

# EC-TYPE EXAMINATION CERTIFICATE



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[2]

**Equipment or Protective System intended for use  
in Potentially Explosive Atmospheres  
Directive 94/9/EC**

[3]

EC-Type Examination Certificate Number: **DEMKO 06 ATEX 137480X Rev. 2**

[4]

Equipment or Protective System: **Leak Detection Systems for Flammable Liquid Storage Tanks and Piping**

[5]

Manufacturer: **Veeder Root Company**

[6]

Address: **2709 Route 674, Duncansville, PA 16635 USA**

[7]

This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

[8]

UL International Demko A/S, notified body number 0539 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment and protective systems 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. **12NK09120-06ATEX137480X**

[9]

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0:2009  
EN 60079-26:2007**

**EN 60079-11:2007  
EN 60079-25:2010**

[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 the certificate.

[12]

The marking of the equipment or protective system shall include the following:

II (1) G [Ex ia] IIA

II 1 G Ex ia IIA T4

## Certification Manager

Jan-Erik Storgaard

**Date of issue:** 2006-03-05

**Re-issued:** 2012-09-10

## Notified Body

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[13]

[14]

**Schedule**  
**EC-TYPE EXAMINATION CERTIFICATE No.**  
**DEMKO 06 ATEX 137480X** Rev. 2  
**Report: 12NK09120-06ATEX137480X**

[15]

Description of Equipment or protective system

The Leak Detection System consists of a TLS-450/8600, TLS-350, TLS-300, TLS-50, TLS-2, TLS-IB, 8601, or TLS-XB Console with a TLS-RF Console, probes, sensors and/or simple apparatus. The TLS-RF System consists of a TLS-Battery, TLS-Transmitter and a probe. The systems are intended to provide monitoring of flammable liquid storage tanks and piping for leakage and inventory control. The simple apparatus used with this system are not identified by this certificate. Each Associated Apparatus and Intrinsically Safe Apparatus intended for use within this Intrinsic Safety System are described in their respective EC-Type Examination Certificates.

Types comprised by the certificate:

The TLS-450 Leak Detection System consists of:

Tank Monitoring Console, Model TLS-450/8600 or TLS-450R, Series 8600

**[Ex ia] IIA**

Supply: 120/240 V, 50/60 Hz

EC-Type Examination Certificate No. DEMKO 07 ATEX 16184X

Tank Monitoring Console, Model TLS-RF, Series 332242

**[Ex ia] IIA**

Supply: 120/240 V, 50/60 Hz

EC-Type Examination Certificate No. DEMKO 06 ATEX 137478X

Mag Plus Probe, Series 8462 or 8463 or 8473 or 8563 or Mag Sump Sensor, Series 8570

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 06 ATEX 0508841X

Mag Plus 1 Series

**Ex ia IIA T4**

EC-Type Examination Certificate No. TUV 12 ATEX 105828

PLLD Line Leak, Series 8484

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 06 ATEX 137486X

DPLLD Line Leak, Series 8590

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 07 ATEX 141031X

Vacuum Sensor, Model 332175-XXX

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 07 ATEX 29144X

The TLS-350 Leak Detection System consists of:

Tank Monitoring Console, Model TLS-350, Series 8470 or TLS-350R, Series 8482

**[Ex ia] IIA**

Supply: 120/240 V, 50/60 Hz

EC-Type Examination Certificate No. DEMKO 06 ATEX 137481X

Tank Monitoring Console, Model TLS-RF, Series 332242

**[Ex ia] IIA**

Supply: 120/240 V, 50/60 Hz

EC-Type Examination Certificate No. DEMKO 06 ATEX 137478X

Mag Plus Probe, Series 8462 or 8463 or 8473 or 8563 or Mag Sump Sensor, Series 8570

