[1] # EU-TYPE EXAMINATION CERTIFICATE

[2] **Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU**

[3] EU-Type Examination Certificate Number: **DEMKO 13 ATEX 1305741X Rev. 14**

[4] Product: **LED VMV Luminaires**

[5] Manufacturer: **Eaton's Crouse-Hinds Business**

[6] Address: **1201 Wolf Street, Syracuse, NY 13208 USA**

[7] This product 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 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to design and construction of products 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. **US/UL/ExTR15.0136/08**.

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

EN 60079-0:2012+A11:2013 **EN 60079-31:2014**

[10] If the sign "**X**" is placed after the certificate number, it indicates that the product is subject to special conditions for safe use specified in the schedule to this certificate.

[11] This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by the certificate.

[12] The marking of the product shall include the following:

II 2 D Ex tb IIIC T*°C Db

***Note: See Table Below for Temperature Code Information**

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product 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 product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product 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: 2013-08-23
Re-issued: 2021-03-31

Notified Body UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
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[13] [14]

Schedule
EU-TYPE EXAMINATION CERTIFICATE No.
DEMKO 13 ATEX 1305741X Rev. 14

[15] Description of Equipment or protective system

LED VMV and VMVHE series of luminaires are composed of an LED housing, driver housing, and various covers. There is a seal located between the driver housing and the LED housing. There are six types of covers that are available. The entire enclosure is cast aluminum; the lens is either glass or plastic and there are three gasketed joints. The gasketed joints are between the cover and the driver housing, between the driver housing and the LED housing, and between the LED housing and lens.

LED VMVL and VMVHEL series of luminaires utilize enclosure construction, including the LED housing, driver housing and various covers identical to those used in models VMV and VMVHE, with the internal LED drivers and LEDs being the only difference between the VMV and VMVL series. VMVL and VMVHEL are evaluated for protection technique 'ec mb'.

All luminaire series VMV, VMVHE, VMVL, and VMVHEL are evaluated for protection technique 'tb'.

Nomenclature for Luminaires:

Luminaire series VMV and VMVHE :

I. VMV – LED series luminaire
VMVHE – High Efficacy Series

II. Lamp/Function
3L - 4000 lumen equivalent LED
5L - 5000 lumen equivalent LED
7L - 7000 lumen equivalent LED
9L - 9000 lumen equivalent LED
11L – 11000 lumen equivalent LED
RL – Red (3200 Lumen)
GL – Green (4300 Lumen)
BL – Blue (2100 Lumen)
AL – Amber (5000 Lumen)

III. LED Color Temperature
Blank – 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
2B - ¾" Dust Shedding
3B - 1" Dust Shedding
2C - ¾" Ceiling
3C - 1" Ceiling
2HA - ¾" Offset Pendant
2TW - ¾" Wall Mount
3TW - 1" Wall Mount
20A - 20mm Pendant
25A - 25mm Pendant
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
Blank - Type 5 Optic Standard (All Mounts)
R1 - Type 1 Optic (All Mounts Except ceiling)
R1A - Type 1 Optic (Ceiling with conduit 45° counter-clockwise or 135°clockwise from hinge)
R1B - Type 1 Optic (Ceiling with conduit 45° clockwise or 135° counter-clockwise from hinge)
R3 - Type 3 Optic (All mounts except ceiling)
R3AP – Type 3 Optic (For use with Appleton top hat adapter)
R3A1 - Type 3 Optic (Ceiling with conduit 45° counter-clockwise from top hat hinge)
R3A2 - Type 3 Optic (Ceiling with conduit 135° clockwise from top-hat hinge)
R3AP - Type 3 Optic (Spacer plate, LED MCPCB and optic lens rotated 180°)
R3B1 - Type 3 Optic (Ceiling with conduit 45° clockwise from top-hat hinge)
R3B2 - Type 3 Optic (Ceiling with conduit 135° counter-clockwise from top-hat hinge)

