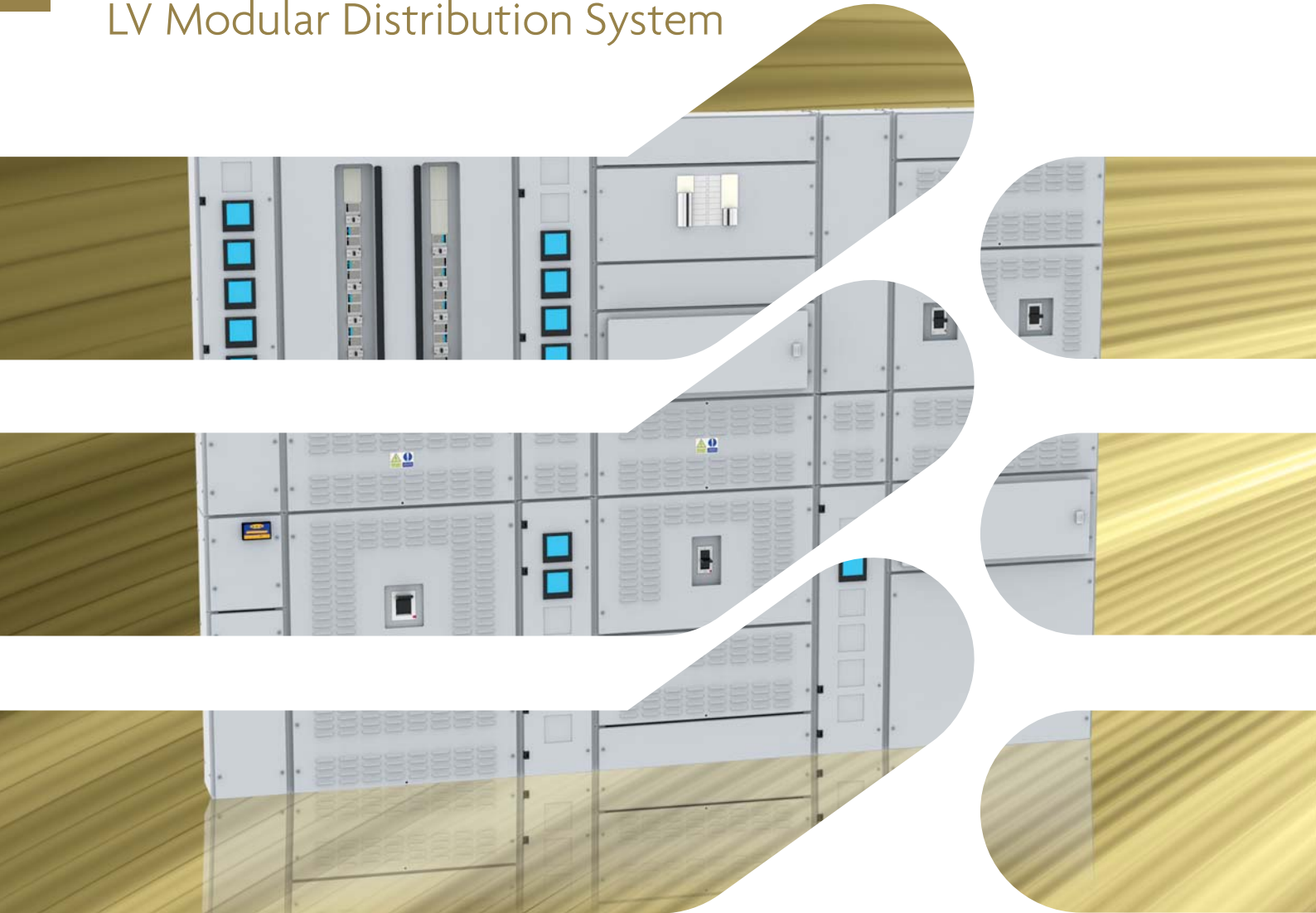
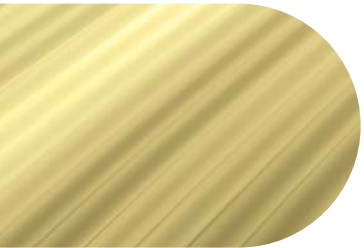
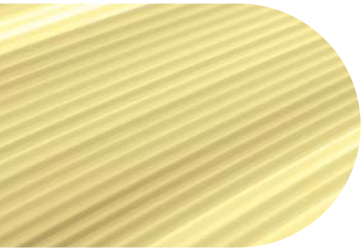
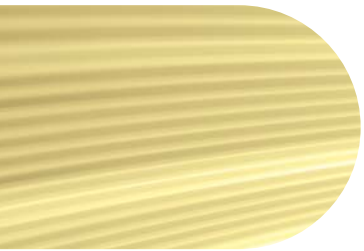


# Modis 12 Ultra

LV Modular Distribution System





# Dorman Smith Switchgear Limited

With over 130 years of experience in switchgear design and production Dorman Smith Switchgear Limited continues to provide high quality equipment for low-voltage electrical distribution and circuit protection.

Our product range begins with single-pole and neutral distribution board systems and continues up to custom designed, factory built low-voltage electrical switchboards for a broad range of commercial, industrial and retrofit applications.

We continue to build on our extensive technical knowledge and awareness of customer and market demands, operating conditions and current regulations.

This breadth of experience supports the development and manufacturing techniques of our electrical products to exceed the industry standards.

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# Modis 12 Ultra

## LV Modular Distribution System

### Key Features

The flexible modular concept of Modis 12 Ultra allows design and build of distribution systems that meet the exact power expectations and space limitations of individual schemes up to 1250A.

Utilising MCB, MCCB and fuse combination unit technology, Modis 12 Ultra offers an extensive range of incomers, busbars, interconnections, service centres, MCB distribution boards and ancillary devices which are easily assembled in a variety of switchboard configurations, from Form 3 section panels through to complex Form 4 multi-section switchboards. Panels are wall mounted and have gland plates for either top and/or bottom cable entry. The standard finish is epoxy powder coating in light grey RAL 7035.

#### Compliance

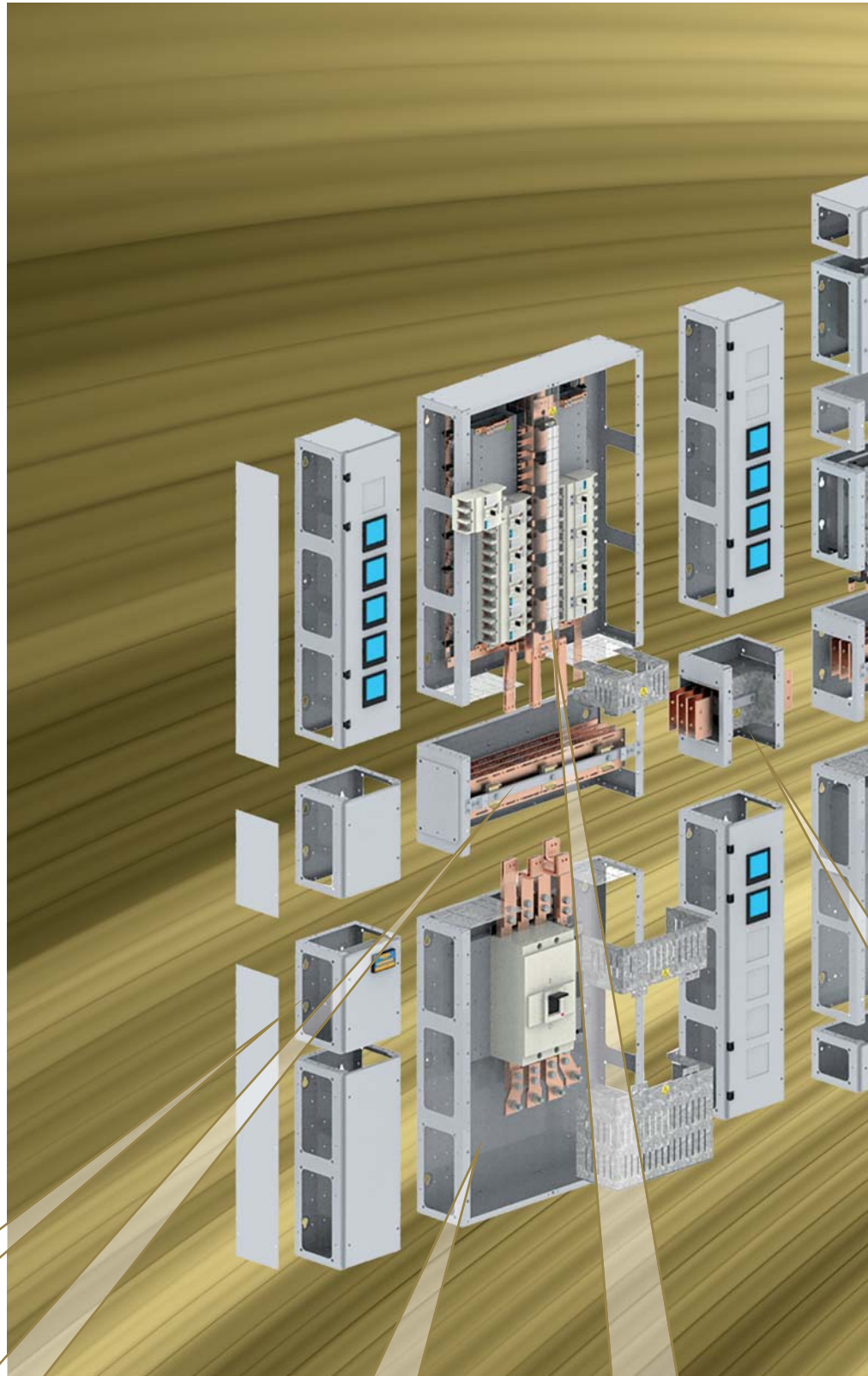
|                     |            |
|---------------------|------------|
| Distribution System | EN 61439-2 |
| MCCBs               | EN 60947-2 |
| Loadswitches        | EN 60947-3 |

Surge protection devices.

