



## [1] EU-TYPE EXAMINATION CERTIFICATE

### [2] Component intended for use in potentially explosive atmospheres - Directive 2014/34/EU

[3] EU-type Examination Certificate number: **IMQ 18 ATEX 009 U**

[4] COMPONENT: **Electronic ballast**  
TYPE/SERIES: **AB72/1-ED**

[5] MANUFACTURER: **Amvaje Abi Co.**

[6] ADDRESS: **Science and Technology Park, Arian St., Dr. Hesabi St., Shiraz, Iran**

[7] This component and any acceptable variation thereto are specified in the annex to this certificate and the documents therein referred to.

[8] IMQ, notified body N° 0051, 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 component 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 to the Directive.

The examination and test results are recorded in confidential Report No.: **AT17-0020177-01**

[9] Compliance with Essential Health and Safety Requirements, except in respect of those listed at item 18 of the annex, has been assured by compliance with:

**EN 60079-0:2012/A11:2013; EN 60079-1:2014; EN 60079-7:2015**

[10] If the sign "U" is placed after the certificate number indicates that this certificate shall not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified component. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

[12] The marking of the component shall include the following:

**II 2G Ex db eb IIC Gb**

This document is composed of 3 pages including 1 annex

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## [13] Annex

[14] EU-type Examination Certificate number: **IMQ 18 ATEX 009 U**

[15] Component Description:

This product is an electronic ballast for start and operation of fluorescent lamps.

[15.1] Models/Series Identification:

AB72/1-ED

[15.2] Ratings:

198 - 264 Vac  
176 - 254 Vdc  
Current : 0,32 A

[15.3] Safety Ratings:

N/A

[15.4] Ambient temperature and temperature classes:

Service temperature range: -20 ÷ +60°C

[15.5] Degree of protection (IP code):

N/A - Component to be incorporated into an Ex Equipment.

[15.6] Warnings:

N/A

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[16.1] Routine (factory) tests:

The Manufacturer shall carry out the routine test prescribed at clauses 27 of the EN 60079-0.  
The Manufacturer shall carry out the test prescribed at clause 6.3.4.3 of EN 60079-7.  
The Manufacturer shall carry out the overpressure test on each component at 2.1 bar minimum for 10 s, according to EN 60079-1 clause 16.1.

[16.2] Conformity with the documentation:

The manufacturer shall carry out the verifications or tests necessary to ensure that the product complies with the documentation.  
Marking the equipment in accordance with Clause 29 of EN 60079-0, the manufacturer attests on his own responsibility that:

- ▶ the equipment has been constructed in accordance with the applicable requirements of the relevant standards in safety matters;
- ▶ the routine verifications and routine tests in 28.1 of EN 60079-0 have been successfully completed with positive results.

[16.3] Installation conditions:

Above referred component is to be incorporated into an equipment which is foreseen to be installed in locations where there are environmental conditions as clearly specified at clause 1, par. 2 of EN 60079-0.  
Installation and use in atmospheric and environmental conditions that are out of above

## [13] Annex

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mentioned intervals require special considerations and additional measures by the side of installer or user.

These should be specified to the manufacturer by the user;

It is not a requirement of the applicable standards listed in [9] that the certification body confirm suitability for the adverse conditions.

Installation of the final equipment shall be done according to EN 60079-14.

[17] Schedule of limitations

The service temperature shall be between  $-20^{\circ}\text{C}$  and  $+60^{\circ}\text{C}$ .

This electronic ballast have not been tested according 6.3.4.3 of EN 60079-7.

The component shall be subjected to dielectric routine test prescribed at clause 7.1 of the EN 60079-7 standard, the applied voltage shall be at least at  $2U+1000$  Vac with a minimum voltage value of 1500 Vac.

[18] Essential Health and safety Requirements:

This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed in [9].

This Certificate **does not** cover hazards coming from environmental conditions different from those clearly and precisely indicated and covered in clause 1 of EN 60079-0.

ESHR 1.2.7 According Annex VIII of the Directive

ESHR 1.4 Not verified.

ESHR 1.5 Not verified.

ESHR 3 Not applied.

[19] Descriptive documents:

DL-AT17-0020177-01

[20] Certification Validity Conditions:

The use of this Certificate is subject to the Certification Scheme and to the Regulation applicable to holders of IMQ Certificates.

The validity of this certificate is subject to the condition that the manufacturer complies with the results of the document review and of the pertinent requirement if any included, recorded in the relevant copy of documentation as per 19.

One copy of the mentioned documentation is kept in IMQ file.

[22] Variations

1<sup>st</sup> issue.