

MF9300 Range Control Panel



simple access to connection terminals and batteries



MF9304 control panel



MFR9300 repeater panel

Overview

The Menvier MF9300 is a range of high specification conventional control panels designed for a wide range of building types and sizes at a competitive price.

Available in a choice of 2, 4, 8 or 16 zone versions, the MF9300 range is designed for ease of installation and simple operation.

All panels can be either surface or flush mounted, without the need of additional bezels or back boxes.

System flexibility is emphasised by the availability of matching repeater panels for the 4, 8 and 16 zone panels.

Features

- 2, 4, 8 or 16 zone panels
- Matching repeaters available for 4, 8 and 16 zone panels
- Coincidence detection and non-latching zone features on 4, 8 and 16 zone panels
- Surface or flush mounting option as standard
- Up to 32 detectors per zone
- 72 hour standby as standard
- 24 hour standby available

Benefits

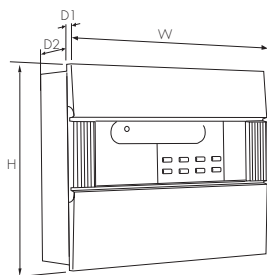
- Designed for ease of installation
- One man walk test facility
- Fully compatible with Menvier range of ancillaries

Technical Specification

Code	MF9302	MF9304	MF9308	MF9316
Description	2 zone control panel	4 zone control panel	8 zone control panel	16 zone control panel
Standards	EN54 Pt2 & Pt4 1998 EN50130-4:1996 EN500081-1:1992 & EN61000-2-2:1994	EN54 Pt2 & Pt4 1998 EN50130-4:1996 EN500081-1:1992 & EN61000-2-2:1994	EN54 Pt2 & Pt4 1998 EN50130-4:1996 EN500081-1:1992 & EN61000-2-2:1994	EN54 Pt2 & Pt4 1998 EN50130-4:1996 EN500081-1:1992 & EN61000-2-2:1994
Specification				
Number of Zones	2	4	8	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 2 4V 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	N/A	1A 2 4V 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	N/A	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%. 50/60Hz	230V ac \pm 10%. 50/60Hz	230V ac \pm 10%. 50/60Hz	230V ac \pm 10%. 50/60Hz
System Operating Voltage	24V dc	24V dc	24V dc	24V dc
Standby Duration	72 hours	72 hours	72 hours (24 hours option)	72 hours (24 hours option)
Battery	2 x 7Ah sealed lead acid battery	2 x 7Ah sealed lead acid battery	2 x 12Ah sealed lead acid battery	2 x 12Ah sealed lead acid battery
Recharge Period	24 hours	24 hours	24 hours	24 hours
Environmental				
Operating Temperature	-5°C to +40°C	-5°C to +40°C	-5°C to +40°C	-5°C to +40°C
Humidity (Non Condensing)	0 to 75% RH	0 to 75% RH	0 to 75% RH	0 to 75% RH
Physical				
Construction	ABS/Polycarbonate housing & back box	ABS/Polycarbonate housing & back box	ABS/Polycarbonate housing & steel back box	ABS/Polycarbonate housing & steel back box
Dimensions (H x W x D)	344mm x 395mm x 95mm	344mm x 395mm x 114mm	386mm x 395mm x 114mm	386mm x 395mm x 114mm
Weight	10.6kg	10.6kg	16.8kg (24 hours option 16.0kg)	16.9kg (24 hours option 16.0kg)
Ingress Protection	IP20	IP20	IP20	IP20
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

Note: If a repeater panel is required to operate with the MF9304, use the MFR9308, 8 zone repeater.

Dimensions



Description	H (mm)	W (mm)	D1 (mm)	D2 (mm)
MF9302	344	395	25	70
MF9304	344	395	25	70
MF9308	386	395	25	119
MF9316	386	395	25	119
MFR9308	386	395	25	119
MFR9316	386	395	25	119

Description	Cut-out (mm)
MF9302	324 x 385
MF9304	324 x 385
MF9308	376 x 385
MF9316	376 x 385

Note: If surface mounting add D1 and D2 to obtain depth dimension.

Product Codes

Code	Description
MF9302	Conventional 2 zone control panel
MF9304	Conventional 4 zone control panel
MF9308	Conventional 8 zone control panel
MF9316	Conventional 16 zone control panel
MF9308L	Conventional 8 zone control panel (24 hour standby)
MF9316L	Conventional 16 zone control panel (24 hour standby)
MFR9308	Conventional 8 zone repeater panel
MFR9316	Conventional 16 zone repeater panel
MFALOG	Fire alarm system log book

Installation

1. 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 end user to perform routine tests.
2. Panels are designed to be wall mounted. When surface fixed use keyhole slot mounting holes found on back of housing, if recessed mounted use an appropriate cut-out for panel and fixed via 6 x screw fixing holes around the housing flange.
3. 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.
4. 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.
5. Standby batteries are connected via push-on terminal connectors.
6. End of line (EOL) devices are supplied with the panel and must be fitted at the end of each detector and alarm circuit wiring.
7. 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.

System Functionality

1. 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.
2. Supervisor mode provides access to test mode, where zones can be tested individually or in any combination.
3. One man walk test feature permits each manual callpoint 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.
4. 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)
5. Non-latching zone facility can be selected on one zone, enabling the direct interconnection of panels in a simple network.
6. 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 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 callpoint on the zone immediately operates the alarm.

7. 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 callpoint immediately operates the alarm.

User Interface

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

Interface Options

1. Class change input facility. Terminals provided for switching of alarm circuits to indicate school/college class change.
2. Auxiliary 1A 24V dc fault relay (except 2 zone panel).
3. Remote signal 1A 24V dc relay for remote location signalling, or operation of a remote dialler (can be isolated during tests/servicing).
4. 24V dc common output provided (does not operate with non-latching zone).
5. Auxiliary 24V dc output power supply provided as standard.

Detection Capacity

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

Alarm Capacity

1. 2 separate alarm lines on 2 and 4 zone panels. 500 mA maximum load per line.
2. 4 separate alarm lines on 8 and 16 zone panels. 500mA maximum load per line.
3. Alarm lines are monitored for open circuit and short circuit faults.

Repeater Panels

1. Repeaters match the style and appearance of main control panels.
2. Facility for signalling to repeater panels provided on all main panels (except 2 zone).
3. 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
4. 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.

Standard Panel Connections

