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EC-TYPE EXAMINATION CERTIFICATE



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

[3]

EC-Type Examination Certificate Number: **DEMKO 10 ATEX 0948139X**

[4]

Equipment or Protective System: **Camera, VEN-650V05-X Series
Illuminator, LED-65 Series**

[5]

Manufacturer: **Bosch Security Systems**

[6]

Address: **Building SX-130, Glaslaan 2, 5616 LW Eindhoven, Netherlands**

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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. **09CA48139**

[9]

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

EN 60079-0:2006

EN 60079-1:2007

EN 60079-31:2009

[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.

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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.

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

II 2 G Ex d IIB T6 Gb

II 2 D Ex tb IIIC T85°C Db IP67

Certification Manager

Jan-Erik Storgaard

Date of issue: 2011-03-24

Notified Body

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Schedule
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Description of Equipment or Protective System

These devices are flameproof and dust protected by enclosure camera and illuminator assemblies. The camera and illuminator each consist of a cylindrical stainless steel or aluminum housing with a front window cover and back plate assembly threaded into either end of the housing. The back plate assembly has four threaded ¼ NPT entries for the supply connection. All unused entries contain a conduit plug. Both models contain a mounting bracket assembly and sunshield (not used for mechanical protection).

The optical radiation output of the apparatus with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 94/9/EC, is not covered in this certificate

Nomenclature for the Camera and Illuminator Assemblies:

Camera -

Model <u>VEN-650V05-X</u>	<u>S3</u>	<u>N</u>
I	II	III

I - Basic Series Designation

VEN-650V05-X – Camera, where X can be 1 or 2 (1 or 2 represents video standards, not safety related)

II - Enclosure Material

S3 – Stainless Steel
A3 - Aluminum

III - Video Connection

Blank or X, where X can be any letter (not safety related, all video connections are in rigid metal conduit)

Illuminator –

Model <u>LED65</u>	<u>8</u>	<u>-SX</u>
I	II	III

I - Basic Series Designation

LED65 – Illuminator

II - Wavelength

8 – 850 nm
9 – 940 nm

III - Enclosure Material

-SX – Stainless Steel, where X can be M or W (Medium or Wide angle of illumination)

-AX – Aluminum, where X can be M or W (Medium or Wide angle of illumination)

Temperature Range:

The ambient temperature range is $-50^{\circ}\text{C} \leq T_a \leq 60^{\circ}\text{C}$.

Electrical Data:

Rated Input 12-24 V ac/dc, Class 2, 50/60 Hz, 20 W (Camera), 37 W (Illuminator)

Installation Instructions:

- Proper operation and instruction for putting the device into safe use is described in the manufacturer's installation instructions, Drawing Numbers F.01U.142.061 (Camera) and F.01U.162.949 (Illuminator).
- Unused conduit openings shall be closed with the provided conduit plug.
- For ambient temperatures below -10°C use field wiring suitable for the minimum ambient temperature.
- The joint between the junction box and housing is secured by a thread locker for permanent securement. This joint shall not be removed because there may be damage to the flamepath.
- The device was subjected to the resistance to impact test at 2 J. It shall be installed where it will not be subjected to impact.
- Information about contacting the manufacturer for information about the flameproof joints.
- Information about the application of thread sealant Slic Type Paste with PTFE, manufactured by Laco Markal, to the conduit plug/back plate assembly threaded joint.

Routine Tests:

A routine overpressure test according to EN 60079-1, Clause 16.1, shall be conducted at 13,9 bar (201 PSI) in a normal room ambient on each front cover/fascia. There shall be no permanent deformation of the joints or damage to the enclosure, including the window.

