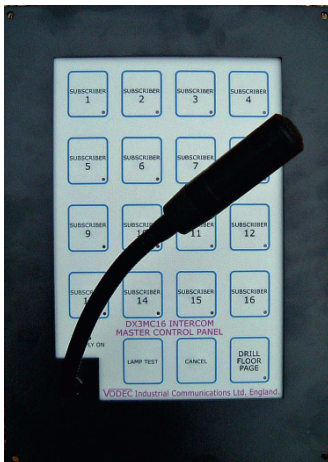


DRILLERS INTERCOM SYSTEM DATASHEET

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Drillers Talkback Intercom System

Features

- Hands-free Operation
- 16 Subscriber selectors fitted as standard
- Star wired system architecture
- Single pair field cables no multi-core or special cable
- Safe, simple communication
- Simple, easy maintenance
- Elimination of common mode failure

Description

The BARTEC VODEC DX3+1 Driller's Intercom system has been specifically designed in conjunction with drilling operations to provide reliable, simple two way voice communications on board a drilling rig.

The system is primarily designed to enhance health and safety on board the rig.

It is developed to the same high standards of security as the BARTEC VODEC Public Address and General Alarm (PAGA) System which is a prime life safety package.

The DX3+1 system comprises of a central panel, (which carries switching and amplification) Driller's cabin master control, subscriber station(s) and paging loudspeaker(s).

The entire system is designed to facilitate control from the driller's position, to this end all stations are hands-free including the Driller's station.

The Driller position comprises of the following ATEX certified DX3+ apparatus:

- 200 mm/600 mm long reach gooseneck mounted intrinsically safe EExi microphone fitted to DX3MC16 control membrane panel
- Thigh/Knee/Foot EEx Switch to facilitate communication control type KNS01.
- Driller "receive speech" EEx Loudspeaker

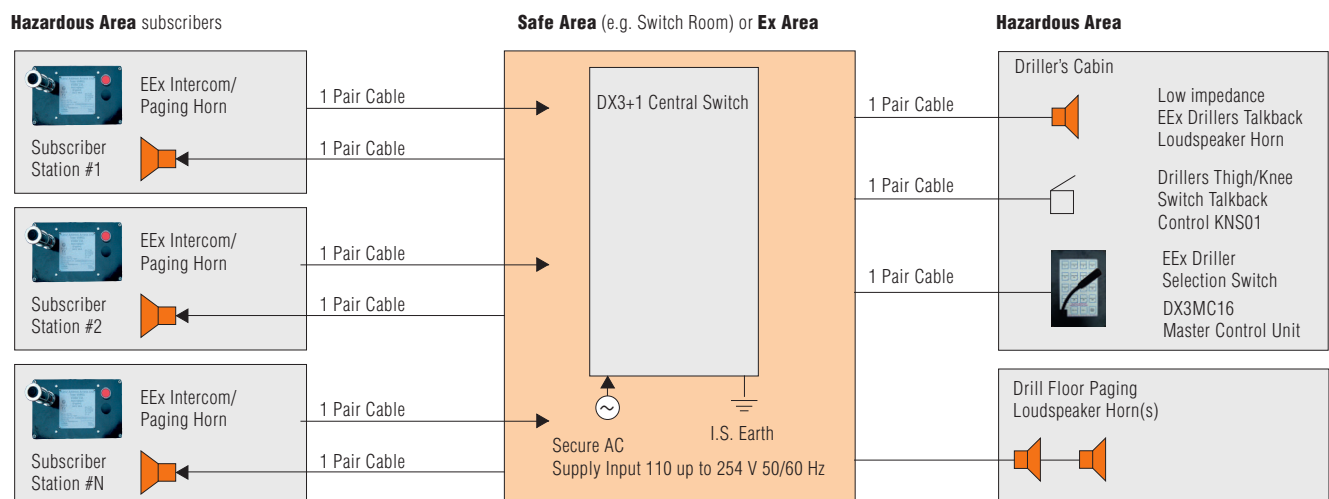
Subscriber Stations

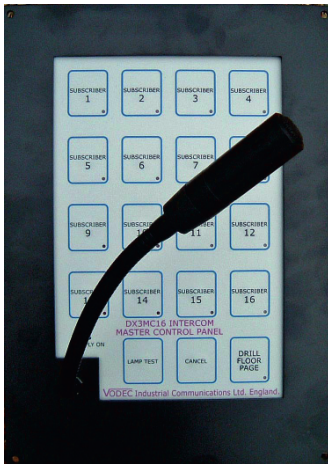
Subscriber positions comprise of glass reinforced microphone and loudspeaker unit with up to sixteen stations possible to connect to a single DX3+1 switch.

