



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx EPIL 24.0002X	Page 1 of 3	<u>Certificate history:</u>
Status:	Current	Issue No: 0	
Date of Issue:	2024-10-16		
Applicant:	Imen Tajhiz Tabnak Melal Engineering Company (Ltd.) Ground Floor, No. 4826, 4th Alley, Sulehaye Banafsh St., Sahand Industrial State, Islamshahr City, Central District, Islamshahr County, Tehran Province, Iran Tehran Iran, Islamic Republic of		
Equipment:	ESJ/ EAJ Terminal Boxes		
Optional accessory:			
Type of Protection:	Increased safety 'eb', Protection by Enclosure 'tb'		
Marking:	Ex eb IIC T6...T4 Gb Ex tb IIIC T85°C...T135°C Db		

Approved for issue on behalf of the IECEx
Certification Body:

Seyed Mohsen Mirsadri

Position:

CEO and Certification Body Manager

Signature:
(for printed version)

Date:
(for printed version)

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2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

EPIL Testing, Inspection and Certification
Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St.,
Bozorgmehr St., Vali-Asr Ave.,
Tehran 1416854523
Iran, Islamic Republic of





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Certificate No.: **IECEx EPIL 24.0002X**

Page 2 of 3

Date of issue: 2024-10-16

Issue No: 0

Manufacturer: **Imen Takhiz Tabnak Melal Engineering Company (Ltd.)**
Ground Floor, No. 4826, 4th Alley, Sulehaye Banafsh St., Sahand Industrial State, Islamshahr City, Central District,
Islamshahr County, Tehran Province, Iran
Tehran
Iran, Islamic Republic of

Manufacturing
locations: **Imen Takhiz Tabnak Melal
Engineering Company (Ltd.)**
Ground Floor, No. 4826, 4th Alley,
Sulehaye Banafsh St., Sahand
Industrial State, Islamshahr City,
Central District, Islamshahr County,
Tehran Province, Iran
Tehran
Iran, Islamic Republic of

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-31:2022 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

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

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

IR/EPIL/ExTR24.0001/00

Quality Assessment Report:

IR/EPIL/QAR24.0001/00



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Page 3 of 3

Date of issue: 2024-10-16

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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The ESJ/EAJ terminal box series, crafted from stainless steel sheets (ESJ) and Aluminum Alloy (EAJ), ensures optimal functionality in challenging environments where it is situated.

The ESJ/EAJ enclosures are specifically designed for terminal box for Ex e and Ex t protection.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- When terminals are supplied with the enclosure they shall be Ex certified components as specified in the scheduled drawings. All terminals shall be installed in accordance with their Conditions of Safe Use/Schedule of Limitations of Certification and the relevant codes of practice/wiring regulations, specifically to the minimum creepage and clearance requirements and to any limitations to ratings that may be observed due to method of installation.
- All terminals fitted shall be suitable for the lower operating temperature marked on the certification label.
- The manufacturer shall verify all creepage and clearance distance of Table 2 of IEC 60079-7 in a way that they are rigidly controlled when mounted and housed or wired into the Ex Enclosure of each Ex Components.
- The manufacturer shall carry out the necessary thermal verification to ensure that the electrical appliance have been produced considering the power loss and the maximum temperature class limit per each ambient temperature range.
- Cable glands and any blanking elements mounted on the entries of the enclosure shall be certified according to flameproof characteristics of the equipment in sense of type of protection, Gas group, Ambient or service temperature.
- In order to prevent the risk of electrostatic charge, the equipment shall only be cleaned with damp, non-fibrous (cotton) cloth, or sponge.

