



- Duplicated microphone transducers
- Monitored microphone voice coil
- Easy installation, low cost, simple installation

Explosion protection VAP01

Marking ATEX	Ⓔ II 2G Ex ib IIC T4
Certification	ITS 09 ATEX 26420
Marking IECEx	Ex ib IIC T4 Gb
Certification	IECEx ITS 14.0009

Technical data VAP01

Mains supply	phantom powered DC 5 V
Current consumption	approx. DC 20 mA
Output to line	0 db (770 mV RMS)
Frequency response	100 Hz to 10 kHz
Microphone	hyper-cardioid response noise cancelling type
Number of push buttons	up to three push buttons
Dimensions (width x height x depth)	260 mm x 175 mm x 160 mm (10.24 inch x 6.89 inch x 6.30 inch)
Weight	2.5 kg (5.5 lbs)
Temperature range	-40 °C to +60 °C (-40 °F to +140 °F)
Colour	black
Material enclosure	GRP Glass re-enforced polyester
Gland entry	2 x M20
Humidity	up to 100 %
Protection class	IP 66

Technical data ATE1

Supply	DC 48 V
Consumption	100 mA
DTMF resolution	50 mV RMS
Phantom supply	DC 6 V
Dimensions (width x height x depth)	483 mm x 220 mm x 120 mm (19.02 inch x 8.66 inch x 4.72 inch) (19" rack mount, 2 units)
Weight	0.46 kg (1.0 lbs)
Temperature range	0 °C to +50 °C (+32 °F to +122 °F)
Location	safe area within cabinet
Terminals	40 x field cable termination up to 2.5 mm ² conductors

The VAP01 is a rugged corrosion proof microphone unit designed to allow public address/paging system access in external hostile climatic conditions. The VAP01 can be supplied certified to provide safe operation in potentially explosive atmospheres and is ATEX & IECEx certified accordingly. The robust glass reinforced polyester enclosure is equipped with up to three push buttons. Up to two hyper-cardioid noise cancelling microphones are fitted behind a protective wire guard, which can be arranged to each drive, dedicated amplification and loudspeakers.

The VAP01 is equipped with a high performance line driver. The line driver enables the unit to be located remotely from the host loudspeaker amplification. Automatic monitoring is included to supervise microphone voice coil, pre-amplification and critical paths to the central equipment. The access unit VAP01 requires no local mains supply, the unit is energised by phantom power sourced from the host central equipment panel. The connectivity to the unit is via a twisted pair for either the VAP01-11 or VAP01-21 variants and two pairs for either the VAP01-12, VAP01-22, VAP01-13 or VAP01-23 variants.

Up to 2 x VAP01 access panel can be connected directly to the PA/GA system through the 2IP interface ports. For higher quantity access panel need to be connected through the ATE1 which is a clip on/off DIN rail mount port which is designed to extend a PSC VODEC VX/AT-M switch to allow connection of up to four VAP01 public address microphone access units. The ATE1 comprises of a rugged DIN rail mount PCB carrier, field cable terminal assembly and on board switching matrix. An array of LED indicators provide the engineer with ATE1 operation status and DIL switches allow the engineer to enable or disable ATE1 features to meet specific applications.

Further ATE1 ports can be cascaded up to a maximum of four models, inter port connectivity is by plug in/out flat IDC ribbon cable enabling simple expansion with minimal hardware impact. The ATE1 is managed by an on board processing sub-system that determines access priority, emergency/routine speech preference and system alarm tone control. Connection to the ATE1 from the host VX/AT-M switch is by single 34 way IDC plug in/out ribbon cable assembly. Connection to other ATE1 ports (where more that four VAP01 microphones are required) is by identical 34 way IDC ribbon cable enabling simple expansion with minimal hardware impact. Power supply is derived from the VX/AT-M management switch which is stepped down to provide DC 6 V to supply the VAP01 access unit(s).

The ATE1 also provides drive output to allow direct control of loudspeaker muting relays on the PSC VODEC Loudspeaker mute port. This enables loudspeaker(s) in the vicinity of a live VAP01 access unit to be disabled for the duration of the broadcast from the active VAP01 thereby obviating risk of acoustic feedback.

The ATE1 also allows connection of up to four intrinsically safe LED system status indicator units (PSC ComEx control stations).