- **Provides audio communications under harsh conditions**

- **Pre-start alarm function**

- **Battery backed operation**

- **Ruggedised microphone**

DESCRIPTION

Several ABMA3-1 intercoms can be distributed along a conveyor belt at fixed distances apart to provide complete sound coverage along the conveyor. During a pre-start sequence the intercom sounds the pre-start alarm through its two sideways facing speakers. These same speakers, along with a microphone mounted in the front panel are used to carry out a half duplex voice conversation with other intercoms on the conveyor or a BMA exchange operator at the surface.

The intercom type ABMA3-1 has three front panel mounted push buttons, a front panel microphone and two side-mounted speakers. A conversation with another worker along the conveyor belt can be initiated by pressing the call local button once or several times. The call local button is used to signal or attract the attention of workers along the conveyor. The call local button can be pressed and released to sound a series of beeps along the conveyor.

The patterns and meaning of these beeps can be used to transmit messages to others along the belt. The call exchange button is pressed to attract the attention of the BMA exchange operator at the surface. Once the operator has acknowledged the call, then further instructions or requests can be given from the intercom.

CERTIFICATION

The intercom type ABMA3-1 has been certified for use as part of the Pre-Start Alarm and Communication System type PSACS1. The ABMA3-1 may be used within any PSACS1 system in accordance with the certificate IECEx TSA 07.0021X.
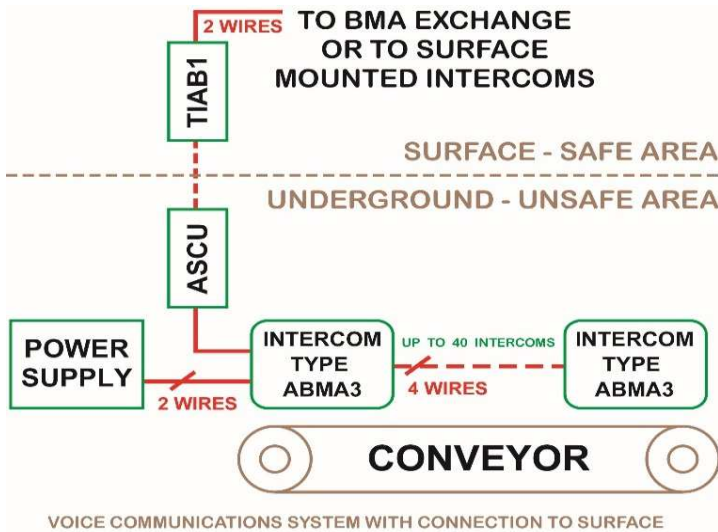
TYPICAL APPLICATIONS

The ABMA3-1 intercom system is ideal in a simple stand-alone voice communication-only system, because it can generate call tones without requiring a system controller. Up to 40 intercoms can be connected in a communications-only system with a single power supply.

APPLICATIONS CONTINUED

The ABMA3-1 intercom system is also an ideal tool for communication between workers underground and a BMA exchange or surface-mounted intercoms located above ground. This configuration allows workers to communicate with each other along the length of the conveyor and with the surface or with another conveyor if patched through the surface exchange. The surface exchange may be a hardware based BMA exchange or an Austdac computer based exchange. The intercom type ABMA3 is best suited for this application as it can generate local call and exchange call tones without requiring a system controller.
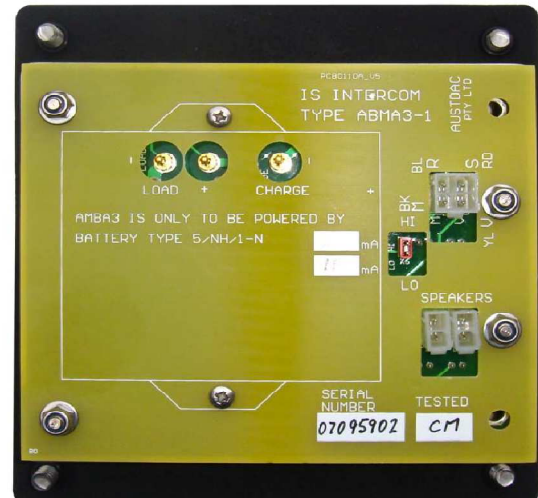

VOICE COMMUNICATIONS SYSTEM WITH CONNECTION TO SURFACE

SPECIFICATIONS

GENERAL SPECIFICATIONS

Size	270(W) x 164(H) x 132(D) mm
	10.6(W) x 6.5(H) x 5.2(D) inches
Mounting hole size	4 off 12 x 20mm round end slot
Connection options	Gland or connector cable
Enclosure material	Stainless steel
Operating Temperature	0ºC - 40ºC (32ºF - 104ºF)
Storage Temperature	0ºC - 40ºC (32ºF - 104ºF)
Enclosure Type	ENCL068

CONNECTIONS & PIN ASSIGNMENT

PSACS1 SYSTEM CABLE

4 Pin	Colour	Description
1	BLUE	R - Positive Supply
2	YELLOW	V - VOICE or TONES
3	RED	S - PRE-START ALARMS
4	BLACK	M - NEGATIVE SUPPLY

SPEAKERS

2 Pin	Colour	Description
1	RED	SPEAKER V+
2	BLACK	SPEAKER V-
1	RED	SPEAKER V+
2	BLACK	SPEAKER V-

BATTERY PORT

3 Pin	Colour	Description
1	BLACK	LOAD
2	RED	POSITIVE
3	BLACK	CHARGE

JUMPER OPTION

1	HI	Hi Charge current 22mA
2	CENTRE	Shorted to either pins 1 or 3
3	LO	Lo Charge current 11mA

ORDERING DETAILS

DESCRIPTION	ORDER CODE
BMA INTERIOR S/STEEL I.S. (Type ABMA3)	BMA69
Options:	
BMA AMPLIFIER ASSEMBLY STAINLESS STEEL	BMA02M
BMA AMPLIFIER C/W 5 PIN P/MNT SKTS S/S	BMA02N