

MF9300

- Choice of 2, 4, 8 or 16 zone panels
- Matching repeater panels available
- Coincidence detection and non-latching zone features
- Surface or recessed mounting option as standard
- Up to 32 detectors per zone
- One man walk test facility
- 72 hour standby as standard

Designed for a wide range of building types and sizes, the Menvier MF9300 series of panels incorporates many standard features which are usually only available at extra cost. Available in a choice of 2, 4, 8 or 16 zone versions, MF9300 is designed for ease of installation and simple operation. All panels can be either surface fixed or flush mounted, without the need of additional bezels or back boxes. System flexibility is emphasised by the availability of matching repeater panels plus features such as non-latching zone, coincidence detection, alarm delay and one man walk test facilities, all included as standard. If high specification is essential, combined with a competitive price, the MF9300 series delivers an ideal solution.



SYSTEM OVERVIEW

- High specification conventional panel, suitable for use in a wide range of building types and sizes
- Choice of 2, 4, 8 & 16 zone panels
- Matching repeater panels, available in 8 and 16 zone versions, for use with main panels of 4 zone or higher capacity
- Supplied complete with batteries for 72 hour standby as standard. Option of 24 hour standby available on 8 & 16 zone panels

USER INTERFACE

- Stylish and attractive panel with easy to use 8 button keypad to control all functions
- Comprehensive power, fire and fault LED indicators and integral piezo buzzer for on-board fire or fault indication
- Panel can be surface mounted or recessed, without the need of an additional fixing bezel or back box
- Special tool used to release hinged upper door to access connections and configuration settings or bottom door to access battery

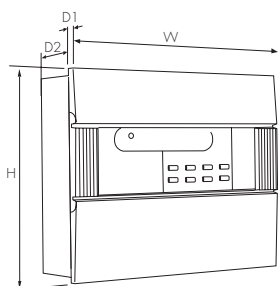
DETECTION CAPACITY

- Up to 32 detectors per zone. End of line monitoring devices must be fitted and are supplied as standard
- Detector circuits are monitored for open circuit, short circuit and detector removal

ALARM CAPACITY

- Two separate alarm lines on 2 and 4 zone panels. 500mA maximum load per line
- Four separate alarm lines on 8 and 16 zone panels. 500mA maximum load per line
- Alarm lines are monitored for open circuit and short circuit faults

DIMENSIONS



	H (mm)	W (mm)	D1 (mm)	D2 (mm)	Cut-out (mm)
2/4 zone	344	395	25	70	324 x 385
8/16 zone	386	395	25	119	376 x 385

Note: If surface mounting, add D1 & D2 to obtain depth dimension

SYSTEM FUNCTIONALITY

- Normal and supervisor mode facility. Supervisor mode protected by 4 digit security code to prevent unauthorised use. Service engineer and configuration modes accessed by further security codes
- Supervisor mode provides access to test mode, where zones can be tested individually or in any combination
- One man walk test feature permits each manual call point and detector on the zone(s) in test mode to be put into fire condition and activates the alarms for 2 seconds. Panel automatically resets the zone(s) 10 seconds after each device has been tested. A fire condition received from a zone not in test mode results in an immediate alarm, overriding the test mode
- Supervisor mode also provides facility to disable/isolate the following for maintenance or other purposes
 - each detection zone independently
 - the alarm circuits
 - the remote signal output (except 2 zone panel)
- Non-latching zone facility can be selected on one zone. Enables the direct interconnection of panels in a simple network
- Coincidence detection facility can be selected on one zone (except 2 zone panel). An alarm condition is dependant upon a fire signal from 2 detectors and within a defined period, when facility is selected. A single detector fire signal is indicated by sounding the integral buzzer and flashing LED on the panel. Any fire signal from a manual call point on the zone immediately operates the alarm
- An alarm line delay feature can be selected (except 2 zone panel). Preset delays of 1 to 7 minutes can be programmed during commissioning, permanently illuminating a panel indicator when set. Indicator and zone LED flash when fire signal is received and delay is in operation. Any fire signal from a manual call point immediately operates the alarm

INTERFACE OPTIONS

- Class change input facility. Terminals provided for switching of alarm circuits to indicate school/college class change
- Auxiliary 1A 24V DC fault relay (except 2 zone panel)
- Remote signal 1A 24V DC relay for remote location signalling, or operation of a remote dialler (can be isolated during tests/servicing)
- 24V common output provided (does not operate with non-latching zone)
- Auxiliary 24V DC output power supply provided as standard

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REPEATER PANELS

- Repeaters match the style and appearance of main control panels
- Facility for signalling to repeater panels provided on all main panels (except 2 zone)
- Displays essential information at other key locations in a large building/site
 - Zone fire or fault conditions
 - Zones or alarm lines in test mode
 - Zones or alarm lines in disabled mode
 - Alarm delays
 - Faults, isolations and test mode for control outputs
- Repeater panel requires only a single pair of wires to receive signals from main control panel, plus local mains power supply, reducing cost of installation