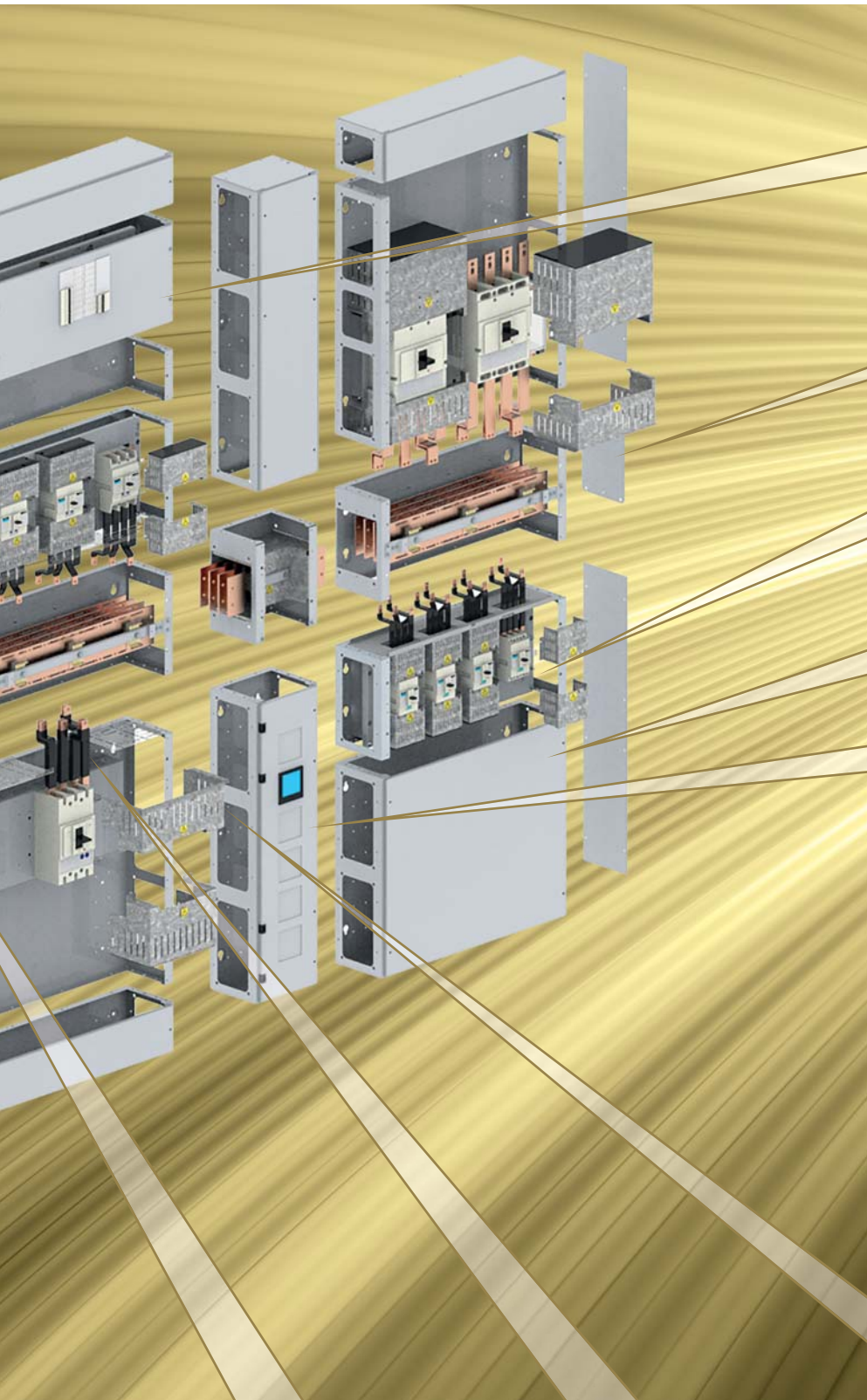
4-pole horizontal copper busbars ASTA certified with a short circuit withstand rating of 25kA for 1 second for 630A and 50kA for 1 second for 1250A.

Dedicated enclosures for various device sizes complete with rigid terminal shrouds. Neutral links also available to match each MCCB frame size.

Panel boards are available to accommodate fuse switches or YA3/YB3 MCCBs.







MCB Distribution Boards

Side plates.

Multiple device enclosures available for smaller devices.

General purpose enclosures in various modular sizes.

Cableways with meters fitted to hinged door.

**For full information on panel boards, devices and accessories please refer to the relevant Dorman Smith product publication.**

Rigid polycarbonate/sheet steel barriers supplied to segregate busbars from incoming/outgoing units.

Cableway busbars shielded to allow cables to pass in front of them.

Dedicated copper connections to horizontal busbars for each device.

# Modis 12 Ultra Product Selection Chart

## LV Modular Distribution System

### Busbars 630A

630A Busbars are 244.80mm high. If an empty cableway is required MBBECW must be used.



**MBB63**  
630A Busbars  
Use **MBB63L** busbar links to join two busbars together



**MBB63CW**  
630A Cableway Busbars  
(MBB63L not required)



**MBBECW**  
Empty Cableway Alongside 630A Busbars

### Busbars 1250A



**MBB12**  
1250A Busbars  
Use **MBB12L** busbar links to join two busbars together



**MBB12CW**  
1250A Cableway Busbars  
(MBB12L not required)

### MCCB Enclosures



**MHYB1X4**  
Enclosure for 4 x YB1 MCCB  
**MCYB1**  
B/B connections  
**YB1NL**  
Neutral link



**MHYB3X3**  
Enclosure for 3 x YA3/YB3 MCCB  
**MCYB3**  
B/B connections  
**YB3NL**  
Neutral link



**MHYA5X1**  
Enclosure for 1 x YA5 MCCB  
**MCYA5**  
B/B connections  
**YA5NL**  
Neutral link

NOTE: When using MCCB enclosures refer to Page 6 for additional information on assembly ratings.  
If using the YA6, YA7 or YA8 frame size MCCB as an outgoing device this should NOT be mounted below the horizontal busbars.



**MHYA6X1**  
Enclosure for 1 x YA6 MCCB  
**MCYA6**  
B/B connections  
**YA6NL**  
Neutral link



**MHYA6X2**  
Enclosure for 2 x YA6 MCCB  
**MCYA6**  
B/B connections  
**YA6NL**  
Neutral link



**MHYA7X1**  
Enclosure for 1 x YA7 MCCB  
**MCYA7**  
B/B connections  
**YA7NL**  
Neutral link



**MHYA8X1**  
Enclosure for 1 x YA8 MCCB  
**MCYA8/MCYA84P**  
B/B connections  
**YA7NL**  
Neutral link

### Loadswitch Enclosures



**MHFS200X3**  
Enclosure for 3 x 200A SF Loadswitch  
**MCFS200**  
B/B connections



**MHFS400X1**  
Enclosure for 1 x 400A SL Loadswitch  
**MCFS400**  
B/B connections



**MHFS400X2**  
Enclosure for 2 x 400A SL Loadswitch  
**MCFS400**  
B/B connections



**MHFS800X1**  
Enclosure for 1 x 800A SN Loadswitch  
**MCFS800**  
B/B connections

### MCB Boards & Service Centres



**LDT212X\*** 2 x 12 Way TP&N  
**LDT112X** 1 x 12 Way TP&N  
**LDT106X** 1 x 6 Way TPN  
**LDS17** 17 Way SP&N  
**LDS24** 24 Way Service Centre  
\*Not suitable for SP RCBOs

Door Kits  
**LD2D12X**  
**LD1D12X**  
**LD1D06X**  
**LD1DS**  
**LD1DS**

Notes: All cableways are 250mm wide and main units are 750mm wide. Heights are given in 152.4 modules. Eg 2 is 2 modules = 304.8mm. All units have side plates except device enclosures, cableways and cableway busbar links which have none. All units are supplied with at least one end plate except Form 4 panelboards, MCB boards, GP enclosures and cableways which have 2.  
More detail on each unit can be found on the following pages.  
For device selection please refer to the relevant Dorman Smith product publication.