Annex:

[IECEX EPIL 24.0002X issue No. 0.pdf](#)

Annex to Certificate: IECEx EPIL 24.0002X issue No. 0
 Applicant: Imen Tajhiz Tabnak Melal
 Engineering Company (Ltd.)
 Apparatus: ESJ/ EAJ Terminal Boxes



ESJ series:

Models					
ESJ Series	ESJ1212A	ESJ1812B	ESJ2618A	ESJ3524A	ESJ5029B
	ESJ1212B	ESJ1818A	ESJ2618B	ESJ3524B	ESJ6036A
	ESJ1512A	ESJ1818B	ESJ3020A	ESJ4024A	ESJ6036B
	ESJ1512B	ESJ2218A	ESJ3020B	ESJ4024B	ESJ8050A
	ESJ1812A	ESJ2218B	ESJ3020C	ESJ5029A	ESJ8050B

EAJ series:

Models		
EAJ Series	EAJ1313	EAJ2519
	EAJ1616	EAJ3525
	EAJ1917	EAJ4031

Degree of protection (IP code): IP65, IP66

Routine test:

When supplied with terminals complete of wiring cables, the terminal boxes have been submitted to the dielectric test in accordance with the clause 7.1 of IEC 60079-7 with the following values: 1000 V + 2 U or 1500 V whichever is greater (U= Working Voltage).

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ESJ series Maximum allowed power dissipation table section:

Gas application:

ESJ series	Maximum allowed power dissipation (W)								
	For Gas application								
	T amb: -20°C ≤ Ta ≤ 40°C			T amb: -30°C ≤ Ta ≤ 55°C			T amb: -30°C ≤ Ta ≤ 65°C		
	T6	T5	T4	T6	T5	T4	T6	T5	T4
ESJ1212A	6.12 W	6.92 W	7.23 W	5.13 W	6.11 W	6.68 W	4.12 W	5.14 W	6.23 W
ESJ1212B	7.08 W	7.52 W	7.85 W	6.12 W	6.84 W	7.36 W	4.73 W	5.46 W	6.51 W
ESJ1512A	8.19 W	8.71 W	9.10 W	7.16 W	7.97 W	8.50 W	5.73 W	6.51 W	7.60 W
ESJ1512B	9.29 W	9.89 W	10.36 W	8.20 W	9.10 W	9.64 W	6.72 W	7.57 W	8.68 W
ESJ1812A	10.39 W	11.08 W	11.61 W	9.23 W	10.23 W	10.79 W	7.72 W	8.63 W	9.77 W
ESJ1812B	11.49 W	12.27 W	12.86 W	10.27 W	11.37 W	11.93 W	8.71 W	9.68 W	10.85 W
ESJ1818A	12.34 W	13.28 W	14.26 W	11.13 W	12.48 W	13.25 W	9.64 W	10.34 W	11.46 W
ESJ1818B	13.70 W	14.64 W	15.36 W	12.34 W	13.63 W	14.21 W	10.70 W	11.80 W	13.03 W
ESJ2218A	14.80 W	15.82 W	16.61 W	13.38 W	14.76 W	15.36 W	11.70 W	12.85 W	14.11 W
ESJ2218B	15.91 W	17.01 W	17.86 W	14.42 W	15.89 W	16.50 W	12.69 W	13.19 W	15.20 W
ESJ2618A	16.35 W	17.19 W	18.66 W	14.86 W	16.24 W	17.21 W	12.36 W	14.22 W	15.43 W
ESJ2618B	18.11 W	19.38 W	20.37 W	16.49 W	18.16 W	18.79 W	14.68 W	16.02 W	17.37 W
ESJ3020A	19.22 W	20.56 W	21.62 W	17.53 W	19.29 W	19.93 W	15.68 W	17.08 W	18.46 W
ESJ3020B	20.32 W	21.75 W	22.87 W	18.56 W	20.42 W	21.07 W	16.67 W	18.14 W	19.54 W
ESJ3020C	22.47 W	23.55 W	23.51 W	20.47 W	21.96 W	21.59 W	18.34 W	19.38 W	21.37 W
ESJ3524A	22.53 W	24.12 W	25.37 W	20.64 W	22.68 W	23.36 W	18.66 W	20.25 W	21.72 W
ESJ3524B	23.63 W	25.30 W	26.62 W	21.68 W	23.82 W	24.50 W	19.66 W	21.30 W	22.80 W
ESJ4024A	24.73 W	26.49 W	27.87 W	22.71 W	24.95 W	25.64 W	20.65 W	22.36 W	23.89 W
ESJ4024B	25.84 W	27.68 W	29.13 W	23.75 W	26.08 W	26.79 W	21.65 W	23.42 W	24.97 W
ESJ5029A	26.94 W	28.86 W	30.38 W	24.79 W	27.21 W	27.93 W	22.64 W	24.47 W	26.06 W
ESJ5029B	28.14 W	29.38 W	30.39 W	26.34 W	27.81 W	28.64 W	24.68 W	25.13 W	25.69 W
ESJ6036A	29.15 W	31.23 W	32.88 W	26.76 W	29.47 W	30.22 W	24.63 W	26.59 W	28.23 W
ESJ6036B	30.25 W	32.42 W	34.13 W	27.90 W	30.61 W	31.36 W	25.63 W	27.64 W	29.32 W
ESJ8050A	31.35 W	33.60 W	35.38 W	28.93 W	31.74 W	32.50 W	26.62 W	28.70 W	30.40 W
ESJ8050B	32.12 W	35.46 W	38.19 W	29.34 W	33.42 W	34.52 W	26.94 W	30.41 W	32.76 W

