

ML2144 – Surface Flush Metal Plate

Medical Service Panels (MSP's)



The surface flush mounted MSP's shall be the ML2144 Series flush mounted system and shall comprise of common Medilec ML2000 and Clipsal 2000 Series size modular low voltage, extra low voltage, and gas accessories incorporated into a flush mount metal plate MSP.

The MSP shall comprise of a zinc annealed mild steel recessed 1 to 4 gang mounting bracket with adjustable fascia height adjusters to allow for easy installation. The overall size of the backing bracket shall be 120mm high and range in widths of 103mm, 175mm, 247mm, and 319mm. The mounting brackets shall be modular in construction to allow them to be joined together behind surface mounted joinery to produce longer MSP's when required.

The fascia shall be fixed to the mounting bracket, via a mounting grid, with countersunk raised head slotted screws. The overall height of the fascia shall be 150mm. The facias shall be finished in a powder coated or brushed stainless steel finish.

All accessories within the MSP shall be grid mounted and shall be of common Medilec ML2000 and Clipsal 2000 Series, all segregation must be provided by others or the use of Clipsal 90B plastic insulating shroud (excluding the Line Isolation and Overload Monitor, which shall be a stand-alone item). The front face of each accessory that protrudes through the fascia shall be 76mm high x 58mm wide

Residual Current Devices (RCD's)



The RCD's shall be the ML2000 Series catalogue no. ML2031RC10 Series and shall comprise of 10mA RCD protection, amber load power available indication, red line powder available indication, and an in built test facility.

The front face of the RCD that protrudes through the fascia shall be 76mm high x 58mm wide

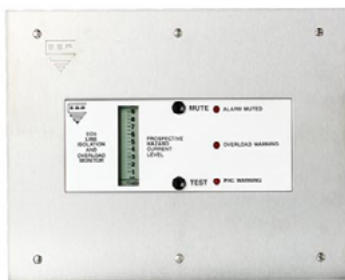
Audible Alarms



Each RCD shall have an Audible Alarm to highlight that the RCD has tripped. The Audible Alarms shall be the ML2000 Series catalogue no. ML2031E08 Series and shall comprise of a mutable two tone audible alarm, flashing red visual alarm, and mute push button labelled "press to mute"

The front face of the Audible Alarm that protrudes through the fascia shall be 76mm high x 58mm wide.

Line Isolation and Overload Monitors (LIOM) and Isolation Transformers



The Line Isolation and Overload Monitors (LIOM's) shall be the ESP Series catalogue no. E05 and shall comprise of an 18 segment Prospective Hazard Current (PHC) LCD Bargraph display, mutable two tone audible alarm activated at 5mA PHC and 15A/20A overload current, alarm muted – overload warning – PHC warning amber indicators, and in built test facility.

The LIOM shall be a stand-alone item with an overall fascia size of 220mm high x 275mm wide.

Isolation Transformer



The Isolation Transformer shall be the ESP Series catalogue no. E14 and shall comprise of an isolation transformer encapsulated within a steel enclosure with heat cured epoxy resin.

The overall size of the Isolation Transformers shall be 210mm high x 270mm wide x 280mm deep (15A version) and 290mm high x 270mm wide x 280mm deep (20A version).

Equipotential Junctions



The Equipotential Junctions shall be the ML2164 Series catalogue no. ML2031VR0 series and shall comprise of a fully insulated green screw clamp terminal with a terminal head size of 26mm in diameter labelled “EQUIPOTENTIAL JUNCTION” and a buss bar with line tap (10 x 5mm tunnels & 4 x 8mm tunnels).

GPO's



The first GPO's in a group of GPO's shall be Clipsal Integrated Systems ML2000 Series and the remaining GPO's shall be Clipsal 2000 Series.

ML2000 Series GPO's



The GPO shall be labelled with the type of electrical protection provided ie. RCD PROTECTED or ISOLATING TRANSFORMER PROTECTED. The RCD Protected GPO shall incorporate an amber power available neon labelled “POWER AVAILABLE” and single pole switching. The Isolating Transformer Protected GPO shall incorporate double pole switching.

Clipsal 2000 Series GPO's



The RCD Protected GPO shall incorporate single pole switching. The Isolating Transformer Protected GPO shall incorporate double pole switching.

The front face of the GPO's that protrudes through the fascia shall be 76mm high x 58mm wide.

Equipotential Earth Terminals



The Equipotential Earth Terminals shall be the ML2031VR0 Series and shall comprise of a fully insulated green screw clamp terminal with a terminal head size of 26mm in diameter.

The front face of the Equipotential Earth Terminal that protrudes through the fascia shall be 76mm high x 58mm wide.

ML2144 – Surface Flush Metal Plate - Accessories



All additional items to be incorporated into the Medical Service Panel eg. nurse call system , gas system, data, and lighting control etc shall be based on the Clipsal 2000 Series format.

