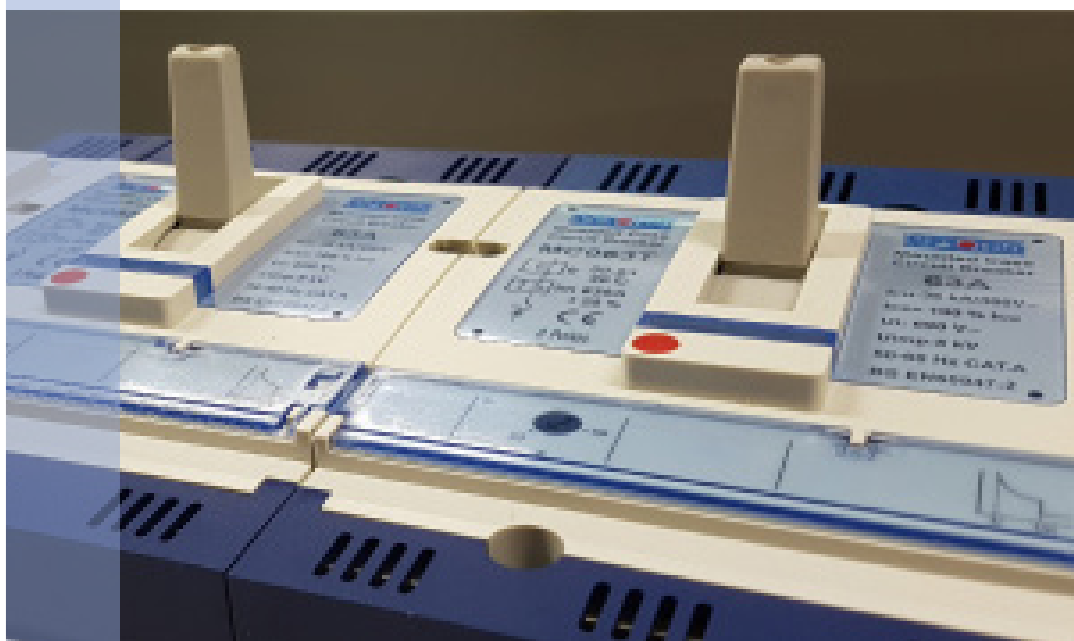
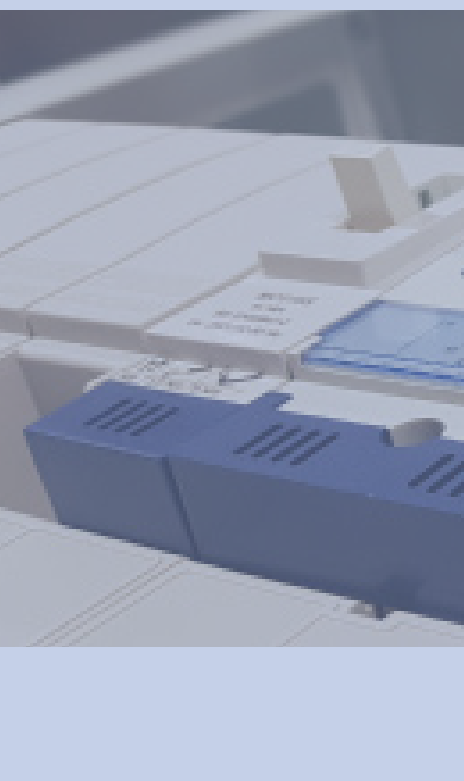




MC PANELBOARDS

MOULDED CASE CIRCUIT BREAKERS

BS EN 61439 - 1 & 2 | BS EN 60947 - 2



NEW EXTENDED RANGE
INCLUDING MCX & CBX COMBINATION BOARDS

INDUSTRIAL SWITCHGEAR DIVISION

Proteus are committed to bringing our customers solutions for power distribution and energy efficiency, whilst focusing on the manufacture of switchgear products specifically designed to offer reliability from 'plant room to plug top'.

With many years of experience in Power & Distribution, we can help you make your energy use and distribution systems safer in order to protect your people, assets and business. Our comprehensive array of electrical distribution products, technologies and services, allows architects and facility owners a flexible approach to their electrical distribution needs.

With considerable stock within our UK based factory and 800 distributors worldwide, we are ready and able to satisfy all of your power distribution needs.

Section Content

MC Panelboards

MCX & CBX Combination Boards

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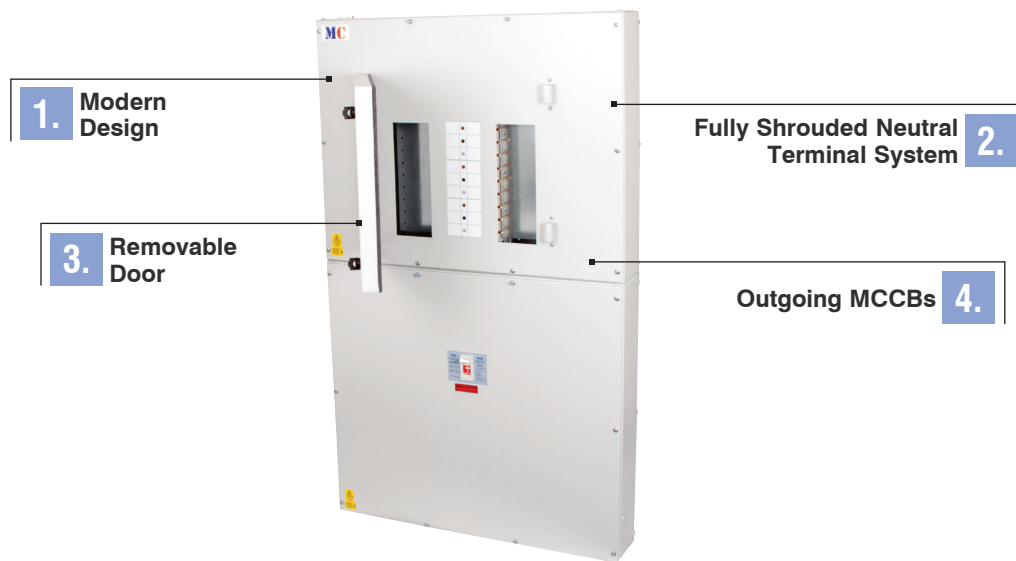
KEY FEATURES:

3-PHASE PANELBOARDS FULLY COMPLIANT TO BS EN 61439-1&2

FEATURES:

250A, 400A and 800A busbar MCCB Panelboards.
Available from 3 to 18 triple pole outgoing ways as standard.
Factory fitted incoming MCCB/Isolator up to 800A (3 & 4pole).
Outgoing MCCBs can be factory fitted on request.
High fault level rating, 36kA Icc.
Removable end plates for easy glanding and ease of installation.
Standard board width 900 mm allowing easy cabling.
Construction gives type 2 and type 3 group mounted segregation to BS EN 61439:Pt1 & 2:2011.
Constructed with 1.6 mm thick steel with an epoxy paint finish to RAL7035.
Other paint finishes available upon request.
Key hole foot fixings for wall mounting.
Lift off door hinges.





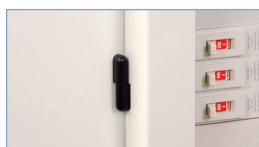
1. Modern Design

Modern design allows ultimate flexibility with SP & TP MCCBs which can be fitted in any position.



