

SA-30S

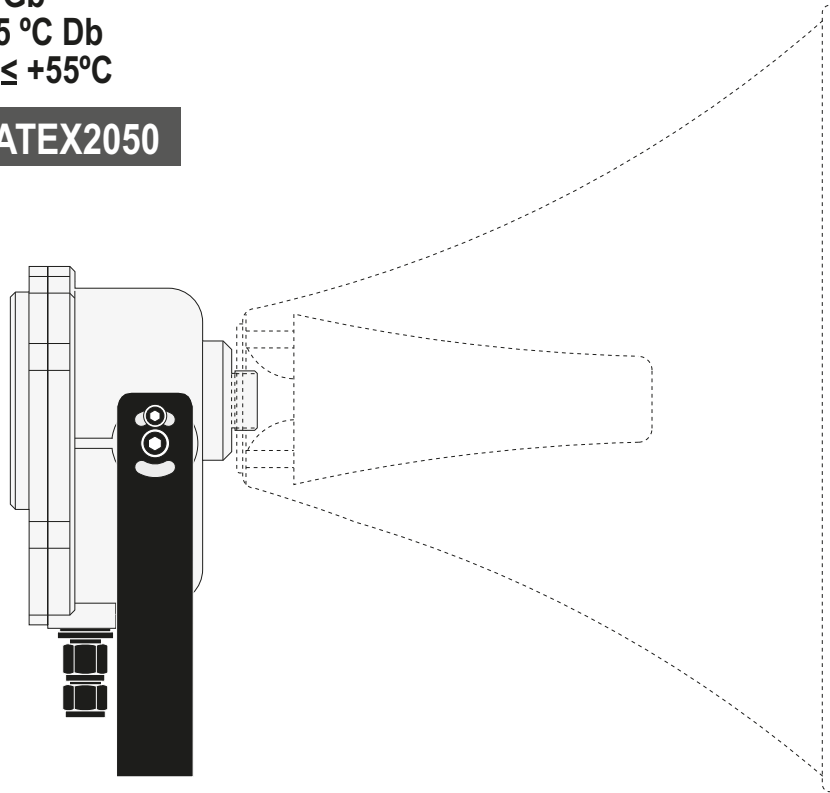
Driver unit for explosion proof speaker



II 2GD
Ex d IIB T3 Gb
Ex t IIIC T85 °C Db
-20 °C ≤ Ta ≤ +55°C

Manufactured to comply with
EN 60849 European Standard

Certificate: LOM 10ATEX2050

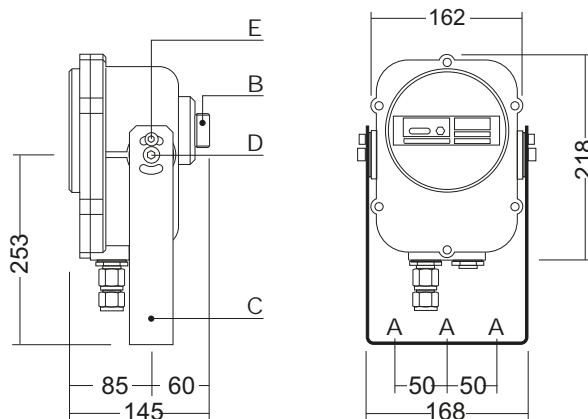


Technical characteristics

- Rated power:	30 W.	100 V. line transformer.	
- Sensitivity (*):	107 dB 1 W/1 kHz/1 m.	- Cable input:	1 3/4" NPT cable gland.
- Frequency range:	150 to 10000 Hz.	- Weight:	5.6 k.

Power selection (100 V. line): 30 / 15 / 7.5 / 3 W.

(*) with BG-50/E horn.



- A = FASTENING SCREWS (∅ 11 mm.)
- B = HORN COUPLING THREAD RW 1" 3/8" (18 threads)
- C = BRACKET
- D = VERTICAL ORIENTATION SCREW
- E = BRACKET SCREW

MEASUREMENTS IN MILLIMETRES
SCREWS: STAINLESS STEEL.



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rev.2 | 610.063a | 1 / 4

DESCRIPTION

The SA-30 30 W RMS explosion proof driver has an impedance adaptation transformer for 100 V constant voltage audio-frequency lines.

The surrounding casing is made of aluminium alloy and the screws are made of stainless steel. It is connected to exponential horns with RW 1" 3/8 threads (16 wires per inch).

INSTALLATION

Its steel brackets make possible to place it facing any direction, and to fix it permanently using two screws provided for this purpose.

The cable is run in through a 3/4" thread NPT cable gland.

