36W, 2*18W, 2*36W
Rated Frequency(AC)	50/60 Hz
Degree of protection	IP 66

- a. FLB220E / FLB220C 2 \* 18
- b. FLB240E / FLB240C 2 \* 36
- c. FLC240E / FLC240C 2 \* 36
- d. FLC140E / FLC140C 1 \* 36

C: Electronic Ballast      E: Electromagnetic Ballast

### Cable entries:

- The 3/4" NPT or M25 flameproof Ex d IIC certified Cable Gland shall be used for Equipment cable entry.
- The flameproof certified bushing shall be used for making 2x18 or 2x36 Watt light fittings versions.

### **Equipment technical details :**

- Terminals L1, N and PE: 2 x 2.5 mm<sup>2</sup> / PE ext. 2 x 6 mm<sup>2</sup>
- Insulation class I
- Lamp cap G 13 for Bi pin lamps according to IEC 60081
- Direct entry: 2 x M20 other thread types on request
- Enclosure material Copper-free aluminum
- Protective cover Borosilicate glass

### **Equipments Dimensions:**

No.	Type	L (mm)	W (mm)	H (mm)
1	FLB 220	736	148	141
2	FLB 240	1330	148	141
3	FLC140	1535	120	102
4	FLC240	1535	277	102

### **3- Descriptive documents**

- Test Report No.: EPIL EXTR 00802-1-0, EPIL EXTR 00802-1-1
- Schedule Drawing No.: FLB0106 – FLC0106
- Technical File No.: EP-S.E.M.C.-15-02

### **4- Routine tests**

- Each enclosure shall be subjected to a static method routine over pressure test, according to EN-60079-1, clause 15.1.3.1 shall be conducted using the values tabulated below:
- 4.5 bar for type FLB 220
- 6.75 bar for type FLB 240
- 6 bar for type FLC 140 and 240
- The pressure of test is 1.5 times the reference pressure of Test report (Report Number: EPIL EXTR 00802-1-1)

### **5- Warning Label for all types:**

“DONOT OPEN WHEN ENERGIZED”

### **6- Essential Health and Safety Requirements**

The Essential Health and Safety Requirements are assessed by compliance to the following Standards:

EN60079-0:2013

EN60079-1:2014

EN60079-31:2014