



# 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 BKI 15.0003 Issue No: 0 Certificate history:  
Issue No. 0 (2015-03-23)

Status: Current Page 1 of 4

Date of Issue: 2015-03-23

Applicant: **TECHNOR ITALSMEA SPA**  
Via Italia, 33,  
20060 Gessate (MI)  
**Italy**

Electrical Apparatus: **Control stations and junction boxes GUB... series**  
*Optional accessory:* GUB..., GUB-QL ..., GUB-.. / EMH- ..

Type of Protection: **General requirements, Flameproof enclosures "d", Intrinsic safety "I", Dust ignition protection by enclosure "t"**

Marking: **Ex db IIC T6 or T5 or T4 Gb or Ex db [Ia Ga] IIC T6 Gb or Ex db [Ib] IIC T6 Gb and**  
  
**Ex tb IIIC T85°C or T100°C or T135°C Db IP66 or Ex tb [Ia Da] IIIC T85°C Db IP66 or Ex tb [Ib] IIIC T85°C Db IP66**

T<sub>amb</sub>: **-60°C to +60°C** or See details in point 5 of addendum to IECEx BKI 15.0003

Approved for issue on behalf of the IECEx  
Certification Body:

János Müllner

Position:

managing director

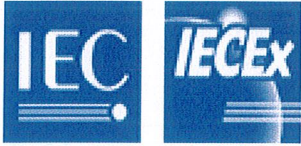
Signature:  
(for printed version)

Date:

2015-03-23

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:



# IECEx Certificate of Conformity

Certificate No: IECEx BKI 15.0003

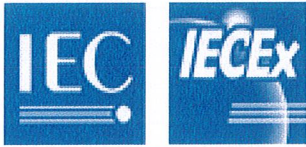
Issue No: 0

Date of Issue: 2015-03-23

Page 2 of 4

Testing Station for Explosion Proof Equipment  
H 1037 BUDAPEST  
MIKOVINY S.u. 2-4  
Hungary





# IECEX Certificate of Conformity

Certificate No: IECEX BKI 15.0003 Issue No: 0

Date of Issue: 2015-03-23 Page 3 of 4

Manufacturer: **TECHNOR ITALSMEA SPA**  
Via Italia, 33,  
20060 Gessate (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 60079-1 : 2014-06</b> Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-11 : 2011</b> Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
<b>IEC 60079-31 : 2013</b> Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*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*

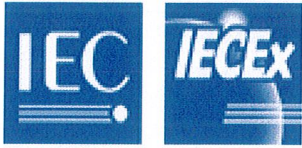
Test Report:

[HU/BKI/ExTR15.0003/00](#)

Quality Assessment Report:

[FR/INE/QAR08.0002/05](#)





# IECEX Certificate of Conformity

Certificate No: IECEX BKI 15.0003

Issue No: 0

Date of Issue: 2015-03-23

Page 4 of 4

## Schedule

### EQUIPMENT:

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

Control stations, junction boxes and instrument housings GUB... series are constituted by enclosures with Ex db IIC mode of protection, complete of accessories (push buttons, selector switches, potentiometers, signal lamps, rotary handles, fuse, etc.) and containing electric and/or electronic equipment and terminals.

See details in addendum to IECEX Certificate of Conformity IECEX BKI 15.0003.

### CONDITIONS OF CERTIFICATION: NO

### Annex:

[Addendum to IECEX Certificate of Conformity IECEX BKI 15.0003.pdf](#)

**1. Description**

Control stations, junction boxes and instrument housings GUB... series are constituted by enclosures with Ex db IIC mode of protection, complete of accessories (push buttons, selector switches, potentiometers, signal lamps, rotary handles, fuse, etc.) and containing electric and/or electronic equipment and terminals.

Lids of the GUB... series may be equipped with an inspection window made of tempered glass and cemented with adhesive/sealant.

