AlarmSense CFP

two-wire 2 to 8 zone fire alarm control panel and ancillaries

You're safe with C-TEC

Two-wire AlarmSense 2-8 Zone Fire Alarm Control Panel & Ancillaries

AlarmSense CFP

The AlarmSense® CFP two-wire fire panel is designed to work with Apollo's AlarmSense® range of detectors, call points, sounders and beacons.

Most conventional fire systems are designed to work with two pairs of wires per zone: one pair for detection devices such as smoke detectors, heat detectors and manual call points; the other for alarm devices such as bells, sounders or strobes. By using different voltage bands for quiescent and alarm states, AlarmSense® components can be connected to the same pair of supply wires.

When powered and controlled by the CFP two-wire fire panel, this reliable technology takes all the complexity out of fire alarm system design, leading to quicker, less expensive and more flexible installation. Research shows an AlarmSense® two-wire system can achieve a 20-25% reduction of labour over a standard four wire conventional system.

AlarmSense® devices are acceptable for BS 5839-1 and BS 5839-6 systems making them particularly useful for fire protection in Houses of Multiple Occupation (HMOs).

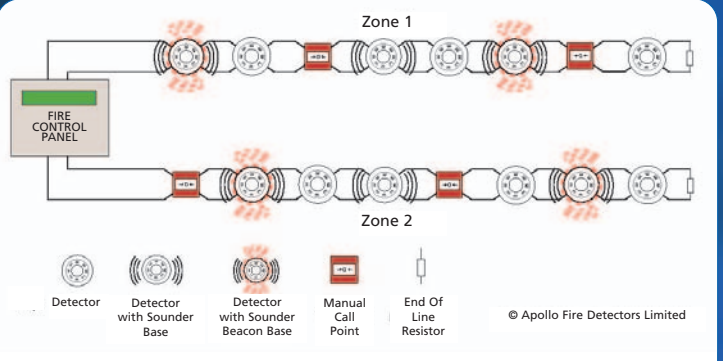
CFP ALARMSENSE FIRE PANELS & ANCILLARIES

CFP702-2	CFP AlarmSense 2 zone two-wire panel, code entry version, does not extend
CFP704-2	CFP AlarmSense 4 zone two-wire panel, code entry version, does not extend
CFP708-2	CFP AlarmSense 8 zone two-wire panel, code entry version, does not extend
CFP760	CFP 8 zone repeater panel, up to 8 per system, code entry version
CFP761	CFP network driver card (one required per repeater system, fit at main)
CFP762	CFP relay output card (provides reset, fault, aux & remote relay outputs)
CFP763	CFP relay output per zone card (as CFP762 plus 8 output per zone relays)

See page 3 for a full list of AlarmSense detectors, bases, sounders, beacons, etc

CFP features

- Designed to comply with EN54 Parts 2 and 4
- Available with 2, 4 or 8 AlarmSense zone circuits (dependent on model purchased)
- Installer-friendly design accommodates easy first fix and straightforward maintenance
- Auxiliary remote, auxiliary fire, fault and reset outputs
- 'Class change' and alert inputs
- Four conventional sounder circuits (for use with non-AlarmSense sounders)
- Low quiescent current - for extended standby times on small batteries
- Attractive flush or surface mountable plastic lid and enclosure
- Intuitive user-friendly interface
- Integral 1.5A switch mode PSU
- Comprehensive fault diagnostic facilities
- Push button access code entry to a wide range of engineering functions, including:-
  - Zone delay
  - Non-latching zones
  - Coincidence (double knock)
  - Zone test
- Ancillary connections provided for up to eight two-wire repeaters (one CFP761 network driver card required per system) and optional CFP relay boards.



ALARMSENSE ZONE WIRING

ALARMSENSE DETECTORS

BF302ASH (55000-190) STANDARD HEAT DETECTOR

A rate of rise (A1R) heat detector. Housed in a pure white polycarbonate moulding and fitted with two LEDs in order to allow 360° visibility. Requires AlarmSense base.

