



LV LOAD CENTERS

(ASTA Certified)

MIDDLE EAST Switchgear IND. LTD.

TECHNOLOGY • SAFETY • RELIABILITY

Company Profile

Middle East Switchgear Ind. Ltd. (MES), established in 1992, is one of the leading manufacturers of LV switchgear in the United Arab Emirates. MES aims to provide complete customer satisfaction by delivering world-class and reliable switchgear products on time at competitive price without compromising quality.

Our switchgear products range from small to industrial sizes and conform to both local and international standards. Nevertheless, special or customized designs and standards can also be produced upon request.

Apart from the UAE as its main market, MES also exports to other Middle East and European countries.

MES has a fully-automated manufacturing system facilitated by Computer Aided Design and Manufacturing (CAD/CAM). The latest and most efficient machines and equipment are used to execute the processes and designs.

The company's head office is located in Sharjah, while it has sales offices in Abu Dhabi and Al Ain. To date, MES has handled many projects for various infrastructures such as residential, commercial and industrial buildings and facilities for the government and private sectors.

MES is also the first company to manufacture electronic motor protection relays in the UAE. The mass production of these products started in the year 2003.

MES Product Line

Following are the products that MES manufactures:

- MCB Distribution Boards (Load Centers)
- MCCB Distribution Boards
- Switchboard of Forms 2, 3 and 4
- Motor Control Centre Forms 2, 3 and 4 (Fixed and Drawout)
- Feeder Pillars
- Automatic Power Factor Correction Panels
- Auto and Manual Change-over Switches (ATS)
- Synchronising Panels
- Sheet Steel and Stainless Steel Enclosures
- Double and Single Wall Aluminum Enclosures
- Electronic Motor Protection Relays
- Contactors, Overloads, Push Buttons & Indicating Lamps

Single Phase Consumer Units



MES Consumer Units are arranged for Single Phase and neutral incoming supply and outgoing circuits utilizing MCBs up to 63A with 6kA/10kA breaking capacity. These are factory assembled with 125A busbar. Units are available in five sizes with the choice of 6, 9, 12, 14 and 18 outgoing ways. Special units incorporating contactors, timers, instruments, RCDs, etc. can be provided upon request.

The completely detachable chassis contains all components including neutral and earth bars. It is fixed inside the box with extended studs having star-nuts provided for the adjustment of its depth. The empty enclosure can then be installed easily. This feature avoids the possibility of damaging the interior during construction work.

Construction

MES Consumer Units are made from high quality Cold Rolled Sheet Steel of thickness 1.2mm. The top and bottom of the boxes are provided with a knockout of 20/25mm for outgoing cable and a 45/50mm knockout at the center for the main cable. Units are complete with front cover and doors flush or surface. The door is flush with the cover. Consumer Units with plastic covers are also available upon request.

Standards

Service Voltage: 240V 50/60Hz

• Rated Insulation: 600VAC

IEC 439.3:1992BS 5486, Part 12

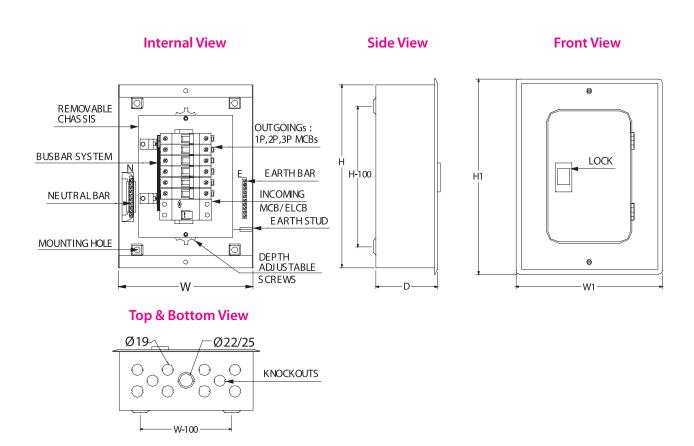
Surface Finish

The surface of the Consumer Units are pretreated with Zinc Phosphate and protected both internally and externally with polyester powder coating. The color is normally RAL 7035 textured. (Any special color can be made available upon request).

