Clifford & Snell®

Yodal® Ex

YO4IS

Intrinsically Safe Device

Audible signal for use in Potentially Explosive Atmospheres



PRODUCT FEATURES

- Max sound output 100 dB (A) 1m
- IP65 rated*
- 32 selectable tones meeting international regulations
- 2 stage alarm
- Flame retardent ABS enclosure
- Stainless steel fixing
- Low current consumption
- Robust, reliable & simple to install
- ATEX Approved
- Zones 0, 1, 2, 20, 21, 22

Product Approvals

CE

Ex ATEX Certificate Number: **ERO22ATEX0002X**

UKCA Certificate Number: **EMA22UKEX0004X**

Issue 2

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TECHNICAL DATA

Certification	
Type	ATEX Product Approvals
Y04/ISC/T4	II 1 G Ex ia IIC T4 Ga II 1 D ia IIIC T_{200} 110°C Da
YO4/ISC/T6	II 1 G Ex ia IIC T6 Ga II 1 D Ex ia IIIC T_{200} 75°C Da
Zones	0, 1 & 2 (Gas Groups > IIC) 20, 21 & 22 (Dust Group > IIIC)
Conforms to	IEC 60079-0:2017, EN IEC 60079-0:2018 IEC 60079-11:2011, EN 60079-11:2012

Mechanical Data	
Enclosure Material	ABS FR UL94 5VB
External Fixings	Stainless Steel
Degree of protection	Up to IP65 (IEC60529) *Subject to the correct cable gland being fitted

Ambient Conditions	
Operating temperature	-25 °C to +40 °C
Storage temperature	-40 °C to +70 °C
Max. relative humidity	95% at 40 °C

Electrical Data			
Operating Voltage	16.2 to 26.4V		
Current consumption	Power Supply	Certified barrier / Isolator parameters	Current Consumption
	24vDC	28v/300 Ω	25 mA
	18vDC	28v/300 Ω	19 mA
Certified input parameters	U_i = 28v I_i = 93 mA P_i = 0.66w C_i = 0 L_i = 0		
Line monitoring	Yes		

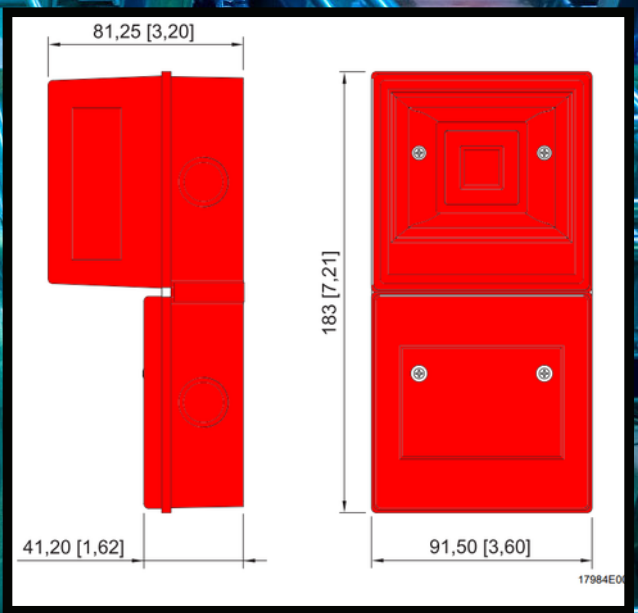
Acoustic Data	
Maximum Volume Output	100dB (A)
Volume Control Adjustment	-15 dB (A) T4 model only
32 selectable tones via DIL-switch	
2 Stage Alarm with predetermined second stage as standard.	

Mounting / Installation

For ease of installation the Sounders are supplied loose from the mounting back box. The back box must be mounted with the two cable entries either at the top or the bottom. The back box should be mounted to a suitable flat wall, bulkhead or conduit box avoiding areas of undue vibration and using the internal fixing point options in the back box. Always use the mounting gasket supplied. The recommended fixing screws are 4.5mm Dia x 20mm long. To maintain the IP rating of the enclosure the cable entries must be fitted with a suitably rated cable gland (Not Supplied). Max cable termination 2.5mm².

Line integrity on DC systems

If line monitoring is required an end-of-line resistor is needed and should have a minimum resistance of 750 Ohm and rated power of at least 2W or a 4700 Ohm and a rated power of at least 0.4W. For end of line monitoring, a suitable barrier/isolator will be required that allows for reverse polarity connection (see page 3 for Moflash recommend barriers).



Dimensional Drawing

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.

All Dimensions in mm [inches] - Subject to alterations

SELECTION

Product Approval	Enclosure Colour	Safety Barrier	Temperature Class	Order number	Art. No.	Weight (kg)
YO4IS Sounder ATEX Approved	Red Normal (RN) RAL 3001	ISC	T4	Y04IS/ISC/T4	205310	0.49
			T6	Y04IS/ISC/T6	205311	0.49
			White Normal (WN) enclosure colour option available on request (RAL 9003)			

Systems Installation
The Sounder must be installed in accordance with the latest EN 60079-0 & EN 60079-11 standards or equivalent IEC standards, with consideration for any local installation requirements, and should only be carried out by appropriately competent and qualified personnel. Moflash Signalling is not able to offer any assistance with additional system parameters beyond that included on the installation sheet, and can not give advise on individual system installations. The system integrators should be contacted for any additional installation requirements.

ACCESSORIES

WARNING: Connection into these Sounder must be via a suitably rated Zener Barrier or Galvanic Isolator. Never connect the sounder or beacon directly to the voltage supply without a barrier in place. Failure to do so will result in permanent damage to the PCB & void the warranty.

Product		Description	Order number	Art. No.	Weight
Zener Barrier		Single Channel DC	Z 728	071788	0.150
		Single Channel AC	Z 928	071857	0.150
Galvanic Solenoid Driver		Single Channel	KCDO-SD3-Ex1.1045	304983	0.150
		Dual Channel	KFDO-SD2-Ex2.1045	242032	0.100
Relay Module		Dual Channel	KFDO-RO-Ex2	038975	0.100
Cable Gland		M20 Nylon IP68		50224	0.05
Lock Nut		M20 Flanged Lock Nut		C00039	