

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

Certificate No.:	IECEx LCIE 13.0072X	issue No.:0	Certificate history:	
Status:	Current			
Date of Issue:	2014-08-28	Page 1 of 3		
Applicant:	TTK 4 rue du Chemin Vert 92110 CLICHY France			
Electrical Apparatus: Optional accessory:	Sensing cable FG-OD			
Type of Protection:	Ex ia			
Marking:	Uo: 10V, Io: 200mA, Po	Type : FG-OD Serial number: Year of construction : Ex ia IIB T4 Ga IECEx LCIE 13.0072 X Ui: 10V, Ii: 200mA, Pi: 500mW, Ci: 0.2 μ F. Cable parameter: 29 μ H/ Ω Uo: 10V, Io: 200mA, Po: 500mW, Co: 19.8 μ F, Lo/Ro: 29 μ H/ Ω The apparatus is a small equipment, following reduced marking can be used: TTK Type : FG-OD		
Approved for issue on behalf of the IECEx Certification Body:		Michel EQUI		
Position:		Certification Officer		
Signature: (for printed version)		Equi 2014/08/2		
Date:		2014/08/2	8	
2. This certificate is not t	chedule may only be reproduc transferable and remains the nticity of this certificate may b		ECEx Website.	

Certificate issued by:

Laboratoire Central des Industries Electriques (LCIE) 33 Avenue du General Leclerc FR-92260 Fontenay-aux-Roses France

Documents relative to LCIE certification activites (Certificates, QARs, ExTRs) can be registered under the references "LCI" or "LCIE".





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Manufacturer:

TTK

4 rue du chemin vert 92110 CLICHY

France

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:

IEC 60079-0: 2011

Explosive atmospheres - Part 0: General requirements

Edition: 6.0

IEC 60079-11 : 2011

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition: 6.0

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:

FR/LCIE/ExTR13.0069/00

Quality Assessment Report:

FR/LCIE/QAR14.0009/00



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The apparatus is a cable detection system for fluid, type hydrocarbon, leakage detection. Any significant leak will be detected and located by the system after coming into contact with a sensor FG-OD. Cable connector is equipped with a microprocessor board which detect leakage by measuring cable resistor variation and send a warning to an external supervision system.

Electrical Parameters:

Ui: 10V, Ii: 200mA, Pi: 500mW, Ci: 0.2μF. Cable parameter: 29μΗ/Ω Uo: 10V, Io: 200mA, Po: 500mW, Co: 19.8μF, Lo/Ro: 29μH/ Ω

CONDITIONS OF CERTIFICATION: YES as shown below:

-30°C ≤ Tamb ≤ +100°C The apparatus shall only be connected to intrinsically safe certified equipment. This combination must be compatible as regard intrinsic safety rules.