

# SPEAKERS – Up to 30 Watts EExde, Weatherproof DB16 Range



## Introduction

This range of loudspeakers, intended for use in potentially explosive gas and dust atmospheres, has a power rating of up to 30 Watts and is suitable for use in the harsh environmental conditions found offshore and onshore in the oil, gas and petrochemical industries.

With an integral increased safety chamber, for termination, this unit offers both high output and easy installation.

In addition, the 25 Watt version still offers superior output with a higher ambient certified temperature (+65°C).

The flamepaths, flare and body, are manufactured from a UV stable glass reinforced polyester. Stainless steel screws and mounting stirrup are incorporated to ensure a corrosion-free product.

- ★ Zone 1, Zone 2 & non-Ex use.
- ★ EExde IIB/IIC, T3/T4\*.
- ★ ATEX approved, Ex II 2G/Ex II 2GD\*.
- ★ BASEEFA certified.
- ★ UL listed for USA and Canada
  - Hazardous locations:
    - Class I, Div 2, Groups A-D\*
    - Class I, Zone 1, AExde IIB/IIC T3/T4\*
  - Ordinary locations: Signalling Speaker
- ★ GOST 'K' certified.
- ★ Brazilian (Inmetro) Certified.
- ★ IP66 and IP67.
- ★ Certified temperature –50°C to +65°C\*.
- ★ GRP corrosion-free flamepath.
- ★ Up to 122dBA at 30 Watts at 1 metre\*.
- ★ 25 and 30 Watt versions.
- ★ Power tapplings via integral transformer.
- ★ Ratcheted swivel mounting stirrup.
- ★ Stainless steel fixtures.
- ★ 100V line or 8 ohm versions available.

\*Model dependent.

# MEDC

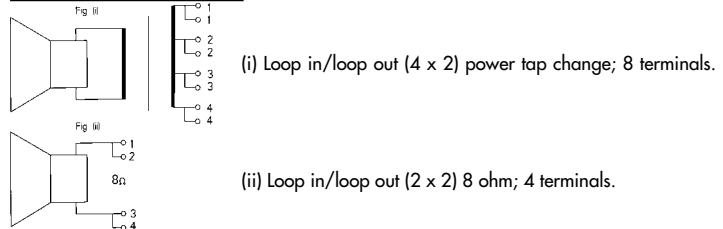
# Specification

**Rated Power:** 30 Watts RMS continuous (at 25°C).  
**Certification:** CENELEC EN50014, 18, 19.  
**IIB Version:** Cert. No. Baseefa04ATEX0166X  
**30 Watt** ATEX Ex II 2G EExde IIB T3 (Tamb. -50°C to +40°C)  
**25 Watt** ATEX Ex II 2G EExde IIB T3 (Tamb. -50°C to +65°C)  
**IIC Version:** Cert. No. Baseefa04ATEX0167X  
**30 Watt** ATEX Ex II 2GD EExde IIC T110°C (Tamb. -50°C to +40°C)  
**25 Watt** ATEX Ex II 2GD EExde IIC T110°C (Tamb. -50°C to +65°C)  
**Zones 1 and 2.**  
**UL Listed for USA and Canada**  
 - Hazardous locations:  
 Class I, Div 2, Groups C & D, Class I, Zone 1, AExde IIB T3  
 Class I, Div 2, Groups A-D, Class I, Zone 1, AExde IIC T110°C  
 - Ordinary locations: Signalling Speaker.  
**GOST 'K' Certification:** Exde IIC T4/IIB T3.  
**Brazilian (Inmetro) Certification:** BR-Ex de IIB T3.  
 BR-Ex de IIC T5.

