[1] # TYPE EXAMINATION CERTIFICATE

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

[3] Type Examination Certificate Number: **UL 21 ATEX 2644U Rev. 0**

[4] Component: **EC Component Fan, Models LPT25G99-BWH-2EM-EX, LPT25G12-BWH-2EM-EX, LPT25G23-BWH-2EM-EX**

[5] Manufacturer: **Mechatronics Inc.**

[6] Address: **8152 304th Ave. SE, PO Box 5012, Preston, WA 98050**

[7] This Component 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 26 February 2014.

The examination and test results are recorded in confidential report number: **4790120023.1.1**

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

EN IEC 60079-0:2018 **EN IEC 60079-7: 2015 +A1:2018**

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

[10] The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

[11] This Type Examination Certificate relates only to the design of the specified component, and not to specific items of component subsequently manufactured.

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

II 3 G Ex ec IIC Gc

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Component described herein ("Certified Component") 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 component 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 component. The Manufacturer are 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: 2021-11-17

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

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

[13] [14]

Schedule
TYPE EXAMINATION CERTIFICATE No.
UL 21 ATEX 2644U Rev. 0

[15] Description of Component:

The devices are brushless type EC component fans, intended for use in a Zone 2 Group IIC Hazardous Locations. All PCB were potted by potting compound and the devices are intended for installation into an end-user supplied enclosure that utilizes a tool-accessible door or cover.

Model difference: All models are similar except for input rating (voltage, current and power), model designations and internal windings. See the following table for details.

Model difference of construction windings.

Model	Diameter (mm) * Turns Number	Internal Resistance
LPT25G99-BWH-2EM-EX	∅0.45*110*2	4.3Ω
LPT25G12-BWH-2EM-EX	∅0.45*240	18.9Ω
LPT25G23-BWH-2EM-EX	∅0.45*240	18.9Ω

Compliance with Design of Fans Working in Potentially Explosive Atmospheres, EN 14986:2017, has not been verified for the component as part of this certificate.

Temperature range:

Model	Ambient Range
LPT25G99-BWH-2EM-EX	-20°C~70°C
LPT25G12-BWH-2EM-EX	-20°C~60°C
LPT25G23-BWH-2EM-EX	-20°C~70°C

Electrical data

Model	Input Rating			
LPT25G99-BWH-2EM-EX	115~230 Vac	50/60 Hz	0.4 A	24 W
LPT25G12-BWH-2EM-EX	115 Vac	50/60 Hz	1.05 A	75 W
LPT25G23-BWH-2EM-EX	230 Vac	50/60 Hz	0.6 A	75 W

Routine tests:

No routine tests are necessary.

[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] Schedule of Limitations:

- The devices shall be installed in an enclosure that provides a degree of protection not less than IP 54 in accordance with EN 60079-7 or the device must be evaluated as part of end-product evaluation.
- The devices shall only be used in an area of not more than pollution degree 2, as defined in EN 60664-1.
- Transient protection shall be provided that is set at a level not exceeding 140% of the peak rated voltage value at the supply terminal to the devices.
- The devices are for use in -20°C to 60°C ambient temperature for LPT25G12-BWH-2EM-EX, and -20°C to 70°C ambient temperature for LPT25G99-BWH-2EM-EX and LPT25G23-BWH-2EM-EX. During temperature test, the highest measured service temperature of potting compound within device was 87°C at 70°C ambient temperature.

[18] Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information

MECHATRONICS®

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