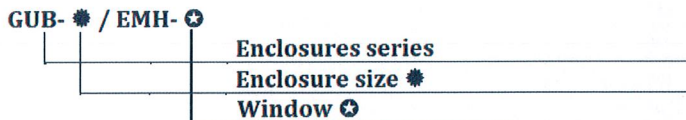
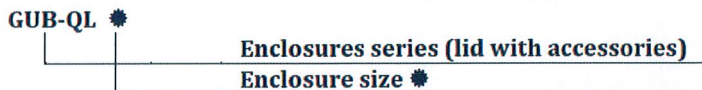
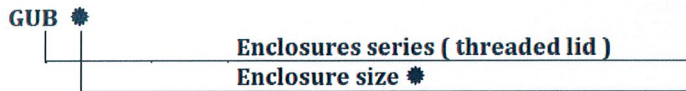
Boxes are made of aluminum, carbon steel, OT58 brass or stainless steel (AISI 304; AISI 316; AISI 316L) with low content of copper and completed with threaded hubs suitable for cable glands or conduit.

The following devices can be mounted on the enclosures:

- breathing and draining device type ECR-1/ ECR-2 (see drawing AC1405-SH09)
- push buttons PL .. series (see drawing AC1405-SH10)
- pilot light type PLD (see drawing AC1405-SH11)
- rotary actuator type PSR-C (see drawing AC1405-SH12)
- rotary actuator type SRC-1 (see drawing AC1405-SH13)
- rotary actuator type SRC-10 (see drawing AC1405-SH14)
- reset device type PLC-R (see drawing AC1405-SH15)

**2. Type assortment**

**2.1. Identification marks**



⊕ ( 70; 140; 160; 175; 200; 230 )

\* ( 0 ; 01 ; 02 ; 03 ; 04 ; 05 ; 06 )

**3. Electrical data**

Max. DC voltage:	1000 V
Max. AC voltage:	20 kV
Nominal frequency:	According to the installed apparatus prescriptions
Maximum current terminal:	According to the installed apparatus prescriptions
Maximum peak current:	According to the installed apparatus prescriptions
Maximum number of terminals:	According to the dissipation tables
Nominal incandescent lamp power:	≤ 5 W

**4. Mechanical data**

Threading details and drilling limits of cable entries and blanking elements must comply with the manufacturer's documentation. See: AC1405 sheet 06.

**5. Ambient temperature range and maximum dissipated powers**

-60°C to +40°C

AMBIENT TEMPERATURE UP TO 40°C			
Enclosure type	Maximum dissipated powers (W)		
	T6	T5	T4
GUB0	59	82	134
GUB01 ; GUB-QL 01	85	117	191
GUB02 ; GUB-QL 02	101	139	228
GUB03 ; GUB-QL 03	126	174	285
GUB04 ; GUB-QL 04	186	256	419
GUB05 ; GUB-QL 05	221	304	498
GUB06 ; GUB-QL 06	304	418	685
EMH160	99	136	223
EMH175	154	213	348
EMH200	182	251	411
EMH230	252	346	567

-60°C to +50°C

AMBIENT TEMPERATURE UP TO 50°C			
Enclosure type	Maximum dissipated powers (W)		
	T6	T5	T4
GUB0	44	67	119
GUB01 ; GUB-QL 01	63	95	170
GUB02 ; GUB-QL 02	76	114	202
GUB03 ; GUB-QL 03	95	142	253
GUB04 ; GUB-QL 04	139	209	373
GUB05 ; GUB-QL 05	166	249	443
GUB06 ; GUB-QL 06	228	342	609
EMH160	74	111	198
EMH175	116	174	309
EMH200	137	205	365
EMH230	189	283	504

