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USER MANUAL

KNLB-ExSeries Explosion-proof speaker user manual

Ver : A0

KNLB-Ex



HONGKONG KOON TECHNOLOGY LTD

Tel/0755 27448753/29790158

Web/www.koontech.com email: mrketing@koontech.com

T31001 YIFANG Center Baoan Shenzhen China 518100

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Foreword

The KNLB-Ex type explosion-proof speaker is a high-frequency speaker loudspeaker, and its explosion-proof performance meets the requirements of the explosion-proof type GB3836. And passed the inspection by the national designated inspection unit, and obtained the explosion-proof certificate. KNLB-Ex type explosion-proof loudspeakers are suitable for hazardous locations containing explosive gas atmospheres of temperature class T1 ~ T5 of class II A, B and C in Zone 1, Zone 2, Zone 21 and Zone 22.

1. Characteristic

- Explosion proof mark and grade

Explosion proof mark : II 2GD Ex db eb mb IIC T5 Gb $-40^{\circ}\text{C} \leq T_a \leq +55^{\circ}\text{C}$
 Ex tb IIC T100 $^{\circ}\text{C}$ Db

Grade : IP 66

- Explosion proof Mode table :

KN LB - Ex 30 Y
 ① ② ③ ④ ⑤

① : KOON

② : Loudspeaker

③ : Explosion proof

④ : Product Rated Power, Unit : W

⑤ : suffix "Y" : constant voltage speaker, built-in audio transformer

Suffix no "Y" : fixed resistor speaker

5-----Rated Power 5W

10-----Rated Power 10W

15-----Rated Power 15W

30-----Rated Power 30W

Model Number	AC impedance 8Ω	Built-in Audio Transformer	Rated Power	application
KNLB-Ex5	√		5W	Explosion-proof telephone: KNEX6/KNEX8
KNLB-Ex10	√		10W	
KNLB-Ex15	√		15W	
KNLB-Ex30	√		30W	
KNLB-Ex30Y		√	5W/10W/15W30W	Voltage type power amplifier

2. Install Instructions

2.1 Installation

According to the field situation, the speaker is fixed to the wall or ceiling with 2- M10*1.5 bolt through the fixed beam of the speaker.

2.2 Connecting

Loosen the fixed screw of the housing, open the flameproof cavity, and connect the audio signal line to the terminal respectively. After the connection is connected, the explosion-proof upper cover and explosion-proof body are installed.

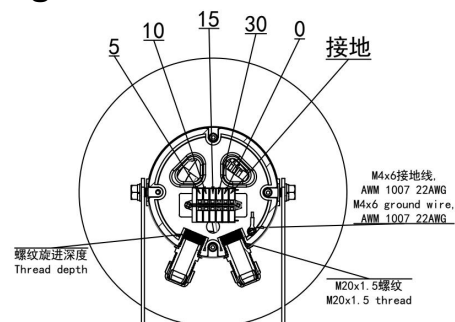
3. Specification

- Material / Color : Aluminum/gray
- Rated Power(Options) : 5W/10W/15W/30W
- Built-in Audio Transformer :70 V/100V,5W/10W/15W/30W.(Options)
- Effective Frequency range :300 Hz~8000 Hz.
- IP-rating IP66
- Ambient temperature:-50 ~ +60degree. Relative humidity:10%~95%
- Input AC resistance : $8 \pm 15\% \Omega$, Sound coil DC resistance : $6.4 \pm 7\% \Omega$
- Explosion-proof standard of the product : EN IEC 60079-0:2018,
EN 60079-1:2014,EN 60079-31:2014
EN 60079-14-2014

4. Interface Connection Schematic Diagram



cable (option : 2-core wire)



Wire connection diagram

5. Warning and Safety Notices

- Before using, please confirm whether the temperature and humidity of the environment meet the temperature and humidity required for the work of the product.
- In the use of this product, please note that the cable must be intact,




otherwise the cable may be damaged.cause the occurrence of safety accidents.