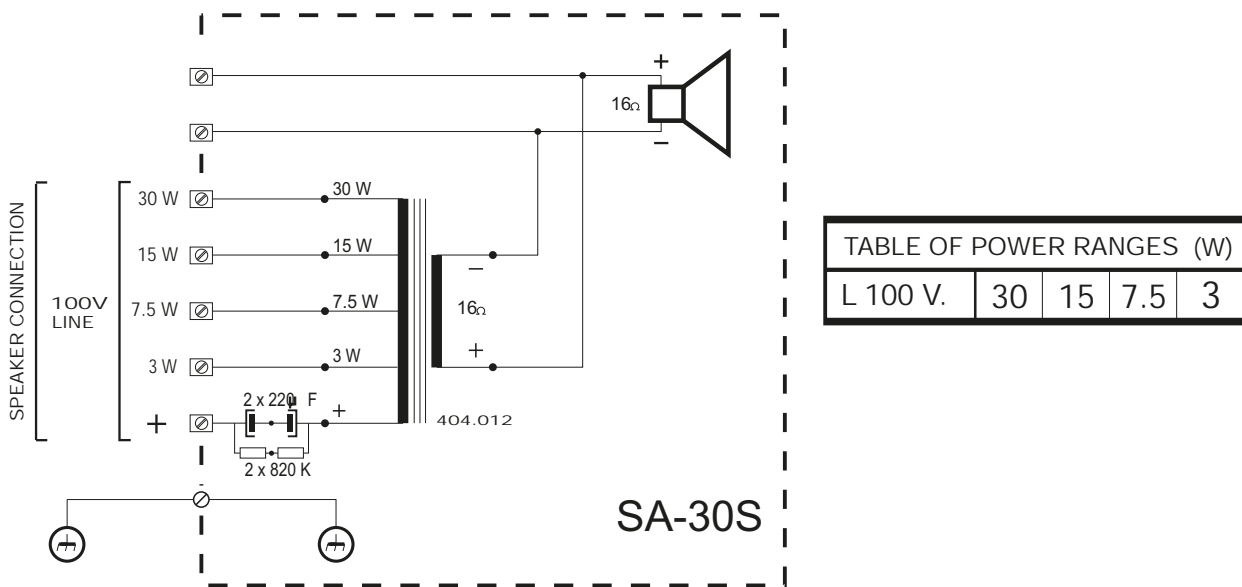
At the end of the line the end of line 3300 ohms / 30W resistor must be connected.

APPLICATIONS

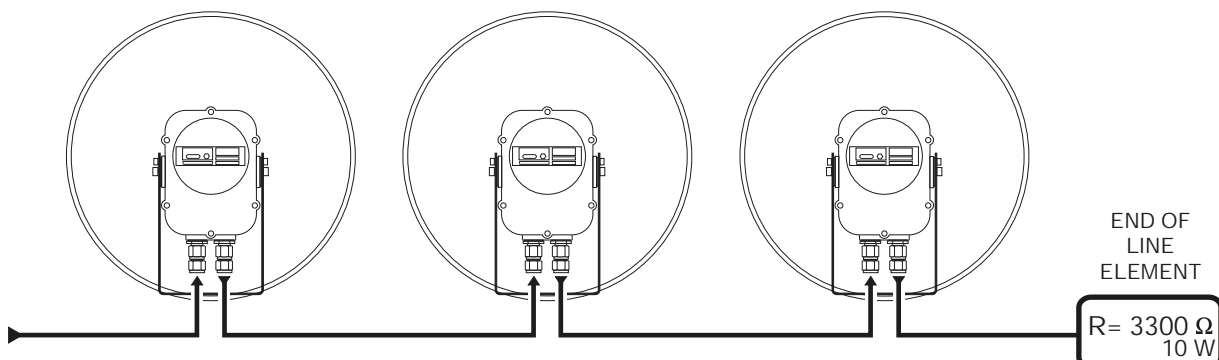
For indoor and outdoor public address installations, in areas where there is a risk of explosion.

Certificate: LOM 03ATEX2113 + Supplement n° 1 + Supplement n° 2.

The superficial temperature mark "T85°C" is referred to the using in environments of combustible powders in the absence of any gases.



TYPICAL INSTALLATION



MANUAL FOR THE CONNECTION OF THE SA-30S DRIVER UNIT ACCORDING TO THE EN-60849 STANDARDS

IMPORTANT

1. The SA-30S driver unit for explosion proof is a variant of the SA-30 model. All the indications of security, assembling, connection and maintenance, appearing in the corresponding technical manual, must be taken into account.

2. The scheme diagram of the line connection must be made in accordance with all the indications of the present manual.

3- End of line elements:

The supervision central for the loudspeakers line of the security sound system (CSX-849) requires an end of line 3300 ohm 10 W resistor.

It is not allowed to assemble this resistance inside of the surround casing of the SA-30S.

The adequate devices for assembling this resistance will be chosen.

If it is located in a safe area, it will be enough to use an IP-54 (or better) box.

If it is located in an area with risk of explosion, a little explosion proof (Exx d) box must be used to place this element.