### Surge Protection

#### LECK2SP C/W DSP600

Type 2 surge protection device with remote indicator in 2 mod cableway enclosure

#### LECK2SM C/W DSP600

Type 2 surge protection device with remote indicator in frame for use in a standard cableway enclosure

#### LECM2SP C/W DSPT3PN

Type 1 surge protection device in 2 mod cableway enclosure

#### LECM2SM C/W DSPT3PN

Type 1 surge protection device in frame for use in a standard cableway enclosure

## Product Selection Chart

# Modis 12 Ultra

## LV Modular Distribution System

### Panel boards

#### Loadbank 250 Form 3a MCCB Boards



|                 |                         |
|-----------------|-------------------------|
| <b>LB418YA3</b> | 400A, 18 way            |
| <b>LB818YA3</b> | 800A, 18 way            |
| <b>LBDD18</b>   | 18 way door             |
| <b>LB412YA3</b> | 400A, 12 way            |
| <b>LB812YA3</b> | 800A, 12 way            |
| <b>LBDD12</b>   | 12 way door             |
| <b>LB406YA3</b> | 400A, 6 way             |
| <b>LB806YA3</b> | 800A, 6 way             |
| <b>LBDD06</b>   | 6 way door              |
| <b>MCLB400</b>  | 400A Busbar Connections |
| <b>MCLB800</b>  | 800A Busbar Connections |

#### Loadbank 250 Form 3a YA5 MCCB Board



|                 |  |
|-----------------|--|
| <b>LB802YA5</b> | 800A, 2 way<br>(cannot be used with form 4 boards) |
| <b>LBDD02</b>   | 2 way door   |
| <b>MCLB800</b>  | 800A Busbar connections                            |

#### Loadbank 250 Form 4b MCCB Boards



|                 |                         |
|-----------------|-------------------------|
| <b>LF810YA3</b> | 800A, 10 way            |
| <b>LFD10</b>    | 10 way door             |
| <b>LF806YA3</b> | 800A, 6 way             |
| <b>LFD06</b>    | 6 way door              |
| <b>MCLF800</b>  | 800A Busbar connections |

#### Loadbank 200 Form 4a Loadswitch Boards



|                |                         |
|----------------|-------------------------|
| <b>LF810A</b>  | 800A, 10 way            |
| <b>LF806A</b>  | 800A, 6 way             |
| <b>MCLF800</b> | 800A Busbar connections |

Outgoing terminal shrouds **MUST** be fitted to achieve form 4. Refer to page 9 for catalogue numbers

#### Panelboard Interconnections

|              |                                   |
|--------------|-----------------------------------|
| <b>LBCK4</b> | 400A LB250 to LB250               |
| <b>LBCK8</b> | 800A LB250 to LB250               |
| <b>LBSKE</b> | LB250 top connection kit          |
| <b>LCFVK</b> | 800A Form 4 LB250 to Form 4 LB250 |

### Add-on Enclosures

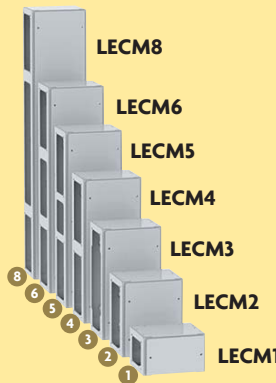
#### General Purpose Enclosures



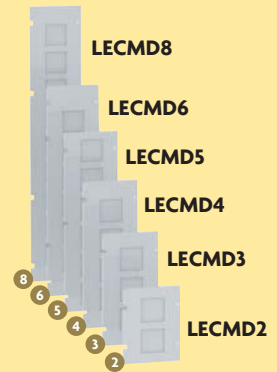
#### Enclosure Hinged Front Plates

|                |
|----------------|
| <b>MXPF6HS</b> |
| <b>MXPF5HS</b> |
| <b>MXPF4HS</b> |
| <b>MXPF3HS</b> |
| <b>MXPF2HS</b> |

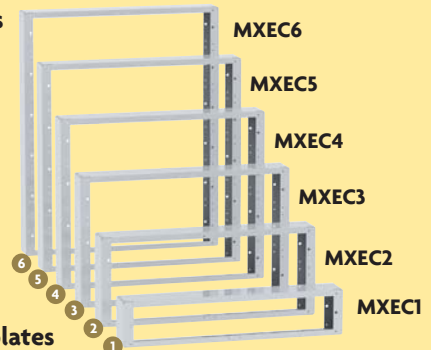
### Cableways



### Cableway Hinged Meter Plates



### Accessories Extension Collars



### Side/End plates

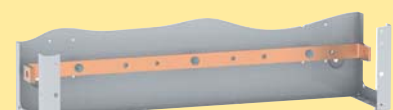
|               |                          |
|---------------|--------------------------|
| <b>MXPE1F</b> | 1 module high side plate |
| <b>MXPE2F</b> | 2 module high side plate |
| <b>MXPE3F</b> | 3 module high side plate |
| <b>MXPE4F</b> | 4 module high side plate |
| <b>MXPE5F</b> | 5 module high side plate |

|               |                          |
|---------------|--------------------------|
| <b>MXPE6F</b> | 6 module high side plate |
| <b>MXPE8F</b> | 8 module high side plate |
| <b>LGES</b>   | Steel End Plate          |
| <b>MXHCS</b>  | Horizontal Cross strap   |
| <b>MXEPF</b>  | Horizontal Partition kit |

### Earth Bars



**MEB250**  
250mm wide earth bar  
(box not included)



**MEB750**  
750mm wide earth bar  
(box not included)



## Modis 12 Ultra LV Modular Distribution System



## Horizontal Busbars

- Depth is 200mm. Height and width is as per the table below.
- 750mm wide units supplied with one end plate and side plates.
- 250mm wide units supplied with one end plate and no side plates.
- MBB\*\*CW unit links two horizontal busbars across a 250mm wide cableway.
- Ingress protection of IP3X.