- Non-technical service personnel should not disassemble or repair the product themselves. Otherwise, improper repair or malfunction may cause electric shock, fire, etc., which may lead to injury accidents and invalidate your product warranty.
- Do not put metal objects such as pins, wires, fingers or other foreign objects into the vents and gaps. It may cause current to pass through metal or foreign matter, which may cause electric shock and cause injury. If the foreign objects or similar objects fall into the product, it should be stopped to use.
- Do not discard or store the packaging in a place where the young child can get it. If the child uses it to cover the head, the nasal and mouth blockage may occur, resulting in suffocation.
- For using the speaker the laws and the industrial regulations, the accident prevention, respectively the electrical regulations must be respected.
- The speaker is suitable for use in Group II,Category 2G, 2D or Non-hazardous Locations .
- Do not disconnect the speaker unless it is in a non-dangerous area and the power has been cut off.
- For During installation or removal, the joint of the upper protective cover and the bottom shell shall not be damaged or scratched.
- Do not damage the flameproof bonding surface during installation and keep it clean. The flameproof surface fastening screws shall be tightened uniformly,Note that the flameproof bonding surface does not contain foreign matter.
- Ambient temperature: -40°C to +55°C
- Repair of the flamepaths is not allowed. It is not accepted that repair in compliance with the values in EN 60079-1.
- The installation must be installed according the requirements of EN 60079-14: latest version (or its National equivalent standard).

6. Product Maintenance

- Avoid inserting water into the phone during rainy days.
- Check the cable regularly.
- Keep the product dry and clean.
- Please operate the loudspeaker according to the user manual.

7. Product Label :

	 0575
Explosion-proof horn KNLB EX5	
5W 8Ω	 II 2GD Ex db ed mb IIC T5 Gb Ex tb IIIC T100°C Db
TPS 20 ATEX 106679 0002 X	
S/N: XXXXXXXXXXXX	-40°C ≤ Ta ≤ +55°C
Date: 20XX XX XX	IP 66
HONGKONG KOON TECHNOLOGY LIMITED	
Room 1001, Block 1, building T3, unit Center, Baoan District, Shenzhen, China	
WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT	
USE FASTENERS WITH YIELD STRESS ≥ 420 MPa	
THE SPECIFIC THREAD TYPE AND SIZE OF ENTRY: M2.0x1.5	

	 0575
Explosion-proof horn KNLB EX10	
10W 8Ω	 II 2GD Ex db ed mb IIC T5 Gb Ex tb IIIC T100°C Db
TPS 20 ATEX 106679 0002 X	
S/N: XXXXXXXXXXXX	-40°C ≤ Ta ≤ +55°C
Date: 20XX XX XX	IP 66
HONGKONG KOON TECHNOLOGY LIMITED	
Room 1001, Block 1, building T3, unit Center, Baoan District, Shenzhen, China	
WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT	
USE FASTENERS WITH YIELD STRESS ≥ 420 MPa	
THE SPECIFIC THREAD TYPE AND SIZE OF ENTRY: M2.0x1.5	



Explosion-proof horn KNLB EX15

15W 8Ω



II 2GD

Ex db ed mb IIC T5 Gb
Ex tb IIIC T100°C Db

TPS 20 ATEX 106679 0002 X

S/N: XXXXXXXXXXXX

-40°C ≤ Ta ≤ +55°C

Date: 20XX XX XX

IP 66

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WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

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THE SPECIFIC THREAD TYPE AND SIZE OF ENTRY: M20x1.5



Explosion-proof horn KNLB EX30

30W 8Ω



II 2GD

Ex db ed mb IIC T5 Gb
Ex tb IIIC T100°C Db

TPS 20 ATEX 106679 0002 X

S/N: XXXXXXXXXXXX

-40°C ≤ Ta ≤ +55°C

Date: 20XX XX XX

IP 66

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USE FASTENERS WITH YIELD STRESS ≥ 420 MPa

THE SPECIFIC THREAD TYPE AND SIZE OF ENTRY: M20x1.5



Explosion-proof horn KNLB EX30Y

70V/100V 30W



II 2GD

Ex db ed mb IIC T5 Gb
Ex tb IIIC T100°C Db

TPS 20 ATEX 106679 0002

S/N: XXXXXXXXXXXX

-40°C ≤ Ta ≤ +55°C

Date: 20XX XX XX

IP 66

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WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

USE FASTENERS WITH YIELD STRESS ≥ 420 MPa

THE SPECIFIC THREAD TYPE AND SIZE OF ENTRY: M20x1.5



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HONGKONG KOON TECHNOLOGY LTD

Office Address: Room 1001, Block 1, building 3, unit Center, Baoan District, Shenzhen, China

Factory Address : Koontech Building, Phoenix Mountain, Linhai Industrial Zone, Shajiao Community Humen Town, Dongguan City, Guangdong, China

Tel: 0755-29790158/27448753

Web: www.koontech.com

E-mail: marketing@koontech.com