Annex to Certificate: IECEx EPIL 24.0002X issue No. 0
 Applicant: Imen Tajhiz Tabnak Melal
 Apparatus: ESJ/ EAJ Terminal Boxes
 Engineering Company (Ltd.)



Dust application:

ESJ series	Maximum allowed power dissipation (W) For Dust application								
	T amb: -20°C ≤ Ta ≤ 40°C			T amb: -30°C ≤ Ta ≤ 55°C			T amb: -30°C ≤ Ta ≤ 65°C		
	T85°C	T100°C	T135°C	T85°C	T100°C	T135°C	T85°C	T100°C	T135°C
ESJ1212A	10.43 W	11.81 W	12.37 W	8.75 W	10.43 W	11.45 W	7.12 W	8.94 W	10.94 W
ESJ1212B	11.99 W	13.07 W	13.98 W	10.65 W	11.70 W	12.76 W	8.60 W	10.00 W	11.65 W
ESJ1512A	13.90 W	15.12 W	16.12 W	12.42 W	13.68 W	14.73 W	10.30 W	11.80 W	13.54 W
ESJ1512B	15.82 W	17.18 W	18.26 W	14.19 W	15.65 W	16.70 W	12.01 W	13.59 W	15.44 W
ESJ1812A	17.74 W	19.23 W	20.39 W	15.96 W	17.62 W	18.67 W	13.72 W	15.38 W	17.34 W
ESJ1812B	19.66 W	21.28 W	22.53 W	17.73 W	19.60 W	20.64 W	15.42 W	17.17 W	19.24 W
ESJ1818A	21.12 W	23.61 W	25.67 W	19.34 W	21.45 W	22.96 W	16.94 W	18.62 W	20.14 W
ESJ1818B	23.50 W	25.39 W	26.80 W	21.26 W	23.54 W	24.59 W	18.84 W	20.57 W	23.03 W
ESJ2218A	25.41 W	27.44 W	28.94 W	23.03 W	25.52 W	26.56 W	20.54 W	22.54 W	24.93 W
ESJ2218B	27.33 W	29.50 W	31.08 W	24.80 W	27.49 W	28.53 W	22.25 W	24.34 W	26.83 W
ESJ2618A	28.14 W	29.12 W	32.49 W	25.93 W	28.12 W	30.25 W	22.31 W	25.54 W	27.63 W
ESJ2618B	31.17 W	33.60 W	35.35 W	28.33 W	31.44 W	32.47 W	25.60 W	27.92 W	30.62 W
ESJ3020A	33.09 W	35.66 W	37.49 W	30.10 W	33.41 W	34.44 W	27.37 W	29.71 W	32.52 W
ESJ3020B	35.01 W	37.71 W	39.63 W	31.87 W	35.39 W	36.41 W	29.08 W	31.50 W	34.52 W
ESJ3020C	38.42 W	41.27 W	40.65 W	34.81 W	38.14 W	36.89 W	32.14 W	33.47 W	37.74 W
ESJ3524A	39.84 W	41.82 W	43.90 W	35.40 W	39.33 W	40.35 W	32.49 W	35.08 W	38.21 W
ESJ3524B	40.76 W	43.87 W	46.04 W	37.17 W	41.31 W	42.32 W	34.19 W	36.88 W	40.11 W
ESJ4024A	42.68 W	45.92 W	48.17 W	38.94 W	43.28 W	44.29 W	35.90 W	38.67 W	42.01 W
ESJ4024B	44.60 W	47.98 W	50.31 W	40.71 W	45.25 W	46.26 W	37.61 W	40.46 W	43.90 W
ESJ5029A	46.53 W	50.03 W	52.45 W	42.47 W	47.23 W	48.23 W	39.31 W	42.25 W	45.80 W
ESJ5029B	48.56 W	50.93 W	52.33 W	45.13 W	48.39 W	49.37 W	42.96 W	42.91 W	45.37 W
ESJ6036A	50.36 W	54.14 W	56.72 W	46.01 W	51.17 W	52.17 W	42.73 W	45.83 W	49.60 W
ESJ6036B	52.27 W	56.19 W	58.86 W	47.78 W	53.15 W	54.14 W	44.43 W	47.62 W	51.50 W
ESJ8050A	54.19 W	58.24 W	61.00 W	49.55 W	55.12 W	56.11 W	46.14 W	49.40 W	53.39 W
ESJ8050B	55.73 W	61.34 W	65.73 W	50.21 W	57.92 W	59.67 W	46.19 W	52.39 W	57.12 W

