

[1] **EC-TYPE EXAMINATION CERTIFICATE**



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

[3] EC-Type Examination Certificate Number: DEMKO 03 ATEX 135182

[4] Equipment or Protective System: **Type 556 Camera Unit and Type 558 Pan & Tilt Unit**

[5] Manufacturer: **Electro-Flow Controls Ltd**

[6] Address: **Block I, Unit 3, Souterhead Industrial Centre, Souterhead Road, Altens, Aberdeen
AB12 3LF**

[7] This equipment or protective system and any acceptable variation there to is 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. 135182

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50014: 1997 E incl. A1+A2 E **EN 50018: 2000E incl. A1**

[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.

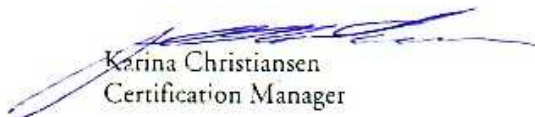
[11] This EC-Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by the certificate.

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

Ex II 2G EEx d IIC T6 (Tamb -20°C to + 50°C)

On behalf of UL International Demko A/S

Herlev, 2004-08-12
Revised 2004-08-26


Karina Christiansen
Certification Manager

UL International Demko A/S

Lyskaer 8, P.O. Box 514
DK-2730, Herlev, Denmark
Telephone: +45 44856565
Fax: +45 44856500

Certificate: 03 ATEX 135182

This certificate may only be reproduced in its
entirety and without any change, schedule included



A Subsidiary of
**Underwriters
Laboratories Inc.**

P1

Schedule

[13]

[14]

EC-TYPE EXAMINATION CERTIFICATE No. DEMKO 03 ATEX 135182

[15]

Description of Equipment or protective system

The type 556 Camera unit comprises of a cast stainless steel housing that forms the main body, a detachable window assembly at the front end and a stainless steel rear cover.

Mounted inside is a chassis plate onto which a CCD digital camera is mounted. Also fitted is an anti-condensation heater assembly to provide internal heating when the temperature falls below 10°C.

The rear cover has a cable entry point.

The window assembly provides a stepped glass window cemented into a stainless steel threaded carrier.

The glass is further held in place by a bolted locating ring.

Electrical power is either provided (when used with the pan and tilt) via a ribbon cable cemented into the centre of the inter positioning shaft using Herculite EA plaster cement, or directly via the cable entry (when not used with the pan & tilt).

The 558 Pan and Tilt unit comprises of two identical motor housings, one fixed to provide a tilt action and the other provides a panning action. Each motor housing comprises of a cast stainless steel enclosure with mounting feet with a drive boss and a top cover with integral drive shaft and bearing assembly. The shaft of the pan motor provides rotational drive from the panning unit and is threaded into the tilt motor housing drive boss. The top cover of each housing forms a cylindrical spigot joint and is secured in place with fourteen M6 stainless steel cap head fasteners. There is a chassis which mounts onto the internal face of the top cover to locate the drive motor, gearbox, connection terminals a heater with associated thermostat set at 10°C and a synchronous drive motor.

Temperature range

The ambient temperature range is -20 °C to +50 °C.

Electrical data

Maximum power = 40 Watts

Installation instructions

All cable entry devices and blanking elements shall be certified in type of explosion protection flameproof enclosure "d", suitable for the conditions of use and correctly installed.

Unused apertures shall be closed with suitable blanking elements.

For service temperatures below -10 °C and above +60 °C use field wiring suitable for both minimum and maximum ambient temperature.

Routine tests

No routine tests according to EN 50018 cl. 16 are required on the Camera Unit or the Pan & Tilt Unit.

[16]

Report No.

Project Report No.: 135182-01 (Hazardous Location Testing)

UL International Demko A/S

Lyskaer 8, P.O. Box 514
DK-2730, Herlev, Denmark
Telephone: +45 44856565
Fax: +45 44856500

Certificate: 03 ATEX 135182
Report: 135182-01

This certificate may only be reproduced in its
entirety and without any change, schedule included



A Subsidiary of
**Underwriters
Laboratories Inc.**

P2/3

Schedule

EC-TYPE EXAMINATION CERTIFICATE No. DEMKO 03 ATEX 135182

Drawings: Number	Date	Description
98066 - A3 - 3001 - 01	25 Nov 03	558 Pan & Tilt Unit - 556 Camera Unit Label Details
98066 - A1 - 3004 - 01	13 Nov 03	558 Pan & Tilt Unit with 556 Camera Unit General Arrangement
98066 - A1 - 3002 - 01	25 Jul 03	558 Pan & Tilt Unit Sections
98066 - A4 - 3002 - 02	25 Jul 03	558 Pan & Tilt Unit Drawing Notes
6001 -- 01	31 Jul 03	556/2 Camera Housing Internal AC Switcher Unit - Position Details
55X - A1 - 9004 - 01	14 Jul 04	556/2 Camera Window Cap General Arrangement
98066 - A1 - 1013 - 01	29 Jun 01	556 Camera Tray Var 1.2 Machining Details

[17] Special conditions for safe use:

None


[18] Essential Health and Safety Requirements

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

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.

On behalf of UL International Demko A/S

Herlev, 2004-08-12
Revised 2004-08-26


Karina Christiansen
Certification Manager

UL International Demko A/S

Lyskaer 8, P.O. Box 514
DK-2730, Herlev, Denmark
Telephone: +45 44856565
Fax: +45 44856500

Certificate: 03 ATEX 135182
Report: 135182-01

This certificate may only be reproduced in its
entirety and without any change, schedule included



A Subsidiary of
**Underwriters
Laboratories Inc.**

P3/3