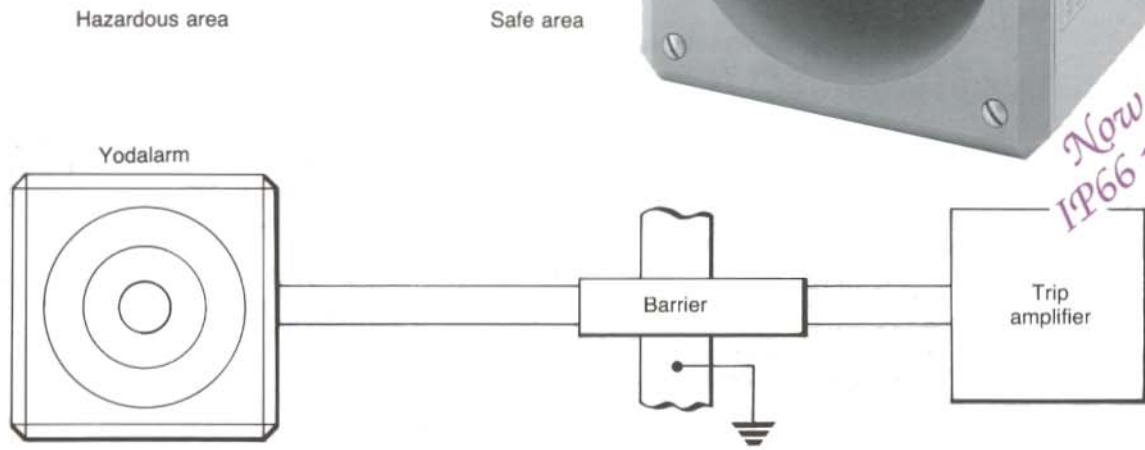


- 11 First stage signals
- 8 Second stage signals
- Up to 105 dB(A) output
- IP66 protection
- Volume control
- Intrinsically safe
CENELEC approved by BASEEFA



*Now with
IP66 protection*



Typical application of Yodalarm in hazardous area

The Yodalarm 2-wire solid state electronic sounder produces a loud audible warning signal within a hazardous area. To avoid confusion between alarm signals the Yodalarm can be set on-site to generate any one of 11 unique first stage alarm signals. Eight of the first stage settings can produce distinct second stage alarm signals when the supply voltage to the Yodalarm is reversed, see the output signal table for full details. The Yodalarm can be set to generate simple continuous tones, single or dual tones with slow or fast switching rates, slow or fast whoop, swept frequency or a siren. A maximum continuous output of 105 dB (A) at 1 metre is available, but this can be reduced by 15 dB (A) using the internal volume control.

Main application of the Yodalarm is the generation of unique signals to give audible plant alarms within the process area. Control room trip amplifiers can be used to activate the hazardous area located Yodalarms. For example, a high-high, or a low-low trip may be used to reverse the supply voltage to the Yodalarm, and thus produce a distinct second stage alarm signal.

The intrinsic safety of the Yodalarm allows it to be installed within a hazardous area without the need for purged, pressurised or flameproof enclosures. The Yodalarm has been certified by BASEEFA to the CENELEC standard, and may be used with most of the common single and dual-channel zener barriers, as well as the isolating interfaces. Application Guide AG:Yodalarm lists the types of zener barrier which may be used, and gives additional application information.

The robust ABS enclosure provides IP66 weather-proof protection and is suitable for external surface mounting. Cable entry is via a single 20mm untapped hole which will accept an M20 gland or conduit fitting.

Output signal table

FIRST STAGE SIGNAL (sound level/current)*	SECOND STAGE SIGNAL (sound level/current)*	DIL SWITCH in open position
Continuous tone 800Hz (101dB(A)/21mA)	Alternate two tone 800/1000Hz 0.5sec (101dB(A)/23mA)	1 - - -
Continuous tone 2400Hz (105dB(A)/32mA)	Alternate two tone 2400/2900Hz at 0.5sec (101dB(A)/34mA)	1 2 3 -
Interrupted tone 800Hz at 0.5sec (98dB(A)/17mA)	Alternate two tone 800/1000Hz at 0.5sec (101dB(A)/23mA)	1 2 - -
Interrupted tone 2400Hz at 0.5sec (102dB(A)/23mA)	Alternate two tone 2400/2900Hz at 0.5sec (105dB(A)/34mA)	1 - - 4
Alternate two tone 800/1000Hz at 0.5sec (101dB(A)/23mA)	Same as first stage signal	- - - -
Alternate two tone 800/1000Hz at 0.5sec (101dB(A)/23mA)	Alternate fast two tone 800/1000Hz at 0.25sec (101dB(A)/23mA)	1 - 3 -
Alternate two tone 2400/2900Hz at 0.5sec (105dB(A)/34mA)	Same as first stage signal	- 2 3 -
Alternate fast two tone 800/1000Hz at 0.25sec (101dB(A)/23mA)	Same as first stage signal	- - 3 -
Slow whoop 500-1200Hz at 3sec (101dB(A)/23mA)	Continuous tone 800Hz (101dB(A)/21mA)	1 2 - 4
Fast whoop 500-1200Hz at 0.1sec (101dB(A)/19mA)	Siren at 3 sec (100dB(A)/22mA)	- 1 2 3 4
Swept frequency 1200-500Hz at 1sec (100dB(A)/36mA)	Continuous tone 800Hz (101dB(A)/21mA)	1 - 3 4
Siren at 3sec (100dB(A)/22mA)	Same as first stage signal	- 2 3 4