-60°C to +55°C

AMBIENT TEMPERATURE UP TO 55°C			
Enclosure type	Maximum dissipated powers (W)		
	T6	T5	T4
GUB0	37	59	111
GUB01 ; GUB-QL 01	53	85	159
GUB02 ; GUB-QL 02	63	101	190
GUB03 ; GUB-QL 03	79	126	237
GUB04 ; GUB-QL 04	116	186	349
GUB05 ; GUB-QL 05	138	221	415
GUB06 ; GUB-QL 06	190	304	570
EMH160	62	99	186
EMH175	96	154	290
EMH200	114	182	342
EMH230	157	252	473



-60°C to +60°C

AMBIENT TEMPERATURE UP TO 60°C			
Enclosure type	Maximum dissipated powers (W)		
	T6	T5	T4
<b>GUB0</b>	29	52	104
<b>GUB01 ; GUB-QL 01</b>	42	74	149
<b>GUB02 ; GUB-QL 02</b>	50	88	177
<b>GUB03 ; GUB-QL 03</b>	63	111	222
<b>GUB04 ; GUB-QL 04</b>	93	163	326
<b>GUB05 ; GUB-QL 05</b>	110	193	387
<b>GUB06 ; GUB-QL 06</b>	152	266	532
<b>EMH160</b>	49	86	173
<b>EMH175</b>	77	135	271
<b>EMH200</b>	91	159	319
<b>EMH230</b>	126	220	441

**6. Ingress protection**

IP66

**7. Warning**

- WARNING! Do not open when energized.

**8. Routine examinations and tests**

**8.1 Control stations, junction boxes and instrument housings GUB... series intended for use in ambient temperature range -20°C...+60°C**

According to chapter 16.6 of standard IEC 60079-1, the enclosure type GUB... series must be subjected to batch testing in view of the fact that it passed the 3 times reference pressure type test according to the chapter 15.2.3.2.

The pressure values for the bath test are the followings:

	Reference pressure value	Batch test pressure value (1,5 times the reference pressure)
GUB...	8,2 bar	12,3 bar
GUB-QL ...	8,4 bar	12,6 bar
GUB-.. / EMH- ..	8,16 bar	12,24 bar

**8.2 Control stations, junction boxes and instrument housings GUB... series intended for use in lower ambient temperature range than -20°C**

In accordance with the clause 16.1 of standard IEC 60079-1, each sample of the equipment must be subjected successfully an overpressure test (1,5 times reference pressure ) between 10 and 60 seconds under 15 bar.

**7. Manufacturer's Documents**

Title:	Drawing No.:	Rev. Level:	Date:
Technical note	TN 1405	0	2015.03.06
Instructions notice	TN 1405 Annex A	0	2015.01.28
Typical assembling of transparent part, made by tempered glass, on cover of GUB-./EMH-. enclosures	AC1405-SH01	0	2015.03.06
Enclosures GUB QL	AC1405-SH02	0	2015.03.06
Enclosures GUB series	AC1405-SH03	0	2015.03.06
Machined cover enclosure GUB-06	AC1405-SH04	0	2015.01.29
GUB enclosures drilling limits	AC1405-SH06	0	2015.01.29
GUB enclosures - label space	AC1405-SH07	0	2015.01.29
Breathing / Draining device type ECR-1 / ECR-2	AC1405-SH09	0	2015.01.29
Push buttons PL.. series	AC1405-SH10	0	2015.01.29
Pilot light type PLD	AC1405-SH11	0	2015.01.29
Rotary actuator type PSR-C	AC1405-SH12	0	2015.01.29
Rotary actuator type SRC-1	AC1405-SH13	0	2015.01.29
Rotary actuator type SRC-10	AC1405-SH14	0	2015.01.29
Reset device type PLC-R	AC1405-SH15	0	2015.01.29
Grounding / bounding terminals - Details	AC1405-SH16	0	2015.01.29
Dataplate Marking	AC1405-SH17	0	2015.01.29
Aluminium alloy	EN AC 46100	0	2010.11.23
Data sheet of Sealant	-	2.7	2013.05.17