

TYPE EXAMINATION CERTIFICATE



- [2] **Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**
- [3] Type Examination Certificate Number: **DEMKO 14 ATEX 1324722X Rev. 1**
- [4] Equipment: **LED VMV Luminaires**
- [5] Manufacturer: **Cooper Crouse-Hinds**
- [6] Address: **Wolf & 7th North Street, PO Box 4999, Syracuse, NY 13221 USA**
- [7] This equipment 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 certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of **Category 3** equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to the European Union Directive 94/9/EC of 23 March 1994.
- The examination and test results are recorded in confidential report no. **1009566.230913-14ATEX1324722X**
- [9] Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to Standards:
- EN 60079-0:2012+A11:2013 EN 60079-15:2010**
- [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 Type examination certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured.
- [12] The marking of the equipment or protective system shall include the following:

 **II 3 G Ex nA nR IIC T6 Gc [40°C Ambeint]**

 **II 3 G Ex nA nR IIC T5 Gc [55°C Ambeint]**

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Equipment described herein ("Certified Equipment") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Equipment Certification Program Requirements. This certificate and test results obtained apply only to the equipment sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured equipment. UL has not established Follow-Up Service or other surveillance of the equipment. The Manufacturer is solely and fully responsible for conformity of all equipment to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2014-04-17

Re-issued: 2014-05-09



Certification Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com

[13]

Schedule

[14]

TYPE EXAMINATION CERTIFICATE No.

DEMKO 14 ATEX 1324722X Rev. 1

Report: 1009566.230913-14ATEX1324722X

[15]

Description of Equipment:

LED VMV series of luminaires are composed of an LED module, heat-sink module, driver module, and various covers. The LED module is evaluated for 'nR' protection and the heat-sink module and driver module are evaluated for 'nA' protection. There is a seal located between the LED module and heat-sink module. There are six types of covers that are available. The LED module is machined aluminium, the heat-sink module is machined aluminium, the driver module is cast aluminium, and the covers are cast aluminium; the lens is either glass or plastic and there are four gasketed joints. The gasketed joints are between the lens and LED module, LED module and heat-sink module, heat-sink module and driver module, and driver module and cover.

Nomenclature for Luminaires:

- I. VMV – LED series luminaire.
- II. Lamp/Function
 - 13L - 13000 lumen equivalent LED
 - 17L - 17000 lumen equivalent LED
 - 21L - 21000 lumen equivalent LED
 - 25L – 25000 lumen equivalent LED
- III. LED Color Temperature
 - [Blank] or C – Cool (5000K)
 - W - Warm (3000K)
 - N - Neutral (4000K)
- IV. Mounting Style
 - Blank - No Cover
 - J - 1-1/2" Stanchion 25°
 - P - 1-1/2" Stanchion Straight
 - 2A - ¾" Pendant
 - 3A - 1" Pendant
 - 20A - 20mm Pendant
 - 25A - 25mm Pendant
 - 2B - ¾" Dust Shedding
 - 3B - 1" Dust Shedding
 - 2C - ¾" Ceiling
 - 3C - 1" Ceiling
 - 20C - 20mm Ceiling Mount
 - 25C - 25mm Ceiling Mount
 - 2HA - ¾" Offset Pendant
 - 2TW - ¾" Wall Mount
 - 3TW - 1" Wall Mount
 - 20TW - 20mm Wall mount
 - 25TW - 25mm Wall mount
- V. Optics
 - R1 - Type 1 Optic
 - R3 - Type 3 Optic
 - [Blank] or R5 - Type 5 Optic
- VI. Wire Guard
 - [BLANK] - No wire guard
 - G - Wire guard
- VII. Voltage
 - /UNV1 - 100-277VAC (50/60Hz) / 108-250VDC
- VIII. Suffix
 - S890 - Quick Clip
 - S903 - Polycarbonate Lens
 - S812 - Trunion Mount Kit with Pin
 - TBX – Terminal Block 'X' signifies the number of poles, UNV1 Only
 - NO - No optic provided



[13]

Schedule

[14]

TYPE EXAMINATION CERTIFICATE No.

DEMKO 14 ATEX 1324722X Rev. 1

Report: 1009566.230913-14ATEX1324722X

Electrical data

The luminaires have the following voltage options:

/UNV1: 100-277VAC, 50/60Hz, 2.9A / 108-250 VDC, 2.75A

Installation instructions

Unused apertures shall be closed with suitable blanking elements.

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

Mounting instructions

Refer to "Instructions".

Routine tests

Routine dielectric testing is to be performed as follows:

1. /UNV1: Input to luminaire ground, voltage of 2176VDC for 60s, or 2611VDC for 100ms.

[16]

Descriptive Documents

Project Report No.: 1009566.230913-14ATEX1324722X (Hazardous Location Testing)

Drawings:

Description:	Drawing No.:	Rev. Level:	Date:
VMVL 17L-25L Certification Drawing	0306554	1	2014-03-23
VMVL Nameplate	0306736	1	2014-04-02
Instruction and Installation Manual	IF 1701	1	2014-04

[17]

Special conditions for safe use:

Instructions shall include the following "To reduce the risk of ignition due to electrostatic discharge, avoid contact with the luminaire while an explosive atmosphere is present. Clean only with a damp cloth."

[18]

Essential Health and Safety Requirements

Met by compliance with the standards EN 60079-0:2012 and EN 60079-15:2010.

Additional information

The VMV LED luminaire has in addition passed the tests for Ingress Protection to IP 66 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.