Electrical Accessories (ACC)	
Grid Plates	
2031VH	1 gang grid
2032VH	2 gang grid
2033VH	3 gang grid
2034VH	4 gang grid
2035VH	5 gang grid
2036VH	6 gang grid
Dimmers	
Dimmer Mech	Dimmer Mech - 32 Series
Dimmer	Dimmer - 2031 Series
Mechs	
30M	Switch mech
30P-ID	Circuit ID mech
30P	Plug mech
30RJ	Data and phone socket mech
30TV	TV mech
N01	Power Available Neon

Equipotential Earthing (EP)	
Studs	
ML2031VR01	Single gang, vertical, EP stud
ML2032VR02	Double gang, vertical, EP stud
ML2031R01	Single gang, horizontal, EP stud
ML2032R02	Double gang, horizontal, EP stud
Single Facias (EP Junction)	
ML2164E35	EP Junction facia 150mm(H) x 280mm(W) - Suit 3 gang wall box
Socket Outlets (GPO-Clipsal)	
Vertical	
2015V	Single gang power outlet, vertical, 250V, 10A
2015VD	Single gang double pole power outlet, vertical, 250V, 10A
2015VXUA	Single gang power outlet, vertical, extra unused aperture, 250V, 10A
2025V	Double gang power outlet, vertical, 250V, 10A
2015D2V	Double gang double pole power outlet, vertical, 250V, 10A
2025VXUA	Double gang power outlet, vertical, extra unused aperture, 250V, 10A
Horizontal	
2015	Single gang power outlet, horizontal, 250V, 10A
2015D	Single gang double pole power outlet, horizontal, 250V, 10A
2015XUA	Single gang power outlet, horizontal, extra unused aperture, 250V, 10A
2025	Double gang power outlet, horizontal, 250V, 10A
2025XUA	Double gang power outlet, horizontal, extra unused aperture, 250V, 10A
Socket Outlets (GPO-Medilec)	
Vertical	
ML2015V	Single gang power outlet, vertical, amber power available neon, RCD label, 250V, 10A
ML2015VI	Single gang power outlet, vertical, amber power available neon, RCD label, circuit identification, 250V, 10A
ML2015-15VI	Single gang power outlet, vertical, amber power available neon, RCD label, circuit identification, 250V, 15A

ML2015VD	Single gang double pole power outlet, vertical, Isolated label, 250V, 10A
ML2015VDI	Single gang double pole power outlet, vertical, Isolated label, circuit identification, 250V, 10A
ML2025V	Double gang power outlet, vertical, amber power available neon, RCD label, 250V, 10A
ML2025VI	Double gang power outlet, vertical, amber power available neon, RCD label, circuit identification, 250V, 10A
ML2025VD	Double gang double pole power outlet, vertical, Isolated label, 250V, 10A
Horizontal	
ML2015	Single gang power outlet, horizontal, amber power available neon, RCD label, 250V, 10A
ML2015I	Single gang power outlet, horizontal, amber power available neon, RCD label, circuit identification, 250V, 10A
ML2015-15I	Single gang power outlet, horizontal, amber power available neon, RCD label, circuit identification, 250V, 15A
ML2015D	Single gang double pole power outlet, horizontal, power neon, Isolated label, 250V, 10A
ML2025	Double gang power outlet, horizontal, amber power available neon, RCD label, 250V, 10A
ML2025I	Double gang power outlet, horizontal, amber power available neon, RCD label, circuit identification, 250V, 10A
Metal (Single Facia)	
Facias (Standard)	
ML2164-1-F	1 gang 2000 series facia 150mm(H) x 136mm(W)
ML2164-2-F	2 gang 2000 series facia 150mm(H) x 208mm(W)
ML2164-3-F	3 gang 2000 series facia 150mm(H) x 280mm(W)
ML2164-4-F	4 gang 2000 series facia 150mm(H) x 352mm(W)
Facias (Gas)	
ML2164-1-GF	1 gang gas facia 150mm(H) x 136mm(W) - Suit 1 gang wall box
ML2164-2-GF	2 gang gas facia 150mm(H) x 280mm(W) - Suit 3 gang wall box
ML2164-3-GF	3 gang gas facia 150mm(H) x 352mm(W) - Suit 4 gang wall box
RCD	
ML2031VRC10	RCD, Double Switched Socket, Light Switch, Dimmer, Nurse Call. 3 x Gas Outlets
ML2031RC10	RCD, Audible Alarm, 2 x Double Switched Sockets, Light Switch, Dimmer, Data Outlet, Blank, 2 x Gas outlet

Example Panels	
ML2144 - Sample	n/a
Alarm	
ML2031VE08	Single gang, vertical, audible/visual alarm, 250V
ML2031E08	Single gang, horizontal, audible/visual alarm, 250V
Gas Outlets	