

PRODUCES QUALITY  
تنتج الجودة

**NEW GENERATION**

Safe, Reliable and High Quality



**BAHRA**  
DISTRIBUTION BOARDS  
CATALOG

LOAD CENTER, BREAKERS  
CIRCUIT BREAKER ENCLOSURE  
BUSBAR CHAMBER



**DOWNLOAD**  
E-CATALOGUE





# SAFE RELIABLE HIGH QUALITY

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BAHRA believes that the only way to sustain for a long time is to provide high quality products and services along with the highest level of customer satisfaction. BAHRA promises to continue enhancing quality and service.



**BAHRA**

**LOAD CENTER**



# LOAD CENTER DESIGN



**MODERN DESIGN**  
**OPTIMIZED SIZE**  
**ROBUST STRUCTURE**  
**QUICK INSTALLATION TIME**

## DESIGN PHILOSOPHY

Designers and manufacturers working in industries ranging from computers, mobile phones to automobiles constantly get benefit of advancement in technology. This helps them in creating products with better design, high performance, enhanced usability and more features. This is the philosophy of the development team at BAHRA.

## SAFETY, DURABILITY & PERFORMANCE

Designed by BAHRA, the Load Centers (LC) use the best selection of materials, cutting edge technology and class leading features to ensure safety, durability and performance.

The remarkable Load Center designs are a result of an extensive effort from a team of some of the best industrial designers in the industry. Advancement in technology has resulted in smaller size, better performance and improved design.

BAHRA Load Centers are used for safe and reliable distribution of electrical power for indoor application in residential and commercial buildings. BAHRA Load Centers are powered by the best selection of international proven quality of breakers by BAHRA to provide reliable circuit protection against overload and short circuit.



DESIGNED BY BAHRA  
FOR MODERN, ELEGANT AND  
IMPACTFUL AESTHETICS



## ATTRACTIVE FORM UNIQUE DOOR DESIGN HIDDEN SCREWS

BAHRA delivers unmatched quality and safety with great attention to user experience. These modern and optimized Load Centers come with an attractive form and a unique door design for a remarkable appearance.

BAHRA Load Center has been provided with many unique features those help in reducing human effort, leading to a stress free ownership experience. They allow for easy wire routing, identification and easy maintenance. The optimized size of the product makes transporting and handling easy and also prevents the need of a large pocket in the wall for placing the product. A dedicated and innovative cable management system allows for easy routing and maintenance of Wires, and helps in reducing clutter and provides a visually neat interface.

**SPECIAL COLOR AVAILABLE ON REQUEST**

For more details please contact customer service at 800 124 8111

# LOAD CENTER DESIGN FEATURES



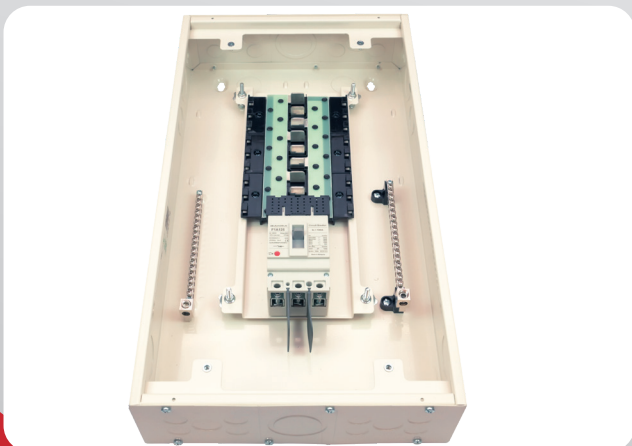
## MODERN LOOK, HIDDEN HINGES AND SCREWS

The door along with the curved edges and compact proportions enhance the aesthetics of the Load Center and provide an elegant and modern look. The hidden hinges and screws used in the Load Center provide a visually neater look and interface. Thus imparting a modern and elegant look to the product and to stand out from the competition.



## INNOVATIVE DOOR CLOSING MECHANISM

The unique magnetic lock ensures a longer operating life in compared with classic spring loaded locks available in classic old generation of Load Centers. Use of plastic seals helps to amortize noise of door closing sound and reduces steel smacking .



## ROBUST STRUCTURE

BAHRA Load Centers use high quality engineering plastic to achieve a robust pan assembly. This plastic material has a unique interlocking snap feature to let all components behave like a single piece construction.



# LOAD CENTER PERFORMANCE FEATURES



## NEXT GENERATION BUSBAR DESIGN

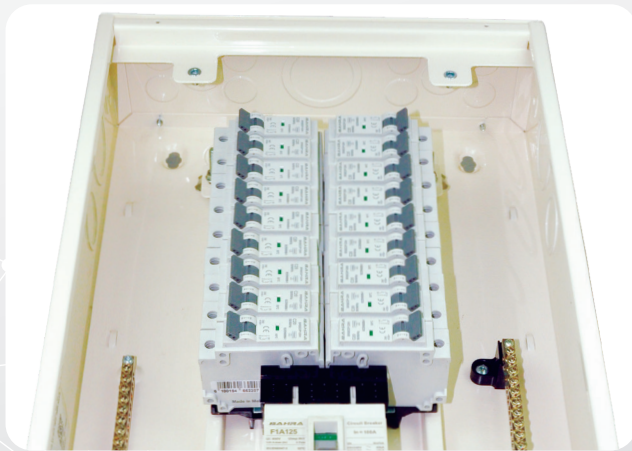
The use of single piece ETP (electrolytic tough pitch) electro tin plated copper of purity more than 99.9% results in high conductivity and less heat generation. This unique new generation design, based on less current density results in a low temperature operating environment which in turn makes the operating life of the Load Centers longer than classic Load Centers available in the market. This is the reason that BAHRA is proud to offer the 25 year warranty.

## TEMPERATURE MANAGEMENT

Proper design of the current carrying parts along with proper selection of the breaker & better engineering behind the Load Centers have led to excellent levels of temperature management. The main factors which help in temperature management are the busbar design and material (ETP with 99.9% purity of copper) and low density of current apart from the well studied connection points to reduce heat generation.

## DESIGNED TO SUIT IEC 61439-1&3

BAHRA Load Centers are designed as per the latest IEC 61439-1&3 standards and are tested as per this standard in highly reputed international labs. This confirms that BAHRA Load Centers meet the highest and latest worldwide standards.





# LOAD CENTER SPECIFICATIONS

## GENERAL SPECIFICATIONS

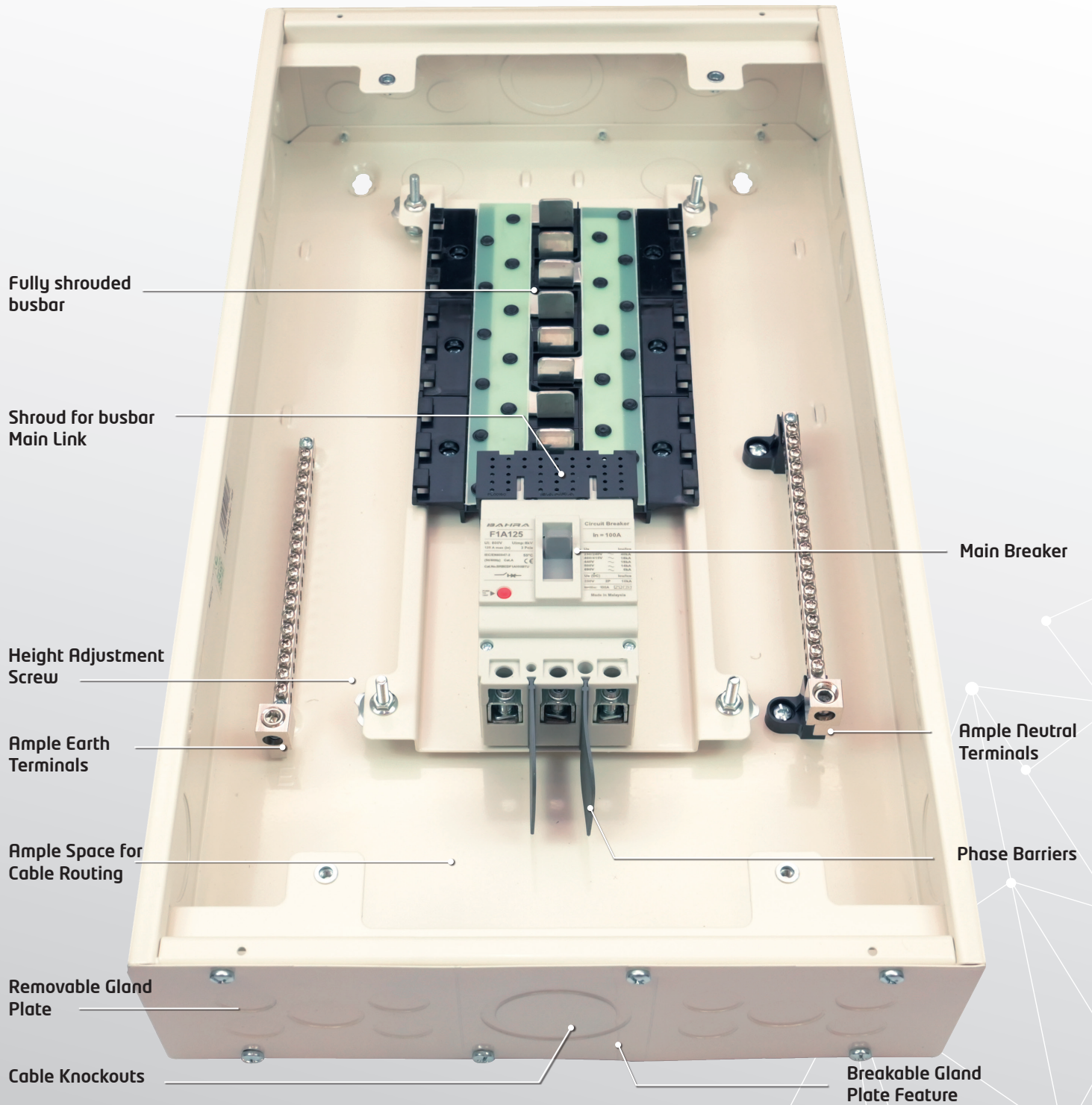
Product has been tested according to the standard IEC61439-1&3 in several international labs.

| ITEM                                         | DESCRIPTION                                                |
|----------------------------------------------|------------------------------------------------------------|
| Standard                                     | IEC61439-1&3                                               |
| Busbar Rating (AFW)                          | 100, 250                                                   |
| No of Phase                                  | 3                                                          |
| Voltage Rating (V)-AC (50/60 Hz)             | 110-415                                                    |
| Mounting Type                                | Flush                                                      |
| No. of Ways (3 Phase)                        | 6, 9, 12, 18, 24, 30, 36, 42, 48                           |
| Ingress Protection (IP)                      | IP 40                                                      |
| Steel sheet Thickness (mm)                   | 1 & 1.5mm                                                  |
| Knockout Sizes                               | Refer to table (2)                                         |
| Surface finishing                            | Powder coated with electrostatic Epoxy polyester (RAL9001) |
| Coating Thickness                            | 70-90 microns                                              |
| Main Incoming Breaker                        | MCCB                                                       |
| Breaker Terminal Capacity (mm <sup>2</sup> ) | BAHRA MCCB 100A → 50 (BT)                                  |
|                                              | BAHRA MCCB 250A → 120 (CL)                                 |
| Branch Breakers                              | 1,2 and 3 pole plug in type                                |
| Neutral Terminal Capacity (mm <sup>2</sup> ) | Incoming cable lug → 95                                    |
|                                              | Outgoing terminals (Bidirectional) → 25                    |
| Earth Terminal Capacity (mm <sup>2</sup> )   | Incoming cable lug → 50                                    |
|                                              | Outgoing terminals (Bidirectional) → 25                    |
| Rated Insulation voltage (V)-Ui              | 690                                                        |
| Ambient Temperature (°C)                     | 50                                                         |

For ampere trip ratings for breaker; refer to table (8 and 9).

Table (1)

# THE BEST SELECTION OF MATERIALS AND MODERN TECHNOLOGY



# LOAD CENTER BOX WRAPPER SPECIFICATIONS

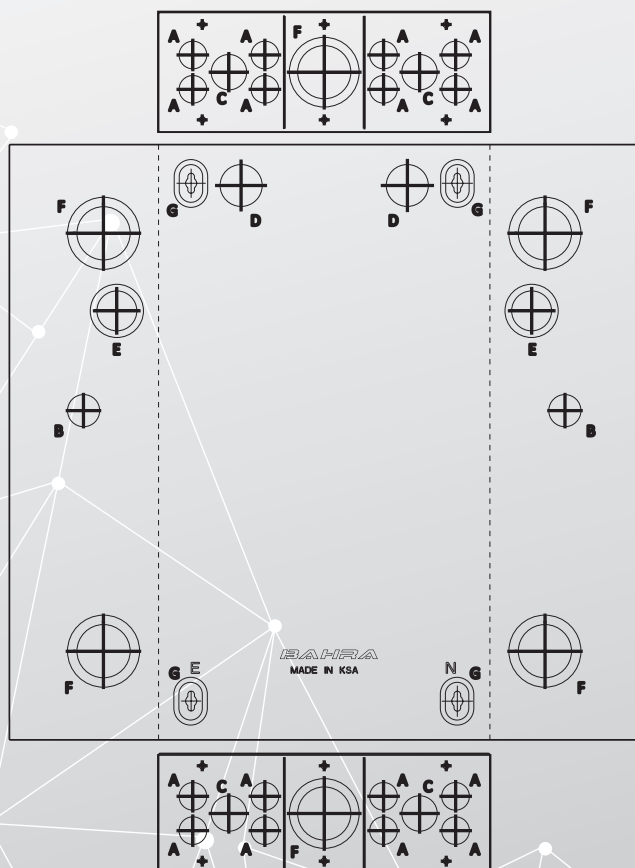
## THE BOX WRAPPER WITH KNOCKOUT FEATURES

The below table indicates the features along with the dimensions.

| KNOCKOUT | KNOCKOUT TYPE | DIAMETER (mm)         |
|----------|---------------|-----------------------|
| A        | Single        | Inside 25             |
| B        | Single        | Inside 27             |
| C        | Single        | Inside 32             |
| D        | Single        | Inside 38             |
| E        | Double        | Inside 38, outside 46 |
| F        | Double        | Inside 50, outside 63 |

A - F : represent the knockout features  
G : represents the 4 key holes

Table (2)



The Load Center is provided with ample easy to remove knockout features in the box wrapper and gland plate. That helps in easy installation of cables and reducing clutter. The left side drawing shows the box wrapper with the knockout features.

# LOAD CENTER

## EASE OF INSTALLATION FEATURES



### GLAND PLATE AND KNOCKOUT FEATURES

Sufficient knockout features in box wrapper and gland plate ensure easy routing of cables. Easy to remove knockouts and gland plate with easily breakable features reduce installation time.



### CEMENT GUARD

A feature is provided to prevent cement from entering inside the Load Center during installation as cement is tough to clean once it enters and dries up inside.

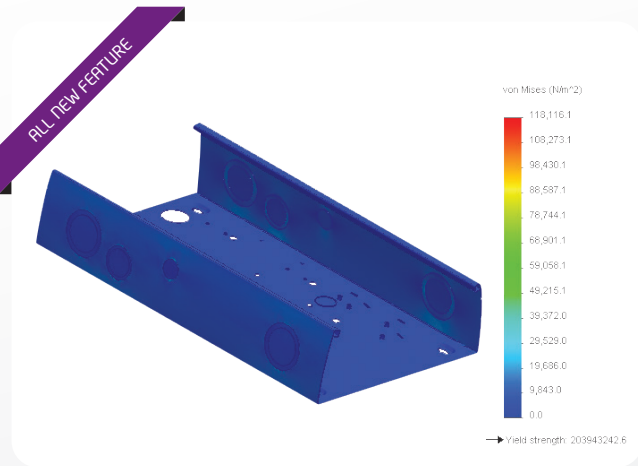


### UNIQUE HEIGHT ADJUSTMENT FEATURE

Pan assembly height adjustment screws helps in accurate and fast alignment in Load Center with the wall. For more details please refer to the installation manual provided with the product.

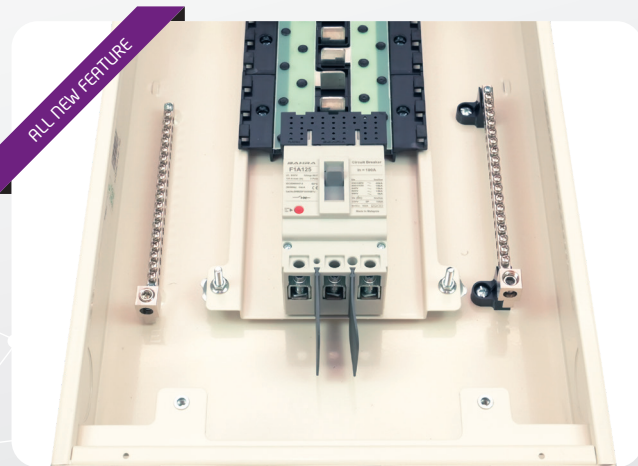
# LOAD CENTER

## EASE OF INSTALLATION FEATURES



## NON TWISTING, NON CRUSHING FEATURES

Unique box wrapper profile developed using latest technologies and simulation software ensures the strongest resistance to high crushing forces. This profile helps in preventing the twisting of the box wrapper during cement packing.



## AMPLE CABLING SPACE

Cable entry area is 40% more among the most popular brands in the market. This vast space makes the incoming cable connection to the main breaker much easier and faster.



# BAHRA

## NEXT GENERATION BREAKER



As a fruit of several years of development done in BAHRA In Saudi Arabia to bring a new generation of Bahra branch breaker according to the IEC60898-1. We are very proud to offer the new generation series of Bahra MCB range with innovative features.



### THERMAL STRESS MANAGEMENT

Special design of housing and cover, to reduce thermal stress between the breakers, and enhance the air circulation. Superior quality plastic material to withstand high thermal and mechanical stress, and also provide high electrical insulation and fire retardant properties.

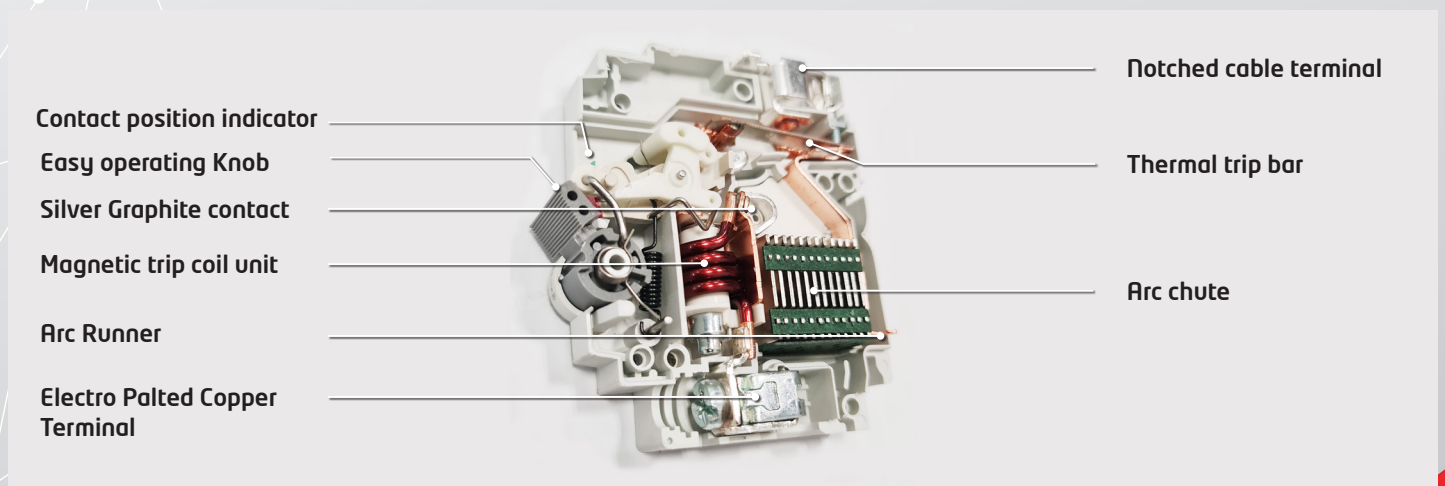


# BAHRA IEC PLUG IN MCB FOR SAFE AND RELIABLE CIRCUIT POTECTION



## GENERAL FEATURES

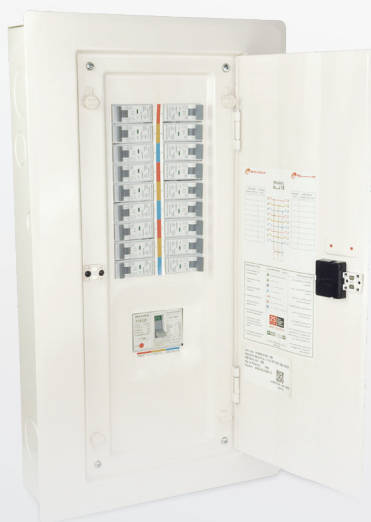
- Easy to operate the breaker knob .
- Finger Protection IP20 .
- Contact position indicator red and green to indicate the contact/ circuit is close or open condition.
- Positive contact indication through trip free mechanism.
- Higher magnetic coil diameter to reduce overall breaker circuit resistance.



# LOAD CENTER RANGE

## BAHRA MCCB 100AF PLUG-IN TYPE

Main breaker available range is: 16-20-25-32-40-50-63-80-100 A



100AF MCCB 18W

| NO. OF WAYS | BOX Dim. |     |     | DFC Dim. |     | MCFD* Dim. |
|-------------|----------|-----|-----|----------|-----|------------|
|             | H        | W   | D   | B        | C   | A          |
| 6 W         | 465      | 340 | 109 | 364      | 490 | 120        |
| 9 W         | 465      | 340 | 109 | 364      | 490 | 217        |
| 12 W        | 537      | 340 | 109 | 364      | 566 | 151        |
| 18 W        | 613      | 340 | 109 | 364      | 642 | 151        |
| 24 W        | 689      | 340 | 109 | 364      | 718 | 151        |
| 30 W        | 765      | 340 | 109 | 364      | 794 | 151        |
| 36 W        | 841      | 340 | 109 | 364      | 870 | 151        |
| 42 W        | 917      | 340 | 109 | 364      | 946 | 151        |

Table (3)