**Note!** 630A busbar also has a conditional rating Icc 50kA, 415Vac.

| Current rating (A) | Short circuit withstand rating                      | Modular height | Height (mm) | Width (mm) | Weight (kg) | Product Code |
|--------------------|---|----------------|-------------|------------|-------------|--------------|
| 630A               | 25kA for 1 second                                   | N/A            | 244.8       | 750        | 20          | MBB63        |
| 630A               | 1 second  | N/A            | 244.8       | 250        | 13          | MBB63CW      |
| 630A               | Copper busbar links to join 2 x 750mm wide busbars* |                |             |            |             | MBB63L       |
| 1250A              | 50kA for 1 second                                   | 2              | 304.8       | 750        | 32          | MBB12        |
| 1250A              | 1 second  | 2              | 304.8       | 250        | 19          | MBB12CW      |
| 1250A              | Copper busbar links to join 2 x 750mm wide busbars* |                |             |            |             | MBB12L       |

\*Not required with MBB\*\*CW unit.

## Device Housings

- Form 4 as standard
- Width is 750mm and depth is 200mm. Height as per the table below.
- Supplied with one end plate and no side plates. See page 11 for optional side plates.
- Ingress protection of IP3X.
- Devices and neutral links are supplied separately. See relevant publications for details.

| Assembly current rating (A) | Modular height | Height (mm) | Weight (kg) | Device type       | Product Code |
|-----------------------------|----------------|-------------|-------------|-------------------|--------------|
| 400A                        | 2              | 304.8       | 17          | 4 x YB1 MCCB      | MHYB1X4      |
| 500A                        | 2              | 304.8       | 18          | 3 x YB3 MCCB      | MHYB3X3      |
| 400A                        | 5              | 762.0       | 23          | 1 x YA5 MCCB      | MHYA5X1      |
| 630A                        | 5              | 762.0       | 27          | 1 x YA6 MCCB      | MHYA6X1*     |
| 800A                        | 5              | 762.0       | 29          | 2 x YA6 MCCB      | MHYA6X2*     |
| 1000A                       | 6              | 914.4       | 32          | 1 x YA7 MCCB      | MHYA7X1*     |
| 1250A                       | 6              | 914.4       | 34          | 1 x YA8 MCCB      | MHYA8X1*     |
| 600A                        | 2              | 304.8       | 19          | 3 x SF Loadswitch | MHFS200X3    |
| 400A                        | 5              | 762.0       | 25          | 1 x SL Loadswitch | MHFS400X1    |
| 800A                        | 5              | 762.0       | 29          | 2 x SL Loadswitch | MHFS400X2    |
| 800A                        | 6              | 914.4       | 37          | 1 x SN Loadswitch | MHFS800X1    |

\*If the YA6, YA7 or YA8 frame size MCCB is used as an outgoing device it should **NOT** be mounted below the horizontal busbars.

## Device Connections to Horizontal Busbars

- Solid copper connections to horizontal busbars

| Current rating (A) | Description                                  | Product Code |
|--------------------|--|--------------|
| 160A               | YB1 MCCB connections (1 per MCCB)            | MCYB1        |
| 250A               | YB3 MCCB connections (1 per MCCB)            | MCYB3        |
| 400A               | YA5 MCCB connections (1 per MCCB)            | MCYA5        |
| 630A               | YA6 MCCB connections (1 per MCCB)            | MCYA6        |
| 1000A*             | YA7 MCCB connections (1 per MCCB)            | MCYA7        |
| 1250A*             | YA8 MCCB connections (1 per MCCB)            | MCYA8        |
| 1250A*             | YA8 4 pole MCCB connections (1 per MCCB)     | MCYA84P      |
| 200A               | SF Loadswitch connections (1 per Loadswitch) | MCFS200      |
| 400A               | SL Loadswitch connections (1 per Loadswitch) | MCFS400      |
| 800A               | SN Loadswitch connections (1 per Loadswitch) | MCFS800      |

\*Cannot be fitted to 630A busbars.



## Add on Enclosures

### General Purpose Enclosures

- IP4X Ingress Protection
- Enclosures are 750mm wide and 200mm deep. Height as per table below.
- Supplied with two end plates and side plates.

| Modular height | Height (mm) | Weight (kg) | GP Enclosure Product Code | Hinged front plate Product Code |
|----------------|-------------|-------------|---------------------------|---------------------------------|
| 1              | 152.4       | 4           | LEBM1                     | N/A                             |
| 2              | 305.8       | 10          | LEBM2                     | MXPF2HS                         |
| 3              | 457.2       | 16          | LEBM3                     | MXPF3HS                         |
| 4              | 609.6       | 22          | LEBM4                     | MXPF4HS                         |
| 5              | 762.0       | 28          | LEBM5                     | MXPF5HS                         |
| 6              | 914.4       | 34          | LEBM6                     | MXPF6HS                         |

### Cableways

- IP4X Ingress Protection.
- Recommended for cables over 70mm<sup>2</sup>.
- Enclosures are 250mm wide and 200mm deep. Height as per table below.
- Supplied with two end plates and no side plates.
- Can be used with Cableway Hinged Meter Plates for panel mounted metering options.

### Cableway Hinged Meter Plates

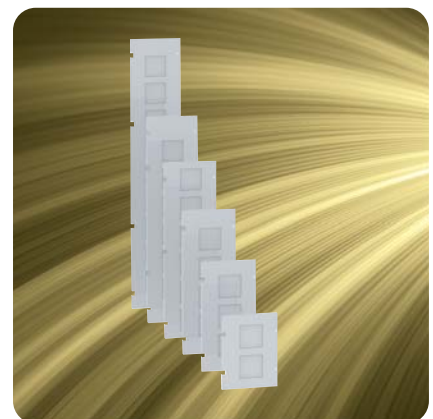
- For incoming and outgoing panel mounted metering.
- Hinged Meter Plates are designed to be used with standard cableway.
- Includes DIN-rail for mounting fuses and Current Transformers within cableway.
- Meters, Current Transformers and wiring looms are available as optional extras.

| Modular height | Height (mm) | Weight (kg) | Cableway Product Code | Cableway Hinged Meter Plate (if reqd) |
|----------------|-------------|-------------|-----------------------|---------------------------------------|
| 1              | 152.4       | 2           | LECM1                 | N/A                                   |
| 2              | 305.8       | 4           | LECM2                 | LECMD2                                |
| 3              | 457.2       | 6           | LECM3                 | LECMD3                                |
| 4              | 609.6       | 8           | LECM4                 | LECMD4                                |
| 5              | 762.0       | 10          | LECM5                 | LECMD5                                |
| 6              | 914.4       | 12          | LECM6                 | LECMD6                                |
| 8              | 1219.2      | 14          | LECM8                 | LECMD8                                |
| 630A Busbar    | 244.8       | 2           | MBBECW                |                                       |

### Metering Looms

- Pre-prepared cabling looms for panel mounted meters.
- Refer to Dorman Smith Loadbank publication for meter and CT selection guide.

## Modis 12 Ultra LV Modular Distribution System



# Modis 12 Ultra

## LV Modular Distribution System



## Panelboards

All devices and neutral links are supplied separately. See relevant publication for details.

### Loadbank 250 Form 3a MCCB Panelboards

- Form 3a as standard.
- Width is 750mm and depth is 200mm. Height as per the table below.
- Outgoing device is single pole or 3 pole YA3/YB3 frame MCCBs.
- All busbar cross connector blanks are supplied as standard. See accessories for front blank.
- Supplied with one end plate and side plates.
- Ingress protection of IP3X. IP4X with door kit fitted (available as optional extra).

| Rating (A) | Short circuit rating | Outgoing Triple Pole Ways | Modular height | Height (mm) | Weight (kg) | Panelboard Product Code | Door kit Product Code |
|------------|----------------------|---------------------------|----------------|-------------|-------------|-------------------------|-----------------------|
| 400A       | 36kA for 1 second    | 6                         | 4              | 609.6       | 36          | LB406YA3                | LBDD06                |
| 400A       |                      | 12                        | 6              | 762.0       | 52          | LB412YA3                | LBDD12                |
| 400A       |                      | 18                        | 8              | 1219.2      | 66          | LB418YA3                | LBDD18                |
| 800A       | 50kA for 1 second    | 6                         | 4              | 609.6       | 42          | LB806YA3                | LBDD06                |
| 800A       |                      | 12                        | 6              | 762.0       | 62          | LB812YA3                | LBDD12                |
| 800A       |                      | 18                        | 8              | 1219.2      | 78          | LB818YA3                | LBDD18                |

### Loadbank 250 Form 4b MCCB Panelboards

- Form 3b, Type 2 as standard.
- Form 4b, Type 6 with optional shielding fitted (see accessories).
- Outgoing device is 3 pole YA3/YB3 frame MCCB with neutral link (see accessories) or 4 pole YA3/YB3 frame MCCB (fitted left hand side only).
- Ingress protection of IP3X. IP4X with door kit fitted (available as optional extra).
- All busbar cross connector blanks and front plate blanks are supplied as standard.
- Supplied with two end plates and side plates.
- Panelboard does not accept 1 pole outgoing devices.
- Panelboard width is 750mm and depth is 200mm. Height is as per table below.

| Rating (A) | Short circuit rating | Outgoing Triple Pole Ways | Modular height | Height (mm) | Weight (kg) | Panelboard Product Code | Door kit Product Code |
|------------|----------------------|---------------------------|----------------|-------------|-------------|-------------------------|-----------------------|
| 800A       | 50kA for 1 second    | 6                         | 5              | 762.0       | 59          | LF806YA3                | LFD06                 |
| 800A       |                      | 12                        | 8              | 1219.2      | 98          | LF810YA3                | LFD10                 |

### Loadbank 200 Form 4a Loadswitch Panelboards

- Certified at 50kA for 1 second.
- Form 2b, Type 2 as standard.
- Form 4a Type 2 achieved with optional shrouding fitted (see accessories).
- Outgoing device is 3 pole or 4 pole 63-200A skeleton Loadswitch.
- IP4X as standard.
- All busbar cross connector covers are supplied as standard. See accessories for handle blank.
- Supplied with two end plates and side plates.
- Width is 750mm and depth is 200mm. Height as per table below.

| Rating (A) | Short circuit rating | Outgoing Triple Pole Ways | Modular height | Height (mm) | Weight (kg) | Panelboard Product Code |
|------------|----------------------|---------------------------|----------------|-------------|-------------|-------------------------|
| 800A       | 50kA for 1 second    | 6                         | 5              | 762.0       | 59          | LF806A                  |
| 800A       |                      | 12                        | 8              | 1219.2      | 98          | LF810A                  |

## Panelboards

### Loadbank 250 Form 3a YA5 MCCB Panelboard (not for use with Form 4b Panelboards)

- When mounting to a standard Loadbank 250 Form 3a 800A panelboard the **LBCK8** connection kit is required. If mounting on top of the standard panelboard the **LBSKE** is also required.
- Cableway extension enclosures are necessary to assist with cabling
- Optional outgoing terminal shroud **YA5TS3P** if required (1 per MCCB)
- YA5 MCCB busbar terminal cover not required, however if internal degree of protection required is greater than IP2X then terminal cover **YA5TC3P** required (1 per MCCB)
- Width is 750mm and depth is 200mm. Height as per table below.

| Rating (A) | Outgoing Triple Pole Ways      | Modular height | Height (mm) | Weight (kg) | Panelboard Product Code | Door kit Product Code |
|------------|--------------------------------|----------------|-------------|-------------|-------------------------|-----------------------|
| 800A       | 2 x YA5 MCCBs (400A max. each) | 3              | 457.2       | 35          | LB802YA5                | LBDD02                |

## Modis 12 Ultra LV Modular Distribution System



## Panelboard Connections to Horizontal Busbars

- Solid copper connections to horizontal busbars.

| Current rating (A) | Description   | Product Code |
|--------------------|---|--------------|
| 400A               | Loadbank 250 Form 3a MCCB Panelboard  | MCLB400      |
| 800A               | Loadbank 250 Form 3a MCCB Panelboard & Loadbank 250 Form 3a YA5 MCCB Panelboard   | MCLB800      |
| 800A               | Loadbank 250 Form 4b MCCB Panelboard & Loadbank 200 Form 4a Loadswitch Panelboard | MCLF800      |

## Panelboard Accessories

### Loadbank to Loadbank connection

- Solid copper connections/shrouds to connect panelboard busbars together vertically.

| Description   | Product Code |
|---|--------------|
| Connections to link 2 x 400A Loadbank 250 Form 3a MCCB Panelboards                    | LBCK4        |
| Connections to link 2 x 800A Loadbank 250 Form 3a MCCB Panelboards                    | LBCK8        |
| Top connection kit and shroud for Loadbank 250 Form 3a MCCB Panelboard                | LBSKE*       |
| Connections to link 2 x 800A Loadbank 200/250 Form 4b/4a MCCB/ Loadswitch Panelboards | LCFVK        |

\*Must be fitted if connecting to the top of the Loadbank busbars. NOT required for connection to form 4 Loadbanks.

### Shielding/blanks

| Description  | Product Code |
|--|--------------|
| 3 pole front plate blank (for use with unused ways on Loadbank 250 Form 3a MCCB Panelboards) | LBPP3PYA3    |
| YA3 Triple Pole MCCB shroud  | YA3TS3P      |
| YB3 Triple Pole MCCB shroud  | YB3TS3P      |
| YA3 4 Pole MCCB shroud   | YA3TS4P      |
| YB3 4 Pole MCCB Shroud   | YB3TS4P      |
| Neutral link for Loadbank 250 Form 4b MCCB Panelboard  | YA3F4NL      |
| Loadswitch shroud (70mm <sup>2</sup> maximum)  | LFS41A       |
| Loadswitch shroud (150mm <sup>2</sup> maximum)   | LFS42A       |
| Loadswitch handle blank  | LFXHBA       |

## Modis 12 Ultra LV Modular Distribution System



## MCB Distribution Boards and Service Centres

- IP3X as standard and IP4X with doors fitted.
- MCB Distribution boards have fully shielded busbars and interconnections.
- Supplied with two end plates and side plates.
- Space saving twin TP&N Distribution board option.

| Description            | Modular height | Height (mm) | Weight (kg) | Product Code | Door kit (If required) |
|------------------------|----------------|-------------|-------------|--------------|------------------------|
| 17 Way SP&N Board      | 1              | 152.4       | 15          | LDS17        | LD1DS                  |
| 6 Way TP&N Board       | 2              | 305.8       | 23          | LDT106X      | LD1D06X                |
| 12 Way TP&N Board      | 3              | 457.2       | 30          | LDT112X      | LD1D12X                |
| 2 x 12 Way TP&N Boards | 4              | 609.6       | 35          | LDT212X*     | LD2D12X                |
| 24 Way Service Centre  | 1              | 152.4       | 10          | LDS24        | LD1DS                  |

\*Not suitable for single module RCBOs.

## Surge Protection

### Surge Protection Device Mounting

There are two different options for providing surge protection and both are offered with Type I or Type II surge protection devices.

Option 1: 2 module high cableway complete with surge protection device.

Option 2: Frame for mounting the surge protection device in a cableway larger than 2 modules high.

### Type I Class I Surge Suppression Device

- Three-phase & neutral, 25kA L-N, 100kA surge protector
- Maximum continuous operating voltage (Uc) is 275Vac rms
- Lightning impulse current 10/350ms, L-N (Iimp) is 25kA
- Lightning impulse current 10/350ms, N-PE (Iimp) is 100kA
- Total lightning impulse current 10/350ms, L1, L2, L3, N-PE (Itotal) is 100kA.

| Device Series | Mounting Option | Method of Mounting  | Product Code |
|---------------|-----------------|---|--------------|
| DSPT          | Option 1        | 2 module cableway complete with DSPT3PN Surge Suppression Device                    | LECM2SP      |
| DSPT          | Option 2        | Frame for mounting inside a cableway complete with DSPT3PN Surge Suppression Device | LECM2SM      |

### Type II Class II Surge Suppression Device

- Two stage (redundant) protection with pre-failure indication
- Maximum continuous operating voltage (Uc) L-N is 300Vac rms and L-L is 500Vac rms
- Maximum surge current (8/20ms) (Imax) is 30kA per phase.
- Leakage current to earth is 600mA

| Device Series | Mounting Option | Method of Mounting   | Product Code |
|---------------|-----------------|--|--------------|
| DSPE          | Option 1        | 2 module cableway complete with DSPE600R Surge Suppression Device                    | LECK2SP      |
| DSPE          | Option 2        | Frame for mounting inside a cableway complete with DSPE600R Surge Suppression Device | LECK2SM      |





## Accessories

### Extension Collars

- Adds 100mm to the depth of a 200mm deep general purpose enclosure for deeper devices.

| Description                              | Product Code |
|--|--------------|
| 1 module high enclosure extension collar | MXEC1        |
| 2 module high enclosure extension collar | MXEC2        |
| 3 module high enclosure extension collar | MXEC3        |
| 4 module high enclosure extension collar | MXEC4        |
| 5 module high enclosure extension collar | MXEC5        |
| 6 module high enclosure extension collar | MXEC6        |