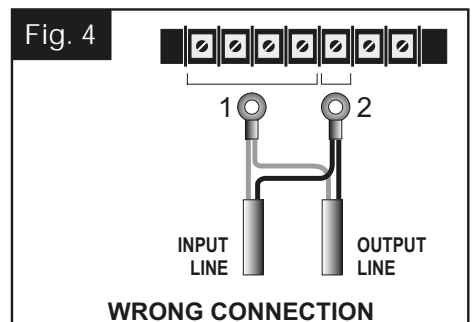
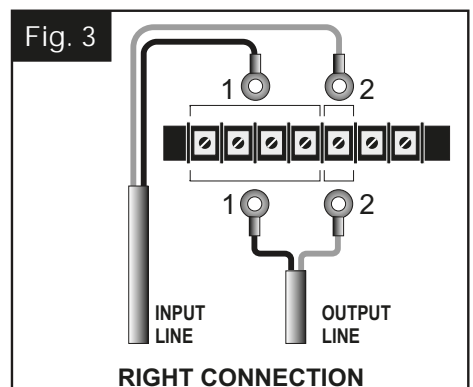
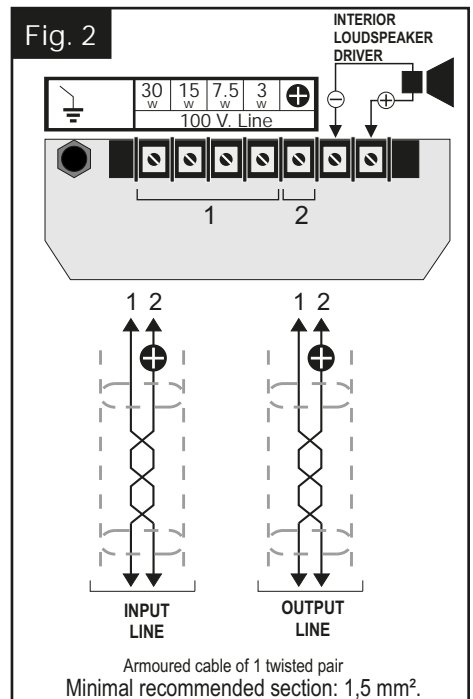
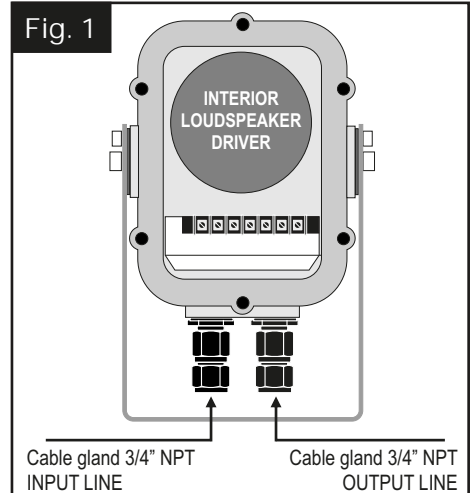
4- Since the loudspeakers line must go in and out of each SA-30S driver unit, with armoured cable, the second cable gland $\frac{3}{4}$ "NTP (provided) must be used in each SA-30S driver unit, specifically in the hole designed for this cases, removing the corresponding obturating plug (Fig 1).

5- For using the SA-30S driver unit for speaker with the security sound system UDE according to the EN-60849 you must never use the low impedance plug. The connection will be made according to the enclosed scheme and instructions (Fig 2).

6- For the connection there must be used two terminals for the input line and two terminals for the output line. The two terminals corresponding to each pole of the line will be connected together on the same terminal (Fig 3).

You must never use a unique terminal for two conductors (Fig 4).

7- The equal-powered union terminal of the surrounding case will be connected according to the general project corresponding to each installation.



CONNECTION OF THE LOUDSPEAKERS' LINE TO THE SECURITY CENTRAL (UDE-CSX-849)

Before connecting the loudspeakers line to the supervision central for lines and amplifiers CSX-849, make the following verifications:

Once all the loudspeakers and the end of line resistor are connected, after closing all the surrounding cases, even the box of the end of line, you must proceed with the measurement as follows:

- **Verification of the equal powered mass union according to the corresponding procedure.**

- **Measurement of the DC resistance of the line:**

- Using a electrical multimeter check the value of the resistance in continuous current.

- The measured value must be 3300 ohm (+/- 20 %).

- **Measurement of the charge impedance of the line:**

- Using a measurer of audio impedances, UDE model MZ-100 or equivalent, check the value of the impedance of the line on 1 kHz.

The value Z must correspond to the outcome of the following computation:

$$Z=U^2/P (+/- 20 \%).$$

P= Sum of the powers applied to each one of the loudspeakers of the line.

U= Voltage of the loudspeakers line. Normally 100V.

- **Measurement of the isolation of the line:**

- Using a insulation meter or equivalent device, check the isolation between the conductors of the line of loudspeaker and ground.

- The measurement using a tester or multimeter will not be admitted.