IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	**IECEx KTL 17.0001X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 2	Issue 1 (2018-08-30) Issue 0 (2017-01-16)
Date of Issue:	2022-07-27		

Applicant: **KLT Co., Ltd.**
34-12, Bangchon-ro 955beon-gil, Tanhyeon-myeon, Paju-si
Gyeonggi-do 10857
Korea, Republic of

Equipment: **Automatic Single Point Lubricators, Pulsarlube EXP/EXPL**

Optional accessory:

Type of Protection: **Intrinsic safety "i"**

Marking: Ex ic IIC T5/T4 Gc
Ex ic IIB T4 Gc

Approved for issue on behalf of the IECEx Certification Body: **Park, Jong-Koo**

Position: **Certification Manager**

Signature:
(for printed version)

Date:
(for printed version) 2022-07-27

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

Korea Testing Laboratory
87, Digital-ro, 26-gil, Guro-gu
Seoul
Korea, Republic of

IECEx Certificate of Conformity

Certificate No.: **IECEx KTL 17.0001X**

Date of issue: 2022-07-27

Manufacturer: **KLT Co., Ltd.**
34-12, Bangchon-ro 955beon-gil, Tanhyeon-myeon, Paju-si
Gyeonggi-do 10857
Korea, Republic of

Manufacturing locations: **KLT Co., Ltd.**
34-12, Bangchon-ro 955beon-gil,
Tanhyeon-myeon, Paju-si
Gyeonggi-do 10857
Korea, Republic of

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements.This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :
The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

KR/KTL/ExTR17.0001/00 KR/KTL/ExTR17.0001/01 KR/KTL/ExTR17.0001/02

Quality Assessment Report:

KR/KTL/QAR10.0002/08

IECEx Certificate of Conformity

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The Pulsarlube EXP/EXPL is an automatic grease single point lubricator for extending the life of the bearing in the manufacturing process. The equipment contains a grease pouch, a vertical feed pump, a reduction gear with DC motor, an LCD with key pad, PCBs with microprocessor and a replaceable battery pack. Alkaline battery pack (B001) and lithium battery pack (LB001) are applicable, and each pack contains three non-rechargeable batteries.

The Pulsarlube EXP/EXPL provides the options for selecting different pre-set dispensing rates from 1 month to 24 months, and LCD screen provides necessary information for setup and status. The batteries used inside the battery pack are as follows and not intended to be replaced by the user.
- AA size Alkaline battery(Type L): Energizer E91 or Duracell MN1500.
- AA size Lithium battery(Type F): Energizer L91.

The Ex-Codes are as follows:
Pulsarlube EXP - Ex ic IIC T5/T4
Pulsarlube EXPL - Ex ic IIB T4

The model name is categorized by each product capacity:
<Pulsarlube EXP/EXPL>
EXP60/EXPL60 - Grease Capacity(cc): 60
EXP120/EXPL120 - Grease Capacity(cc): 120
EXP240/EXPL240 - Grease Capacity(cc): 240
EXP480/EXPL480 - Grease Capacity(cc): 480

The conditions of temperature class are as follows:
<Pulsarlube EXP>
-Temperature Class T5
Applied battery pack type: LB001, Lithium battery pack
Ambient temperature range: -40 °C ≤ Ta ≤ +50 °C
-Temperature Class T4
Applied battery pack type: B001, Alkaline battery pack
Ambient temperature range: -18 °C ≤ Ta ≤ +54 °C

<Pulsarlube EXPL>
-Temperature Class T4
Applied battery pack type: LB001, Lithium battery pack
Ambient temperature range: -40 °C ≤ Ta ≤ +50 °C
-Temperature Class T4
Applied battery pack type: B001, Alkaline battery pack
Ambient temperature range: -18 °C ≤ Ta ≤ +54 °C

Refer to the instruction manual for details.

SPECIFIC CONDITIONS OF USE: YES as shown below:
1) Pulsarlube EXP/EXPL shall be marked "X" with indication of the necessary information in accordance with item e) of Cl. 29.3 and item g) of Cl. 29.12 of IEC 60079-0 to ensure the installation minimizes the risk from electrostatic discharge as follow.
"WARNING – Potential electrostatic charging hazard – See instructions"

2) Pulsarlube EXP/EXPL is operated by batteries but the batteries inside the battery pack are not intended to be replaced by the user so the warning label as specified in Cl.12.3 of IEC 60079-11 is not needed but an indication of the necessary information to ensure the correct use on the manual is recommended as follow.
"WARNING – Use only OEM battery pack (B001/LB001)"
"WARNING – Do not replace battery when an explosive atmosphere is present"
"WARNING – Do not open when an explosive atmosphere is present"

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 2:

1. The type numbers of the battery packs have been addressed as B001(Alkaline battery pack) and LB001(Lithium battery pack) for identification.
2. The address of the manufacturing location has been changed.
3. Update of IEC 60079-0 standard to the latest edition, IEC 60079-0:2017(Ed.7)
4. Addition of alternate material for the housings and pouch cartridge
5. Addition of alternate types of connectors for internal connections
6. Minor modification of several mechanical parts to correct dimension errors without adversely affecting the intrinsic safety of the equipment
7. Reorganization of technical document list(addition to PART LIST, Instruction Manual Pulsarlube EXP/EXPL, and PCBs drawings related to the reed switch)

Issue 1:

1. To increase the motor's torque, the resistance value of R7 is changed to 2Ω at EXPL which is the added model from 5Ω of the original model EXP. The Ex-code of the model EXPL is Ex ic IIB T4.
2. Marking method is changed to Printed sticker from Silk print.
3. Nothing is changed except R7 and marking method.