MF9300 matching repeater

INSTALLATION NOTES

- A full set of Installation and User Instructions is supplied with each panel to assist the installer to carry out the work efficiently and safely, and the user to perform routine tests
- Panels are wall mounted. Surface mounted via keyhole slot mounting holes on back of housing. Recessed mounting requires appropriate cut-out for panel and fixed via 6 x screw fixing holes around housing flange
- Mains power supply cable must be routed via the designated 20mm conduit entry knockouts on the top or rear of the housing. The mains terminal block is provided with fuse protection
- Conduit entry knockouts are provided on the top of the housing for zone, alarm and output cables. A total of 13 (2/4 zone) or 27 (8/16 zone) knockouts are provided
- Standby batteries connected via push-on terminal connectors
- End of line (EOL) devices are supplied with the panel and must be fitted at the end of each detector and alarm circuit wiring
- Front cover is screw fixed with hinged battery compartment door and hinged upper door for access to zone/alarm connections and configuration settings, which requires use of a special tool for access
- See page 136 for full details of system design
- Cooper Lighting and Security offer a commissioning, service and maintenance facility. Please contact the Service Department - Tel: 01302 303352, E-mail: service@cooperls.com

OPTIONS

- **Repeater panel**
Choice of 8 or 16 zone repeater panels with 72 hour standby, providing local indication of essential status information

SYSTEM ANCILLARIES

Callpoints
Page 78



Conventional sounders
Page 75



Detectors
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Beam detector
Page 94



TECHNICAL SPECIFICATION

Panel catalogue number	MF9302	MF9304	MF9308	MF9316
Standards	EN54-2:1998 & EN54-4:1998 EN50130-4:1996 EN500081-1:1992 & EN61000-2-2:1994	EN54-2:1998 & EN54-4:1998 EN50130-4:1996 EN500081-1:1992 & EN61000-2-2:1994	EN54-2:1998 & EN54-4:1998 EN50130-4:1996 EN500081-1:1992 & EN61000-2-2:1994	EN54-2:1998 & EN54-4:1998 EN50130-4:1996 EN500081-1:1992 & EN61000-2-2:1994
Number of zones	2	4	6/8	12/16
Detectors per zone	32	32	32	32
Number of alarm circuits	2	2	4	4
Alarm circuit load	500mA per circuit, 1A total	500mA per circuit, 1A total	500mA per circuit, 2A total	500mA per circuit, 2A total
End of line devices	Detection circuits: 12K Ω resistor Alarm lines: 12K Ω resistor	Detection circuits: 12K Ω resistor Alarm lines: 12K Ω resistor	Detection circuits: 12K Ω resistor Alarm lines: 12K Ω resistor	Detection circuits: 12K Ω resistor Alarm lines: 12K Ω resistor
Auxiliary fire signal output	1A 24V DC (resistive) single pole changeover contacts. Isolate facility available	1A 24V DC (resistive) single pole changeover contacts. Isolate facility available	1A 24V DC (resistive) single pole changeover contacts. Isolate facility available	1A 24V DC (resistive) single pole changeover contacts. Isolate facility available
Auxiliary fault output	-	1A 24V DC (resistive) single pole changeover contacts	1A 24V DC (resistive) single pole changeover contacts	1A 24V DC (resistive) single pole changeover contacts
Auxiliary common output	24V DC pull to 0V. Max 10mA	24V DC pull to 0V. Max 10mA	24V DC pull to 0V. Max 10mA	24V DC pull to 0V. Max 10mA
Auxiliary DC output	24V DC fused, 100mA	24V DC fused, 100mA	24V DC fused, 350mA	24V DC fused, 350mA
Repeater output	-	2 wire serial link (Repeater also requires separate 230V AC supply)	2 wire serial link (Repeater also requires separate 230V AC supply)	2 wire serial link (Repeater also requires separate 230V AC supply)
Mains input voltage	230V AC \pm 10%. 50/60 Hz	230V AC \pm 10%. 50/60 Hz	230V AC \pm 10%. 50/60 Hz	230V AC \pm 10%. 50/60 Hz
System operating voltage	24V DC	24V DC	24V DC	24V DC
Standby duration	72 hours (24 hours option on 8 & 16 zone)	72 hours (24 hours option on 8 & 16 zone)	72 hours (24 hours option on 8 & 16 zone)	72 hours (24 hours option on 8 & 16 zone)
Battery	1 x 7AH sealed lead acid battery	1 x 7AH sealed lead acid battery	1 x 12AH sealed lead acid battery	1 x 12AH sealed lead acid battery
Recharge period	24 hours	24 hours	24 hours	24 hours
Panel construction	ABS/Polycarbonate housing & back box	ABS/Polycarbonate housing & back box	ABS/Polycarbonate housing & steel back box	ABS/Polycarbonate housing & steel back box
Cable entries	Top: 13 x 20mm knockouts Back: 1 x 20mm knockout	Top: 13 x 20mm knockouts Back: 1 x 20mm knockout	Top: 27 x 20mm knockouts Back: 1 x 20mm knockout	Top: 27 x 20mm knockouts Back: 1 x 20mm knockout
Environmental rating	IP20. -5°C to +40°C Humidity 75% max (non-condensing)	IP20. -5°C to +40°C Humidity 75% max (non-condensing)	IP20. -5°C to +40°C Humidity 75% max (non-condensing)	IP20. -5°C to +40°C Humidity 75% max (non-condensing)