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 Apparatus: ESJ/ EAJ Terminal Boxes



EAJ series Maximum allowed power dissipation table section:

Gas application:

EAJ Series	Maximum allowed power dissipation (W) For Gas application								
	T amb: -20°C ≤ Ta ≤ 40°C			T amb: -30°C ≤ Ta ≤ 55°C			T amb: -30°C ≤ Ta ≤ 65°C		
	T6	T5	T4	T6	T5	T4	T6	T5	T4
EAJ1313	6.25 W	7.11 W	8.11 W	5.47 W	6.13 W	6.75 W	5.11 W	6.25 W	7.13 W
EAJ1616	8.56 W	9.47 W	10.50 W	7.26 W	8.06 W	8.69 W	6.78 W	7.83 W	8.69 W
EAJ1917	11.24 W	12.16 W	13.12 W	9.16 W	10.19 W	10.58 W	8.45 W	9.20 W	10.43 W
EAJ2519	12.91 W	13.94 W	15.81 W	11.35 W	12.21 W	13.24 W	10.56 W	11.96 W	12.36 W
EAJ3525	16.26 W	17.18 W	20.22 W	14.53 W	15.52 W	16.18 W	13.01 W	14.42 W	15.75 W
EAJ4031	19.26 W	20.12 W	24.43 W	17.62 W	18.65 W	19.20 W	15.49 W	17.11 W	18.98 W

Dust application:

EAJ Series	Maximum allowed power dissipation (W) For Dust application								
	T amb: -20°C ≤ Ta ≤ 40°C			T amb: -30°C ≤ Ta ≤ 55°C			T amb: -30°C ≤ Ta ≤ 65°C		
	T85°C	T100°C	T135°C	T85°C	T100°C	T135°C	T85°C	T100°C	T135°C
EAJ1313	10.11 W	11.41 W	13.02 W	8.80 W	9.88 W	10.73 W	8.25 W	10.08 W	11.55 W
EAJ1616	13.75 W	15.20 W	16.91 W	11.64 W	12.95 W	13.99 W	10.97 W	12.62 W	14.02 W
EAJ1917	17.93 W	19.42 W	21.12 W	14.73 W	16.34 W	17.12 W	13.72 W	14.83 W	16.72 W
EAJ2519	20.73 W	22.59 W	25.73 W	18.12 W	19.64 W	21.55 W	17.03 W	19.16 W	19.88 W
EAJ3525	26.09 W	27.85 W	33.09 W	23.64 W	25.13 W	26.24 W	21.01 W	23.12 W	25.10 W
EAJ4031	30.93 W	32.70 W	40.14 W	28.93 W	30.33 W	31.07 W	24.97 W	27.42 W	30.12 W