VI. Guard
Blank - No guard
G - P3001 Wire guard

VII. Voltage
/UNV1 - 100-277VAC, 50/60Hz
/VDC - 108-250VDC
/UNV34 - 347-480VAC, 50/60Hz

VIII. Suffix
S890 - Quick Clip
S903 - Polycarbonate Lens
S892 - Redundant Drivers (VMV5L and VMV7L only)
S812 K1 - Trunion Mount Kit with Pin
TBX - Terminal Block 'X' signifies the number of poles (/UNV1 and /VDC only)
NO - No Optic provided in fixture

Luminaire series VMVL and VMVHEL:

I. VMVL – LED series luminaire
VMVHEL – High Efficacy Series

II. Lamp/Function
-3 – 3000 Lumen LED
-5 – 5000 Lumen LED
-7 – 7000 Lumen LED
-9 – 9000 Lumen LED
-11 – 11000 Lumen LED
-13 – 13000 Lumen LED
-R – Red (3200 Lumen)
-G – Green (4300 Lumen)
-B – Blue (2100 Lumen)
-A – Amber (5000 lumen

III. LED Color Temperature
[BLANK] Cool: 5000K +/-200K
N - Neutral: 4000K +/-200k
W - Warm: 3000K +/-200k

IV. Optics
Blank - TYPE 5 Standard (All mounts)
R1 - Type 1 Optic (All Mounts Except ceiling)
R1A - Type 1 Optic (Ceiling with conduit 45° counter-clockwise or 135°clockwise from hinge)
R1B - Type 1 Optic (Ceiling with conduit 45° clockwise or 135° counter-clockwise from hinge)
R3 - Type 3 Optic (All mounts except ceiling)
R3AP – Type 3 Optic (For use with Appleton top hat adapter)
R3A1 - Type 3 Optic (Ceiling with conduit 45° counter-clockwise from top hat hinge)
R3A2 - Type 3 Optic (Ceiling with conduit 135° clockwise from top-hat hinge)
R3B1 - Type 3 Optic (Ceiling with conduit 45° clockwise from top-hat hinge)
R3B2 - Type 3 Optic (Ceiling with conduit 135° counter-clockwise from top-hat hinge)

V. Wire Guard
[BLANK] – No Wire Guard
G - Wire Guard

VI. Voltage
/UNV1 - 100-240VAC, 50/60Hz, 127-250VDC (Not DC for S892)

VII. Optional suffix – Indicates optional construction features
S812 – Trunion Mount Kit
S831 – Supplemental cable attachment
S890 – Quick Clips
S892 - Redundant Driver
S903 – Indicates a polycarbonate lens
TBX – Terminal Block 'X' signifies the number of poles (/UNV1 only)
DBR – Fixture provided with 94205-X PVC coating
UPLT - Uplight glass globe refractor
NO – No Optic Provided

VIII. Optional Suffix –
Blank – for lower lumens VMVL/VMVHEL- 3-11
M2 – Only for VMVL/VMVHEL-13

IX. Optional Suffix – indicates no change in construction, ordering purposes only.
DR – may be followed by up to seven numerical digits

Performance testing
The optical radiation output of the product with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is not covered in this certificate.

[13]

[14]

Schedule
EU-TYPE EXAMINATION CERTIFICATE No.
DEMKO 13 ATEX 1305741X Rev. 14

Temperature range
The relation between ambient temperature and the assigned temperature class is as follows:

Lamp Type	Voltage	Ambient Temperature	Marking
Luminaire models VMV and VMVHE:			
3L, 5L, 7L, 9L, 11L	100-277VAC	-40°C to +40°C	Ex II 2 D Ex tb IIIC T72°C Db IP66
		-40°C to +55°C	Ex II 2 D Ex tb IIIC T87°C Db IP66
		-40°C to +65°C *	Ex II 2 D Ex tb IIIC T92°C Db IP66
	347-480VAC	-40°C to +40°C	Ex II 2 D Ex tb IIIC T70°C Db IP66
		-40°C to +55°C	Ex II 2 D Ex tb IIIC T85°C Db IP66
		-40°C to +65°C *	Ex II 2 D Ex tb IIIC T92°C Db IP66
	100-250VDC	-40°C to +40°C	Ex II 2 D Ex tb IIIC T72°C Db IP66
		-40°C to +55°C	Ex II 2 D Ex tb IIIC T87°C Db IP66
		-40°C to +65°C *	Ex II 2 D Ex tb IIIC T92°C Db IP66
RL, GL, BL, AL	100-277VAC	-40°C to +40°C	Ex II 2 D Ex tb IIIC T60°C Db IP66
		-40°C to +55°C	Ex II 2 D Ex tb IIIC T75°C Db IP66
Luminaire models VMVL and VMVHEL:			
-3L, -5, -7, -9, -11	100-240VAC, 127-250VDC (not DC for -S892)	-40°C to +40°C	Ex II 2 D Ex tb IIIC T72°C Db IP66
		-40°C to +55°C	Ex II 2 D Ex tb IIIC T87°C Db IP66
		-40°C to +65°C	Ex II 2 D Ex tb IIIC T92°C Db IP66
-13 (all models including S892)	100-240VAC, 127-250VDC (not DC for -S892)	-40°C to +40°C	Ex II 2 D Ex tb IIIC T64°C Db IP66
		-40°C to +55°C	Ex II 2 D Ex tb IIIC T77°C Db IP66
-R, G, B, A	100-240VAC	-40°C to +40°C	Ex II 2 D Ex tb IIIC T75°C Db IP66
		-40°C to +55°C	Ex II 2 D Ex tb IIIC T75°C Db IP66
		-40°C to +65°C	Ex II 2 D Ex tb IIIC T75°C Db IP66

* - Designates this ambient temperature is only applicable for luminaires utilizing Driver item 4 and 5 as detailed below.

[13] [14]

Schedule
EU-TYPE EXAMINATION CERTIFICATE No.
DEMKO 13 ATEX 1305741X Rev. 14

Electrical data
The luminaires have the following electrical ratings:

VMV/VMVHE3L-VMV/VMVHE11L, RL, GL, BL and AL	/UNV1: 100-277VAC, 50/60Hz, 1A and 0.75A /UNV34: 347-480VAC, 50/60Hz, 0.35A /VDC: 108-250VDC, 0.5A
VMVL/VMVHEL-3, -5, 7, -9, -11, -13	/UNV1: 100-240VAC, 50/60Hz, 1.3A, 127-250VDC, 1.3A (Not DC for S892)
VMVL/VMVHEL-R, G, B and A	/UNV1: 100-240VAC, 50/60Hz, 1.3A

Driver Model Numbers and Rating					
Luminaire models VMV and VMVHE :					
Item No	Manufacturer	Manufacturer Part Number	Input Ratings	Output Ratings	Catalog Usage
1	Martek Power	PS2556-Y	347-480VAC, 50/60Hz	16-40VDC, 1.0 Amp	UNV34
2	Martek Power	PS2548-Y-0.7-C2	100-277 VAC, 50/60HZ	16-40VDC, 0.7 Amp	UNV1 (Color LED)
3	Martek Power	PS2548-Y-0.7-C2-DC	108-250VDC	16-40VDC, 0.7 Amp	VDC (Color LED)
4	Martek Power	PS2565R-Y-XXX	100-277 Vac, 50/60 Hz, 108-250VDC	20-80 VDC, 0.75 Amp	UNV1/VDC
5	Martek Power	PS2569R-Y-XXX	347- 480 VAC, 50/60 Hz	20-80 VDC, 1.0 Amp	UNV34
Luminaire models VMVL and VMVHEL					
1	Inventronics Inc.	EUD-060S120DT-FTxxy	100-240VAC; 50/60Hz 127-250VDC	25-86VDC 1.2A	UNV1
2	Inventronics Inc.	EUD-096S105DTAFTxx	100-240VAC; 50/60 Hz 127-250VDC	48-137 VDC	UNV1
3	Shanghai MOONS' Automation Control Co., Ltd **	MU60H105AQ_MB	100-277VAC; 50/60Hz, 0.8A 125-300VDC, 0.8A	24-86 Vdc 1.05A Max	UNV1
4	Shanghai MOONS' Automation Control Co., Ltd **	MU100H120AQ_MB	100-277VAC; 50/60 Hz, 1.3A 125-300VDC, 1.3A	48-125 Vdc 1A Max	UNV1

