

# **Explosion-proof Telephone with Beacon and Horn Specification**

## Introduction

The Explosion Proof Telephone is designed for voice communication in the hostile environment where reliability, efficiency and safety are of prime importance. The telephone can handle the large temperature differences found outdoors, high humidity, exposure to sea water and dust, Corrosive atmosphere, Explosive gases & particles, as well as mechanical wear and tear, making it perfect for use as an emergency telephone. The unique robust handset is manufactured from moulded Bulk Molding Compound and designed specifically to withstand arduous use in all environments, armoured cord to provide additional resistance to vandalism or heavy industrial use.

This Explosion proof broadcasting telephone is widely used in oil exploration, oil & gas plants, military, chemical and petrochemical plants, refineries, mines, oil refining, offshore and land based rigs, power generation facilities, wastewater treatment facilities, grain storage sites and other hazardous industrial environments.

## General Description

- Standard Analogue or VoIP/SIP Explosion-proof & Weatherproof Telephone
- Aluminium alloy die-casting body
- Vandal resistant handset and cord
- Full Keypad, "LR" button for last number redial, "R" for flash recall, "M" for muting
- Inductive coupler fitted as standard for hard of hearing
- Wall mounting, simple installation
- The beacon will flash when there is an incoming call.
- Built-in amplifier, with external horn: broadcasting feature
- Wall mounting, simple installation
- External power supply for beacon and horn

## Technical Data

### Analogue Version

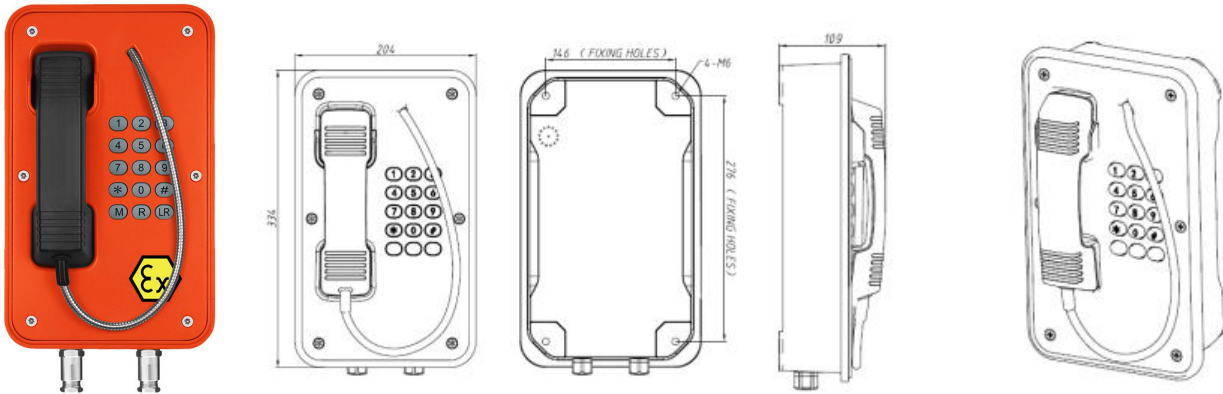
Power Supply	Telephone line powered for telephone; External power supply for beacon and horn
Supply Voltage	24 VDC to 65 VDC
Supply Current	20 mA DC to 100 mA DC
Ringer Volume	- 80dB(A) at a distance of 1 m - 110dB(A) at a distance of 1 m (for external horn speaker)
Dialing Method	DTMF mode in accordance with ITU-T recommendation Q.23.

### SIP Version

Power Supply	PoE for telephone; External power supply for beacon and horn
Power Consumption	-Idle: 1.5W -Active: 1.8W
SIP Protocol	SIP 2.0 (RFC3261)
Support Codec	G.711 A/U, G.722 8000/16000, G.723, G.729
Communication Type	Full duplex
Ringer volume	- 90~95dB(A) at a distance of 1 m - 110dB(A) at a distance of 1 m (for external horn speaker)

## Parts Description

### Explosion-proof Telephone :



### Explosion protection:

II 2G Ex e ib mb IIC T4 Gb

II 2D Ex ib [ib] tb IIIC T135 ° Db

Certificated for use in Hazardous areas of Gas Group IIB/IIA

Zone classification: Zone 1, Zone 2 and Zone 22

Ex 'd' protected

Intrinsically safe Ex "ib" certified

Temperature classification:T4

### Lightning / Transients

Protection to ITU-T k.21 enhanced levels

### Casing Material

Die cast aluminium, epoxy powder coated.

