

XP95 VAD Base

FUNCTION

The XP95® Visual Alarm Device (VAD) Base incorporates a loop-powered VAD with a standard mounting base. It is used to signal a visual fire alarm warning in enclosed areas.

The XP95 VAD Base can be used either with a detector fitted or with a cap for operation as a stand-alone alarm device. The VAD Bases are supplied with a built-in isolator. A version without an isolator is also available.

FEATURES

The product offers:

- EN54-23 Compliant Category O. VAD
- VAD flash rate of 0.5Hz
- Synchronised with the Apollo Protocol
- Individual and group addressing
- Automatic LED check when VAD activated
- Built in short circuit Isolator



Part no 45681-709 - XP95 VAD Base with Isolator

Group addressing is a simple method of alerting an entire area or group of rooms without delay.

For systems requiring isolators at every point the built-in isolator saves installation time and cost.

The VAD self test is achieved by means of an LED monitoring circuit. If the LEDs do not draw current when the VAD Base has been switched on a fault signal is transmitted when the device is next polled.



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ELECTRICAL CONSIDERATIONS

The XP95 VAD Bases are loop-powered so needs no external power supply. It operates at 17–28V DC and is polarity-sensitive.

ADDRESSING

The XP95 VAD Base responds to its own individual address set with a DIL switch. It also responds both to a group address, set by means of a 4-segment DIL switch and to a synchronisation address which is embedded in the unit.

Addresses 1 to 111 are used exclusively for individual addresses; addresses 112 to 126 are used for group addressing. Any VAD Bases on a loop may be freely assigned to a group. The address for any group *must* be chosen from the range 112–126.

Addresses 112–126 *may* be used as individual addresses but *only* if the 4-segment DIL switch is not used ie, group addressing is disabled. If the 4-segment DIL switch were set to any number other than the default 127, a pre-set analogue value of 4 would be transmitted to indicate a fault.

GROUP ADDRESSING

It may be desirable, in alarm conditions, to switch more than one VAD Base simultaneously. To enable this, devices may be controlled as a group and given a group address which is common to all VAD Bases in the group. When a device recognises its group address, it will process the output bits but it will not return any data to the control panel on that address. If it is required to confirm the status of the outputs of devices under group address control, it is necessary to interrogate all devices in the group at their individual addresses.

SELF TEST

An important safety feature has been incorporated into the VAD Bases: when it is switched on it tests itself by checking the flash operation. If no current is drawn by the LEDs an analogue value of 2 (= VAD fault) is transmitted.

This feature can also be used during commissioning or periodical maintenance testing. Simply activate the VAD for at least 5 seconds and check the control panel for a fault

signal. If none is received, the VAD Base is working properly.

PROTOCOL COMPATIBILITY

The VAD Bases will operate only with compatible control equipment using the Apollo XP95 or Discovery protocol. The features of the VAD Base are available only when it is connected to a control panel with the appropriate software.

SYNCHRONISATION

It is possible to synchronise the sound and flash outputs of the VAD range of bases connected to a loop. Other alarm devices, including the 100dB Sounder, the Integrated Base Sounder, the Intelligent Base Sounder, the Sounder Control Unit and the loop-powered VAD may also be synchronised.

This method of synchronisation depends on the design and configuration of the control panel. Further information should be sought from the panel manufacturer.

MECHANICAL CONSTRUCTION

The VAD Base is moulded in polycarbonate and has stainless steel contacts that accept solid or stranded cables of up to 2.5mm².

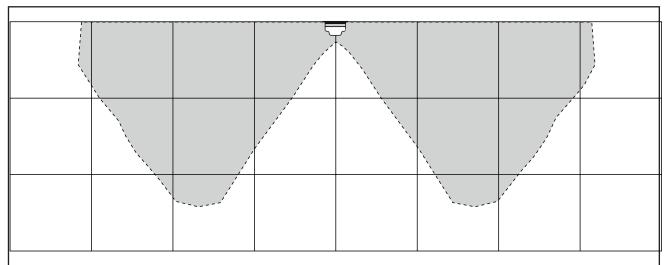
DIMENSIONS AND WEIGHT

Part no	Description	Dimension & Weight
45681-709	XP95 VAD Base with Isolator	115 x 38mm 156g

Notes

- 1. The VAD Base is a Type A device, ie, for indoor use only.
- 2. The isolating circuit of the VAD Bases is certified to EN54–17
- 3. For information on isolating circuits see publication PP2090 available on request from Apollo.

COVERAGE DIAGRAM



XP95 VAD BASE - CROSS SECTION OF COVERAGE VOLUME. EACH SQUARE REPRESENTS 1M

PROTOCOL USAGE

Output Bits			
2	Group Mode		
1	VAD on		
0	VAD on		
Interrupt	No		
Analogue Value			
Quiescent Group Address Conflict	16 4		
VAD Fail	2		
Input Bits			
2	Group Mode Confirmed		
1	VAD on Confirmed		
0	VAD on Confirmed		
Flag Setting			
XP95 Flag	Yes		
Alarm Flag	No		

TECHNICAL DATA

Operating voltage	17–28V DC
Current consumption at 24V Quiescent Switch-on surge Activated Frequency IP rating	350µA 1.2mA for 1 sec 9mA 0.5Hz IP21C
Flash Rate (white flash only)	0.5Hz

DIMENSIONAL DRAWING