## BAHRA MCCB 250AF PLUG-IN TYPE

Main breaker available range is: 125-160-200-250 A



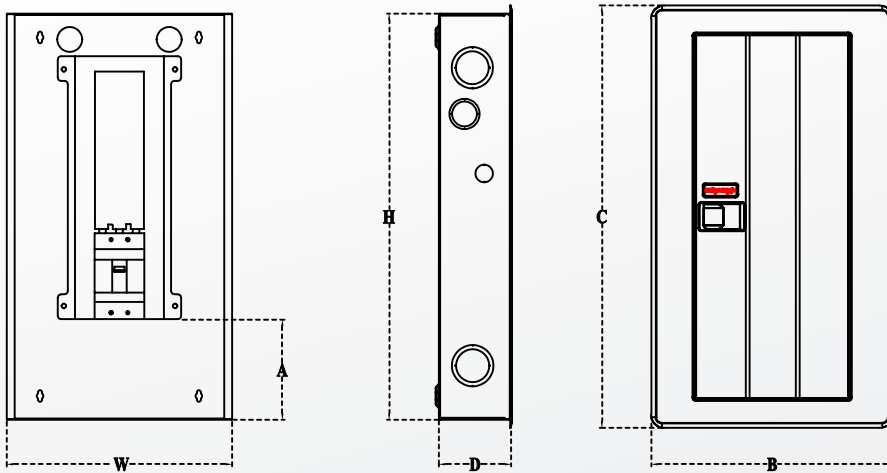
250AF MCCB 18W

| NO. OF WAYS | BOX Dim. |     |     | DFC Dim. |      | MCFD* Dim. |
|-------------|----------|-----|-----|----------|------|------------|
|             | H        | W   | D   | B        | C    | A          |
| 12 W        | 613      | 340 | 109 | 364      | 642  | 194        |
| 18 W        | 689      | 340 | 109 | 364      | 718  | 194        |
| 24 W        | 765      | 340 | 109 | 364      | 794  | 194        |
| 30 W        | 841      | 340 | 109 | 364      | 870  | 194        |
| 36 W        | 917      | 340 | 109 | 364      | 946  | 194        |
| 42 W        | 993      | 340 | 109 | 364      | 1022 | 194        |
| 48 W        | 993      | 340 | 109 | 364      | 1022 | 118        |

Table (4)

# A RANGE OF 3 PHASE LOAD CENTERS FOR INDOOR APPLICATION IN RESIDENTIAL AND COMMERCIAL BUILDINGS

Load Center - Bahra



- All Dimension are in (mm).
- \* **MCFD (A):** Main Cable Freedom Dimension which is the distance between bottom of main breaker and bottom gland plate.

Reference drawings for tables  
(3), (4).





**BAHRA**

# CIRCUIT BREAKERS SPECIFICATIONS



# BREAKER

# SPECIFICATIONS

## MINIATURE CIRCUIT BREAKERS (MCB)

| ITEM                                         | DESCRIPTION                           |                          |
|----------------------------------------------|---------------------------------------|--------------------------|
| Frame size                                   | 63                                    |                          |
| No. of Poles                                 | 1, 2, 3                               |                          |
| Calibrated/suitable temperature (°C)         | 50                                    |                          |
| Standard                                     | IEC/EN 60898-1                        |                          |
| Rated operating voltage (V)-Ue               | 240/415V AC                           |                          |
| Rated Insulation voltage (V)-Ui              | 440 V                                 |                          |
| Rated impulse withstand voltage Uimp         | 4 kV (1.2/50) µsec                    |                          |
| Rated current (A)                            | 06, 10, 16, 20, 25, 32, 40, 50, 63    |                          |
| Rated frequency (Hz)                         | 50/60                                 |                          |
| Short circuit breaking capacity Icu (kA)     | 10 kA - as per IEC/EN 60898-1         |                          |
| Type of trip unit (Thermal magnetic release) | Yes                                   |                          |
| Trip Characteristic                          | C                                     |                          |
| Selectivity class                            | 3                                     |                          |
| Short circuit trip response                  | 5 - 10 I <sub>n</sub>                 |                          |
| Conventional non-tripping current            | I <sub>nt</sub> = 1.13 I <sub>n</sub> |                          |
| Conventional tripping current                | I <sub>t</sub> = 1.45 I <sub>n</sub>  |                          |
| Max.back-up fuse (gL/Gg)                     | 125A                                  |                          |
| Endurance                                    | Numbers of mechanical operation       | >10,000 (IEC/EN 60898-1) |
|                                              | Numbers of electrical operation       | >4,000 (IEC/EN 60898-1)  |
| Terminal capacity                            | 25 mm <sup>2</sup> / 4 AWG            |                          |
| Degree of protection (DIN VDE 0470)          | Surface mounted                       | IP20                     |
|                                              | Built-in behind panel                 | IP40                     |
| Contact position indicator                   | red / green                           |                          |
| Breaker Dimension W x H x D (mm)             | 1 Pole                                | 25.3 x 80 x 65           |
|                                              | 2 Pole                                | 50.6 x 80 x 65           |
|                                              | 3 Pole                                | 75.9 x 80 x 65           |

Table (5)



# MCCB BREAKER

## SPECIFICATIONS

### MOLDED CASE CIRCUIT BREAKERS (MCCB) BAHRA SERIES

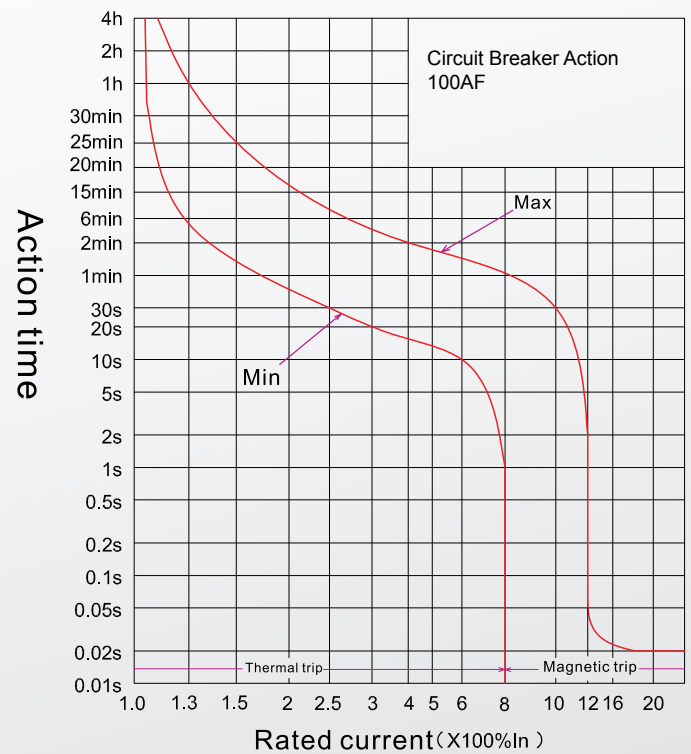
| ITEM                                                | DESCRIPTION                            | DESCRIPTION                            | DESCRIPTION        |
|-----------------------------------------------------|----------------------------------------|----------------------------------------|--------------------|
| <b>Breaker family</b>                               | 100AF-18KA                             | 100AF-25KA                             | 250AF-25KA         |
| <b>Frame size</b>                                   | 100                                    | 100                                    | 250                |
| <b>No. of poles</b>                                 | 3                                      | 3                                      | 3                  |
| <b>Calibrated/suitable temperature (°C)</b>         | 55                                     | 55                                     | 55                 |
| <b>Standard</b>                                     | IEC/EN60947-2                          | IEC/EN60947-2                          | IEC/EN60947-2      |
| <b>Rated operating voltage (V)-Ue (50/60 Hz)</b>    | 400/415                                | 400/415                                | 400/415            |
| <b>Rated Insulation voltage (V)-Ui (50/60 Hz)</b>   | 800                                    | 800                                    | 800                |
| <b>Rated impulse withstand voltage (kV)- Uimp</b>   | 8                                      | 8                                      | 8                  |
| <b>Rated current (A)</b>                            | 16, 20, 25, 32, 40,<br>50, 63, 80, 100 | 16, 20, 25, 32, 40,<br>50, 63, 80, 100 | 125, 160, 200, 250 |
| <b>Short circuit breaking capacity Icu (kA)</b>     | 18                                     | 25                                     | 25                 |
| <b>Service breaking capacity Ics = % Icu</b>        | 100%                                   | 100%                                   | 100%               |
| <b>Category of use</b>                              | A                                      | A                                      | A                  |
| <b>Endurance</b>                                    |                                        |                                        |                    |
| <b>Mechanical</b>                                   | >10,000                                | >10,000                                | >8,000             |
| <b>Electrical</b>                                   | 1500                                   | 1500                                   | 1000               |
| <b>Type of trip unit (Thermal magnetic release)</b> | Yes                                    | Yes                                    | Yes                |
| <b>Terminal capacity (mm<sup>2</sup>)</b>           | 50 (BT)                                | 50 (BT)                                | 120 (CL)           |
| <b>Thermal-magnetic release</b>                     | Fixed                                  | Fixed                                  | Fixed              |
| <b>Breaker Dimension W x H x D (mm) 3 Pole</b>      | 75 X 130 X 85                          | 75 X 130 X 85                          | 105 X 165 X 95     |

Table (6)

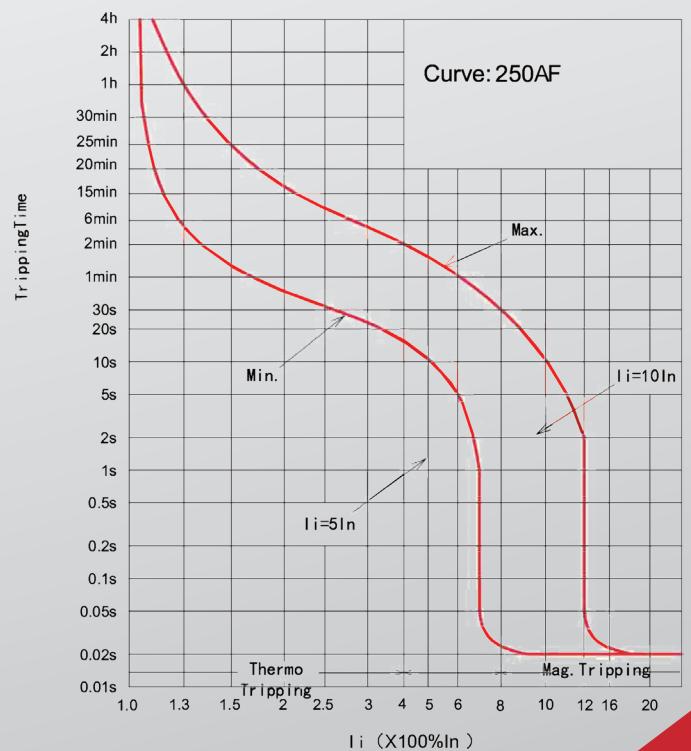


# PREMIUM CIRCUIT BREAKERS FOR SAFE AND RELIABLE CIRCUIT PROTECTION

## TRIPPING CURVE FOR BAHRA MCCB 100AF BREAKERS



## TRIPPING CURVE FOR BAHRA MCCB 250AF BREAKERS





**BAHRA**

# CIRCUIT BREAKERS ENCLOSURE



# INTRODUCING NEXT GENERATION CIRCUIT BREAKERS ENCLOSURE



## SAFETY RELIABILITY PROTECTION

Use of BAHRA breakers of high specification with high interrupting capacity secures the highest safety standards. It also increases durability and helps the product withstand electrical shocks. The use of the Circuit Breaker Enclosure (CBE) provides your house with a double layer of protection.

BAHRA Circuit Breakers Enclosure are powered with the best selection of international proven quality of breakers by BAHRA to provide reliable circuit protection against overload and short circuits.

# CIRCUIT BREAKERS ENCLOSURE FEATURES



## HIDDEN COVER FIXING SCREWS

Cover fixing screws in the surface type are hidden to enhance the look of the product. The screws can be fixed from 8 different locations. This feature helps optimizing the use of Product in limited space.



## GLAND PLATE AND KNOCKOUT FEATURES

Sufficient knockout features in box wrapper and gland plate ensure easy routing of cables. Easy to remove knockouts and gland plate with easily breakable features reduce installation time.

# UNIQUE DESIGN FEATURES FOR EASE OF USE AND ENHANCED USER EXPERIENCE



## FULLY SHROUDED NEUTRAL BAR

Fully shrouded busbar with fire retardant thermal sleeves and lugs are shrouded with high thermal resistance plastic more over the bottom surfaces additional are protected with high electrical insulation sheet for higher safety.



## NEXT GENERATION NEUTRAL BAR DESIGN

The neutral bar was designed to enable bidirectional entry of the cable (both sides of the breaker) facilitating the cable routing and making less stress on the cables.

Neutral incoming & outgoing cables can enter parallel in and parallel out in order to avoid more bending & cable overlapping.



## MOVABLE EARTH LUG

The earth lug can be fixed in two different places depending on the entry direction of the earth cable.

# CIRCUIT BREAKERS ENCLOSURE SPECIFICATIONS

## GENERAL SPECIFICATIONS

Product has been tested according to the standard IEC 61439-1&2 in several international labs

| ITEM                                              | DESCRIPTION                                                                                              |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| <b>Standard</b>                                   | IEC 61439-1&2                                                                                            |
| <b>Breaker Classifications</b>                    | BAHRA G1A125 MCCB → 100 AF<br>BAHRA G2A250 MCCB → 250 AF                                                 |
| <b>Voltage Rating (V)-AC (50/60 Hz)</b>           | 110-415                                                                                                  |
| <b>Mounting Type</b>                              | Flush / Surface                                                                                          |
| <b>Ingress Protection (IP)</b>                    | IP 40                                                                                                    |
| <b>Steel Sheet Thickness (mm)</b>                 | 1                                                                                                        |
| <b>Surface finishing</b>                          | Powder coated with electrostatic Epoxy polyester (RAL9001)                                               |
| <b>Coating Thickness</b>                          | 70 - 90 Microns                                                                                          |
| <b>Breaker Terminal Capacity (mm<sup>2</sup>)</b> | BAHRA G1A125 MCCB → 50 (BT)<br>BAHRA G2A250 MCCB → 120 (CL)                                              |
| <b>Neutral Terminal Capacity (mm<sup>2</sup>)</b> | Incoming & outgoing cable lug CBE G1A125 MCCB → 50<br>Incoming & outgoing cable lug CBE G2A250 MCCB → 95 |
| <b>Earth Terminal Capacity (mm<sup>2</sup>)</b>   | Incoming cable lug → 50                                                                                  |
| <b>Rated Insulation voltage (V)-Ui</b>            | 690                                                                                                      |
| <b>Ambient Temperature (°C)</b>                   | 50                                                                                                       |

Table (7),

For ampere trip ratings for breaker; refer to table (5), (6).





# Circuit Breakers Enclosure

## RANGE



### BAHRA MCCB 100AF

Main breaker available range is: 16-20-25-32-40-50-63-80-100 A

| Mounting Type | BOX Dim. |     |    | COVER Dim. |     |
|---------------|----------|-----|----|------------|-----|
|               | H        | W   | D  | A          | B   |
| Surface       | 389      | 224 | 91 | 394        | 229 |
| Flush         | 389      | 224 | 91 | 408        | 243 |

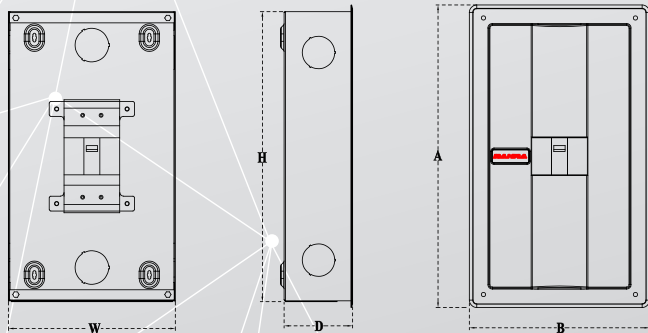
Table (8)

### BAHRA MCCB 250AF

Main breaker available range is: 125-160-200-250 A

| Mounting Type | BOX Dim. |     |    | COVER Dim. |     |
|---------------|----------|-----|----|------------|-----|
|               | H        | W   | D  | A          | B   |
| Surface       | 389      | 259 | 91 | 394        | 264 |
| Flush         | 389      | 259 | 91 | 408        | 278 |

Table (9)



- All Dimension are in (mm).