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.
2. /UNV34: Input to luminaire ground, voltage of 2744VDC for 60s, or 3293VDC for 100ms.
3. /VDC: Input to Luminaire ground, voltage of 2100VDC for 60s, or 2520VDC for 100ms.
4. LED PCB: Between P1 inputs tied together and aluminum substrate, voltage of 700VDC, for 60s, or 840VDC for 100ms.
5. LED PCB: Between P2 inputs tied together and aluminum substrate, voltage of 700VDC, for 60s, or 840VDC for 100ms.

[16] Descriptive Documents
The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this EU-Type Examination Certificate.

[17] Specific conditions of 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
The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

[13]

[14]

Schedule
EU-TYPE EXAMINATION CERTIFICATE No.
DEMKO 13 ATEX 1305741X Rev. 14

Additional information
The VMV LED luminaire has in addition passed the tests for Ingress Protection to IP 66 in accordance with EN60529:1991+A1:2000+A2:2013.

The trademark COOPER Crouse-Hinds or Crouse-Hinds by EATON will be used as the company identifier on the marking label.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in Annex III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.

[1] # TYPE EXAMINATION CERTIFICATE

[2] **Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU**

[3] Type Examination Certificate Number: **DEMKO 13 ATEX 1475031X Rev. 15**

[4] Product: **LED VMV Luminaires**

[5] Manufacturer: **Eaton's Crouse-Hinds Business**

[6] Address: **1201 Wolf Street, Syracuse, NY 13208 USA**

[7] This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] UL International Demko A/S certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in confidential report no. **US/UL/ExTR15.0136/08**.

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

EN 60079-0:2012+A11:2013
EN 60079-15:2010
EN IEC 60079-7:2015+A1:2018
EN 60079-18:2015 + A1:2017

except in respect of those requirements listed at item 18 of the Schedule.

[10] If the sign "**X**" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

[11] This Type examination certificate relates only to the design of the specified product, and not to specific items of product subsequently manufactured.

[12] The marking of the product shall include the following:

II 3 G Ex nA nR IIC T* Gc

II 3 G Ex nA IIC T* Gc

II 3 G Ex ec mb IIC T* Gc

***Note: See Table Below for Temperature Code Information**

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product 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 product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product 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: 2013-08-23
Re-issued: 2021-03-31

Certification Body UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
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[13] [14]

Schedule
TYPE EXAMINATION CERTIFICATE No.
DEMKO 13 ATEX 1475031X Rev. 15

[15] Description of Product:

LED VMV and VMVHE series of luminaires are composed of an LED housing, driver housing, and various covers. The LED housing is evaluated for 'nR' protection and the driver housing is evaluated for 'nA' protection for certain luminaire constructions as shown on the marking label. There is a seal located between the driver housing and the LED housing. For the rest of the models, the LED housing and driver housing are evaluated for 'nA' protection. There are six types of covers that are available. The entire enclosure is cast aluminum; the lens is either glass or plastic and there are three gasketed joints. The gasketed joints are between the cover and the driver housing, between the driver housing and the LED housing, and between the LED housing and lens.

LED VMVL and VMVHEL series of luminaires utilize enclosure construction, including the LED housing, driver housing and various covers identical to those used in models VMV and VMVHE, with the internal LED drivers and LEDs being the only difference between the VMV and VMVL series. VMVL and VMVHEL are evaluated for protection technique 'ec'.