- VAP01-GO can be fitted where an extended reach microphone is required.
- Simple subscriber unit with microphone and single button.
- For certain locations, e.g. shale shaker, an acoustic shelter aids intelligible communications.

The DX3+1 Switch can support a Driller's cabin fitted with dual chairs. In this instance two KNS01 knee/thigh control switches and two master control access panels type DX3MC16 are installed to allow dedicated control to each chair.

Diagram of Hands-free Drillers Talkback Intercom System





Master Control Panel

Features

- 16 Subscriber selectors fitted as standard
- Single pair connectivity
- Membrane keyboard
- Simple system expansion
- Easy installation, rapid commissioning

Description

The BARTEC VODEC DX3+1 is a driller's talkback intercom system designed to enable reliable safety critical two way communication between a master Driller's position and strategic rig locations.

The DX3+1 system is managed and controlled from a DX3MC16 control panel which allows the driller to conveniently establish communication plans for hands-free operation.

The unit comprises of a robust low profile enclosure which carries a tactile membrane keyboard (which is fitted with large illuminating subscriber channel selector keys) and an extended "long reach" gooseneck mounted noise cancelling microphone.

The DX3MC16 is ATEX certified for safe use in a Zone 1 IIC potentially explosive atmospheres and

is rated intrinsically safe when used in conjunction with BARTEC VODEC central equipment.

The DX3MC16 is fitted with a BARTEC VODEC VAP100a transceiver which provides modular plug in/out interface facilitating rapid service.

Connection between the control unit and the host DX3+1 central rack is by a single cable pair which carries phantom DC power supply, data and status indication control.

Technical Data

ATEX Certified

Zone IIC T4
Hazardous Area 1 Certification

Dimensions

250 mm wide
350 mm high
55 mm deep

Weight

1kg

Finish

Back enclosure electroplate steel

Power supply

5V DC phantom powered

Transceiver

VAP100a

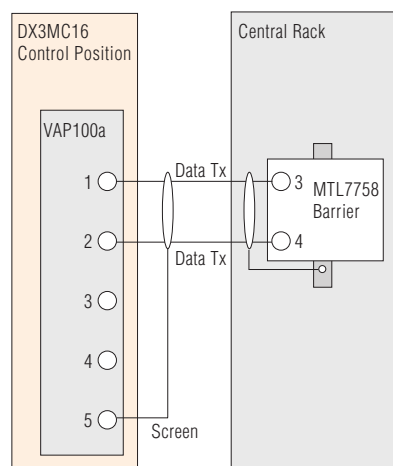
Explosion protection

Ex protection

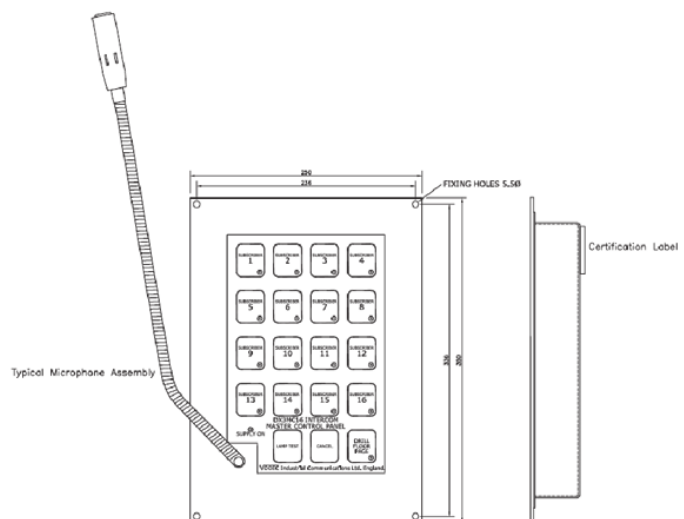
II 2G Ex ib IIC T4
-40 °C ≤ T_a ≤ +60 °C

Diagramm

shows connection of DX3MC16 master control unit linked to host equipment



Drawing



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