*24V dc supply via zener barrier

SPECIFICATION

Power supply

Voltages Supply (nominal)	24V, 18V and 12V dc via suitable barriers
Max across sounder	15V dc Voltages above this will damage the sounder
Min across sounder	9V dc
Current	36mA max (see output signal table)

Output

Continuously rated sound level at 1 metre	105 dB(A) (see output signal table)
Volume control	15dB(A) level reduction
2 stage alarm	By polarity reversal with supply connected to terminals 3 and 4

Intrinsic safety

BASEEFA Standard Code	BS5501:Part 7:EN50 020 Ex ia IIC T4
Certificate numbers: Apparatus System	BAS Ex87B2163 BAS Ex872300
IS supply U _{max:in} I _{max:in} W _{max:in}	30VC 133mA 1.3W
Location Installation	Zone 0, 1 or 2 The Yodalarm type YO5/ISA may be connected to any certified intrinsically safe zener barrier whose parameters do not exceed the IS supply values shown above. See certificate and AG: Yodalarm for full details

Environmental

Operating temperature	-25 to +40°C
Storage temperature	-40° to +70°C
Humidity	To 95% RH at 40°C
Case	IP66 housing, moulded ABS ERA test report available

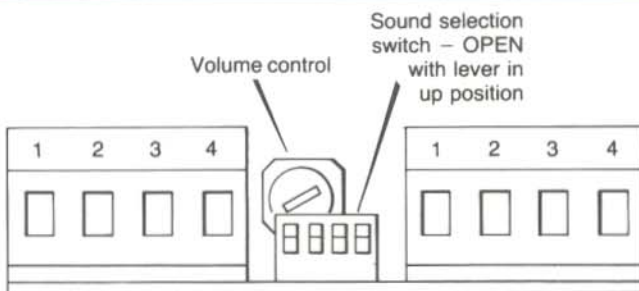
Mechanical

Terminals	Screw clamp for 1.5mm ² conductor
Weight	0.7kg

Accessories

Tag plate	Thermally printed tag strip secured by screws
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Terminals and controls



INPUT TERMINALS

Terminals 1(-ve) and 2(+ve) for single stage signal.

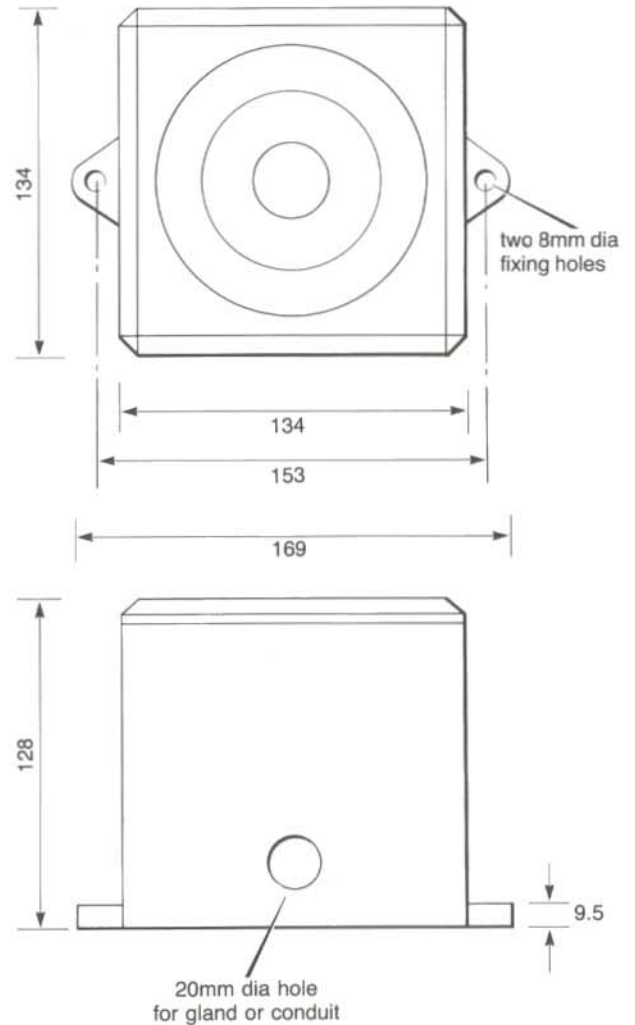
Terminals 3 and 4 for two stage signal when supply polarity is reversed.

DUPLICATE TERMINALS

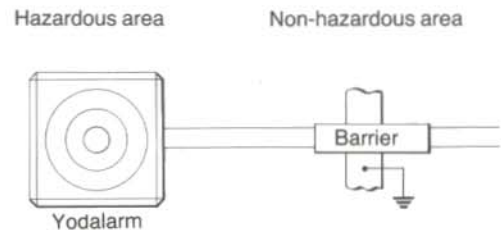
for connections to a second Yodalarm, or end-of-line monitoring resistor.

WARNING: Direct connection to a supply without a Zener barrier, IS isolator or series current limiting resistor in circuit will damage the sounder.

DIMENSIONS (mm)



Yodalarm loop diagram



For single stage alarm use dc barrier connected to terminals 1 and 2.
For two stage alarm use ac barrier connected to terminals 3 and 4.

HOW TO ORDER: please specify

Model number Y05/ISA/T4

Accessory items:

Tag plate Specify legend required

Your local BEKA distributor is: