TECHNICAL DATA SHEET

4 - 12 zone AlarmSense two-wire fire alarm control panels

Haes AlarmSense PLUS is a 4 - 12 zone Apollo Fire Detectors AlarmSense protocol two-wire conventional control panel with integral power supply & space for standby batteries.

Four, eight or twelve AlarmSense fire zone circuits are provided plus two additional conventional monitored sounder circuits. Fire & Fault VFCO relays, Fire & Fault switched negative outputs, class change and an alert input are also included.

A fully functional repeater panel is available via a plug in comms PCB.

AlarmSense PLUS panels support the full range of Apollo Fire Detectors AlarmSense devices.

The panels are supplied with a 3.0 amp internal power supply module. This module complies with the requirements of EN54-4 : 1988 and provides temperature compensated battery management charging.

AlarmSense PLUS panels are approved to European standards EN54-2 & 4, Fire Detection and Alarm Systems – Control & Indicating Equipment.

Features

Main Features

- 4, 8 or 12 AlarmSense zones
- Activate controls via key switch or code entry
- Integral detector removal monitoring
- 3.0 Amp switch mode power supply Nom 27V DC
- 2 conventional monitored sounder outputs
- 2 Aux C/O relays (1 x Fire) (1 x Fault). voltage free
- Class change I/P
- Alert I/P
- Fire & fault switched -ve outputs
- Test mode, with or without sounders
- Disable zones, sounder O/Ps & aux O/Ps
- Conventional sounder circuits are fused @ 500mA with resettable fuses.
- Fully functional repeater available

Technical specifications	
Enclosure	1.2mm Mild Steel IP30. Colour ref: MW334E Interpon powder coat
Cable Entry	Via 20mm knockouts located in the top and rear of the cabinet
Dimensions	Back box: 450mm W x 300mm H x 85mm D, Lid: 460mm W x 310mm H x 25mm D
Mains Supply	3A internal switch mode power supply, Nom 27v DC
Battery Capacity	2 x 7.0Ah 12v VRSLA
Detection Zones	4, 8 or 12 AlarmSense protocol. EOL = 3K3R
Sounder Circuits	2 x monitored, fused @500mA. EOL = 3K3R
On Board Relays	2 x programmable, 3A, 30v volt free changeover
Outputs	2 x programmable, 40mA switch -ve
Switch Inputs	Class change & alert (pulsing)
Event Log	40 event history
Non priority alarm	Selectable per zone
Coincidence alarm	Selectable per zone

Models	
ASP-4	4 zones, AlarmSense
ASP-8	8 zones, AlarmSense
ASP-12	12 zones, AlarmSense

LOSS PREVENTION CERTIFICATION BOARD LPCB

Cert No. 810a

Specifications

Electrical Specification Inputs & Outputs - MAIN PCB		
PSU @ output	Power supply voltage control line.	For temperature compensation control.
PSU Input + -	28vdc supply input. Diode protected for reversal and independent short circuit. Max current 3 amps.	Max input current 3 amps. Input voltage 22vdc to 32vdc.
28v+, 0v- power output	28vdc supply output for fire alarm accessory relays etc. Max continuous use = 400mA.	Fused @ 500mA. Fuse = 500mA resettable fuse.
Common fire relay	Fire relay contact. Clean C/O. Max 3A @ 30vdc.	Unfused
Common fault relay	Maintained fault relay contact. Clean C/O Max 3A @ 30vdc.	Unfused
Outputs; FR, FLT	Switched -ve voltage outputs for relay control.	Overload voltage protected to 52vdc. Current limited 680R. Max load = 40mA
Inputs; CC, PUL	Switched -ve inputs, connect to 0v to trigger. Max input voltage = 28vdc. Non latching, max resistance 100R.	Protected via 10K Ohm impedance, 3v6 zener diode.
SNDR 1 - 2	28vdc polarity reversal monitored sounder outputs to fire alarm devices. 3K3 Ohm 5% 0.25W EOL resistor.	Monitoring current limit 28mA, fused @ 500mA. Typical max load 22 devices @ 18mA each per circuit. Ensure 2.4A is not exceeded.
Zone 1 - 4	AlarmSense fire alarm zone circuits. 3K3 Ohm 5% 0.25W EOL resistor.	Monitoring current limit 50mA, fused @ 200mA. Typical max load 20 alarm devices @ 18mA each per circuit. Ensure 2.4A is not exceeded.

Electrical Specification Inputs & Outputs - ZONE CARDS		
Zone A - D	AlarmSense fire alarm zone circuits. 3K3 Ohm 5% 0.25W EOL resistor.	Monitoring current limit 50mA, fused @ 200mA. Typical max load 20 alarm devices @ 18mA each per circuit. Ensure 2.4A is not exceeded.
Programmable outputs OP A & OP B	Switched -ve voltage outputs for relay control.	Overload voltage protected to 52vdc. Current limited 680R. Max load = 40mA
Programmable relay output	Fire relay contact. Clean C/O, C & N/O Max 3A @ 30vdc.	Unfused

Power Supply Specification		
Mains supply	230vac +10% / -15% 50Hz max current 1.2A	
Mains supply fuse	4 Amp (F4A 250V)	Not accessible for servicing. Internal to switch mode power unit
Internal power supply rating	3.0 Amps total including battery charging	Maximum load shared between outputs = 2.4A
Power supply output voltage	21.27 - 29.68vdc	Tolerance +/- 0.1%
Maximum continuous load for battery standby (ImaxA)	ImaxA = 610mA	ImaxB not specified
Minimum current drawn by panel (example)	4 Zone I min = 90mA	12 Zone I min = 188mA
Maximum ripple	120 mV p-p	Supply and charger fault monitored
Min/max battery size and type	2 x 7.0Ah 12volt VRLA Use Yuasa NP range batteries	Other equivalent batteries may be used but have not been tested for the purposes of EN54 approval.
Battery charging voltage	27.3 vdc nominal at 20 deg C	Temperature compensated
Battery charging output current	3.0A PSU 1.34A Current limited 4.7 Ohms	
Battery high impedance fault (Batt Hi Z)	Resistance = 1 Ohm or greater	1 hour reporting time
Max current drawn from batteries	3.15 Amps with main power source disconnected. Battery fuse 3.15A LBC 20mm.	

Quiescent and Alarm Current Details for Standby Battery Calculations		
Base Models	Standby Current	Alarm Current
ASP-4	90mA	133mA
TPCA07 4 zone ext card	43mA	47mA

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