

# TECHNICAL DATA SHEET

# ISI – INTRINSICALLY SAFE INDICATOR

#### **IECEX MSC 14.0019X**

#### **Description**

The Ampcontrol Intrinsically Safe Indicator (ISI) is an intrinsically safe audio-visual alarm. The ISI is equipped with sirens and an array of LEDs that provide 180 degrees of visual indication. The ISI can be wired to operate with the LEDs and sirens operating (Audio Visual Mode), the LEDs only (Visual Only Mode), or sirens only (Audio Only Mode).

A condition of the certification for the ISI is that it is mounted on an enclosure that has an ingress protection rating of no less than IP54.



#### **Application**

There are two models of ISI available, for two different types of installation. The first model is used as a "ringing" device for the Ampcontrol Voicecom Telephone System, and the second model is a general audio-visual alarm (requires a FIM module).

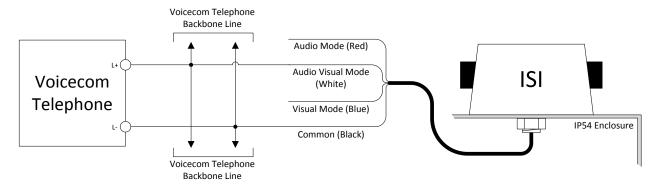
The Voicecom Telephone ISI is connected to the same line as the Voicecom Telephones. When the voltage on the telephone line reverses, indicating a ringing phone, the ISI will provide an audible and visual alert to personnel in the area.

The Stand-Alone ISI provides a versatile audio-visual alarm. The Stand-Alone ISI must be used with a 380mW FIM Module in series to limit the available supply power. The Stand-Alone ISI will then provide an audible and visual alert when energised.

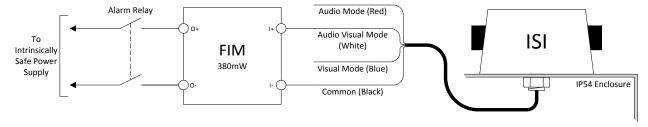
#### **Key Features:**

- IEC 60079 Certification
- 180 Degree Range of Visual Indication
- Two Sirens for Audible Indication
- Three Modes of Operation: Audio Visual Mode, Visual Only Mode & Audio Only Mode
- Broad Range of Applications (Model Dependant)

#### Typical Voicecom Telephone ISI Connection Diagram (Audio Visual Mode)

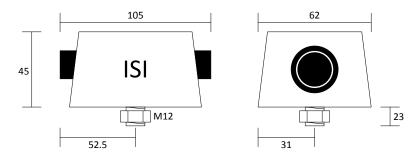


### Typical Stand-Alone ISI Connection Diagram (Audio Visual Mode)



# MAG-164 ISI TECHNICAL DATASHEET Version: 1, Date: 15 APR 2015

# **Dimensional Drawing**



SPECIFICATIONS	
General	
Supply Voltage	7 - 30Vdc
Temperature Range	-20°C - 60°C
IP Rating	To be mounted on an enclosure of IP54 minimum
Dimensions	45 x 105 x 62mm (excluding M12 mounting bolt, see above drawing)
Certification	IECEx MSC 14.0019X
I.S. Parameters	
Ui	30V
li	200mA
Pi	1.3W
Ci	Negligible
Li	Negligible
Installation Requirements	
Mounting Bolt Size	M12
Mounting Thread Length	23mm
Mounting Hole Size	ø14mm
Enclosure Requirement	IP54 minimum
Maximum Tightening	5Nm
Torque	
	The ISI is supplied with a silicone gasket that must be installed flush with the
	base of the ISI unit. This is a condition of the certification.
Additional Requirements	When installed as a stand-alone unit, the ISI must be installed with a FIM. This
	is necessary to limit the available power to the ISI to meet the certification
	requirements. The FIM is not required for Voicecom Phone installations.
Installation Tips	
During the tightening of the mounting bolt, the ISI may twist on the silicone gasket. In order to prevent this	
twisting, it is recommended that the ISI be secured in place with a clear set silicone adhesive.	
Wiring & Modes	
Audio Visual Mode	Positive of the supply to white wire, negative of supply to black wire
Audio Only Mode	Positive of the supply to red wire, negative of supply to black wire
Visual Only Mode	Positive of the supply to blue wire, negative of supply to black wire
Service & Disposal	
Service	The ISI has no serviceable parts.
Birman	Wipe clean using an anti-static cloth.
Disposal	To ensure that the unit is disposed correctly, return to Ampcontrol at end of life.
Ordering Part Number	Voice com Tolombono ICI Audio Vieural Alerra Mandrile
173203	Voicecom Telephone ISI Audio Visual Alarm Module
173569	Stand-Alone ISI Audio Visual Alarm Module
142406	FIM – Field Interface Module 100mA (380mW)
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