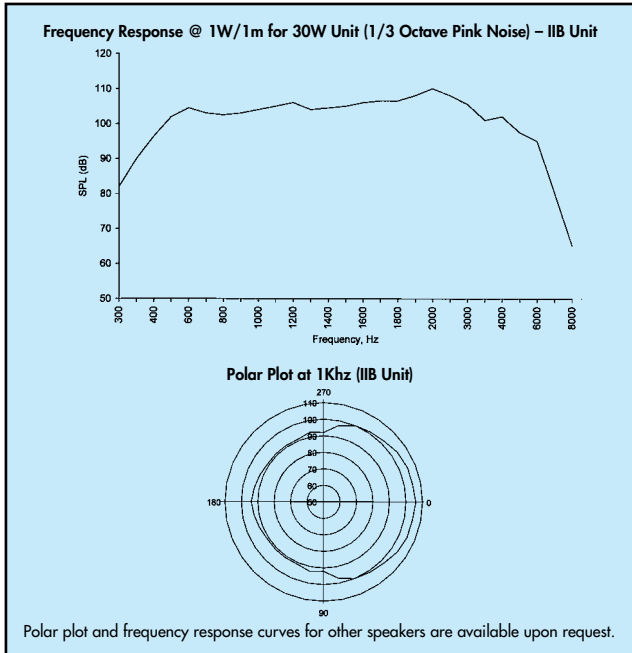
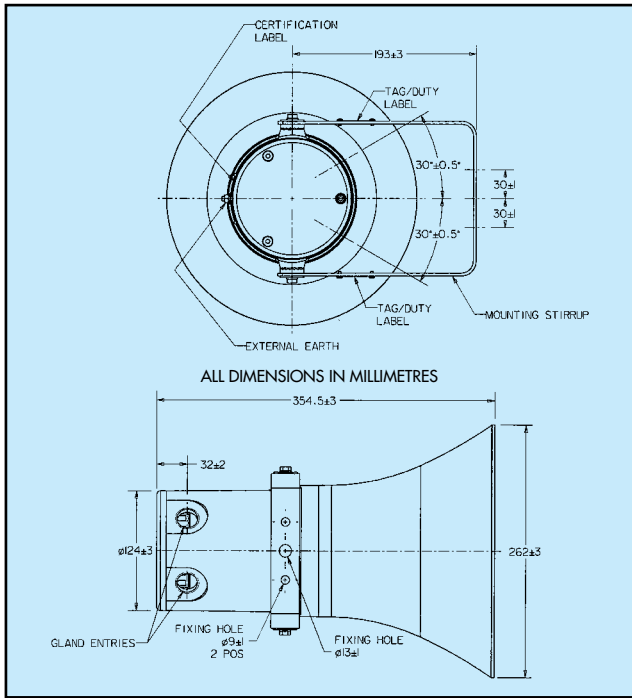
**Material:** Body & horn in anti-static, UV stable, glass reinforced polyester. Mounting stirrup and fixtures in stainless steel.  
**Finish:** All natural or body and horn can be painted to client's requirements.  
**Output:** IIB Version: Maximum output at 1W/1m is 110dBA  
 Maximum output at 25W/1m is 121dBA  
 Maximum output at 30W/1m is 122dBA  
 IIC Version: Maximum output at 1W/1m is 107dBA  
 Maximum output at 25W/1m is 118dBA  
 Maximum output at 30W/1m is 119dBA  
**Weight:** 5.5kg approx.  
**Certified Temperature:** -50°C to +40°C (30W version) -50°C to +65°C (25W version).  
**Ingress Protection:** IP66 & IP67.  
**Frequency Range:** 370Hz to 8kHz.  
**Voice Coil Impedance:** 8 ohms.  
**Transformer:** Used by combining the rated power tapings below.

| Transformer Tappings | Power (30W unit) (W) | Power (25W unit) (W) |
|----------------------|----------------------|----------------------|
| 1:2                  | 30.0                 | 25                   |
| 2:3                  | 25.0                 | 12.5                 |
| 3:4                  | 12.0                 | 6.0                  |
| 1:3                  | 6.0                  | 4.0                  |
| 2:4                  | 4.0                  | 2.0                  |
| 1:4                  | 2.0                  | 1.0                  |

### Transformer Tapping Options:



**Terminals:** 8 x 2.5mm<sup>2</sup>.  
**Earth Continuity:** Available via optional earthing stud or by internal earth plate.  
**Mounting:** Via stirrup with ratchet facility.  
**Labels:** Optional stainless steel tag and duty labels.  
**Cable Entries:** Up to 2 x M20, 2 x M25 ISO, 2 x 1/2" NPT or 2 x 3/4" NPT into termination (EExe) chamber.



# Ordering Requirements

The following code is designed to help you in the selection of the correct unit. Build up the reference number by inserting the code for each feature into the appropriate box. **For standard products available ex-stock, contact sales office for details.**

**DB16**      Certification      Max Rated Power      Transformer      Options      Entries      Finish

| Certification           | Code | Max Rated Power | Code | Transformer  | Code | Option                    | Code      | Entries   | Code | Option        | Code |
|-------------------------|------|-----------------|------|--|------|---------------------------|-----------|---|------|---------------|------|
| ATEX IIB                | BB   | 30 Watts        | 30   | Yes  | X*   | None                      | N         | 1 x M20   | 1B   | Natural Black | N    |
| ATEX IIC                | BC   | 25 Watts        | 25*  | No   | N    | Duty label                | D         | 2 x M20   | 2B   | Red           | R    |
| UL (C & D)*             | UB   |                 |      | *Std 100V.<br>Other voltages available, specify voltage. |      |                           | Tag label | 1 x M25   | 1C   | Special       | S    |
| UL (A-D)†               | UC   |                 |      |  |      | Internal earth continuity | E         | 2 x M25   | 2C   |               |      |
| UL (ordinary locations) | UW   |                 |      |  |      | Earth stud                | B         | 1 x 1/2" NPT  | 1M   |               |      |
| GOST 'K' IIB            | KB   |                 |      |  |      |                           |           | 2 x 1/2" NPT  | 2M   |               |      |
| GOST 'K' IIC            | KC   |                 |      |  |      |                           |           | 1 x 3/4" NPT  | 1N   |               |      |
| Inmetro IIB             | MB   |                 |      |  |      |                           |           | 2 x 3/4" NPT  | 2N   |               |      |
| Inmetro IIC             | MC   |                 |      |  |      |                           |           | To specify certified plug, suffix appropriate code with 'P', e.g. 2BP is 2 x M20 entries with one certified plug. |      |               |      |

Unit suitable for gas groups: \*C & D †A-D

\*Only available in ATEX versions.



All the above specifications, dimensions, weights and tolerances are nominal (typical) and MEDC reserve the right to vary all data without prior notice. No liability is accepted for any consequence of use.