



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: IECEx IMQ 17.0015X

Issue No: 1

Certificate history:

Issue No. 1 (2018-02-09)

Issue No. 0 (2017-10-27)

Status: **Current**

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Date of Issue: **2018-02-09**

Applicant: **Teleindustria S.r.l.**  
Via Palermo , 12 - I-20090 Assago (MI)  
**Italy**

Equipment: **Explosion proof analogue telephone**  
*Optional accessory:* *Series:TEL501*

Type of Protection: **Ex eb; Ex ib; Ex mb**

Marking:  
Ex eb ib mb I Mb

*Approved for issue on behalf of the IECEx  
Certification Body:*

Mr. Mauro CASARI

*Position:*

IMQ ExCB Manager

*Signature:  
(for printed version)*

*Date:*

1. This certificate and schedule may only be reproduced in full.
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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

**Istituto Italiano del Marchio di Qualità S.p.A**  
Via Quintiliano 43  
20138 Milano  
Italy





# IECEX Certificate of Conformity

Certificate No: IECEX IMQ 17.0015X Issue No: 1  
Date of Issue: 2018-02-09 Page 2 of 4  
Manufacturer: **Teleindustria S.r.l.**  
Via Palermo , 12 - I-20090 Assago (MI)  
**Italy**

Additional Manufacturing location(s):

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 electrical apparatus 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:

<b>IEC 60079-0 : 2011</b> Edition:6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-11 : 2011</b> Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
<b>IEC 60079-18 : 2014</b> Edition:4.0	Explosive atmospheres – Part 18: Equipment protection by encapsulation "m"
<b>IEC 60079-7 : 2015</b> Edition:5.0	Explosive atmospheres – Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical 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:

[IT/IMQ/ExTR17.0018/01](#)

Quality Assessment Report:

[IT/IMQ/QAR17.0001/00](#)



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

TEL501 are Explosion Proof analogue telephones designed for use in potentially explosive atmosphere zone M2 (EPL Mb), for mining applications.

The main body of device is composed by an stainless steel welded enclosure, protected by increased safety "e" method.

Inside the enclosure are located the circuit boards protected by means of intrinsic safety "i" and encapsulation "m" methods.

The external connections are made via Ex e approved terminal blocks, that protruding from the encapsulated main circuit board.

Rated ambient temperature:  $-20\text{ }^{\circ}\text{C} \leq T_a \leq 40\text{ }^{\circ}\text{C}$

More details in Annex.

### SPECIFIC CONDITIONS OF USE: YES as shown below:

- Only vertical suspended installation position is permitted
- The equipment shall be protected to mineral oils and synthetic hydraulic fluid contamination, due to spray, jets or other kind of contact with these substances "SEE INSTRUCTIONS".



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**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):**

Issue 1: editorial corrections on IT/IMQ/ExTR17.0018

**Annex:**

[IECEX IMQ 17.0015X issue No. 1 Annex.pdf](#)

**Annex to:** IECEx IMQ 17.0015X issue No. 1  
**Applicant:** TELEINDUSTRIA S.r.l.  
**Apparatus:** Explosion proof analogue telephone  
**Series:** TEL501



## General description

TEL501 are Explosion Proof analogue telephones designed for use in potentially explosive atmosphere zone M2 (EPL Mb), for mining applications.

The main body of device is composed by an stainless steel welded enclosure, protected by increased safety “e” method.

Inside the enclosure are located the circuit boards protected by means of intrinsic safety “i” and encapsulation “m” methods.

The external connections are made via Ex e approved terminal blocks, that protruding from the encapsulated main circuit board.

## Temperature class and ambient temperature

The Explosion Proof Analogue Telephone type TEL501 have temperature class compliant with group I equipment requirements with ambient temperature range of  $-20\text{ °C} \leq T_a \leq 40\text{ °C}$ .

## Design options

### Key code

[a] ■■■	[b] ■■■	-	[c] ■■
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[a]	Equipment type	TEL	: Telephone
[b]	Series	501	: Analogue telephone
[c]	Keyboard layout:	T -	: Complete keyboards (maximum number of keys)
		M”n”	: Keyboard reduced to “n” numbers of keys

Number of digits ( ■ )

IP code: IP66

### Safety ratings

Um = 160 Vrms (60 Vdc + 100 Vac 20 ÷ 60 Hz, superimposed)

Maximum power input is defined as 1,2W

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**Applicant:** TELEINDUSTRIA S.r.l.  
**Apparatus:** Explosion proof analogue telephone  
**Series:** TEL501



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## Markings

Ex eb ib mb I Mb

## Conditions of use

- Only vertical suspended installation position is permitted
- The equipment shall be protected to mineral oils and synthetic hydraulic fluid contamination, due to spray, jets or other kind of contact with these substances "SEE INSTRUCTIONS".

## Installation conditions

- Above referred equipment is foreseen to be installed in locations where there are environmental conditions, as clearly specified at clause 1, par. 2 of IEC 60079-0.  
Installation and use in atmospheric and environmental conditions that are out of above mentioned intervals request 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 required by applicable standards that the certification body confirm suitability for the adverse conditions.
- TEL501 Explosion Proof Analogue shall be installed according to IEC 60079-14 or EN 50628 standards and other relevant applicable standards regards electrical installation requirements.
- Metal parts shall be grounded.

## Warnings

- "WARNING – DO NOT OPEN WHEN ENERGIZED"
- "WARNING – AFTER DE-ENERGIZING, DELAY 5 MINUTES BEFORE OPENING"

## Manufacturer's documentation

Installation Manual Explosion-proof Telephone series "501" code: TEL501-17-IM-001-0-EN, rev. 24.07.2017