EC-TYPE EXAMINATION CERTIFICATE



[1]

[2]

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

[3]

EC-Type Examination Certificate Number: **DEMKO 14 ATEX 2274231X Rev. 1**

[4]

Equipment or Protective System: **LED VMV Luminaires**

[5]

Manufacturer: **Cooper Crouse-Hinds**

[6]

Address: **Wolf & 7th North Street, PO Box 4999, Syracuse, NY 13221 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. **1009566.230913-14ATEX2274231X**

[9]

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

EN 60079-0:2012+A11:2013

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.

[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 2 D **Ex tb IIIC T66°C Db IP66** [13L, 17L at 40°C Ambient]

II 2 D **Ex tb IIIC T81°C Db IP66** [13L, 17L at 55°C Ambient]

II 2 D **Ex tb IIIC T71°C Db IP66** [21L, 25L at 40°C Ambient]

II 2 D **Ex tb IIIC T86°C Db IP66** [21L, 25L at 40°C Ambient]

Certification Manager

Jan-Erik Storgaard

Notified Body

This is to certify that the sample(s) of the Equipment described herein ("Certified Equipment") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Equipment Certification Program Requirements. This certificate and test results obtained apply only to the equipment sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured equipment. UL has not established Follow-Up Service or other surveillance of the equipment. The Manufacturer is solely and fully responsible for conformity of all equipment to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2014-04-22

Re-issued: 2014-05-07

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com



[13]

Schedule

[14]

EC-TYPE EXAMINATION CERTIFICATE No.

DEMKO 14 ATEX 2274231X Rev. 1

Report: 1009566.230913-14ATEX2274231X

[15]

Description of Equipment:

LED VMV series of luminaires are composed of an LED module, heat-sink module, driver module, and various covers. The LED module is evaluated for 'nR' protection and the heat-sink module and driver module are evaluated for 'nA' protection. There is a seal located between the LED module and heat-sink module. There are six types of covers that are available. The LED module is machined aluminium, the heat-sink module is machined aluminium, the driver module is cast aluminium, and the covers are cast aluminium; the lens is either glass or plastic and there are four gasketed joints. The gasketed joints are between the lens and LED module, LED module and heat-sink module, heat-sink module and driver module, and driver module and cover.

Nomenclature for Luminaires:

- I. VMV – LED series luminaire.
- II. Lamp/Function
 - 13L - 13000 lumen equivalent LED
 - 17L - 17000 lumen equivalent LED
 - 21L - 21000 lumen equivalent LED
 - 25L - 25000 lumen equivalent LED
- III. LED Color Temperature
 - [Blank] or C – Cool (5000K)
 - W – Warm (3000K)
 - N – Neutral (4000K)
- IV. Mounting Style
 - Blank - No Cover
 - J - 1-1/2" Stanchion 25°
 - P - 1-1/2" Stanchion Straight
 - 2A - 3/4" Pendant
 - 3A - 1" Pendant
 - 20A - 20mm Pendant
 - 25A - 25mm Pendant
 - 2B - 3/4" Dust Shedding
 - 3B - 1" Dust Shedding
 - 2C - 3/4" Ceiling
 - 3C - 1" Ceiling
 - 20C - 20mm Ceiling Mount
 - 25C - 25mm Ceiling Mount
 - 2HA - 3/4" Offset Pendant
 - 2TW - 3/4" Wall Mount
 - 3TW - 1" Wall Mount
 - 20TW - 20mm Wall mount
 - 25TW - 25mm Wall mount
- V. Optics
 - R1 - Type 1 Optic
 - R3 - Type 3 Optic
 - [Blank] or R5 - Type 5 Optic
- VI. Wire Guard
 - [BLANK] - No wire guard
 - G - Wire guard
- VII. Voltage
 - /UNV1 - 100-277VAC (50/60Hz) / 108-250VDC
- VIII. Suffix
 - S890 - Quick Clip
 - S903 - Polycarbonate Lens
 - S812 - Trunion Mount Kit with Pin
 - TBX – Terminal Block 'X' signifies the number of poles, UNV1 Only
 - NO - No optic provided



[13]

Schedule

[14]

EC-TYPE EXAMINATION CERTIFICATE No.

DEMKO 14 ATEX 2274231X Rev. 1

Report: 1009566.230913-14ATEX2274231X

Electrical data

The luminaires have the following voltage options:

/UNV1: 100-277VAC, 50/60Hz, 2.9A / 108-250 VDC, 2.75A

Installation instructions

Unused apertures shall be closed with suitable blanking elements.

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

Mounting instructions

Refer to "Instructions".

Routine tests

Routine dielectric testing is to be performed as follows:

1. /UNV1: Input to luminaire ground, voltage of 2176VDC for 60s, or 2611VDC for 100ms.

[16]

Descriptive Documents

Project Report No.: 13CA24722 (Hazardous Location Testing)

Drawings:

Description:

Drawing No.:

Rev. Level:

Date:

VMVL 17L-25L Certification Drawing

0306554

1

2014-03-20

VMVL Nameplate

0306736

1

2014-04-02

Instruction and Installation Manual

IF 1701

1

2014-04

[17]

Special conditions for safe use:

Instructions shall include the following "To reduce the risk of ignition due to electrostatic discharge, avoid contact with the luminaire while an explosive atmosphere is present. Clean only with a damp cloth."

[18]

Essential Health and Safety Requirements

Met by compliance with the standards EN 60079-0:2012+A11:2013, EN 60079-31:2009.

Additional information

The VMV LED luminaire has in addition passed the tests for Ingress Protection to IP 66 in accordance with EN60529: 1991/A1 2001.

This certificate was issued as "Accredited by DANAK under registration number 7011 to certification of products".

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.