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 06 ATEX 0508841X

Mag Plus 1 Series

**Ex ia IIA T4**

EC-Type Examination Certificate No. TUV 12 ATEX 105828

PLLD Line Leak, Series 8484

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 06 ATEX 137486X

DPLLD Line Leak, Series 332681

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 07 ATEX 141031X

Vacuum Sensor, Model 332175-XXX

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 07 ATEX 29144X



[13]

[14]

**Schedule**  
**EC-TYPE EXAMINATION CERTIFICATE No.**  
**DEMKO 06 ATEX 137480X** Rev. 2  
**Report: 12NK09120-06ATEX137480X**

The TLS-300 Leak Detection System consists of:

Tank Monitoring Console, Models TLS-300, Series 8485

**[Ex ia] IIA**

Supply: 120/240 V, 50/60 Hz

EC-Type Examination Certificate No. DEMKO 06 ATEX 137484X

Tank Monitoring Console, Model TLS-RF, Series 332242

**[Ex ia] IIA**

Supply: 120/240 V, 50/60 Hz

EC-Type Examination Certificate No. DEMKO 06 ATEX 137478X

Mag Plus Probe, Series 8462 or 8463 or 8473 or 8563 or Mag Sump Sensor, Series 8570

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 06 ATEX 0508841X

Mag Plus 1 Series

**Ex ia IIA T4**

EC-Type Examination Certificate No. TUV 12 ATEX 105828

The TLS-50 Leak Detection System consists of:

Tank Monitoring Console, Models TLS-50, Series 8469 or TLS2, Series 8560 or TLS-IB, Series 8466

**[Ex ia] IIA**

Supply: 120/240 V, 50/60 Hz

EC-Type Examination Certificate No. DEMKO 06 ATEX 137485X

Tank Monitoring Console, Model TLS-RF, Series 332242

**[Ex ia] IIA**

Supply: 120/240 V, 50/60 Hz

EC-Type Examination Certificate No. DEMKO 06 ATEX 137478X

Mag Plus Probe, Series 8462 or 8463 or 8473 or 8563 or Mag Sump Sensor, Series 8570

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 06 ATEX 0508841X

Mag Plus 1 Series

**Ex ia IIA T4**

EC-Type Examination Certificate No. TUV 12 ATEX 105828

The TLS-RF System consists of:

TLS Radio Transmitter, Series 332235-XXX, or Battery Pack, Series 332425-XXX

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 06 ATEX 137478X

Mag Plus Probe, Series 8462 or 8463 or 8563 or Mag Sump Sensor, Series 8570

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 06 ATEX 0508841X

Mag Plus 1 Series

**Ex ia IIA T4**

EC-Type Examination Certificate No. TUV 12 ATEX 105828



[13]

[14]

**Schedule**  
**EC-TYPE EXAMINATION CERTIFICATE No.**  
**DEMKO 06 ATEX 137480X** Rev. 2  
**Report: 12NK09120-06ATEX137480X**

The 8601 Leak Detection System consists of:

Tank Monitoring Console, Series 8601

**[Ex ia] IIA**

Supply: 120/240 V, 50/60 Hz

EC-Type Examination Certificate No. DEMKO 11 ATEX 11659X

Mag Plus Probe, Series 8462 or 8463 or 8473 or 8563 or Mag Sump Sensor, Series 8570

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 06 ATEX 0508841X

Mag Plus 1 Series

**Ex ia IIA T4**

EC-Type Examination Certificate No. TUV 12 ATEX 105828

Vacuum Sensor, Model 332175-XXX

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 07 ATEX 29144X

DPLLD Line Leak, Series 8590

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 07 ATEX 141031X

The TLX-XB Leak Detection System consists of:

Tank Monitoring Console, Model TLS-XB

**[Ex ia] IIA**

Supply: 120/240 V, 50/60 Hz

EC-Type Examination Certificate No. DEMKO 12 ATEX 1204670X

Tank Monitoring Console, Model TLS-RF, Series 332242

**[Ex ia] IIA**

Supply: 120/240 V, 50/60 Hz

EC-Type Examination Certificate No. DEMKO 06 ATEX 137478X

Mag Plus Probe, Series 8462 or 8463 or 8473 or 8563 or Mag Sump Sensor, Series 8570