Optional

- Incomer Padlocking device
- Locking facility for doors
- Removable gland plates with or without knockouts
- Special boards incorporating contactors, timers, instruments, RCDs etc.

Another economical design is introduced with the same arrangement but without a fixed busbar. A loose comb busbar is provided to connect the breakers together. Choice of 2 Pole incomer as Isolator, MCB or ELCB are interchangeable. Units are available with 2 Pole space for incoming and 4, 6, 8, 12, 14 and 18 outgoing MCBs. Same unit can be used with split busbar arrangement. Flush type is our normal stock item. Surface type can be produced upon request.



Dimensions

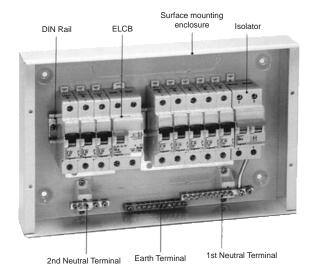
Incoming 2P ELCB / MCB / Isolator

No.		Во	dy		Cover					
of	Catalogue No.			Flu	sh	Surface				
Ways		н	W	H1	W1	H1	W1			
6	061IEM100	300	220	320	240	310	230			
9	091IEM100	350	220	370	240	360	230			
12	121IEM100	400	220	420	240	410	230			
14	141IEM100	450	220	470	240	460	230			
16	161IEM100	470	220	490	240	480	230			
18	181IEM100	540	220	560	240	550	230			

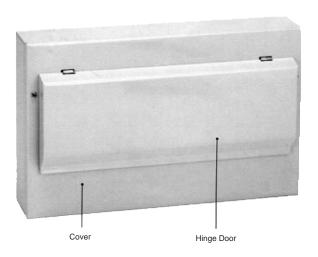
Consumer Units

with any choice of Incoming and Outgoing

Internal View



Front View

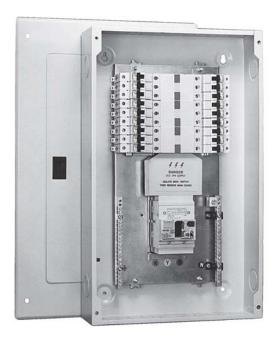


Dimensions

Split Type Arrangement

No. of Ways	Catalogue Numbers		Size						
No. Of Ways	Catalogue Nullibers	Н	x	W	х	D			
9	091EM125	200	х	260	х	90			
11	111EM125	200	х	260	х	90			
13	131EM125	200	Х	350	Х	90			
17	171EM125	200	Х	375	Х	90			
19	191EM125	200	х	430	Х	90			
23	231EM125	200	х	540	Х	90			

3 Phase Distribution Boards



Load Centers are arranged for Three Phase and neutral incoming supply and outgoing circuits utilizing MCBs up to 63A with 6kA/10kA breaking capacity. These are factory assembled with Form 3b Type 1. ASTA certified bus bar system having short time withstand current of 10kA and can accommodate SP, DP & TP MCBs. Ample cabling space is provided. Load Centres are complete with front covers and doors. Both surface and flush mounting designs are available in this range.

Special Features

The completely detachable chassis contains all components including neutral and earth bars. It is fixed inside the box with four/six extended studs having star-nuts provided for the adjustment of its depth. The empty enclosure can then be installed easily. This feature avoids the possibility of damaging the interior during construction.

- Choice of incomers, Isolators, MCBs, ELCBs are interchangeable
- Auto or Non-Auto MCCBs are interchangeable
- Door is flush with the cover

Standards

Service Voltage: 415/240V 50/60Hz

Rated Insulation: 600VAC

IEC 439.3 BS 5486, Part 12

Construction

MES Load Centers are made from high quality Cold Rolled Sheet Steel of thickness 1.2 mm.

The top and bottom of the boxes are provided with knockouts of 20/25mm for outgoing cables and a 38/50mm knockout at the centre for the incoming cable. This facility enables it to be used for top or bottom cable entry. The doors can be locked to cover all devices to prevent unwanted access.

Surface Finish

The surface of the MES Distribution Boards are pretreated with Zinc Phosphate and protected both internally and externally with polyester powder coating. The colour is normally RAL 7035 textured. (Any special colour can be made available upon request).