Nomenclature for Luminaires:

Luminaire series VMV and VMVHE:

I. VMV – LED series luminaire
VMVHE – High Efficacy Series

II. Lamp/Function
3L - 4000 lumen equivalent LED
5L - 5000 lumen equivalent LED
7L - 7000 lumen equivalent LED
9L - 9000 lumen equivalent LED
11L – 11000 lumen equivalent LED
RL – Red (3200 Lumen)
GL – Green (4300 Lumen)
BL – Blue (2100 Lumen)
AL – Amber (5000 Lumen)

III. LED Color Temperature
Blank – 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
2B - ¾" Dust Shedding
3B - 1" Dust Shedding
2C - ¾" Ceiling
3C - 1" Ceiling
2HA - ¾" Offset Pendant
2TW - ¾" Wall Mount
3TW - 1" Wall Mount
20A - 20mm Pendant
25A - 25mm Pendant
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
Blank - Type 5 Optic Standard (All Mounts)
R1 - Type 1 Optic (All Mounts Except ceiling)
R1A - Type 1 Optic (Ceiling with conduit 45° counter-clockwise or 135°clockwise from hinge)
R1B - Type 1 Optic (Ceiling with conduit 45° clockwise or 135° counter-clockwise from hinge)
R3 - Type 3 Optic (All mounts except ceiling)
R3A1 - Type 3 Optic (Ceiling with conduit 45° counter-clockwise from top hat hinge)
R3A2 - Type 3 Optic (Ceiling with conduit 135° clockwise from top-hat hinge)
R3AP - Type 3 Optic (Spacer plate, LED MCPCB and optic lens rotated 180°)
R3B1 - Type 3 Optic (Ceiling with conduit 45° clockwise from top-hat hinge)
R3B2 - Type 3 Optic (Ceiling with conduit 135° counter-clockwise from top-hat hinge)

VI. Guard
Blank - No guard
G - P3001 Wire guard

[13]

[14]

Schedule
TYPE EXAMINATION CERTIFICATE No.
DEMKO 13 ATEX 1475031X Rev. 15

VII. Voltage
/UNV1 - 100-277VAC, 50/60Hz
/VDC - 108-250VDC
/UNV34 - 347-480VAC, 50/60Hz

VIII. Suffix
S890 - Quick Clip
S903 - Polycarbonate Lens
S892 - Redundant Drivers (VMV5L and VMV7L only)
S812 K1 - Trunion Mount Kit with Pin
TBX - Terminal Block 'X' signifies the number of poles (/UNV1 and /VDC only)
NO - No Optic provided in fixture

Luminaire series VMVL and VMVHEL:

I. VMVL – LED series luminaire
VMVHEL – High Efficacy Series

II. Lamp/Function
-3 – 3000 Lumen LED
-5 – 5000 Lumen LED
-7 – 7000 Lumen LED
-9 – 9000 Lumen LED
-11 – 11000 Lumen LED
-13 – 13000 Lumen LED
-R – Red (3200 Lumen)
-G – Green (4300 Lumen)
-B – Blue (2100 Lumen)
-A – Amber (5000 lumen

III. LED Color Temperature
[BLANK] Cool: 5000K +/-200K
N - Neutral: 4000K +/-200k
W - Warm: 3000K +/-200k

IV. Optics
Blank - TYPE 5 Standard (All mounts)
R1 - Type 1 Optic (All Mounts Except ceiling)
R1A - Type 1 Optic (Ceiling with conduit 45° counter-clockwise or 135°clockwise from hinge)
R1B - Type 1 Optic (Ceiling with conduit 45° clockwise or 135° counter-clockwise from hinge)
R3 - Type 3 Optic (All mounts except ceiling)
R3AP – Type 3 Optic (For use with Appleton top hat adapter)
R3A1 - Type 3 Optic (Ceiling with conduit 45° counter-clockwise from top hat hinge)
R3A2 - Type 3 Optic (Ceiling with conduit 135° clockwise from top-hat hinge)
R3B1 - Type 3 Optic (Ceiling with conduit 45° clockwise from top-hat hinge)
R3B2 - Type 3 Optic (Ceiling with conduit 135° counter-clockwise from top-hat hinge)

V. Wire Guard
[BLANK] – No Wire Guard
G - Wire Guard

VI. Voltage
/UNV1 - 100-240VAC, 50/60Hz, 127-250VDC (Not DC for S892)

VII. Optional suffix – Indicates optional construction features
S812 – Trunion Mount Kit
S831 – Supplemental cable attachment
S890 – Quick Clips