Reference drawings for tables (8), (9).



**BAHRA**

# CIRCUIT BREAKERS ENCLOSURE (WEATHERPROOF)



# CIRCUIT BREAKERS ENCLOSURE WEATHERPROOF SPECIFICATIONS

## CIRCUIT BREAKER ENCLOSURE - IP65 (CBE -Weatherproof) - BAHRA

| ITEM                                              | DESCRIPTION                              |
|---------------------------------------------------|------------------------------------------|
| <b>Technical</b>                                  |                                          |
| Standard                                          | IEC 61439-1 & 2                          |
| <b>Rated Current (MCCB)</b>                       |                                          |
| G1A125                                            | 16, 20, 25, 32, 40, 50, 63, 80, 100, 125 |
| G2A250                                            | 125, 160, 200, 250                       |
| Voltage Rating (V)- AC (50/60Hz)                  | 110-415                                  |
| <b>Breaker Terminal Capacity (mm<sup>2</sup>)</b> |                                          |
| G1A125                                            | G1A125 ->> 50                            |
| G2A250                                            | G2A250 ->> 95/120                        |
| <b>Neutral Terminal Capacity(mm<sup>2</sup>)</b>  |                                          |
| G1A125                                            | 50                                       |
| G2A250                                            | 95                                       |



Table (10)

# CIRCUIT BREAKERS ENCLOSURE WEATHERPROOF SPECIFICATIONS

## CIRCUIT BREAKER ENCLOSURE - IP65 (CBE -Weatherproof) - BAHRA

| ITEM                                            | DESCRIPTION                                                |
|-------------------------------------------------|------------------------------------------------------------|
| <b>Earth Terminal Capacity (mm<sup>2</sup>)</b> | <b>50</b>                                                  |
| <b>Rated Insulation voltage (V)-Ui</b>          | <b>690</b>                                                 |
| <b>Ambient Temperature (°C)</b>                 | <b>50</b>                                                  |
| <b>General</b>                                  |                                                            |
| <b>Application</b>                              | <b>Indoor/ outdoor</b>                                     |
| <b>Degree Of Protection</b>                     | <b>IP65</b>                                                |
| <b>Finish</b>                                   | <b>Polyester Powder Coated</b>                             |
| <b>Color</b>                                    | <b>RAL 9001/7032/ 7035/ As per customer requirements</b>   |
| <b>Enclosure Material</b>                       | <b>1.0mm Thick Steel Sheet</b>                             |
| <b>Door Gasket</b>                              | <b>Polyurethane gasket provided to ensure IP65 ratings</b> |
| <b>Door Lock</b>                                | <b>Quarter Turn Lock provided to ensure IP65 Ratings</b>   |
| <b>Mounting PAN Material</b>                    | <b>1.0mm Thick GI Sheet</b>                                |



Table (11)



**BAHRA**

# BUSBAR CHAMBER



# INTRODUCING NEXT GENERATION BUSBAR CHAMBER



## Robust Design

**Durable Construction:** Made from high-quality materials that withstand harsh environmental conditions, ensuring longevity and reliability.

**Compact Footprint:** Space-efficient design that maximizes installation flexibility without compromising performance.

## Enhanced Safety

**Insulation and Protection:** Equipped with advanced insulating materials to prevent electrical hazards and ensure safe operation.

**Integrated Earthing System:** Designed with built-in earthing features to enhance safety and compliance with international standards.



# INTRODUCING NEXT GENERATION BUSBAR CHAMBER

## High Current Capacity

Scalable Solutions: Can handle high current loads, making them suitable for industrial and commercial applications.

Efficient Power Distribution: Optimized for minimal power loss, ensuring effective energy management and distribution.

## Easy Installation and Maintenance

User-Friendly Design: Simplified installation process with clear instructions, reducing downtime and labor costs.

Accessible Maintenance Points: Designed for easy access to components for routine inspections and maintenance, promoting operational efficiency.

## Versatile Applications

Multi-Industry Use: Ideal for power generation, manufacturing, data centers, and commercial buildings, providing versatile solutions for various sectors.

## Aesthetic Appeal

Modern Design: Sleek and professional appearance that complements contemporary environments.

## Environmentally Friendly

Sustainable Materials: Constructed with eco-friendly materials, contributing to sustainability goals and reducing environmental impact.

Energy Efficiency: Designed to optimize energy use, supporting green initiatives and reducing operational costs.

# BUSBAR CHAMBER SPECIFICATIONS

## BUSBAR CHAMBER (BBC) - BAHRA

| ITEM                          | DESCRIPTION                        |
|-------------------------------|------------------------------------|
| <b>Technical</b>              |                                    |
| Standard                      | IEC 61439-1 & 2                    |
| Rated Current (MCCB)          | 100A, 160A, 200A, 250A, 320A, 400A |
| Voltage Rating                | 415V AC                            |
| Rated Frequency               | 50/60Hz                            |
| Numbers of Phases             | 3 Phase                            |
| Outgoing Terminal / Phase     | 50/60Hz                            |
| Busbar                        | Tin Plated ETP Copper              |
| <b>Short Circuit Capacity</b> |                                    |
| 100A                          | 18kA                               |
| 160A/200A/250A                | 25kA                               |
| 320A/400A                     | 36kA                               |



Table (12)

| ITEM CODE  | DESCRIPTION                              |
|------------|------------------------------------------|
| BBCF***ACu | Bus Bar Chamber Copper Bus Bar MCCB ***A |

\*\*\* AMPERE RATING (100A, 160A, 200A, 250A, 320A, 400A)

# BUSBAR CHAMBER SPECIFICATIONS

## BUSBAR CHAMBER (BBC) - BAHRA

| ITEM                                    | DESCRIPTION                                         |
|-----------------------------------------|-----------------------------------------------------|
| <b>General</b>                          |                                                     |
| Degree Of Protection                    | IP65                                                |
| Color                                   | RAL 7035 (Light Gray)                               |
| Enclosure Material                      | 1.2-1.5mm Thick Steel Sheet                         |
| Door Gasket                             | Polyurethane gasket provided to ensure IP65 ratings |
| Door Lock                               | Quarter Turn Lock provided to ensure IP65 Ratings   |
| Mounting PAN Material                   | 1.5mm Thick GI Sheet                                |
| <b>Overall Dimension W x H x D (mm)</b> |                                                     |
| 100A                                    | 555 x 355 x 175                                     |
| 160A-200A                               | 665 x 425 x 165                                     |
| 250A                                    | 745 x 425 x 190                                     |
| 320A-400A                               | 915 x 515 x 185                                     |



Table (13)

| ITEM CODE                                              | DESCRIPTION                              |
|--------------------------------------------------------|------------------------------------------|
| BBCF***ACu                                             | Bus Bar Chamber Copper Bus Bar MCCB ***A |
| *** AMPERE RATING (100A, 160A, 200A, 250A, 320A, 400A) |                                          |

# HOW TO ORDER THE PRODUCT

## BAHRA CODING SYSTEM

BAHRA **Load Center** catalog number is as follows

**1** **4** **K** **X** **Y** **Π** **G** **Z** **Z** **T** **T** **T** - **M** **M** **M**

BAHRA **CBE** Catalog number is as follows

**4** **4** **K** **X** **Y** **Π** **G** **T** **T** **T** - **M** **M** **M**

| DIGIT      | DESCRIPTION                             | SELECTION                                                                                     |                        |                       |
|------------|-----------------------------------------|-----------------------------------------------------------------------------------------------|------------------------|-----------------------|
| <b>14</b>  | Load Center plug in, IP 40,             |                                                                                               |                        |                       |
| <b>44</b>  | Circuit Breaker with Enclosure, IP40    |                                                                                               |                        |                       |
| <b>K</b>   | Mounting type                           | <b>1:</b> Flush                                                                               | <b>2:</b> Surface      |                       |
| <b>X</b>   | Number of phases                        | <b>1:</b> One phase                                                                           | <b>2:</b> Two phase    | <b>3:</b> Three phase |
| <b>Y</b>   | Breaker type                            | <b>C:</b> MCB                                                                                 | <b>F:</b> MCCB         |                       |
| <b>Π</b>   | Breaker entry terminal type             | <b>B:</b> 100A                                                                                | <b>F:</b> 250A         |                       |
| <b>G</b>   | Product generation                      | Alphabet entry (A, B, C ...) which presents product generation for latest generation call CSD |                        |                       |
| <b>ZZ</b>  | Number of ways of load center           | 06, 09, 12, 18, 24, 30, 36, 42, 48                                                            |                        |                       |
| <b>TTT</b> | Ampere frame ( AF ) of the main breaker | <b>100:</b> MCCB 100AF                                                                        | <b>250:</b> MCCB 250AF |                       |
| <b>MMM</b> | Ampere trip rating of main breaker (AT) | available rating for each breaker, refer to Breaker Specification Tables.                     |                        |                       |

### For example:

If you need BAHRA Load Center plugin flush mounting for the indoor usage with main breaker BAHRA MCCB 100A, 18 ways, 100AF & 100A trip; the code will be 1413FBC18100-100.

If you need a CBE Flush mounted BAHRA MCCB 250A mainbreaker with Enclosure, 160A ampere trip; the code will be 4413FFC250-160.

# BAHRA SERVICES



## TOLL FREE SERVICE 800-124-8111

BAHRA has deployed a team of professional customer service center to serve all its customers to solve any problem they might face during the product life and to provide the technical support to buyers on the time of purchase.

Please contact our toll for any query

**We care..**



## WEB SERVICES

BAHRA is a Consumer oriented Brand and always seeking to improve its services to its customers and make all data and information easily available to them.

Several web services were added to our website such as: distributor map details through SMS, online inquiry.. For details please visit us @:

**[www.bahra-electric.com](http://www.bahra-electric.com)**



## EXPORT SERVICES

For any export request; please contact us on:

**[www.bahra-electric.com](http://www.bahra-electric.com)**



## DISTRIBUTORS SERVICES

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For distributors in other countries; contact us on:

**[www.bahra-electric.com](http://www.bahra-electric.com)**

# ITEMS LIST WITH PRODUCT PACKING

| BAHRA LOAD CENTER              |                                                    |            |              |              |
|--------------------------------|----------------------------------------------------|------------|--------------|--------------|
| LC BAHRA MAIN MCB 32A - 100A   |                                                    |            |              |              |
| Item Code                      | Item Description                                   | No of Ways | Carton / Pcs | Pallet / Pcs |
| BLC.LFPDB-306XXX               | LC 3PH BAHRA F MCB MAIN 6 WAY G3 XXXA              | 6          | 1            | 24           |
| BLC.LFPDB-309XXX               | LC 3PH BAHRA F MCB MAIN 9 WAY G3 XXXA              | 9          | 1            | 24           |
| BLC.LFPDB-312XXX               | LC 3PH BAHRA F MCB MAIN 12 WAY G3 XXXA             | 12         | 1            | 24           |
| BLC.LFPDB-318XXX               | LC 3PH BAHRA F MCB MAIN 18 WAY G3 XXXA             | 18         | 1            | 18           |
| BLC.LFPDB-324XXX               | LC 3PH BAHRA F MCB MAIN 24 WAY G3 XXXA             | 24         | 1            | 18           |
| BLC.LFPDB-330XXX               | LC 3PH BAHRA F MCB MAIN 30 WAY G3 XXXA             | 30         | 1            | 18           |
| BLC.LFPDB-336XXX               | LC 3PH BAHRA F MCB MAIN 36 WAY G3 XXXA             | 36         | 1            | 12           |
| BLC.LFPDB-342XXX               | LC 3PH BAHRA F MCB MAIN 42 WAY G3 XXXA             | 42         | 1            | 12           |
| BLC.LFPDB-348XXX               | LC 3PH BAHRA F MCB MAIN 48 WAY G3 XXXA             | 48         | 1            | 12           |
| LC BAHRA MAIN MCCB 32A - 100A  |                                                    |            |              |              |
| BLC.1413FBC12100-XXX           | LC 3PH BAHRA F MCCB MAIN 12 WAY G3 XXXA            | 12         | 1            | 24           |
| BLC.1413FBC18100-XXX           | LC 3PH BAHRA F MCCB MAIN 18 WAY G3 XXXA            | 18         | 1            | 18           |
| BLC.1413FBC24100-XXX           | LC 3PH BAHRA F MCCB MAIN 24 WAY G3 XXXA            | 24         | 1            | 18           |
| BLC.1413FBC30100-XXX           | LC 3PH BAHRA F MCCB MAIN 30 WAY G3 XXXA            | 30         | 1            | 18           |
| BLC.1413FBC36100-XXX           | LC 3PH BAHRA F MCCB MAIN 36 WAY G3 XXXA            | 36         | 1            | 12           |
| BLC.1413FBC42100-XXX           | LC 3PH BAHRA F MCCB MAIN 42 WAY G3 XXXA            | 42         | 1            | 12           |
| BLC.1413FBC48100-XXX           | LC 3PH BAHRA F MCCB MAIN 48 WAY G3 XXXA            | 48         | 1            | 12           |
| LC BAHRA MAIN MCCB 125A - 250A |                                                    |            |              |              |
| BLC.1413FFC12250-XXX           | BLC-Flush-G3-3PH-Indoor-IP40-MCCB-250AF/ XXXAT-12W | 12         | 1            | 18           |
| BLC.1413FFC18250-XXX           | BLC-Flush-G3-3PH-Indoor-IP40-MCCB-250AF/ XXXAT-18W | 18         | 1            | 18           |
| BLC.1413FFC24250-XXX           | BLC-Flush-G3-3PH-Indoor-IP40-MCCB-250AF/ XXXAT-24W | 24         | 1            | 18           |
| BLC.1413FFC30250-XXX           | BLC-Flush-G3-3PH-Indoor-IP40-MCCB-250AF/ XXXAT-30W | 30         | 1            | 12           |
| BLC.1413FFC36250-XXX           | BLC-Flush-G3-3PH-Indoor-IP40-MCCB-250AF/ XXXAT-36W | 36         | 1            | 12           |
| BLC.1413FFC42250-XXX           | BLC-Flush-G3-3PH-Indoor-IP40-MCCB-250AF/ XXXAT-42W | 42         | 1            | 12           |
| BLC.1413FFC48250-XXX           | BLC-Flush-G3-3PH-Indoor-IP40-MCCB-250AF/ XXXAT-48W | 48         | 1            | 12           |