### Color

Available in four colors:

Orange, Yellow, Red and Blue

### Keypad

Weather resistant full Keypad, No.of keys(TOTAL 15KEYS):0-9, \*, #, Redial, Mute, Last Number Redial

### Handset

With Noise canceling microphone, for effective communication from noisy areas(Armored SS cord stands up to rough treatment, optional for black curly cord )

### Mounting

Wall/column/structural

Captive cover screws prevent loss during installation

### Weather Resistance

IP66-IP67

### Ringing Tone

Built-in External Ringer that provides penetrating calling signal(85dbA@1meter)

### Hook switch

Electronic / magnetic with no visible moving parts

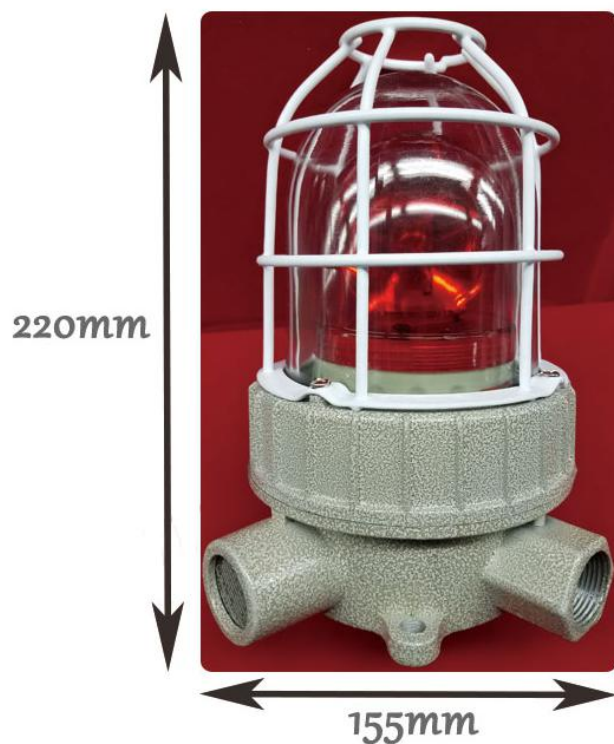
### M.T.B.F.

Calculated to have an M.T.B.F. in excess of 50,000 hours using

**Unit Size:** 204\*334\*126mm (H\*W\*D)

Net weight: 8KG; Gross weight: 8.8KG

**Explosion Proof Beacon:**



- Aluminium alloy Enclosure, high-pressure electrostatic powder coated after shot blasted.
- Compact structure and nice appearance.
- High impact resistance tempered glass cover.
- High brightness red LED, long lifetime and high brightness.
- Galvanized and plastic coated protection mask, durable and good anti-corrosive.
- Can be used as warning light without buzzer.
- Stainless steel Exposed fasteners
- Steel conduit or cable wiring.
- Suitable for explosive gas environment Zone 1 and Zone 2.
- Suitable for IIA, IIB, IIC explosive gas environment.
- Suitable for Hazardous dust area: Zone 20, Zone 21, Zone 22.
- Can be used in the environment of temperature group for T1~T4.
- Meet a criterion: G3B3836.1, GB3836.2, GB3836.3, GB12476.1, IEC60079
- Ex-proof Mark: Exd II BT4 Gb, DIP A21 TA, T4.
- Rated voltage: AC220V/110V/36V, DC12V/24V/36V
- Lighting Source: 5W Rotary warning light (ordinary) or LED.
- Protection grade: IP65
- Corrosion-proof grade: WF1
- Inlet Thread: G3/4"
- Cable outer dia: 10mm~14mm
- Guide number: 150/min
- Sound intensity: ≥80dB

- Gross Weight: 1.5 KG

#### Explosion Proof Horn:

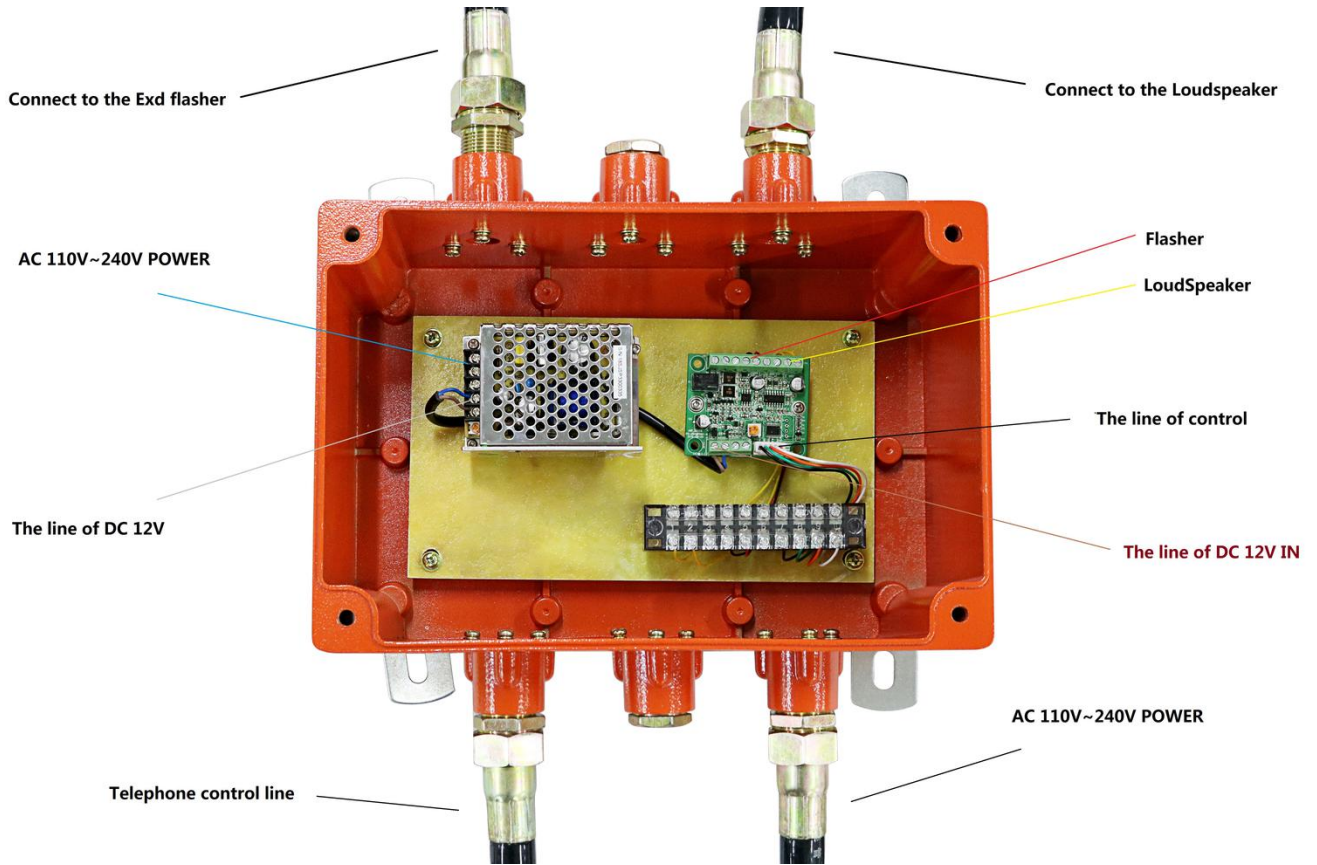


- Aluminum casting body
- Fire-proof spool material is stainless steel preparation of net
- Cable entry is sealing ring structure
- The sealing is made of the rubber materials with an international hardness of 50 to 60. And the aging test is according to the rules of GB3836.1 Appendix D3.3 for testing. After tested, the hardness shall not exceed 20% compared with the hardness before tested.
- This explosion-proof horn meets the GB3836.1-2000, GB3836.2-2000 current national standards.
- Explosion-proof mark Exd II CT6:IP65
- Ex type is flame-proof type
- Output power
  - Output power 25W (load  $8\Omega$ )
  - Output power 25W (110V audio signal)
- Output sound pressure level (SPL)
  - Output frequency range: 300 ~ 4000Hz
  - Intensity of output sound pressure: 110 dBA @ 1 metre typical
- Size:L220\*W200\*H200 (mm)
- Gross Weight: 1.5 KG

#### Explosion Proof Connection Box:



- Aluminum casting body
- Ex-proof Mark: ExellBT6
- Waterproof protection:IP65
- Corrosion-proof grade: WF1
- Suitable for IIA IIB IIC Anti-explosion Gas Environment
- Dimension 200\*200\*130(mm)
- Connection Drawing:



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