2. Shrouded Neutral Terminal System

Fully shrouded neutral terminal system with clear perspex covers.



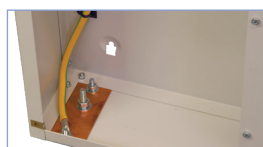
3. Removable Door

Door fitted over outgoing MCCBs as standard using high quality, steel pin hinges. Removable for ease of fitting.



4. Outgoing MCCBs

Outgoing MCCBs up to 250A TP and 200A SP.



5. Main Earth Termination

Main earthing termination point onto high conductivity copper plate and robust bonding throughout.

OFFERING A COMPREHENSIVE RANGE



MCCB PANELBOARDS - 250A BUSBAR 36KA ICC

Measurements:

Millimetres (mm)
unless stated
otherwise

Outgoing Switchgear:

Supplied separately

Outgoing MCCB's:

Upto 250A TP and
200A SP

FEATURES:

- Available from 3 to 18 triple pole outgoing ways.
- Factory fitted incoming MCCB/isolator up to 250A 3/4 pole.
- These boards utilise the busbar ability to accept 250A MCCBs by using one way as the incoming position when a 3 pole incomer is acceptable.
- Reduced height where space is at a premium.
- Any rating of MCCB up to 250A can be used as the incomer.
- The incoming device is fitted at the top right as standard to allow cable spreading room, this can be moved to any position.

- Range of side extension boxes, side meter boxes, bottom extension boxes and corner boxes to suit 250A range of MC panels.
- Bottom extension boxes are available in 200 or 300 mm height as standard.
- Side extension and meter boxes are available in left/right hand and 3/4pole versions sized to suit all 250A range MC panels
- Corner boxes available when using side and bottom boxes to give a clean look.
- Meters, SPDs and Earth Leakage Units are also available.



200A MCCB INCOMER OR SWITCH DISCONNECTOR FITTED BOARDS

MCP32/I200

NO. of O/G WAYS	CAT. NO. - 3 POLE	H	W	D
3	MCP32/I200 (S)	500	900	170
5	MCP52/I200 (S)	700	900	170
7	MCP72/I200 (S)	700	900	170
11	MCP112/I200 (S)	950	900	170
15	MCP152/I200 (S)	1300	900	170
17	MCP172/I200 (S)	1300	900	170

(S) - Add suffix 'S' for Switch Disconnecter Incomer Fitted Boards e.g. MCP32/I200S



200A MCCB INCOMER FITTED BOARDS

MCP42/I200F

NO. of O/G WAYS	CAT. NO. - 4 POLE	H	W	D
4	MCP42/I200F	1000	900	170
6	MCP62/I200F	1200	900	170
8	MCP82/I200F	1200	900	170
12	MCP122/I200F	1450	900	170
16	MCP162/I200F	1800	900	170
18	MCP182/I200F	1800	900	170



250A MCCB INCOMER OR SWITCH DISCONNECTOR FITTED BOARDS

MCP72/I250

NO. of O/G WAYS	CAT. NO. - 3 POLE	H	W	D
3	MCP32/I250 (S)	500	900	170
5	MCP52/I250 (S)	700	900	170
7	MCP72/I250 (S)	700	900	170
11	MCP112/I250 (S)	950	900	170
15	MCP152/I250 (S)	1300	900	170
17	MCP172/I250 (S)	1300	900	170

(S) - Add suffix 'S' for Switch Disconnecter Incomer Fitted Boards e.g. MCP72/I250S



MCP62/I250F

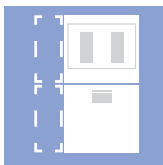
250A MCCB INCOMER FITTED BOARDS

NO. of O/G WAYS	CAT. NO. - 4 POLE	H	W	D
4	MCP42/I250F	1000	900	170
6	MCP62/I250F	1200	900	170
8	MCP82/I250F	1200	900	170
12	MCP122/I250F	1450	900	170
16	MCP162/I250F	1800	900	170
18	MCP182/I250F	1800	900	170

3 POLE



4 POLE



MCPEB32L

SIDE EXTENSION BOX 3 & 4 POLE INCOMER

* - To suit four pole boards.

CAT. NO. (LEFT SIDE)	CAT. NO. (RIGHT SIDE)	H	W	D
MCPEB32L	MCPEB32R	500	200	170
MCPEB52L	MCPEB52R	700	200	170
MCPEB72L	MCPEB72R	700	200	170
MCPEB112L	MCPEB112R	950	200	170
MCPEB152L	MCPEB152R	1300	200	170
MCPEB172L	MCPEB172R	1300	200	170
MCPEB42FL*	MCPEB42FR*	1000	200	170
MCPEB62FL*	MCPEB62FR*	1200	200	170
MCPEB82FL*	MCPEB82FR*	1200	200	170
MCPEB122FL*	MCPEB122FR*	1450	200	170
MCPEB162FL*	MCPEB162FR*	1800	200	170
MCPEB182FL*	MCPEB182FR*	1800	200	170

Measurements:
Millimetres (mm)
unless stated
otherwise

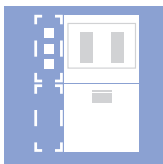
**Outgoing
Switchgear:**
Supplied separately

Outgoing MCCB's:
Upto 250A TP and
200A SP

3 POLE



4 POLE



MCPMB52L

SIDE METER EXTENSION BOX 3 & 4 POLE INCOMER

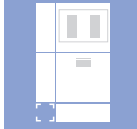
* - To suit four pole boards.

NO. of METER POSITIONS	CAT. NO. (LEFT SIDE)	CAT. NO. (RIGHT SIDE)	H	W	D
2	MCPMB32L	MCPMB32R	500	400	170
3	MCPMB52L	MCPMB52R	700	400	170
4	MCPMB72L	MCPMB72R	700	400	170
6	MCPMB112L	MCPMB112R	950	400	170
8	MCPMB152L	MCPMB152R	1300	400	170
9	MCPMB172L	MCPMB172R	1300	400	170
2	MCPMB42FL*	MCPMB42FR*	1000	400	170
3	MCPMB62FL*	MCPMB62FR*	1200	400	170
4	MCPMB82FL*	MCPMB82FR*	1200	400	170
6	MCPMB122FL*	MCPMB122FR*	1450	400	170
8	MCPMB162FL*	MCPMB162FR*	1800	400	170
9	MCPMB182FL*	MCPMB182FR*	1300	400	170

3 POLE



4 POLE



MCPCB34L

CORNER EXTENSION BOX

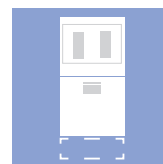
CAT. NO. (LEFT SIDE)	CAT. NO. (RIGHT SIDE)	H	W	D
MCPCB22L	MCPCB22R	200	200	170
MCPCB32L	MCPCB32R	300	200	170
MCPCB24L	MCPCB24R	200	400	170
MCPCB34L	MCPCB34R	300	400	170



3 POLE

4 POLE

MCPBEB200



BOTTOM EXTENSION BOX

CAT. NO.	H	W	D
MCPBEB200	200	900	170
MCPBEB300	300	900	170

Bottom extension boxes can also be used as a top extension box

Measurements:

Millimetres (mm)
unless stated
otherwise

Outgoing Switchgear:

Supplied separately

Outgoing MCCB's:

Upto 250A TP and
200A SP

FEATURES:

- Available from 4 to 18 triple pole outgoing ways.
- Factory fitted incoming MCCB/isolator up to 400A 3/4 pole.
- Ample cabling space for incoming cables.
- Space next to incomer for metering, earth leakage protection and surge protection to monitor and protect whole board.
- Range of side extension boxes, side metering boxes, bottom extension boxes and corner boxes

to suit 400A range of MC panels.

- Bottom extension boxes are available in 200 or 300 mm heights as standard.
- Side extension and meter extension boxes are available in left/right hand versions sized to suit all 400A range MC panels.
- Corner boxes available when using side and bottom extension boxes to give a clean look.
- Meters, SPDs and Earth Leakage Units are also available.



MCP44/I315

**WALL
MOUNTED**

**SIDE
HINGED
DOOR**

315A MCCB INCOMER FITTED BOARDS

NO. of O/G WAYS	CAT. NO. 3 POLE	CAT. NO. 4 POLE	H	W	D
4	MCP44/I315	MCP44/I315F	1300	900	170
6	MCP64/I315	MCP64/I315F	1500	900	170
8	MCP84/I315	MCP84/I315F	1500	900	170
12	MCP124/I315	MCP124/I315F	1750	900	170
16	MCP164/I315	MCP164/I315F	2100	900	170
18	MCP184/I315	MCP184/I315F	2100	900	170



MCP84/I400S

**WALL
MOUNTED**

**SIDE
HINGED
DOOR**

400A MCCB INCOMER OR SWITCH DISCONNECTOR FITTED BOARDS

NO. of O/G WAYS	CAT. NO. 3 POLE	CAT. NO. 4 POLE	H	W	D
4	MCP44/I400 (S)	MCP44/I400F	1300	900	170
6	MCP64/I400 (S)	MCP64/I400F	1500	900	170
8	MCP84/I400 (S)	MCP84/I400F	1500	900	170
12	MCP124/I400 (S)	MCP124/I400F	1750	900	170
16	MCP164/I400 (S)	MCP164/I400F	2100	900	170
18	MCP184/I400 (S)	MCP184/I400F	2100	900	170

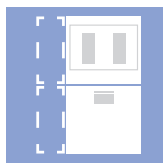
(S) - Add suffix 'S' for Switch Disconnecter Incomer option e.g. MCP84/I400S. Triple pole only

Measurements:
Millimetres (mm)
unless stated
otherwise

**Outgoing
Switchgear:**
Supplied separately

Outgoing MCCB's:
Upto 250A TP and
200A SP

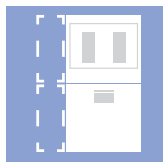
MCPEB64L



SIDE EXTENSION BOX

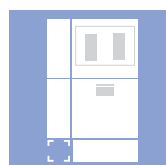
CAT. NO. (LEFT SIDE)	CAT. NO. (RIGHT SIDE)	H	W	D
MCPEB44L	MCPEB44R	1300	200	170
MCPEB64L	MCPEB64R	1500	200	170
MCPEB84L	MCPEB84R	1500	200	170
MCPEB124L	MCPEB124R	1750	200	170
MCPEB164L	MCPEB164R	2100	200	170
MCPEB184L	MCPEB184R	2100	200	170

MCPMB124L



SIDE METER EXTENSION BOX

NO. of METER POSITION	CAT. NO. (LEFT SIDE)	CAT. NO. (RIGHT SIDE)	H	W	D
2	MCPMB44L	MCPMB44R	1300	400	170
3	MCPMB64L	MCPMB64R	1500	400	170
4	MCPMB84L	MCPMB84R	1500	400	170
6	MCPMB124L	MCPMB124R	1750	400	170
8	MCPMB164L	MCPMB164R	2100	400	170
9	MCPMB184L	MCPMB184R	2100	400	170



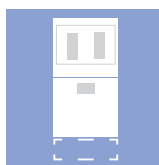
MCPCB34L

CORNER EXTENSION BOX

CAT. NO. (LEFT SIDE)	CAT. NO. (RIGHT SIDE)	H	W	D
MCPCB22L	MCPCB22R	200	200	170
MCPCB32L	MCPCB32R	300	200	170
MCPCB24L	MCPCB24R	200	400	170
MCPCB34L	MCPCB34R	300	400	170



MCPBEB200



BOTTOM EXTENSION BOX

CAT. NO.	H	W	D
MCPBEB200	200	900	170
MCPBEB300	300	900	170

Bottom extension boxes can also be used as a top extension box

MCCB PANELBOARDS - 800A BUSBAR 36KA ICC

Measurements:

Millimetres (mm)
unless stated
otherwise

Outgoing Switchgear:

Supplied separately

Outgoing MCCB's:

Upto 250A TP and
200A SP

FEATURES:

- Available from 4 to 18 triple pole outgoing ways.
- Factory fitted incoming MCCB/isolator up to 800A 3/4 pole.
- Ample cabling space for incoming cables.
- Space next to incomer for metering, earth leakage protection and surge protection to monitor and protect whole board.
- Range of side extension boxes, side metering boxes, bottom extension boxes and corner boxes

to suit 800A range of MC panels.

- Bottom extension boxes are available in 200 or 300 mm heights as standard.
- Side extension and meter extension boxes are available in left/right hand versions sized to suit all 800A range MC panels.
- Corner boxes available when using side and bottom extension boxes to give a clean look.
- Meters, SPDs and Earth Leakage Units are also available.

MCP48/I500

**SIDE
HINGED
DOOR**

**WALL
MOUNTED**



500A MCCB INCOMER FITTED BOARDS

NO. of O/G WAYS	CAT. NO. 3 POLE	CAT. NO. 4 POLE	H	W	D
4	MCP48/I500	MCP48/I500F	1450	900	170
6	MCP68/I500	MCP68/I500F	1650	900	170
8	MCP88/I500	MCP88/I500F	1650	900	170
12	MCP128/I500	MCP128/I500F	1900	900	170
16	MCP168/I500	MCP168/I500F	2250	900	170
18	MCP188/I500	MCP188/I500F	2250	900	170

MCP48/I630S

**SIDE
HINGED
DOOR**

**WALL
MOUNTED**



630A MCCB INCOMER OR SWITCH DISCONNECTOR FITTED BOARDS

NO. of O/G WAYS	CAT. NO. 3 POLE	CAT. NO. 4 POLE	H	W	D
4	MCP48/I630 (S)	MCP48/I630F	1450	900	170
6	MCP68/I630 (S)	MCP68/I630F	1650	900	170
8	MCP88/I630 (S)	MCP88/I630F	1650	900	170
12	MCP128/I630 (S)	MCP128/I630F	1900	900	170
16	MCP168/I630 (S)	MCP168/I630F	2250	900	170
18	MCP188/I630 (S)	MCP188/I630F	2250	900	170

(S) - Add suffix 'S' for Switch Disconnecter Incomer option e.g. MCP88/I630S. Triple pole only

MCP128/I800F

**SIDE
HINGED
DOOR**

**WALL
MOUNTED**



800A MCCB INCOMER OR SWITCH DISCONNECTOR FITTED BOARDS

NO. of O/G WAYS	CAT. NO. 3 POLE	CAT. NO. 4 POLE	H	W	D
4	MCP48/I800 (S)	MCP48/I800F	1450	900	170
6	MCP68/I800 (S)	MCP68/I800F	1650	900	170
8	MCP88/I800 (S)	MCP88/I800F	1650	900	170
12	MCP128/I800 (S)	MCP128/I800F	1900	900	170
16	MCP168/I800 (S)	MCP168/I800F	2250	900	170
18	MCP188/I800 (S)	MCP188/I800F	2250	900	170

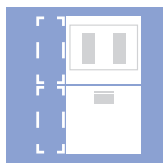
(S) - Add suffix 'S' for Switch Disconnecter Incomer option e.g. MCP88/I800S. Triple pole only

Measurements:
Millimetres (mm)
unless stated
otherwise

**Outgoing
Switchgear:**
Supplied separately

Outgoing MCCB's:
Upto 250A TP and
200A SP

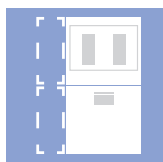
MCPEB68L



SIDE EXTENSION BOX

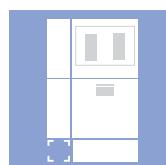
CAT. NO. (LEFT SIDE)	CAT. NO. (RIGHT SIDE)	H	W	D
MCPEB48L	MCPEB48R	1450	200	170
MCPEB68L	MCPEB68R	1650	200	170
MCPEB88L	MCPEB88R	1650	200	170
MCPEB128L	MCPEB128R	1900	200	170
MCPEB168L	MCPEB168R	2250	200	170
MCPEB188L	MCPEB188R	2250	200	170

MCPMB128L



SIDE METER EXTENSION BOX

NO. of METER POSITION	CAT. NO. (LEFT SIDE)	CAT. NO. (RIGHT SIDE)	H	W	D
2	MCPMB48L	MCPMB48R	1450	400	170
3	MCPMB68L	MCPMB68R	1650	400	170
4	MCPMB88L	MCPMB88R	1650	400	170
6	MCPMB128L	MCPMB128R	1900	400	170
8	MCPMB168L	MCPMB168R	2250	400	170
9	MCPMB188L	MCPMB188R	2250	400	170



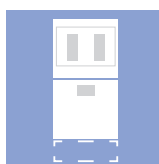
MCPCB34L

CORNER EXTENSION BOX

CAT. NO. (LEFT SIDE)	CAT. NO. (RIGHT SIDE)	H	W	D
MCPCB22L	MCPCB22R	200	200	170
MCPCB32L	MCPCB32R	300	200	170
MCPCB24L	MCPCB24R	200	400	170
MCPCB34L	MCPCB34R	300	400	170



MCPBEB200



BOTTOM EXTENSION BOX

CAT. NO.	H	W	D
MCPBEB200	200	900	170
MCPBEB300	300	900	170

Bottom extension boxes can also be used as a top extension box

Measurements:
Millimetres (mm)
unless stated
otherwise

FEATURES:

- Tariff and non tariff multifunction meters.
- Fitting into side meter boxes for outgoing devices or 250A TP incomers.
- Fitted next to incomer on 250A 4P, 400A and 800A panelboards.

Tariff or MID approved meters are used in situations where it is necessary to charge clients in a Landlord – Tenant type arrangement. The landlord uses the individual meters to charge clients for their energy usage. These meters have a higher accuracy class than Non-Tariff meters.

Non-Tariff (check) meters are used in situations where the electricity bill is apportioned to different departments within a company but there is only one company paying the bill.

NON-TARIFF MULTIFUNCTION MULTIMETERS (1 & 3 PHASE)

To be fitted in meter extension boxes to monitor outgoing / incoming circuits up to 250A. e.g. 6 way panelboard c/w 400A TP MCCB incomer (MCP64/I400). Compatible meter extension boxes could be fitted on left (MCPMB64L) or right (MCPMB64R). Associated switchgear could be 5 x 100A TP MCCBs (MC100T) and 5 x Digital multimeters (MCPMFM100T).



MCPMFM063T

AMPERAGE	CAT. NO. (3 PHASE)	CAT. NO. (1 PHASE)
63A	MCPMFM063T	MCPMFM063S
100A	MCPMFM100T	MCPMFM100S
125A	MCPMFM125T	MCPMFM125S
160A	MCPMFM160T	MCPMFM160S
200A	MCPMFM200T	MCPMFM200S
250A	MCPMFM250T	-



MCPMFM315T

NON-TARIFF MULTIFUNCTION MULTIMETERS

Fitted adjacent to main incomer to monitor total panelboard power usage. No meter extension box required.

AMPERAGE	CAT. NO. (3 PHASE)
315A	MCPMFM315T
400A	MCPMFM400T
500A	MCPMFM500T
630A	MCPMFM630T
800A	MCPMFM800T

MID/TARIFF MULTIMETERS (1 & 3 PHASE)

To be fitted in meter extension boxes to monitor outgoing / incoming circuits up to 250A. e.g. 6 way panelboard c/w 400A TP MCCB incomer (MCP64/I400). Compatible meter extension boxes could be fitted on left (MCPMB64L) or right (MCPMB64R). Associated switchgear could be 5 x 125A TP MCCBs (MC125T) and 5 x digital multimeters (MCPMFM125TMID).



MCPMFM063TMID

AMPERAGE	CAT. NO. (3 PHASE)	CAT. NO. (1 PHASE)
63A	MCPMFM063TMID	MCPMFM063SMID
100A	MCPMFM100TMID	MCPMFM100SMID
125A	MCPMFM125TMID	MCPMFM125SMID
160A	MCPMFM160TMID	MCPMFM160SMID
200A	MCPMFM200TMID	MCPMFM200SMID
250A	MCPMFM250TMID	-



MCPMFM315MID

MID/TARIFF MULTIMETERS (1 & 3 PHASE)

To be fitted adjacent to main incomer to monitor total panelboard power usage. No meter extension box required.

AMPERAGE	CAT. NO. (3 PHASE)
315A	MCPMFM315TMID
400A	MCPMFM400TMID
500A	MCPMFM500TMID
630A	MCPMFM630TMID
800A	MCPMFM800TMID

FEATURES:

- It is intended that the earth leakage units are under the supervision of instructed or skilled persons.
- Earth leakage relay has adjustable trip current and time settings.
- The MCCB is tripped via its integral shunt trip coil.
- The full breaking capacity of the MCCB is retained.
- Type A filtering.

Measurements:
Millimetres (mm)
unless stated
otherwise

EARTH LEAKAGE UNITS

To be fitted in meter extension boxes to monitor outgoing / incoming circuits earth leakage up to 250A. e.g. 6 way panelboard c/w 400A TP MCCB incoher (MCP64/I400). Compatible meter extension boxes could be fitted on left (MCPMB64L) or right (MCPMB64R). Associated switchgear could be 5 x 100A TP MCCBs (MC100T) and 5 x Earth Leakage Units (MCPEL100).



MCPEL100

AMPERAGE	CAT. NO.
100A	MCPEL100
125A	MCPEL125
160A	MCPEL160
200A	MCPEL200
250A	MCPEL250



Fitted adjacent to main incoher to monitor total panelboard earth leakage.
No meter extension box required.

AMPERAGE	CAT. NO.
400A	MCPEL400
630A	MCPEL630



MCEL200T

STAND ALONE EARTH LEAKAGE UNITS

Triple Pole 36kA Moulded Case Circuit Breaker in Steel Enclosure fitted with Earth Fault Relay Device

AMPERAGE	CAT. NO. (3 POLE + N)	CAT. NO. (4 POLE)	MIN. SENSITIVITY H AMPS	W	D
100A	MCEL100T	MCEL100F	0.03	700	300 170
125A	MCEL125T	MCEL125F	0.03	700	300 170
160A	MCEL160T	MCEL160F	0.03	700	300 170
200A	MCEL200T	MCEL200F	0.03	700	300 170
250A	MCEL250T	MCEL250F	0.1	950	400 170
315A	MCEL315T	MCEL315F	0.1	950	400 170
400A	MCEL400T	MCEL400F	0.1	950	400 170
500A	MCEL500T	MCEL500F	0.1	950	400 170
630A	MCEL630T	MCEL630F	0.1	950	400 170

CT internal diameters of 70 mm from 100A to 200A and 120 mm for current ratings from 250A to 630A.



MCE100T

IP3X ENCLOSED MCCBS

Triple Pole 36kA Moulded Case Circuit Breaker in IP3X Steel Enclosures

AMPERAGE	CAT. NO. (3 POLE)	CAT. NO. (4 POLE)	H	W	D
63A	MCE063T	MCE063F	400	300	170
80A	MCE080T	-	400	300	170
100A	MCE100T	MCE100F	400	300	170
125A	MCE125T	MCE125F	700	300	170
160A	MCE160T	MCE160F	700	300	170
200A	MCE200T	MCE200F	700	300	170
250A	MCE250T	MCE250F	950	400	170
315A	MCE315T	MCE315F	950	400	170
400A	MCE400T	MCE400F	950	400	170
500A	MCE500T	MCE500F	950	400	170
630A	MCE630T	MCE630F	950	400	170
800A	MCE800T	MCE800F	1300	500	300

Measurements:
Millimetres (mm)
unless stated
otherwise



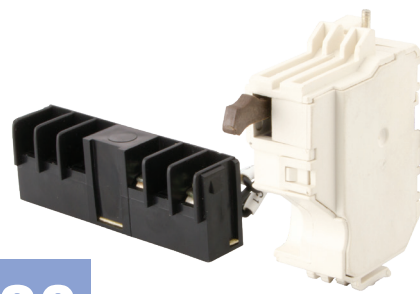
MCENC1

ENCLOSURES TO SUIT INDIVIDUAL MCCBS (3 & 4 POLE)

3 pole units will accept 1 x SP or 1 x TP MCCB. 4 pole units will accept 1 x 4P MCCB only. When fitting a SP MCCB, 2 blanking modules (MCCBM1) will also need to be installed.
250A MCCB must be large frame size MCCB (MC250TLF, MC250FLF).

AMPERAGE	CAT. NO.	H	W	D
16A - 100A	MCENC1	400	300	170
125A - 200A	MCENC2	700	300	170
250A - 630A	MCENC6	950	400	170
800A	MCENC8	1300	500	300
16A - 100A	MCENC1F*	400	300	170
125A - 200A	MCENC2F*	700	300	170
250A - 630A	MCENC6F*	950	400	170
800A	MCENC8F*	1300	500	300

* - Four pole option.



MCST4P400

**220
VOLTS**

SHUNT TRIP UNITS

DESCRIPTION	CAT. NO.	VOLTAGE	DEVICE
For MCCB up to 250A	MCST3P250*	220V	3+4 pole
For MCCB 315A-630A	MCST3P630	220V	3 pole
For MCCB 800A	MCST3P800	220V	3 pole
For MCCB up to 100A	MCST4P100	220V	4 pole
For MCCB 315A-400A	MCST4P400**	220V	4 pole
For MCCB 500A-630A	MCST4P630	220V	4 pole
For MCCB 800A	MCST4P800	220V	4 pole

MCA3P250 - Auxiliary contact for MC016T to MC250T. Wire in series with shunt trip MCST3P250.

* - For MC250TLF use S/T MCST3P630.

** - For MC250FLF use MCST4P400

SURGE PROTECTION DEVICES 3 PHASE + N (4 POLE)

For 250A TP incomer boards, the SPD will be fitted in the included 300 mm bottom extension box. Type 1+2 and Type 2 device kits include a 125A TP MCCB to be fitted into board taking an outgoing way to feed SPD.

For 250A 4P incomer boards, the SPD will be fitted adjacent to the incoming device. Type 1+2 and Type 2 device kits include a 125A TP MCCB to be fitted into board taking an outgoing way to feed SPD.

For 315 - 800A TP and 4P incomer boards, the SPD will be fitted adjacent to the incoming device. Kits include a 250A TP MCCB to be fitted into board taking an outgoing way to feed SPD.

Type 1: Protection against the effects of lightning.

Type 2: Protection against the effects of man-made surges on the mains supply system.



MCP84/1400 & MCPT12/800
(Blanks sold separately)

INCOMER AMPERAGE	INCOMER POLES	TYPE	PROTECTIVE DEVICE	CAT. NO.	H	W	D
≤250A	3	Type 1+2	125A TP MCCB	MCPT12/250	300	900	170
≤250A	3	Type 2	125A TP MCCB	MCPT2/250	300	900	170
≤250A	4	Type 1+2	125A TP MCCB	MCPT12/250F	Fitted adjacent to incomer		
≤250A	4	Type 2	125A TP MCCB	MCPT2/250F			
>315 - 800A	3 & 4	Type 1+2	250A TP MCCB	MCPT12/800			
>315 - 800A	3 & 4	Type 2	250A TP MCCB	MCPT2/800			

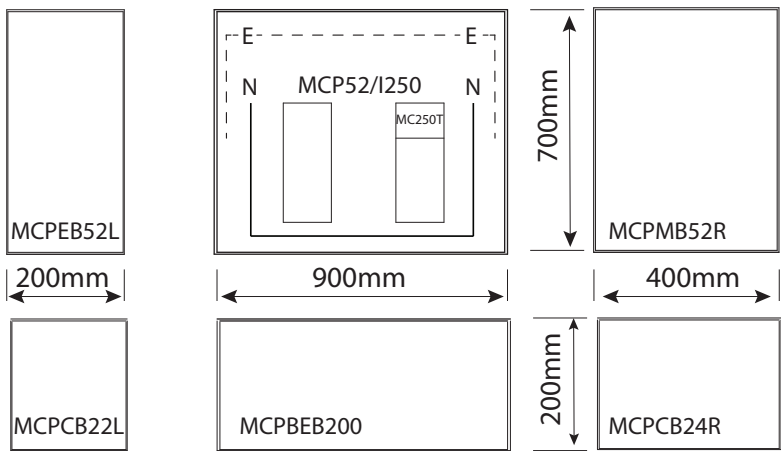


ADDITIONAL ACCESSORIES

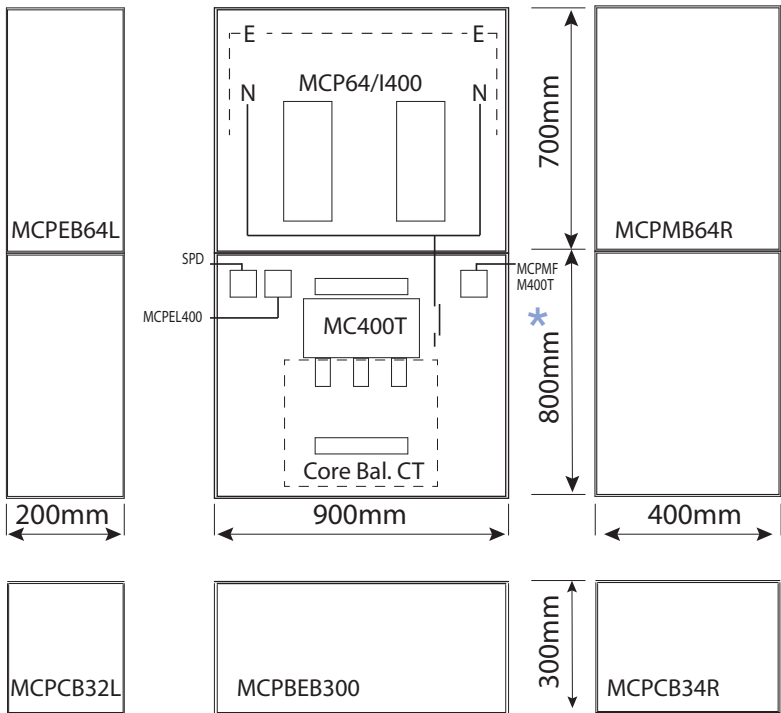
DESCRIPTION	CAT. NO.
Padlocking device - for 3P & adj 4P MCCBs (16A to 630A)	MCPD
SP MCCB blank	MCCBM1
Incomer door	MCPID
120 mm² lug connection kit for MC016T-MC250T	MCLK120
150 mm² lug connection kit for MC016T-MC250T	MCLK150
185 mm² lug connection kit for MC016T-MC250T	MCLK185
MC063T-MC250T long terminal shield	MCLTS
M8 nut insert and bolt for MC016T-MC250T	MCNUTM8
Key lock for door	XLKL

Measurements:
Millimetres (mm)
unless stated
otherwise

250A BUSBAR SYSTEM



400A AND 800A BUSBAR SYSTEMS



* - 800 mm height only up to 400A incomer. 950 mm 500A - 800A. Depth 170 mm/215 mm over door.

KEY FEATURES:

MOULDED CASE CIRCUIT BREAKERS BS EN 60947 1-2

FEATURES:

The moulded case circuit breakers are housed in fibre reinforced thermoset polyester that combines ruggedness, high dielectric and mechanical strength.

High quality silver alloy contacts (with elements of tungsten and graphite) ensure both high conductivity at point contact and minimal pitting during switching for a longer contact life.

Positive contact indication is by means of the operating lever position.





1. Technical Detail

Full technical detail, markings and adjustable parameters clearly identified.



2. Box Clamp Terminals

Box clamp terminals for connection of cables upto 120 mm² (upto MC250T).



3. Fully Shrouded Terminals

Fully shrouded terminals.



4. Trip Position

Mid-trip position of MCCB dolly.



5. Phase Barriers

Phase barriers supplied with lug connected MCCBs.

OFFERING A COMPREHENSIVE RANGE



Measurements:
Millimetres (mm)
unless stated
otherwise

FEATURES:

- The moulded case circuit breakers are housed in fibre reinforced thermoset polyester that combines ruggedness, high dielectric and mechanical strength.

- High quality silver alloy contacts (with elements of tungsten and graphite) ensure both high conductivity at point contact and minimal pitting during switching for a longer contact life.
- Positive contact indication is by means of the operating lever position.



MC125S

SINGLE POLE MCCBS

Single Pole 36kA Moulded Case Circuit Breakers

CURRENT RATING (A)	NO. of POLES	kA RATING (kA)	THERMAL RELEASE	MAGNETIC RELEASE	TERMINAL CAPACITY	CAT. NO.
16	SP	36	F	500A	120 mm ²	MC016S
20	SP	36	F	500A	120 mm ²	MC020S
25	SP	36	F	500A	120 mm ²	MC025S
32	SP	36	F	500A	120 mm ²	MC032S
40	SP	36	F	500A	120 mm ²	MC040S
50	SP	36	F	500A	120 mm ²	MC050S
63	SP	36	F	500A	120 mm ²	MC063S
80	SP	36	F	800A	120 mm ²	MC080S
100	SP	36	F	1000A	120 mm ²	MC100S
125	SP	36	F	1250A	120 mm ²	MC125S
160	SP	36	F	1600A	120 mm ²	MC160S
200	SP	36	F	2000A	120 mm ²	MC200S



MC032T

TRIPLE POLE MCCBS

Triple Pole 36kA Moulded Case Circuit Breakers

** - For panel boards only.

CURRENT RATING (A)	NO. of POLES	kA RATING (kA)	THERMAL RELEASE	MAGNETIC RELEASE	TERMINAL CAPACITY	CAT. NO.
16	TP	36	A (0.8-1xln)	250A	120 mm ²	MC016T
20	TP	36	A (0.8-1xln)	250A	120 mm ²	MC020T
25	TP	36	A (0.8-1xln)	250A	120 mm ²	MC025T
32	TP	36	A (0.8-1xln)	320A	120 mm ²	MC032T
40	TP	36	A (0.8-1xln)	400A	120 mm ²	MC040T
50	TP	36	A (0.8-1xln)	500A	120 mm ²	MC050T
63	TP	36	A (0.8-1xln)	630A	120 mm ²	MC063T
80	TP	36	A (0.8-1xln)	800A	120 mm ²	MC080T
100	TP	36	A (0.8-1xln)	1000A	120 mm ²	MC100T
125	TP	36	A (0.8-1xln)	1250A	120 mm ²	MC125T
160	TP	36	A (0.8-1xln)	1600A	120 mm ²	MC160T
200	TP	36	A (0.8-1xln)	A (5-10xln)	120 mm ²	MC200T
250	TP	36	A (0.8-1xln)	A (5-10xln)	120 mm ²	MC250T**



MC100TMR

MOTOR RATED MCCBS

Triple Pole 36kA Motor Rated Moulded Case Circuit Breakers

** - For panel boards only.

MOTOR RATING KW (APPROX.)	MCCB AMPS	kA RATING (kA)	THERMAL RELEASE	MAGNETIC RELEASE	TERMINAL CAPACITY	CAT. NO.
30	63A	36	A (0.7-1x ln)	15xln	120 mm ²	MC063TMR
37	80A	36	A (0.7-1x ln)	15xln	120 mm ²	MC080TMR
51	100A	36	A (0.7-1x ln)	15xln	120 mm ²	MC100TMR
63	125A	36	A (0.7-1x ln)	15xln	120 mm ²	MC125TMR
80	160A	36	A (0.7-1x ln)	15xln	120 mm ²	MC160TMR
90	200A	36	A (0.7-1x ln)	10-15xln	120 mm ²	MC200TMR
110	250A	36	A (0.7-1x ln)	10-15xln	120 mm ²	MC250TMR**

F - Fixed | A - Adjustable | LF - Large frame.



MC250TLF

LARGE FRAME TRIPLE POLE MCCBS

Large Frame Triple Pole 36 - 70kA Moulded Case Circuit Breakers

CURRENT RATING (A)	NO. of POLES	kA RATING (kA)	THERMAL RELEASE	MAGNETIC RELEASE	TERMINAL CAPACITY	CAT. NO.
250	TP	36	A (0.8-1xIn)	A (5-10xIn)	Lugged(M12)	MC250TLF
315	TP	36	A (0.8-1xIn)	A (4-8xIn)	Lugged(M12)	MC315T
400	TP	36	A (0.8-1xIn)	A (4-8xIn)	Lugged(M12)	MC400T
500	TP	36	A (0.8-1xIn)	A (4-8xIn)	Lugged(M12)	MC500T
630	TP	36	A (0.8-1xIn)	A (4-8xIn)	Lugged(M12)	MC630T
800	TP	36	A (0.8-1xIn)	A (4-8xIn)	Lugged(M12)	MC800T
1000	TP	70	A (0.4-1xIn)	A (2-10xIn)	Lugged	MC1000T***
1250	TP	70	A (0.4-1xIn)	A (2-10xIn)	Lugged	MC1250T***
1600	TP	70	A (0.4-1xIn)	A (2-10xIn)	Lugged	MC1600T***

Large Frame TP MCCBs can not be fitted as an outgoing device.
MC250TLF must be used when using as an individual cable in, cable out MCCB device.
*** - This MCCB does not fit in MCP panelboards.



MC800F

FOUR POLE MCCBS

Four Pole 36 - 50kA Moulded Case Circuit Breakers

CURRENT RATING (A)	NO. of POLES	kA RATING (kA)	THERMAL RELEASE	MAGNETIC RELEASE	TERMINAL CAPACITY	CAT. NO.
63	FP	36	A 0-8-1	630	Tunnel-120mm ²	MC063FA
100	FP	36	A 0-8-1	1000	Tunnel-120mm ²	MC100FA
125	FP	36	A 0-8-1	1250	Tunnel-120mm ²	MC125FA
160	FP	36	A 0-8-1	1600	Tunnel-120mm ²	MC160FA
200	FP	36	A 0-8-1	5-10X	Tunnel-120mm ²	MC200FA
250	FP	36	A 0-8-1	5-10X	Tunnel-120mm ²	MC250FA
250	FP	50	A 0-8-1	5-10X	Lugged(M12)	MC250FALF
315	FP	50	A 0-8-1	5-10X	Lugged(M12)	MC315FA
400	FP	50	A 0-8-1	5-10X	Lugged(M12)	MC400FA
500	FP	50	A 0-8-1	5-10X	Lugged(M12)	MC500FA
630	FP	50	A 0-8-1	5-10X	Lugged(M12)	MC630FA
800	FP	36	F 800A	A (8-10xIn)	Lugged(M12)	MC800F

4 Pole MCCBs cannot be fitted as outgoing devices in MCP panelboards.
MC250FALF must be used when using as an individual cable in, cable out MCCB device.



MC250TNA

TRIPLE POLE NON-AUTO MCCBS

*Non-Auto MCCBs should be protected by a Proteus MC...T/F MCCB of the same rating.
Non-Auto MCCBs cannot be fitted as outgoing devices in MCP panelboards.

CURRENT RATING (A)	NO. of POLES	kA* RATING (kA)	THERMAL RELEASE	MAGNETIC RELEASE	TERMINAL CAPACITY	CAT. NO.
200	TP	36	-	-	Tunnel-120mm ²	MC200TNA
250	TP	36	-	-	Tunnel-120mm ²	MC250TNA
400	TP	36	-	-	Lugged(M12)	MC400TNA
630	TP	36	-	-	Lugged(M12)	MC630TNA
800	TP	36	-	-	Lugged(M12)	MC800TNA

F - Fixed | A - Adjustable | LF - Large frame.

Measurements:
Millimetres (mm)
unless stated
otherwise

MCX 3-PHASE DISTRIBUTION BOARDS

Measurements:

Millimetres (mm)
unless stated
otherwise

Outgoing Switchgear:

Supplied separately

Circuit Protection Devices:

Please refer to page
22 & 49

FEATURES:

- The MCX range 'combination board' brings together the standard TP&N MCB distribution board with typical 17.5 mm module MCBs with the opportunity to fit larger amperage MCCBs upto 160A.
- Accepts MCBs up to 63A and RCBOs up to 45A (17.5 mm wide module).
- Accepts MCCBs 16A to 160A
- Isolator incomer fitted as standard.
- Manufactured to BSEN 61439 - Part 1 & 3.



MCX22/I200

200A MCB/MCCB DISTRIBUTION BOARDS

MCX range offers versatile use of standard MCBs upto 63A, RCBOs upto 45A and MCCBs upto 160A.

INCOMER FACTORY FITTED	NO. of O/G WAYS	CAT. NO.	H	W	D
200A TP Isolator	2 W-63A, 2 W-160A	MCX22/I200	950	600	170
200A TP Isolator	2 W-63A, 4 W-160A	MCX24/I200	1100	600	170
200A TP Isolator	4 W-63A, 2 W-160A	MCX42/I200	1000	600	170
200A TP Isolator	4 W-63A, 4 W-160A	MCX44/I200	1100	600	170
200A TP Isolator	6 W-63A, 2 W-160A	MCX62/I200	1100	600	170
200A TP Isolator	6 W-63A, 4 W-160A	MCX64/I200	1200	600	170
200A TP Isolator	8 W-63A, 2 W-160A	MCX82/I200	1100	600	170
200A TP Isolator	8 W-63A, 4 W-160A	MCX84/I200	1200	600	170
200A TP Isolator	12 W-63A, 2 W-160A	MCX122/I200	1200	600	170
200A TP Isolator	12 W-63A, 4 W-160A	MCX124/I200	1300	600	170



MCX22/I250

250A MCB/MCCB DISTRIBUTION BOARDS

MCX range offers versatile use of standard MCBs upto 63A, RCBOs upto 45A and MCCBs upto 160A.

INCOMER FACTORY FITTED	NO. of O/G WAYS	CAT. NO.	H	W	D
250A TP Isolator	2 W-63A, 2 W-160A	MCX22/I250	950	600	170
250A TP Isolator	2 W-63A, 4 W-160A	MCX24/I250	1100	600	170
250A TP Isolator	4 W-63A, 2 W-160A	MCX42/I250	1000	600	170
250A TP Isolator	4 W-63A, 4 W-160A	MCX44/I250	1100	600	170
250A TP Isolator	6 W-63A, 2 W-160A	MCX62/I250	1100	600	170
250A TP Isolator	6 W-63A, 4 W-160A	MCX64/I250	1200	600	170
250A TP Isolator	8 W-63A, 2 W-160A	MCX82/I250	1100	600	170
250A TP Isolator	8 W-63A, 4 W-160A	MCX84/I250	1200	600	170
250A TP Isolator	12 W-63A, 2 W-160A	MCX122/I250	1200	600	170
250A TP Isolator	12 W-63A, 4 W-160A	MCX124/I250	1300	600	170

FEATURES:

- The CBX range 'combination board' brings together the standard TP&N MCB distribution board with typical 17.5 mm module MCBs with the opportunity to fit larger amperage MCBs upto 125A rated.

- Accepts MCBs up to 63A and RCBOs up to 45A (17.5 mm wide module).
- Accepts MCBs 80A to 125A (26.3 mm wide module).
- Isolator incomer fitted as standard.
- Manufactured to BSEN 61439 - Part 1 & 3.