Optional

- Incomer Padlocking device
- Locking facility for doors
- Removable gland plates with or without knockouts
- Special boards incorporating contactors, timers, instruments, RCDs etc.
- Standard Distribution Boards with Incoming MCCBs are produced with 3 Pole arrangement. If 4 Pole is required, please mention while placing the order.

with Incoming 4P ELCB/MCB/ISOLATOR



MES can provide above
Distribution Boards fitted
with all standard items
i.e. MCBs, ELCBs, isolators,
contactors, timers, and
over/under voltage
relays. We can produce
Load Centers suitable
for all components from
reputed manufacturers.

Application

 Designed to meet a vast variety of applications for distributing power in the final distribution system for domestic/commercial indoor use such as residential flats/shops/office blocks etc.

Busbar

- Tinned copper for low impedance connections and current rating of 225A
- Totally encapsulated busbar assembly of Form 3b Type 1

Range

- A wide range is available to satisfy the needs of most of the specifiers/ customers
- Available in six sizes with the choice of 4, 6, 8, 12, 14 or 18 TP outgoing ways

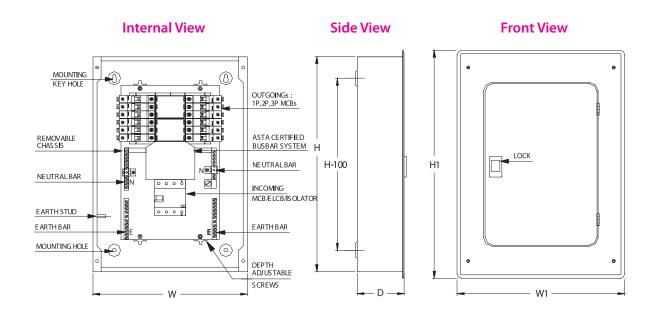
Choice of incomers

 Isolators 3P/4P, MCBs 3P/4P, ELCBs 4P up to 100A interchangeable

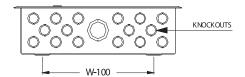
Outgoing breakers

 Flexibility allows various configuration on outgoing ways such as SP, DP & TP MCBs up to 63A

- IP41
- Designed for optimum safety and simple to install



Top & Bottom View



Dimensions

Incoming 4P ELCB / MCB / Isolator

No.		Вос	dy		Cover					
of	Catalogue No.			Flus	sh	Surf	Surface			
Ways		Н	W	H1	W1	H1	W1			
4	123EM100	500	360	520	390	510	380			
6	183EM100	550	360	570	390	560	380			
8	243EM100	650	360	670	390	660	380			
12	363EM100	750	360	770	390	760	380			
14	423EM100	800	360	820	390	810	380			
18	543EM100	950	360	970	390	960	380			

with Side Feeding Incoming 4P ELCB/MCB/ISOLATOR



MES can provide above
Distribution Boards fitted
with all standard items
i.e. MCBs, ELCBs, isolators,
contactors, timers, and
over/under voltage
relays. We can produce
Load Centers suitable
for all components from
reputed manufacturers.

Application

 Designed to meet a vast variety of applications for distributing power in the final distribution system for domestic/commercial, indoor use such as residential flats/shops/office blocks etc.

Busbar

- Tinned copper for low impedance connections and current rating of 125A
- Totally encapsulated busbar assembly of Form 3b Type 1

Range

- A wide range is available to satisfy the needs of most of the specifiers/ customers
- Available in five sizes with the choice of 3, 5, 7, 11 or 13 TP outgoing ways
- · Compact in Dimensions

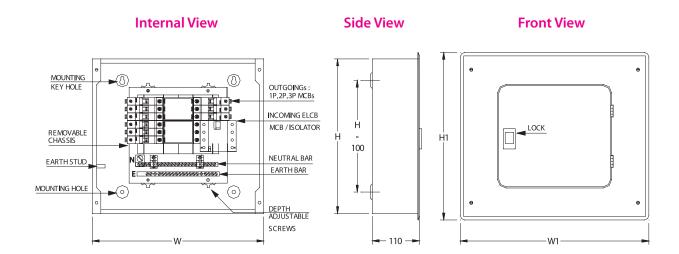
Choice of incomers

- Incomer occupies one of the outgoing ways for side feeding arrangement
- Isolators 3P/4P, MCBs 3P/4P, ELCBs 4P up to 100A interchangeable

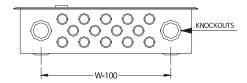
Outgoing breakers

 Flexibility allows various configuration on outgoing ways such as SP, DP & TP MCBs up to 63A and 1P RCCB

- IP41
- Designed for optimum safety and simple to install



Top & Bottom View



Dimensions

Incoming 4P ELCB / MCB / Isolator (Side Feeding)

No.		Вос	dy	er				
of	Catalogue No.			Flu	sh		Surface	
Ways		Н	W	H1	W1	H1	W1	
3	093EMIE100	360	360	380	390	370	380	
5	153EMIE100	400	360	420	390	410	380	
7	213EMIE100	500	360	520	390	510	380	
11	333EMIE100	550	360	570	390	560	380	
13	393EMIE100	600	360	620	390	610	380	
17	513EMIE100	700	360	720	390	710	380	

with Incoming Isolator and ELCB



MES can provide above
Distribution Boards fitted
with all standard items
i.e. MCBs, ELCBs, isolators,
contactors, timers, and
over/under voltage
relays. We can produce
Load Centers suitable
for all components from
reputed manufacturers.

Application

 Designed to meet a vast variety of applications for distributing power in the final distribution system for domestic/commercial, indoor use such as residential flats/shops/office blocks etc. Added safety is provided by ELCB protection for outgoing circuits

Busbar

- Tinned copper for low impedance connections and current rating of 225A
- Totally encapsulated busbar assembly of Form 3b Type 1

Range

- A wide range is available to satisfy the needs of most of the specifiers/ customers
- Available in six sizes with the choice of 4, 6, 8, 12, 14 or 18 TP outgoing ways.

Choice of incomers

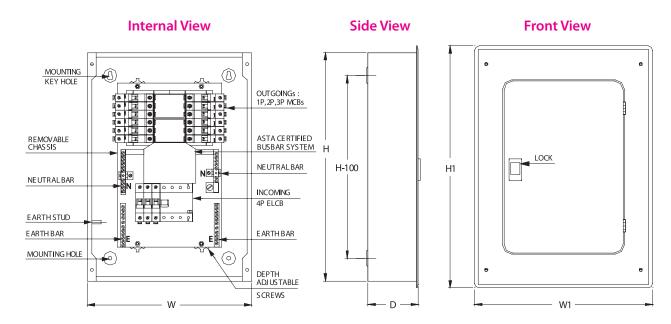
 Isolators 3P/4P up to 100A along with ELCB 4P

Outgoing breakers

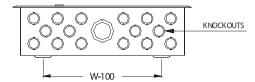
 Flexibility allows various configuration on outgoing ways such as SP, DP & TP MCBs up to 63A

Degree of Protection

Designed for optimum safety and simple to install



Top & Bottom View



Dimensions

Incoming Isolator + ELCB

No.		Bod	ly	Cover					
of	Catalogue No.			Flu	sh	Surf	Surface		
Ways		Н	W	H1	W1	H1	W1		
4	123E+I100	500	400	520	430	510	420		
6	183E+I100	550	400	570	430	560	420		
8	243E+I100	650	400	670	430	660	420		
12	363E+I100	750	400	770	430	760	420		
14	423E+I100	800	400	820	430	810	420		
18	543E+I100	950	400	920	430	960	420		

Split Type Load Centers

with Incoming Isolator feeding Busbar and ELCB Section



MES can provide above
Distribution Boards fitted
with all standard items
i.e. MCBs, ELCBs, isolators,
contactors, timers, and
over/under voltage
relays. We can produce
Load Centers suitable
for all components from
reputed manufacturers.

Application

 Designed to meet a vast variety of applications for distributing power in the final distribution system for domestic/commercial, indoor use such as residential flats/shops/office blocks etc. and where more safety is required only those circuits are protected with branch ELCB 30 or 100mA

Busbar

- Tinned copper for low impedance connections and current rating of 225A
- Totally encapsulated busbar assembly of Form 3b Type 1

Range

- A wide range is available to satisfy the needs of most of the specifiers/ customers
- Available in six sizes with the choice of 4+3, 6, 3, 4, 5, 6+5, 8+3, and 8+5 TP ways

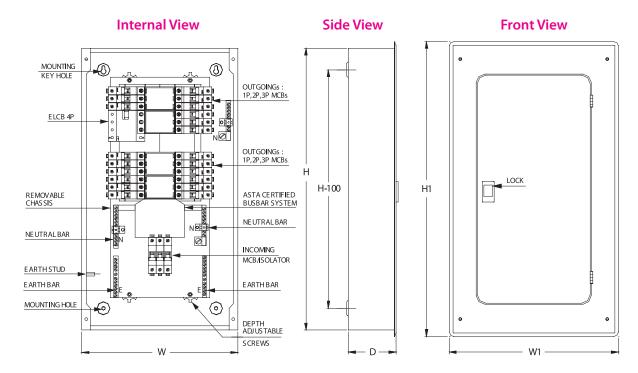
Choice of incomers

 Isolators 3P/4P upto 125A feeding the busbar and Branch ELCB

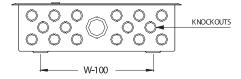
Outgoing breakers

 Flexibility allows various configuration on outgoing ways such as SP, DP & TP MCBs up to 63A and 1P RCCB

- IP41
- Designed for optimum safety and simple to install



Top & Bottom View



Dimensions

Incoming Isolator with ELCB Sections

No.		Во	dy	Cover					
of	Catalogue No.			Flu	sh	Surf	Surface		
Ways		Н	W	H1	W1	H1	W1		
4+3	12091+E100	650	400	680	430	670	420		
4+5	12151+E100	700	400	730	430	720	420		
6+3	18091+E100	700	400	730	430	720	420		
6+5	18151+E100	750	400	780	430	770	420		
8+3	24091+E100	800	400	830	430	820	420		
8+5	24151+E100	900	400	930	430	920	420		

Split Type Load Centers

with Incoming Isolator feeding two ELCB Sections



MES can provide above
Distribution Boards fitted
with all standard items
i.e. MCBs, ELCBs, isolators,
contactors, timers, and
over/under voltage
relays. We can produce
Load Centers suitable
for all components from
reputed manufacturers.

Application

 Designed to meet a vast variety of applications for distributing power in the final distribution system for domestic/commercial, indoor use such as residential flats/shops/office blocks etc. where more safety is required. Outgoing circuits of each section are protected by ELCB assigned to that section.

Busbar

- Tinned copper for low impedance connections and current rating of 225A
- Totally encapsulated busbar assembly of Form 3b Type 1

Range

- A wide range is available to satisfy the needs of most of the specifiers/ customers
- Available in six sizes with the choice of 2+2, 4+2, 4+4, 6+4, 6+6 and 8+8 TP ways

Choice of incomers

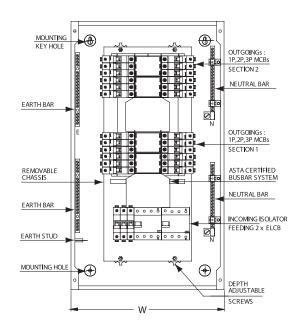
 Isolators 3P/4P upto 125A feeding two independent sections. Outgoing circuits of each section are protected by 4P ELCB 30/100mA

Outgoing breakers

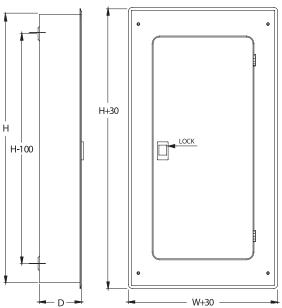
 Flexibility allows various configuration on outgoing ways such as SP, DP & TP MCBs up to 63A

- IP41
- Designed for optimum safety and simple to install

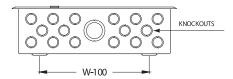
Internal View



Side View Front View



Top & Bottom View



Dimensions

Incoming Isolator Feeding two ELCB Sections

No.		Bod	ly		Cover				
of	Catalogue No.			Flu	sh	Surf	Surface		
Ways		Н	W	H1	W1	H1	W1		
2+2	06061+2E100	500	400	520	430	510	420		
4+2	12061+2E100	550	400	570	430	560	420		
4+4	12121+2E100	650	400	670	430	660	420		
6+4	18121+2E100	750	400	770	430	760	420		
6+6	18181+2E100	750	400	770	430	760	420		
8+6	24181+2E100	800	400	820	430	810	420		

with Incoming MCCB 125A



MES can provide above
Distribution Boards fitted
with all standard items
i.e. MCBs, ELCBs, isolators,
contactors, timers, and
over/under voltage
relays. We can produce
Load Centers suitable
for all components from
reputed manufacturers.

Application

 Designed to meet a vast variety of applications for distributing power in the final distribution system for domestic/commercial indoor use such as residential flats/shops/office blocks etc.

Busbar

- Tinned copper for low impedance connections and current rating of 225A
- Totally encapsulated busbar assembly of Form 3b Type 1

Range

- A wide range is available to satisfy the needs of most of the specifiers/ customers
- Available in six sizes with the choice of 4, 6, 8, 12, 14 or 18 TP outgoing ways

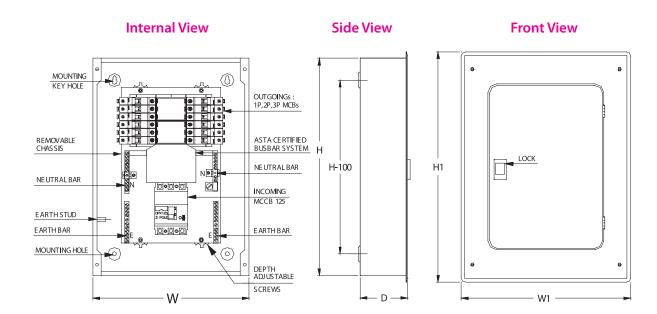
Choice of incomers

 MCCB up to 125A 3 Pole (4 Pole available upon request)

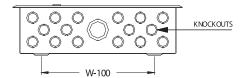
Outgoing breakers

 Flexibility allows various configuration on outgoing ways such as SP, DP & TP MCBs up to 63A and 1P RCCB

- IP41
- Designed for optimum safety and simple to install



Top & Bottom View



Dimensions

Incoming MCCB 125A

No.		Во	dy		Cover				
of	Catalogue No.			Flu	sh	Surface			
Ways		Н	W	H1	W1	H1	W1		
4	123MCC125	550	360	570	390	560	380		
6	183MCC125	600	360	620	390	610	380		
8	243MCC125	650	360	670	390	660	380		
12	363MCC125	750	360	770	390	760	380		
14	423MCC125	800	360	820	390	810	380		
18	543MCC125	900	360	920	390	910	380		

with Incoming MCCB 250A



MES can provide above
Distribution Boards fitted
with all standard items
i.e. MCBs, ELCBs, isolators,
contactors, timers, and
over/under voltage
relays. We can produce
Load Centers suitable
for all components from
reputed manufacturers.

Application

 Designed to meet a vast variety of applications for distributing power in the final distribution system for domestic/commercial indoor use such as residential flats/shops/office blocks etc.

Busbar

- Tinned copper for low impedance connections and current rating of 225A
- Totally encapsulated busbar assembly of Form 3b Type 1

Range

- A wide range is available to satisfy the needs of most of the specifiers/ customers
- Available in six sizes with the choice of 4, 6, 8, 12, 14 or 18 TP outgoing ways

hoice of incomers

 Incoming as MCCB 250A 3 Pole (4Pole available upon request)

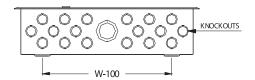
Outgoing breakers

 Flexibility allows various configuration on outgoing ways such as SP, DP & TP MCBs up to 63A and 1P RCCB

- IP41
- Designed for optimum safety and simple to install

Internal View Side View Front View MOUNTING KEY HOLE OUTGOINGs : 1P,2P,3P MCBs UPTO 63A LOCK ASTA CERTIFIED BUSBAR SYSTEM REMOVABLE CHASSIS N OF H1 NE UTRAL BAR NE UTRAL BAR 0 0 0 0 H-100 INCOMING MCCB 250A E ARTH BAR E ARTH BAR EARTH STUD DEPTH ADJUSTABLE SCREWS MOUNTING HOLE 0 – W -W1 -