BF302ASHH (55000-193) HIGH TEMP. HEAT DETECTOR

A fixed temperature (CS) heat detector. Housed in a pure white polycarbonate moulding and fitted with two LEDs in order to allow 360° visibility. Requires AlarmSense base.

BF316ASH (55000-390) OPTICAL DETECTOR

An optical detector working on the light scatter principle. Changes alarm state at a pre-set threshold of smoke penetration in its sensing chamber. Requires AlarmSense base.

BF316ASHI (55000-391) INTEGRATING OPTICAL DETECTOR

An integrating optical detector designed for use in areas where smoke is normally present. For example, a room in a house of multiple occupation which is occupied by a heavy smoker. Requires AlarmSense base.

ALARMSENSE BASES, SOUNDERS, BEACONS AND ANCILLARIES

BF308AS (45681-244) ALARMSENSE BASE

Designed to accept any AlarmSense detector. Includes circuitry to monitor the presence of a detector and allow a fault to be signalled if a detector is removed without authorisation.

BF330ASBS (45681-510) BASE SOUNDER

A polarity insensitive base sounder that is capable of indicating local and general alarms. Includes high 87db(A) and normal 70db(A) volume settings. Note that a BF330ASLIDR red cap or BF330ASLIDW white cap is required for stand alone use.

BF330ASBSB (45681-509) BASE SOUNDER/BEACON

A polarity insensitive base sounder/beacon that is capable of indicating local and general alarms. Incudes high 87db(A) and normal 70db(A) volume settings. Note that a BF330ASLIDR red cap or BF330ASLIDW white cap is required for stand alone use.

BF370ASS (55000-894) MANUAL CALL POINT

A special surface mounting red manual call point that can be detected as an operated call point rather than a detector that has changed to the alarm state. Includes a red LED indicator.

BF310ASR (55000-835) ALARM RELAY (RESET ON SILENCE)

Operates in three configurations:-

- Relay activation places zone voltage on output contact terminals
- Relay activation reverses the polarity of the zone voltage on the output terminals
- Two sets of volt-free contacts for use by door closure units, etc

BF318AS (53832-070) REMOTE INDICATOR

A light-weight remote indicator specifically designed for use with AlarmSense detectors. Measuring just 20mm high and 80mm diameter, two pairs of keyholes are provided - one for 50mm and one for 60mm fixing centres.

ALARMSENSE COMBINATIONS

BF316ASHC (55000-392)

Optical smoke detector, base & sounder combination

BF316ASHIC (55000-393)

Integrating optical smoke detector, base & sounder combination

BF302ASHC (55000-196)

Standard heat detector, base & sounder combination

BF302ASHHC (55000-197)

High temperature heat detector, base & sounder combination

CFP AlarmSense Technical Specifications

Power Supply Specification

Mains supply voltage	230V ±10% 50/60Hz
Internal power supply	27V d.c. nominal
Total output current limited to	1.5A
Supply and battery charger monitored for failure	YES (battery charger is also temperature compensated)
Batteries monitored for disconnection and failure	YES
Batteries protected against deep discharge	YES (Deep discharge cut off approx. 21 volts)
Max. battery size and type	2 x 12V 3.3AHr VRLA (Valve Regulated Lead Acid) connected in series
Mains fuse	240V 1A HRC ceramic 20mm compliant with IEC (EN60127 PT2)
Battery fuse	1.6A F 20mm compliant with IEC (EN60127 PT2)

Zone Circuit Specification (for use with AlarmSense devices only)