S892 – Redundant Driver
S903 – Indicates a polycarbonate lens
TBX – Terminal Block 'X' signifies the number of poles (/UNV1 only)
DBR – Fixture provided with 94205-X PVC coating
UPLT - Uplight glass globe refractor
NO – No Optic Provided

VIII. Optional Suffix –
Blank – for lower lumens VMVL/VMVHEL- 3-11
M2 – Only for VMVL/VMVHEL-13

IX. Optional Suffix – indicates no change in construction, ordering purposes only.
DR – may be followed by up to seven numerical digits

[13]

[14]

Schedule
TYPE EXAMINATION CERTIFICATE No.
DEMKO 13 ATEX 1475031X Rev. 15

Performance testing
The optical radiation output of the product with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is covered in this certificate based on Exception 2) to the scope of EN 60079-28:2015.

Temperature range:
The relation between ambient temperature and the assigned temperature class is as follows:

Lamp Type	Voltage	Ambient Temperature	Marking
Luminaire models VMV and VMVHE			
3L, 5L, 7L, 9L, 11L	100-277VAC	-40°C to +40°C	Ⓔx II 3 G Ex nA nR IIC T6 Gc Ⓔx II 3 G Ex nA IIC T5 Gc**
		-40°C to +55°C	Ⓔx II 3 G Ex nA nR IIC T5 Gc Ⓔx II 3 G Ex nA IIC T5 Gc**
		-40°C to +65°C*	Ⓔx II 3 G Ex nA nR IIC T4 Gc Ⓔx II 3 G Ex nA IIC T4 Gc**
	347-480VAC	-40°C to +40°C	Ⓔx II 3 G Ex nA nR IIC T4 Gc Ⓔx II 3 G Ex nA IIC T4 Gc**
		-40°C to +55°C	Ⓔx II 3 G Ex nA nR IIC T4 Gc Ⓔx II 3 G Ex nA IIC T4 Gc**
		-40°C to +65°C*	Ⓔx II 3 G Ex nA nR IIC T4 Gc Ⓔx II 3 G Ex nA IIC T4 Gc**
	100-250VDC	-40°C to +40°C	Ⓔx II 3 G Ex nA nR IIC T6 Gc
		-40°C to +55°C	Ⓔx II 3 G Ex nA nR IIC T5 Gc
		-40°C to +65°C*	Ⓔx II 3 G Ex nA nR IIC T4 Gc
RL, GL, BL, AL	100-277VAC	-40°C to +40°C	Ⓔx II 3 G Ex nA nR IIC T5 Gc Ⓔx II 3 G Ex nA IIC T4 Gc**
		-40°C to +55°C	Ⓔx II 3 G Ex nA nR IIC T4 Gc Ⓔx II 3 G Ex nA IIC T4 Gc**
Luminaire models VMVL and VMVHEL			
-3, -5, -7, -9, -11 (all models except S892)	100-240VAC, 127-250VDC	-40°C to +40°C	Ⓔx II 3 G Ex ec mb IIC T5 Gc
		-40°C to +55°C	Ⓔx II 3 G Ex ec mb IIC T5 Gc
		-40°C to +65°C	Ⓔx II 3 G Ex ec mb IIC T4 Gc
-13 (all models except S892)	100-240VAC, 127-250VDC	-40°C to +40°C	Ⓔx II 3 G Ex ec mb IIC T5 Gc
		-40°C to +55°C	Ⓔx II 3 G Ex ec mb IIC T4 Gc
-3 thru -11 S892	100-240VAC	-40°C to +40°C	Ⓔx II 3 G Ex ec mb IIC T4 Gc
		-40°C to +55°C	Ⓔx II 3 G Ex ec mb IIC T4 Gc
		-40°C to +65°C	Ⓔx II 3 G Ex ec mb IIC T4 Gc
-13-S892	100-240VAC	-40°C to +40°C	Ⓔx II 3 G Ex ec mb IIC T4 Gc
		-40°C to +55°C	Ⓔx II 3 G Ex ec mb IIC T4 Gc
-R, G, B, A	100-240VAC	-40°C to +40°C	Ⓔx II 3 G Ex ec mb IIC T4 Gc
		-40°C to +55°C	Ⓔx II 3 G Ex ec mb IIC T4 Gc
		-40°C to +65°C	Ⓔx II 3 G Ex ec mb IIC T4 Gc