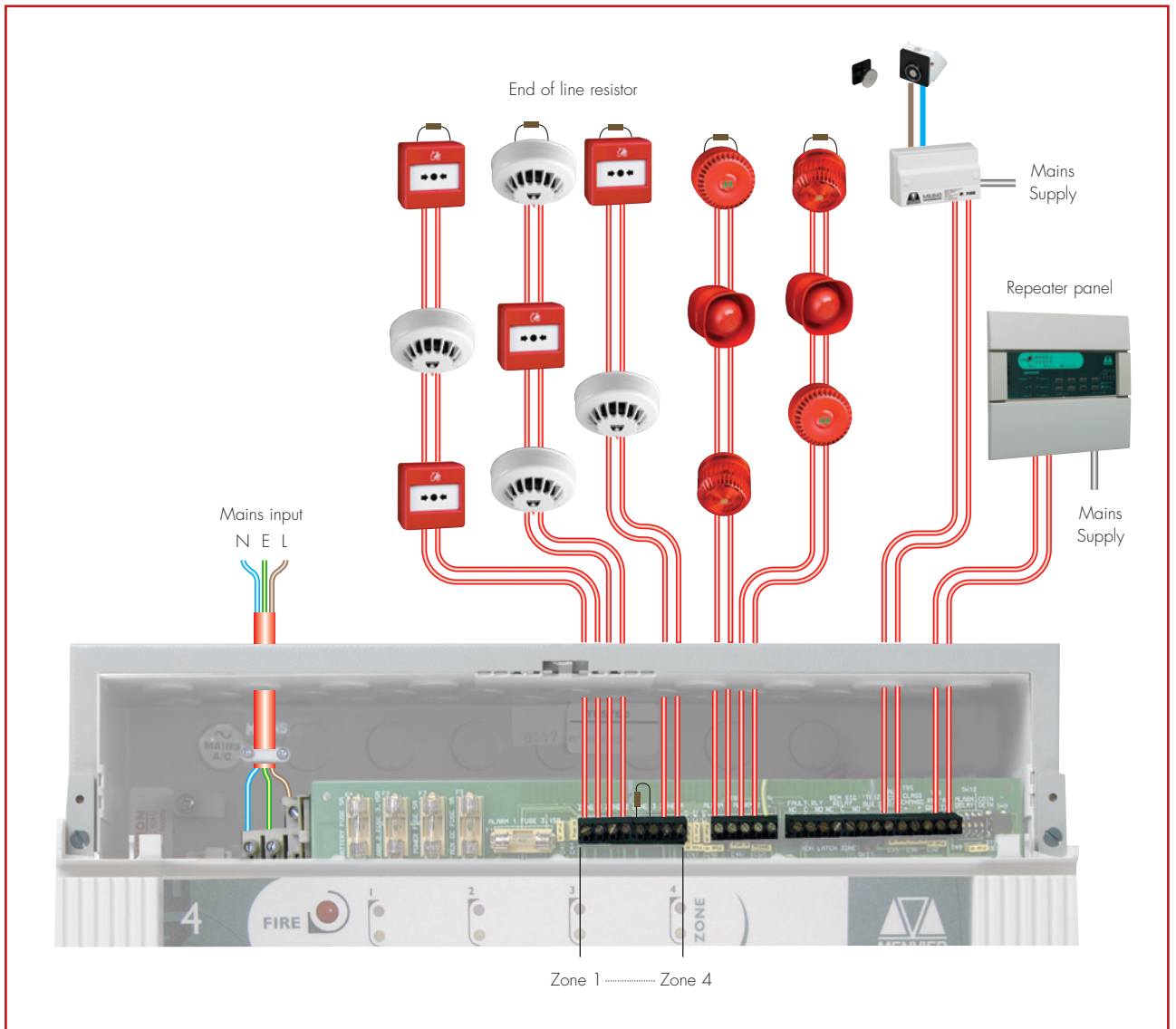
CATALOGUE NUMBERS

Cat. No.	Number of zones	Standby duration (hrs)	Weight (kg)
Panels			
MF9302	2	72	10.6
MF9304	4	72	10.6
MF9308	8	72	16.8
MF9316	16	72	16.9
MF9308-L	8	24	16.0
MF9316-L	16	24	16.0
Repeater panels			
MFR9308	8	72	16.8
MFR9316	16	72	17.2



Simple access to battery and terminals

MF9300



Typical wiring configuration