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 06 ATEX 0508841X

Mag Plus 1 Series

**Ex ia IIA T4**

EC-Type Examination Certificate No. TUV 12 ATEX 105828

DPLLD Line Leak, Series 332681

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 07 ATEX 141031X

PLLD Line Leak, Series 8484

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 06 ATEX 137486X

Vacuum Sensor, Model 332175-XXX

**Ex ia IIA T4**

EC-Type Examination Certificate No. DEMKO 07 ATEX 29144X



[13]

[14]

**Schedule**  
**EC-TYPE EXAMINATION CERTIFICATE No.**  
**DEMKO 06 ATEX 137480X** Rev. 2  
**Report: 12NK09120-06ATEX137480X**

Temperature range:

The ambient range for TLS Consoles: TLS-50, TLS-IS, TLS-2, TLS-300, TLS-350 and TLS-450 is  $0^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$

The ambient range for TLS Consoles: TLS-XB and 8601 is  $0^{\circ}\text{C} \leq T_a \leq 50^{\circ}\text{C}$

The ambient range for the intrinsically safe devices: Mag Plus Probes, Mag Sump Sensor, DPLLD Line Lead Sensors, PLLD Line Leak Sensors, TLS-Transmitter, TLS-Battery and Solid State Sensors, is  $-40^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$ .

The ambient range for the intrinsically safe device: Mag Plus1, is  $-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$ .

Installation instructions:

The associated apparatus and intrinsically safe devices must be installed in accordance with the descriptive system documents. Each system is associated to the following drawings:

- TLS-350: Drawing No. 331940-001
- TLS-450: Drawing No. 331940-006
- TLS-50: Drawing No. 331940-003
- TLS-RF: Drawing No. 331940-005
- TLS-300: Drawing No. 331940-002
- TLS4-8601 : Drawing No. 331940-017
- TLS-XB: Drawing No. 331940-020
- TLS Site Contractors Manual: Drawing No. 577013-578

Mounting instructions:

None

Routine tests:

None

[16]

Report No.

Project Report No.: 12NK09120-06ATEX137480X (Hazardous Location Testing)

Documents:

**Description:**

**Drawing No.:**

**Rev. Level:**

**Date:**

Description:	Drawing No.:	Rev. Level:	Date:
Descriptive System Document for TLS-350	331940-001	J	2012/07/28
Descriptive System Document for TLS-450	331940-006	C	2012/07/28
Descriptive System Document for TLS-50, TLS2, TLS-IB	331940-003	E	2012/07/28
Descriptive System Document for TLS Radio Group	331940-005	D	2012/07/28
Descriptive System Document for TLS-300	331940-002	E	2012/07/28
Descriptive System Document for TLS4-8601	331940-017	C	2012/07/28
Descriptive System Document for TLS-XB	331940-020	C	2012/07/28
TLS Site Contractors Manual	577013-578	R	-

[17]

Special conditions for safe use:

- These devices must be installed as part of the intrinsic safety system as defined in the descriptive system documents, and manual 577013-578 indicated in this certificate.
- The descriptive system documents include references to simple apparatus. Simple apparatus used with these systems must not contain any inductance or capacitance and must also comply with all requirements indicated in the system descriptive document.
- A risk analysis must be performed to determine if the installation location is susceptible to lightning or other electric surges. If necessary, protection against lightning and other electric surges must be provided in accordance with EN 60079-25:2010.
- Each apparatus within the system may have individual condition of safe use. Each apparatus certificate must be reviewed to determine the suitability of each apparatus.

[18]

Essential Health and Safety Requirements

Concerning ESR this Schedule verifies compliance with the ATEX directive only. The manufacturer's Declaration of Conformity declares compliance with other relevant Directives.

Additional information

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in ANNEX III to Directive 94/9/EC of the European Parliament and the Council of 23 March 1994.