Measurements:
Millimetres (mm)
unless stated
otherwise

**Outgoing
Switchgear:**
Supplied separately

**Circuit Protection
Devices:**
Please refer to
page 49



CBX22/I200

200A MCB DISTRIBUTION BOARDS

CBX range offers versatile use of standard size MCB's upto 63A, RCBO's upto 45A and larger frame size MCB's 80A to 125A

INCOMER FACTORY FITTED	NO. of O/G WAYS	CAT. NO.	H	W	D
200A TP Isolator	2 W-63A, 2 W-125A	CBX22/I200	950	600	170
200A TP Isolator	2 W-63A, 4 W-125A	CBX24/I200	1100	600	170
200A TP Isolator	4 W-63A, 2 W-125A	CBX42/I200	1000	600	170
200A TP Isolator	4 W-63A, 4 W-125A	CBX44/I200	1100	600	170
200A TP Isolator	6 W-63A, 2 W-125A	CBX62/I200	1100	600	170
200A TP Isolator	6 W-63A, 4 W-125A	CBX64/I200	1200	600	170
200A TP Isolator	8 W-63A, 2 W-125A	CBX82/I200	1100	600	170
200A TP Isolator	8 W-63A, 4 W-125A	CBX84/I200	1200	600	170
200A TP Isolator	12 W-63A, 2 W-125A	CBX122/I200	1200	600	170
200A TP Isolator	12 W-63A, 4 W-125A	CBX124/I200	1300	600	170

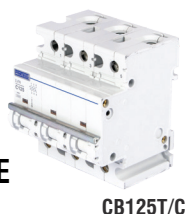


CBX24/I250

250A MCB DISTRIBUTION BOARDS

CBX range offers versatile use of standard size MCB's upto 63A, RCBO's upto 45A and larger frame size MCB's 80A to 125A

INCOMER FACTORY FITTED	NO. of O/G WAYS	CAT. NO.	H	W	D
250A TP Isolator	2 W-63A, 2 W-125A	CBX22/I250	950	600	170
250A TP Isolator	2 W-63A, 4 W-125A	CBX24/I250	1100	600	170
250A TP Isolator	4 W-63A, 2 W-125A	CBX42/I250	1000	600	170
250A TP Isolator	4 W-63A, 4 W-125A	CBX44/I250	1100	600	170
250A TP Isolator	6 W-63A, 2 W-125A	CBX62/I250	1100	600	170
250A TP Isolator	6 W-63A, 4 W-125A	CBX64/I250	1200	600	170
250A TP Isolator	8 W-63A, 2 W-125A	CBX82/I250	1100	600	170
250A TP Isolator	8 W-63A, 4 W-125A	CBX84/I250	1200	600	170
250A TP Isolator	12 W-63A, 2 W-125A	CBX122/I250	1200	600	170
250A TP Isolator	12 W-63A, 4 W-125A	CBX124/I250	1300	600	170



CB125T/C

LARGE FRAME TYPE C MCB

DESCRIPTION	kA RATING	CAT. NO.
80A SP	10	CB080S/C
80A TP	10	CB080T/C
100A SP	10	CB100S/C
100A TP	10	CB100T/C
125A SP	10	CB125S/C
125A TP	10	CB125T/C



CBENCTP

LARGE FRAME MCB IP3X STEEL ENCLOSURES

DESCRIPTION	CAT. NO.	H	W	D
80-125 SP	CBENCSP	385	205	116
80-125 TP	CBENCTP	385	205	116



XLKL

LOCKING

DESCRIPTION	CAT. NO.
Key lock for door	XLKL
CB MCB padlock device	DLPX1

MOULDED CASE CIRCUIT BREAKERS

MCCB PROTECTION OF MOTOR CIRCUITS

Moulded case circuit breakers are not in themselves intended to afford close thermal protection on motor circuits. However, when used in tandem with any intrinsic motor overload device they provide an excellent alternative to the combined isolator and fuse arrangements. In this case the motor is protected by its own circuit breaker. In order to select the correct MCCB, consideration should be given to individual MCCB time/current characteristics (for full details please refer to works). This should only be undertaken in conjunction with

information provided by the motor manufacturer as to starting current and duration.

The motor protection table shown provides a guide to MCCB selection based on the start current and duration indicated and it must always be noted that the drive and motor loading will affect the motor run up time.

(i) The figures shown are based on the assumption that the motor starting conditions are: Direct On-Line = 7 x full load current for 5 seconds max.

MOTOR RATING (kW)	MOTOR RATING (HP)	APPROX. FLC (A) AT 400V	DIRECT ON LINE MCCB TYPE/CURRENT RATING	
< 5.5	< 7.5	< 11.5	16A	MC016T
< 11	< 15	< 22.5	25A	MC025T
< 15	< 20	< 30	32A	MC032T
< 18	< 25	< 36	40A	MC040T
< 22	< 30	< 43	50A	MC050T
< 30	< 40	< 58	63A	MC063TMR
< 37	< 50	< 72	80A	MC080TMR
< 51	< 70	< 98	100A	MC100TMR
< 63	< 85	< 117	125A	MC125TMR
< 80	< 110	< 147	160A	MC160TMR
< 90	< 125	< 169	200A	MC200TMR
< 110	< 150	< 205	250A	MC250TMR
< 160	< 220	< 292	315A	MC315T
< 200	< 270	< 368	400A	MC400T
< 250	< 340	< 465	500A	MC500T
< 315	< 430	< 580	630A	MC630T

MCCB PROTECTION OF CAPACITOR CIRCUITS

Moulded case circuit breakers are commonly applied to capacitor currents. However, due to high in-rush currents and harmonic content found in capacitor circuits, MCCBs should be rated > 1.5 times the current rating of the capacitor.

It is recommended that the MCCB should be utilized as a main isolation/protection device to the capacitor bank. (i.e. occasional switching). Capacitors should be individually protected and switched by appropriately rated contactors.

SUPPLY KVA RATINGS OF MCCBS FOR GENERAL POWER DISTRIBUTION LOADS



MC016T

OUTGOING MCCB SELECTION

RATING	LOAD DEMAND (kVA)	CAT. NO. (TP MCCB)
16A	11	MC016T
20A	14	MC020T
25A	17	MC025T
32A	22	MC032T
40A	27	MC040T
50A	34	MC050T
63A	43	MC063T
80A	55	MC080T
100A	69	MC100T
125A	86	MC125T
160A	110	MC160T
200A	138	MC200T
250A	173	MC250T



MC400T

RECOMMENDATIONS ARE BASED ON A 400V PH-PH 3 PHASE SYSTEM - INCOMING MAIN MCCB

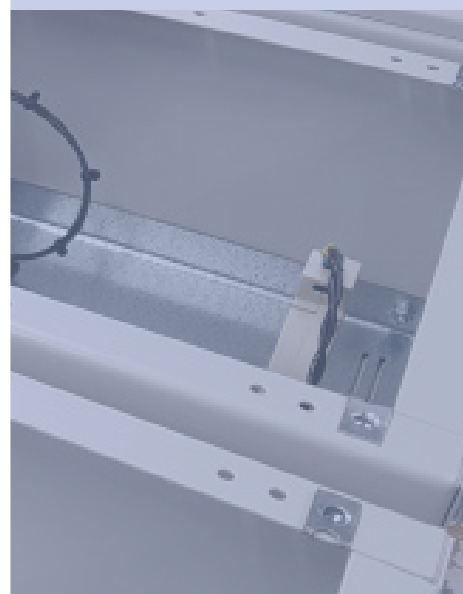
RATING	LOAD DEMAND (kVA)	CAT. NO. (TP MCCB)
315A	218	MC315T
400A	277	MC400T
500A	346	MC500T
630A	436	MC630T
800A	554	MC800T



Proteus Industrial
Stafford Park 12,
Telford,
Shropshire, TF3 3BJ.

☎ 01952 292001
✉ ind@proteusswitchgear.co.uk
🌐 www.proteusswitchgear.co.uk
f Proteus Switchgear
🐦 @proteusswitchg

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NEW EXTENDED RANGE
INCLUDING MCX & CBX COMBINATION BOARDS