Number of circuits	2 (CFP702-2); 4 (CFP704-2); 8 (CFP708-2)
Max cable length per circuit	500 metres
Line monitored for head out, open & short circuit faults	YES
Maximum allowable resistance (each conductor)	20 Ohms
Maximum cable capacitance (per circuit)	0.27µF
Max. number of detectors/manual call points per zone	25
Max. number of sounders per zone	The panel's power supply is designed to give a max. output current of 1.5A. In addition to powering the sounders, this current is also used for handling short circuit faults and supplying the panel's battery charging circuit and any output relays which may be fitted. As a safe margin and to allow for these other loads, the total sounder loading for the panel should not exceed a maximum of 1.25A. Each zone circuit and each sounder circuit will support a max. sounder alarm current of 200mA. Currents in excess of this will cause the circuit's fuse to trip. The sounders should be distributed throughout the site according to the sound levels required, but the load should be distributed as equally as possible across each circuit.
AlarmSense Optical & Heat Detector Specification	Quiescent current <50µA; triggered voltage 9V nominal
AlarmSense Manual Call Point Specification	Quiescent current <50µA; triggered voltage 9V nominal
AlarmSense Sounder Specification	Quiescent current <51µA; Alarm current 4-16mA dependent on tone & volume (note sounder current limited to 200mA per zone). Sounders operate when Zone voltage is above 20V

Conventional Sounder Circuit Specification (for use with non-AlarmSense sounders)

Number of circuits	4
End of line resistor value	6800 5% Tol. 0.25W (blue, grey, red, gold)
Each circuit monitored for open and short circuit	YES
Alarm voltage	27V maximum, 20V minimum (final battery voltage)
Sounder circuit fuses	Each circuit protected by resetable fuses. (200mA min. hold current; 400mA max. trip current; Approx. 50mA when tripped. Reset when faults removed)
Maximum total sounder output current to all outputs	4 x 200mA = 800mA
Maximum No. of bells @ 25mA	32
Maximum No. of electronic sounders @ 20mA	40 (sounders must be polarised)

Auxiliary Outputs

Type	Non monitored open collector transistor
Max. sink current	100mA each
Max. open circuit voltage	27Vd.c
Reset output	Active during reset cycle
Remote output	Active during any unsilenced fire condition (provided all relevant delays have expired)
Auxiliary output	Active during any fire condition (provided all relevant delays have expired)
Fault output	Active when no faults are present - failsafe to open circuit
24V aux power output (for use with the above)	Output protected by a resetable fuse (200mA min. hold current, 400mA max. trip current. Approx. 50mA when tripped. Resets when fault removed)

Auxiliary Inputs

Class Change (makes sounders sound continuously)	Connect to OV to trigger. Max. input voltage 27V. (Non-latching)
Alert (makes sounders pulse intermittently)	Connect to OV to trigger. Max. input voltage 27V. (Non-latching)

Dimensions

Physical size	Size = 380 x 235 x 96mm approx.
Weight	1.75kg (without batteries)

Priority and Non-priority sounder setting

AlarmSense sounder and sounder beacon bases may be set to provide either a general (priority) or a local (non-priority) alarm. In houses of multiple occupation they are typically set to 'non-priority' in individual flats or apartments to give a local alarm and 'priority' in communal areas, circulation spaces and escape routes to give a general alarm. In the event of a detector in an apartment going into alarm, the CFP AlarmSense panel will switch the associated sounder or sounder beacon to non-priority alarm. This will give the flat's occupant 2 minutes to investigate and remove any cause of false alarm. If the cause of the alarm is cleared within 2 minutes the system will reset. If the detector is still activated after 2 minutes, or another detector elsewhere on the system goes into alarm, the CFP AlarmSense panel will switch all of the system's sounders to full alarm.

Quality System Certificate No: 176
Assessed to ISO9001 : 1994

Fire Industry Association

Manufactured by C-TEC, Stephens Way, Wigan, WN3 6PH. England

UK Sales: Tel: 01942 322744. Fax: 01942 829867. Email: sales@c-tec.co.uk
European Sales: Tel: +44 1942 322744. Fax: +44 1942 829867. Email: eu.exports@c-tec.co.uk
Export Sales: Tel: +44 161 257 2541. Fax: +44 161 225 8817. Email: xportsales@xportsales.com

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