Top & Bottom View



Dimensions

Incoming MCCB 250 A

No.		Вос	ly		Cover					
of	Catalogue No.				h	Surfa	ace			
Ways		Н	W	H1	W1	H1	W1			
4	123MCC250	700	400	720	430	710	420			
6	183MCC250	750	400	770	430	760	420			
8	243MCC250	800	400	820	430	810	420			
12	363MCC250	950	400	970	430	960	420			
14	423MCC250	950	400	970	430	960	420			
18	543MCC250	1150	400	1170	430	1160	420			

with Incoming MCCB 250A and Case Section



MES can provide above
Distribution Boards fitted
with all standard items
i.e. MCBs, ELCBs, isolators,
contactors, timers, and
over/under voltage
relays. We can produce
Load Centers suitable
for all components from
reputed manufacturers.

Application

 Designed to meet a vast variety of applications for distributing power in the final distribution system for domestic/commercial, indoor use such as residential flats/shops/office blocks/ camps etc.

Busbar

- Tinned copper for low impedance connections and current rating of 225A
- Totally encapsulated busbar assembly of Form 3b Type 1

Range

- A wide range is available to satisfy the needs of most of the specifiers/ customers
- Available in six sizes with the choice of 4, 6, 8, 12, 14 or 18 TP outgoing ways

Choice of incomers

• MCCBs TP 63A up to 250A

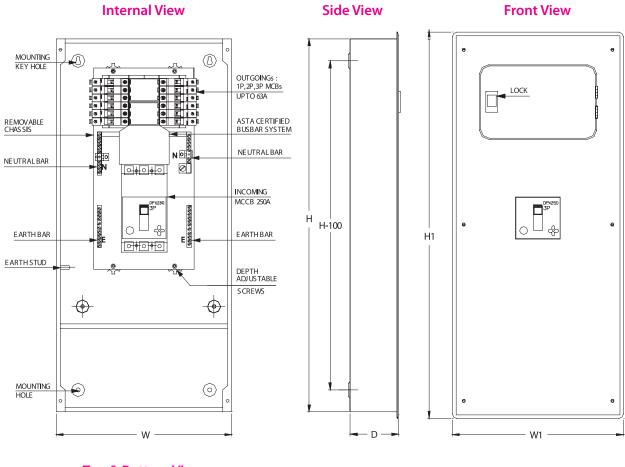
Outgoing breakers

 Flexibility allows various configuration on outgoing ways such as SP, DP & TP MCBs up to 63A and 1P RCCB

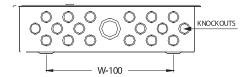
Special Feature

 Cable End box provided for ease of cable termination of higher sizes

- IP41
- Designed for optimum safety and simple to install



Top & Bottom View



Dimensions

Incoming RCCB up to 250A

		Type - 2 Incoming 3P MCCB 250A												
No.		Cover						Cover						
of	Catalogue Numbers	Во	dy	Flu	ısh	Surf	ace	Catalogue Numbers	Во	dy	Flu	ısh	Surf	ace
Ways	Numbers	Н	W	H1	W1	H1	W1	Numbers	Н	W	H1	W1	H1	W1
4	123MCC125CB	550	400	570	430	560	420	123MCC125CB	700	400	720	430	710	420
6	183MCC125CB	600	400	620	430	610	420	183MCC125CB	750	400	770	430	760	420
8	243MCC125CB	650	400	670	430	660	420	243MCC125CB	850	400	820	430	810	420
12	363MCC125CB	750	400	770	430	760	420	363MCC125CB	900	400	920	430	910	420
14	423MCC125CB	800	400	820	430	810	420	423MCC125CB	950	400	970	430	960	420
18	543MCC125CB	900	400	920	430	910	420	543MCC125CB	1150	400	1170	430	1160	420

Notes



Head Office & Factory: Middle East Switchgear Ind. Ltd.

P.O.Box: 22984, Sharjah, U.A.E Tel: +971 6 5388173, Fax: +971 6 5388643 E-mail: meswgear@emirates.net.ae, www.meswitchgear.com

Local Distributors

Middle East Switchgear Est.
P. O. Box: 45953, Abu Dhabi, U. A. E.
Tel: +971 2 6344756 / 6323770

Fax: +971 2 6345582

Trust Electricals

P. O. Box: 5816, Sharjah, U. A. E. **Tel:** +971 6 5330607

Fax: +971 6 5337652