### Side/End Plates and horizontal straps and partitions

- Spare blank side plate for enclosure or cableway.

| Description   | Product Code |
|---|--------------|
| 1 module high enclosure side plate                  | MXPE1F       |
| 2 module high enclosure side plate                  | MXPE2F       |
| 3 module high enclosure side plate                  | MXPE3F       |
| 4 module high enclosure side plate                  | MXPE4F       |
| 5 module high enclosure side plate                  | MXPE5F       |
| 6 module high enclosure side plate                  | MXPE6F       |
| 8 module high enclosure side plate                  | MXPE8F       |
| Steel end plate                                     | LGES         |
| Horizontal cross strap kit                          | MXHCS        |
| Horizontal partition kit for between two enclosures | MXEPF        |

### Horizontal Earth Bar

- Copper earth bar with mountings and fixings (box not supplied).

| Description          | Product Code |
|----------------------|--------------|
| Earth bar 250mm long | MEB250       |
| Earth bar 750mm long | MEB750       |

### Castell Lock Equipment

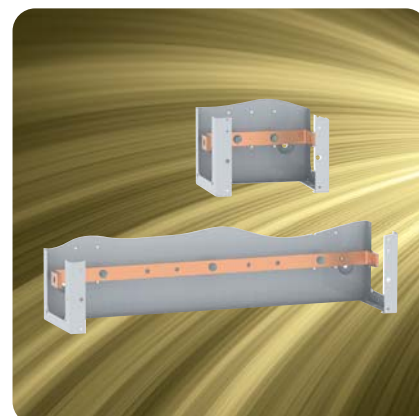
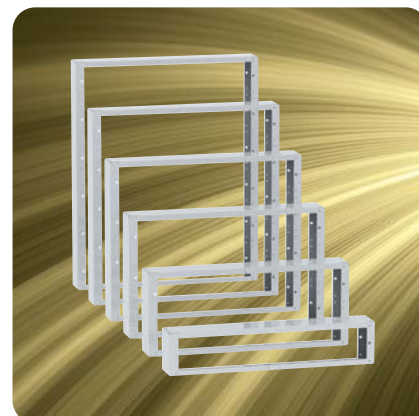
| Description   | Product Code |
|---|--------------|
| Castell lock kit for LB802YA5 (excluding lock)*   | LB802CLK     |
| YA6 Castell lock Mounting Plate (excluding lock)* - 1 required per Castell lock                 | MY6CLP       |
| Front plate for MHYA6X1 suitable for 1 Castell lock   | MHYA6X1C1    |
| Front plate for MHYA6X2 suitable for 2 Castell locks  | MHYA6X2C2    |
| Front plate for MHYA6X2 suitable for 1 lock on LH switch  | MHYA6X2C1L   |
| Front plate for MHYA6X2 suitable for 1 lock on RH switch  | MHYA6X2C1R   |
| Castell lock for use with all Loadswitches (excluding lock)**.                                  | SCLK         |
| Lock can only be fitted LH side on Loadswitch panelboard. (Door requires drilling by customer). |              |

#### Notes:

\* Castell Lock (K Series, Form 1 Type with 6.4mm bolt protrusion.)

\*\* Castell Lock Type FS2

## Modis 12 Ultra LV Modular Distribution System



# Modis 12 Ultra

## LV Modular Distribution System

## Technical Data Sheet

| Characteristic   | Specification   |
|--|---|
| <b>Product Description:</b>  | L.V. Modular Distribution System  |
| <b>Standard:</b>   | EN 61439-2, Power switchgear and controlgear assemblies<br>EN 60947-2, Circuit-breakers<br>EN 60947-3, Switches, disconnectors, switch-disconnectors and fuse-combination units<br>EN 60898, Circuit-breakers for overcurrent protection for household and similar installations.<br>Circuit-breakers for a.c. and d.c. operation<br>EN 61009, Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs) |
| <b>External degree of protection:</b>  | IP3X minimum  |
| <b>Internal form of segregation:</b>   | Form 3a, 4a (Type 2) and Form 4b (Type 6), IP2X   |
| <b>Internal segregation materials:</b>   | Aluminium-zinc coated sheet steel and rigid polycarbonate barriers  |
| <b>External construction:</b>  |   |
| <b>1) Enclosure front cover plates, doors and side plates.</b>                   | Painted 1.2mm thick zinc plated sheet steel.  |
| <b>2) Enclosure back boxes and end plates.</b>                                   | Painted 1.6mm thick zinc plated sheet steel.  |
| <b>Internal construction:</b>  | Painted 1.2mm (min) thick zinc plated sheet steel and 1.2mm thick aluminium-zinc coated sheet steel.  |
| <b>Paint:</b>  | TGIC free polyester powder coat, 60% gloss, ROHS compliant (low smoke/fume), depth 40/60 microns  |
| <b>Paint colour:</b>   | Colour matched to Cromadex ML618E (RAL 7035)  |
| <b>Busbar and interconnection material:</b>                                      | High conductivity copper  |
| <b>Horizontal busbar support material:</b>                                       | 1250A: Flame retardant, glass filled polyester moulding compound<br>630A: Flame retardant, glass filled Nylon   |
| <b>Horizontal busbar current ratings and rated short-time withstand current:</b> | 1250A: Icw 50kA for 1 second 630A: Icw 25kA for 1 second. Rated conditional short-circuit current Icc 50kA at 415Vac  |
| <b>Rated voltage (Un):</b>   | 415Vac  |
| <b>Rated operational Voltage (Ue):</b>   | 415Vac  |
| <b>Rated insulation Voltage (Ui):</b>  | 500Vac  |
| <b>Rated impulse withstand voltage (Uimp):</b>                                   | 6kV   |
| <b>Test Recommendations:</b>   | All Modis 12 Ultra panels should be electrically and mechanically inspected and tested throughout the assembly process.<br>Final testing and inspection should be in accordance with the routine verification requirements of BS EN 61439-1 and must include a dielectric test and 500V Megger test.  |



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