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[16] Report No.
 Project Report No.: 09CA48139 (Hazardous Location Testing)

Documents:

Description:	Drawing No. (SAP):	Rev. Level:	Date:
Camera – Overall Assembly (EX65 ICD – Camera Version)	F01U135699-DRW-002	02	-
Camera – Overall Assembly (EX65 ICD- Camera with Fiber Optic Version)	F01U135702-DRW-002	02	-
Illuminator – Overall Assembly (EX65 ICD Illuminator)	F01U135718-DRW-002	02	-
Illuminator - Wiring Diagram (2 pages)	F01U135718-DRW-001	02	2011-02-14
Camera and Illuminator – Housing Aluminum Version (Housing) (5 pages)	F.01U.162.624	07	2011-02-14
Camera and Illuminator – Housing Stainless Steel Version (Housing) (5 pages)	F.01U.162.626	06	2011-02-14
Camera and Illuminator – Back Cover of Back Plate Assembly Aluminum Version (Back Cover) (3 pages)	F.01U.137.961	07	2011-02-21
Camera and Illuminator – Back Cover of Back Plate Assembly Stainless Steel Version (Back Cover) (3 pages)	F.01U.162.494	02	2010-05-14
Camera and Illuminator – Front Cover/Fascia Aluminum Version(Front Fascia) (3 pages)	F.01U.137.962	06	2011-02-21
Camera and Illuminator – Connection Plate of Back Plate Assembly Aluminium Version (Back Plate Side Entries) (4 pages)	F.01U.139.761	08	2011-02-18
Camera and Illuminator – Connection Plate of Back Plate Assembly Stainless Steel Version (Back Plate Side Entries)(3 pages)	F.01U.162.492	06	2011-02-23
Camera and Illuminator – Front Cover/Fascia Stainless Steel Version (Front Fascia) (3 pages)	F.01U.162.487	03	2010-05-14
Camera and Illuminator – Window (Window) (3 pages)	F.01U.138.603	02	2010-03-03
Camera and Illuminator – Compression Ring Aluminum Version (3 pages)	F.01U.137.963	06	2010-03-03
Camera and Illuminator – Compression Ring Stainless Steel Version (3 pages)	F.01U.162.490	06	2010-03-03
Camera and Illuminator - Front Cover/Fascia Assembly Aluminum Version (Front Face Assembly Aluminum) (2 pages)	F.01U.168.593	01	2010-11-01
Camera and Illuminator - Front Cover/Fascia Assembly Stainless Steel Version(Front Face Assembly INOX) (2 pages)	F.01U.168.594	01	2010-11-01
EX65 Internals Assembly - LED Array, 850 NM (2 pages)	F.01U.162.890	07	2010-12-21
EX65 Internals Assembly - LED Array, 940 NM (2 pages)	F.01U.163.070	07	2010-12-21
EX65 Internals Assembly Assembly, 850 NM (2 pages)	F.01U.162.877	07	2010-12-21
EX65 Internals Assembly Assembly, 940 NM (2 pages)	F.01U.163.071	07	2010-12-21
Camera Nameplate	F.01U.143.888	08	2011-03-01
Illuminator Nameplate	F.01U.214.239	05	2011-03-01
Installation Instructions – Camera (50 Pages)	F.01U.142.061	1.0	2011-02
Installation Instructions – Illuminator (34 Pages)	F.01U.162.949	1.0	2011-02

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Special conditions for safe use:

- Unused conduit openings shall be closed with the provided conduit plug.
- For ambient temperatures below $-10\text{ }^{\circ}\text{C}$ use field wiring suitable for the minimum ambient temperature.
- The joint between the junction box and housing is secured by a thread locker for permanent securement. This joint shall not be removed because there may be damage to the flamepath.
- The device was subjected to the resistance to impact test at 2 J. It shall be installed where it will not be subjected to impact.
- Information about contacting the manufacturer for information about the flameproof joints.
- Information about the application of thread sealant Slic Type Paste with PTFE, manufactured by Laco Markal, to the conduit plug/back plate assembly threaded joint.

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Essential Health and Safety Requirements

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

Additional information

The VEN-650V05-X series camera and the LED-65 series illuminator have additionally passed the tests for Ingress Protection to IP 67 in accordance with EN60529: 1991/A1 2001.

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.