XXX: LC AMPERE RATING

## ITEMS LIST WITH PRODUCT PACKING

| Plug In / Branch Breaker |                                          |       |              |              |
|--------------------------|------------------------------------------|-------|--------------|--------------|
| BRANCH BREAKER 1 POLE    |                                          |       |              |              |
| Item Code                | Item Description                         | Amper | Carton / Pcs | Pallet / Pcs |
| BLC.BRBEDP106H           | BAHRA MCB 1P 06A 10KA PLUG IN            | 6     | 120          | 3480         |
| BLC.BRBEDP110H           | BAHRA MCB 1P 10A 10KA PLUG IN            | 10    | 120          | 3480         |
| BLC.BRBEDP116H           | BAHRA MCB 1P 16A 10KA PLUG IN            | 16    | 120          | 3480         |
| BLC.BRBEDP120H           | BAHRA MCB 1P 20A 10KA PLUG IN            | 20    | 120          | 3480         |
| BLC.BRBEDP125H           | BAHRA MCB 1P 25A 10KA PLUG IN            | 25    | 120          | 3480         |
| BLC.BRBEDP132H           | BAHRA MCB 1P 32A 10KA PLUG IN            | 32    | 120          | 3480         |
| BLC.BRBEDP140H           | BAHRA MCB 1P 40A 10KA PLUG IN            | 40    | 120          | 3480         |
| BLC.BRBEDP150H           | BAHRA MCB 1P 50A 10KA PLUG IN            | 50    | 120          | 3480         |
| BLC.BRBEDP163H           | BAHRA MCB 1P 63A 10KA PLUG IN            | 63    | 120          | 3480         |
| BRANCH BREAKER 2 POLE    |                                          |       |              |              |
| BLC.BRBEDP210H           | BAHRA MCB 2P 10A 10KA PLUG IN            | 10    | 60           | 1740         |
| BLC.BRBEDP216H           | BAHRA MCB 2P 16A 10KA PLUG IN            | 16    | 60           | 1740         |
| BLC.BRBEDP220H           | BAHRA MCB 2P 20A 10KA PLUG IN            | 20    | 60           | 1740         |
| BLC.BRBEDP225H           | BAHRA MCB 2P 25A 10KA PLUG IN            | 25    | 60           | 1740         |
| BLC.BRBEDP232H           | BAHRA MCB 2P 32A 10KA PLUG IN            | 32    | 60           | 1740         |
| BLC.BRBEDP240H           | BAHRA MCB 2P 40A 10KA PLUG IN            | 40    | 60           | 1740         |
| BLC.BRBEDP250H           | BAHRA MCB 2P 50A 10KA PLUG IN            | 50    | 60           | 1740         |
| BLC.BRBEDP263H           | BAHRA MCB 2P 63A 10KA PLUG IN            | 63    | 60           | 1740         |
| BRANCH BREAKER 3 POLE    |                                          |       |              |              |
| BLC.BRBEDP310H           | BAHRA MCB 3P 10A 10KA PLUG IN            | 10    | 40           | 1160         |
| BLC.BRBEDP316H           | BAHRA MCB 3P 16A 10KA PLUG IN            | 16    | 40           | 1160         |
| BLC.BRBEDP320H           | BAHRA MCB 3P 20A 10KA PLUG IN            | 20    | 40           | 1160         |
| BLC.BRBEDP325H           | BAHRA MCB 3P 25A 10KA PLUG IN            | 25    | 40           | 1160         |
| BLC.BRBEDP332H           | BAHRA MCB 3P 32A 10KA PLUG IN            | 32    | 40           | 1160         |
| BLC.BRBEDP340H           | BAHRA MCB 3P 40A 10KA PLUG IN            | 40    | 40           | 1160         |
| BLC.BRBEDP350H           | BAHRA MCB 3P 50A 10KA PLUG IN            | 50    | 40           | 1160         |
| BLC.BRBEDP363H           | BAHRA MCB 3P 63A 10KA PLUG IN            | 63    | 40           | 1160         |
| eRCBO 30mA               |                                          |       |              |              |
| BLC.BRBEDRCOP11630H      | Bahra RCBO 1P 16A 30MA 10KA 240V PLUG IN | 16    | 54           | 1620         |
| BLC.BRBEDRCOP12030H      | Bahra RCBO 1P 20A 30MA 10KA 240V PLUG IN | 20    | 54           | 1620         |
| BLC.BRBEDRCOP13230H      | Bahra RCBO 1P 32A 30MA 10KA 240V PLUG IN | 32    | 54           | 1620         |
| BLC.BRBEDRCOP14030H      | Bahra RCBO 1P 40A 30MA 10KA 240V PLUG IN | 40    | 54           | 1620         |

## ITEMS LIST WITH PRODUCT PACKING

### BAHRA CBE MCCB 100A - 250A (Indoor)

#### FLUSH MOUNTING

| Item Code          | Item Description                                       | Amper | Carton / Pcs | Pallet / Pcs |
|--------------------|--------------------------------------------------------|-------|--------------|--------------|
| BLC.4413FBC100-063 | BAHRA CBE Indoor Flush Mounting 3PH MCCB 100AF / 63AT  | 63    | 1            | 30           |
| BLC.4413FBC100-100 | BAHRA CBE Indoor Flush Mounting 3PH MCCB 100AF / 100AT | 100   | 1            | 30           |
| BLC.4413FFC250-160 | BAHRA CBE Indoor Flush Mounting 3PH MCCB 250AF / 160AT | 160   | 1            | 30           |
| BLC.4413FFC250-200 | BAHRA CBE Indoor Flush Mounting 3PH MCCB 250AF / 200AT | 200   | 1            | 30           |
| BLC.4413FFC250-250 | BAHRA CBE Indoor Flush Mounting 3PH MCCB 250AF / 250AT | 250   | 1            | 30           |

#### SURFACE MOUNTING

|                    |                                                          |     |   |    |
|--------------------|----------------------------------------------------------|-----|---|----|
| BLC.4423FBC100-063 | BAHRA CBE Indoor SURFACE Mounting 3PH MCCB 100AF / 063AT | 63  | 1 | 30 |
| BLC.4423FBC100-080 | BAHRA CBE Indoor SURFACE Mounting 3PH MCCB 100AF / 080AT | 100 | 1 | 30 |
| BLC.4423FBC100-100 | BAHRA CBE Indoor SURFACE Mounting 3PH MCCB 100AF / 100AT | 160 | 1 | 30 |
| BLC.4423FFC250-160 | BAHRA CBE Indoor SURFACE Mounting 3PH MCCB 250AF / 160AT | 200 | 1 | 30 |
| BLC.4423FFC250-200 | BAHRA CBE Indoor SURFACE Mounting 3PH MCCB 250AF / 200AT | 250 | 1 | 30 |

### BAHRA CBE MCCB 100A (Weatherproof)

#### IP65 WEATHERPROOF - INDOOR SURFACE MOUNTING

| Item Code     | Item Description                                     | Amper | Carton / Pcs | Pallet / Pcs |
|---------------|------------------------------------------------------|-------|--------------|--------------|
| BLC.CSWM-3100 | BAHRA CBE SURFACE Mounting IP65 MCCB 25KA - 3PH 100A | 100   | 1            | 25           |

### BAHRA BUSBAR CHAMBER

#### MCCB 100A - 400A

| Item Code     | Item Description                              | Amper | Carton / Pcs | Pallet / Pcs |
|---------------|-----------------------------------------------|-------|--------------|--------------|
| BB.BBCF100ACu | Bus Bar Chamber Copper Bus Bar MCCB 100A 18ka | 100   | 1            | 10           |
| BB.BBCF160ACu | Bus Bar Chamber Copper Bus Bar MCCB 160A 25ka | 160   | 1            | 10           |
| BB.BBCF200ACu | Bus Bar Chamber Copper Bus Bar MCCB 200A 25ka | 200   | 1            | 10           |
| BB.BBCF250ACu | Bus Bar Chamber Copper Bus Bar MCCB 250A 25ka | 250   | 1            | 10           |
| BB.BBCF320ACu | Bus Bar Chamber Copper Bus Bar MCCB 320A 36ka | 320   | 1            | 4            |
| BB.BBCF400ACu | Bus Bar Chamber Copper Bus Bar MCCB 400A 36ka | 400   | 1            | 4            |





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