

1. **EC-TYPE EXAMINATION CERTIFICATE**
2. **Equipment or Protective System Intended for use in
Potentially explosive atmospheres
Directive 94/9/EC**
3. Reference: **VTT 06 ATEX 062**
4. Equipment: **Gas detector assembly**
Certified type: **DGTkex**
5. Manufactured by: **Detector Oy**
6. Address: **Telekatu 8
FI-20360 Turku
Finland**
7. This equipment or protective system and any acceptable variations thereto is specified in the schedule and possible supplement(s) to this Certificate and the documents therein referred to.
8. VTT, notified body number 0537, in accordance with Article 9 of the Council Directive 94/9/EC of March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective system 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. VTT-S-07540-06.
9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0 (2004)
EN 60079-1(2004)



10. If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
11. This EC-Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
12. The marking of the equipment or protective system shall include the following:

**II 2 G****Ex d IIB T6**

Espoo, 1.9.2006

VTT Technical Research Centre of Finland

Pertti Kokkonen
Research engineerRisto Sulonen
Senior Research scientist

13. **Schedule**14. **EC-TYPE EXAMINATION CERTIFICATE VTT 06 ATEX 062**

15. Description of Equipment

Rated values

Power	3,5 W
Voltage	24V DC
Current	120 mA (max)

Construction

Assembly consists of a transmitter and an Exd-certified gas detector assembled in Exd-enclosure with Exd-cable glands.

Ex-Components

Enclosure	XD-lwin, EEx d IIC, FTZU 03 ATEX 0207U
Detector head	CiTiPeL CDH300, EEx d IIC T6, SIRA 01 ATEX 1204X
Cable entries:	CMDEL, EEx d IIC, LCIE 97 ATEX 6008X or equivalent Exd-certified types
Stopping plug	CCM, EEx d IIC, LCIE 98 ATEX 0001U or equivalent Exd-certified types

Degree of protection: IP 66

Drawings and documents:

General construction with part list: DGTkex koontiohje 2092 3221 Rev. 1.0 (dated 30.8.2006)

Measures of the PCB for the transmitter: DGTK-EX 30006008A Jyrsintäohje (dated 31.8.2006)

16. Report No. VTT-S-07540-06

17. Special conditions for safe use

None

18. Essential Health and Safety Requirements

Met by the compliance with the standards:

EN 60079-0 (2004)

EN 60079-1 (2004)

Espoo, 1.9.2006

VTT Technical Research Centre of Finland



Pertti Kokkonen
Research engineer



Risto Sulonen
Senior Research scientist

**SUPPLEMENT 1 TO EC-TYPE EXAMINATION CERTIFICATE
VTT 06 ATEX 062**

Requested by: **Detector Oy, FINLAND**

Apparatus: **Gas detector assembly,**

Certified type: **DGTkex**

The apparatus fulfils the requirements for Group IIC with the construction defined in the following documents:

General construction with part list: DGTkex koontiohje 2092 3221
Rev. 1.1 (dated 29.3.2007)

Measures of the PCB for the transmitter: DGTK-EX 30006008B
Jyrsintäohje (dated 08.01.2007)

The marking of the equipment shall include the following:



II 2 G

Ex d IIC T6

Espoo, 2.4.2007

VTT



Martti Siirola
Research scientist



Risto Sulonen
Senior research scientist

Certificate or supplement without signatures shall not be valid.

This certificate, including the schedule and supplements, may only be reproduced in its entirety and without any change.

**SUPPLEMENT 2 TO EC-TYPE EXAMINATION CERTIFICATE
VTT 06 ATEX 062**

Requested by: **Detector Oy, FINLAND**

Apparatus: **Gas detector assembly,**

Certified type: **DGTkex**

The allowed ambient temperature range can be extended to – 40 °C...+80 °C when using the following sensor head and adapter:

Sensor head: Type NET..., made by N.E.T. s.r.l (Nano Environmental Technology), Certificate CESI 01 ATEX 066 U

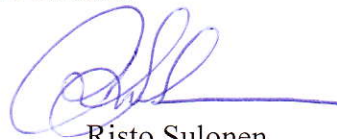
Adapter: Type REB, made by EL.FIT S.p.A., Certificate CESI 02 ATEX 049

Espoo, 28.8.2009

VTT, Technical Research Centre of Finland



Martti Siirola
Research scientist



Risto Sulonen
Senior research scientist