* - Designates this ambient temperature is only applicable for luminaires utilizing Driver item 4 and 5 as detailed below
** - Designates models marked “M4”

Electrical data
The luminaires have the following electrical ratings:

VMV/VMVHE3L-VMV/VMVHE11L, RL, GL, BL and AL	/UNV1: 100-277VAC, 50/60Hz, 1A and 0.75A /UNV34: 347-480VAC, 50/60Hz, 0.35A /VDC: 108-250VDC, 0.5A
VMVL/VMVHEL-3. -5, -7, -9, -11, -13	/UNV1: 100-240VAC, 50/60Hz, 1.3A, 127-250VDC, 1.3A (Not DC for S892)
VMVL/VMVHEL-R, G, B and A	/UNV1: 100-240VAC, 50/60Hz, 1.3A

[13] [14]

Schedule
TYPE EXAMINATION CERTIFICATE No.
DEMKO 13 ATEX 1475031X Rev. 15

Driver Model Numbers and Rating					
Luminaire models VMV and VMVHE :					
Item No	Manufacturer	Manufacturer Part Number	Input Ratings	Output Ratings	Catalog Usage
1	Martek Power	PS2556-Y	347-480VAC, 50/60Hz	16-40VDC, 1.0 Amp	UNV34
2	Martek Power	PS2548-Y-0.7-C2	100-277 VAC, 50/60HZ	16-40VDC, 0.7 Amp	UNV1 (Color LED)
3	Martek Power	PS2548-Y-0.7-C2-DC	108-250VDC	16-40VDC, 0.7 Amp	VDC (Color LED)
4	Martek Power	PS2565R-Y-XXX	100-277 Vac, 50/60 Hz, 108-250VDC	20-80VDC, 1.0 Amp	UNV1/VDC
5	Martek Power	PS2569R-Y-XXX	347-480 VAC, 50/60 Hz	20-80 VDC, 1.0 Amp	UNV34
Luminaire models VMVL and VMVHEL					
1	Inventronics Inc.	EUD-060S120DT-FTxxy	100-240VAC; 50/60Hz 127-250VDC	25-86VDC 1.2A	UNV1
2	Inventronics Inc.	EUD-096S105DTAFTxx	100-240VAC; 50/60 Hz 127-250VDC	48-137 VDC	UNV1
3	Shanghai MOONS' Automation Control Co., Ltd	MU060H105AQ_MB	100-277VAC; 50/60Hz, 0.8A 125-300VDC, 0.8A	24-86 Vdc 1.05A Max	UNV1
4	Shanghai MOONS' Automation Control Co., Ltd	MU100H120AQ_MB	100-277VAC; 50/60 Hz, 1.3A 125-300VDC, 1.3A	48-125 Vdc 1A Max	UNV1

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.
2. /UNV34: Input to luminaire ground, voltage of 2744VDC for 60s, or 3293VDC for 100ms.
3. /VDC: Input to Luminaire ground, voltage of 2100VDC for 60s, or 2520VDC for 100ms.
4. LED PCB: Between P1 inputs tied together and aluminum substrate, voltage of 700VDC, for 60s, or 840VDC for 100ms.
5. LED PCB: Between P2 inputs tied together and aluminum substrate, voltage of 700VDC, for 60s, or 840VDC for 100ms.

[16] Descriptive Documents
The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this Type Examination Certificate.

[17] Special Conditions of 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
The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information
The VMV LED luminaire has in addition passed the tests for Ingress Protection to IP 66 in accordance with EN60529:1991+A1:2000+A2:2013.

The trademark COOPER Crouse-Hinds or Crouse-Hinds by EATON will be used as the company identifier on the marking label.