

# alfanar CIRCUIT BREAKER ENCLOSURES, BUSBAR CHAMBER





**PARTNERSHIP**

# **SAFETY**

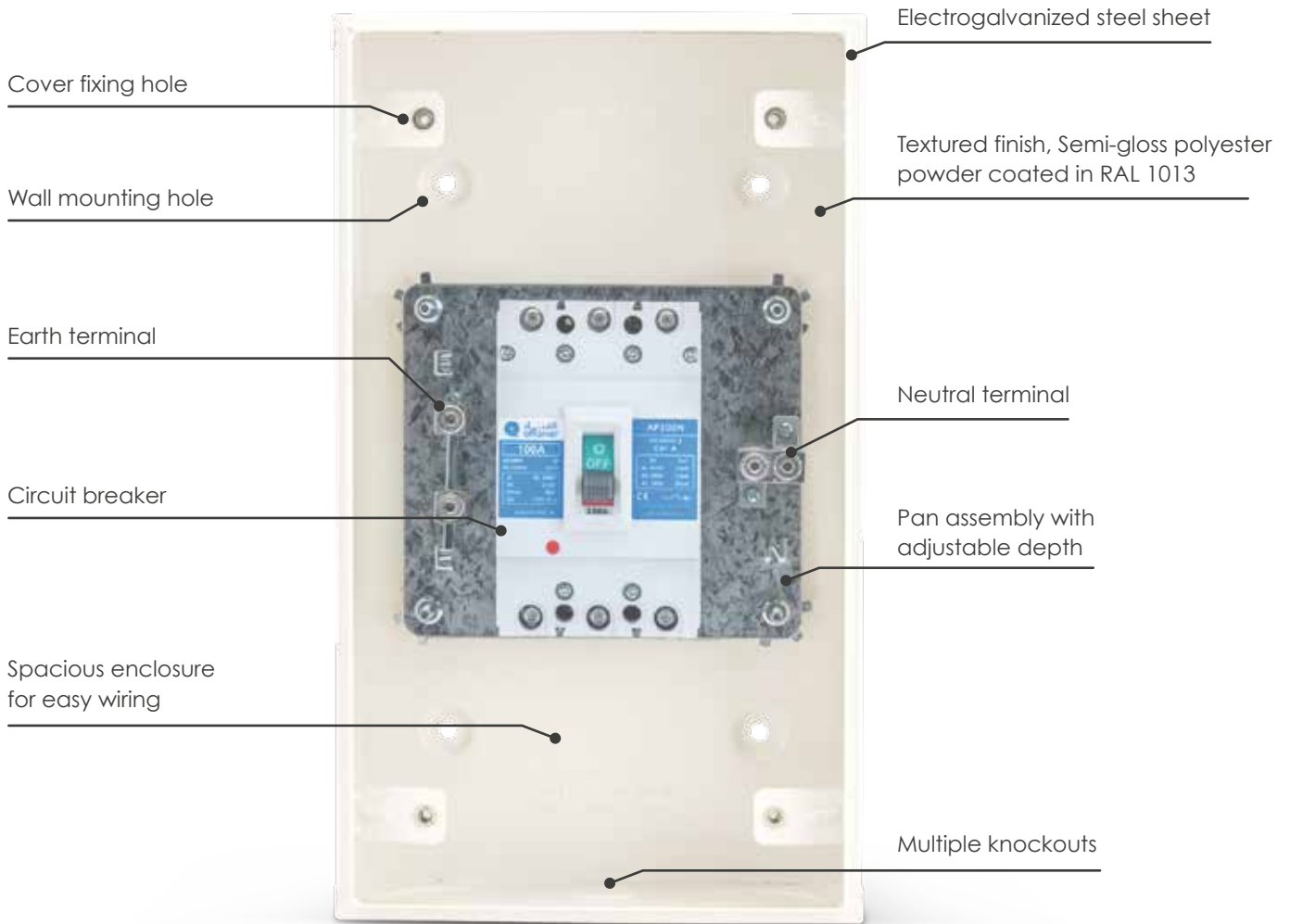
**DURABILITY**

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# INTRODUCTION

**alfanar** Circuit Breaker Enclosure is designed to be a safe and reliable switching device for use in residential, commercial, and industrial premises. It protects the circuits under overload or short circuit conditions. The alfanar CBE is suitable for indoor and outdoor applications and has an ingress protection rating of IP55 to ensure protection against harsh weather conditions.



# PRODUCT FEATURES

## 1. DESIGN

### a. Aesthetics

Circuit breaker enclosure's design is elegant, modern and fits attractively inside or outside your home.

### b. Color

Fresh color scheme was chosen to blend in with the wall colors for indoor and outdoor applications.



## 2. SAFETY

### a. Protection against electric shock

Effective earth continuity is ensured to protect operators against any possible electrical shock when they touch the enclosure.

### b. Dead front cover

A dead front cover is installed to eliminate the possibility of people touching any of the live parts inside the panel during operation.



## 3. PERFORMANCE

### a. Thermal stability

Thermal stability of our circuit breaker enclosure is validated and ensured through a temperature rise test performed as per IEC 61439-3. This ensures that the product will keep functioning normally all day long at a steady temperature state.

### b. Mechanical impact

The circuit breaker enclosure is tested to withstand the impact load as per the International Standard IEC 61439-3 to ensure the strength requirement of the application.

### c. Altitude

Regardless of the mounting location and the height of installation, the alfanar circuit breaker enclosure is rated for an altitude of 2000 m without any derating to ensure the required performance.

## 4. RELIABILITY

### a. High corrosion resistant enclosure and internal parts

Double protection against corrosion is achieved by using an electrogalvanized steel sheet as the base material and powder-coating the same with polyester powder.

This process has been validated for 1000 hours using the Salt Spray test. This ensures the functionality of the circuit breaker enclosure under the worst atmospheric and corrosive conditions.



### b. Ingress protection

alfanar Circuit Breaker Enclosures are tested for IP55 to ensure the ingress protection against solids and water in indoor and outdoor applications.



## 5. INSTALLATION

### a. Ample wiring space

Spacious enclosure design provides more space for easier wiring of the incoming and outgoing cables.



### b. Knockouts

Knockouts are designed to handle multiple sized conduits and glands of international standards which can be opened easily and do not have sharp edges that might damage the conduits, wires or injure the user.



**c. Depth adjustability** (pan assembly depth adjustability)  
Pan assembly depth is adjustable to ensure the breaker is not recessed into the box and to eliminate the gaps between the cover and the breaker after the installation of the door.



**d. Cement guard**

Protects the product from cement deposit during installation and keeps the box clean for the installation of the pan assembly.



**e. Phase barriers**

alfanar Circuit Breaker Enclosures have phase barriers installed at the main breaker terminals to increase the creepage distance and avoid the possibility of electrical faults.





## 6. ENVIRONMENT

All components used in alfanar Circuit Breaker Enclosures are environmentally friendly.



## 7. TESTING

Extensive care is taken during the design and manufacture stages of the alfanar Circuit Breaker enclosures to ensure the safety of the end user.

alfanar Circuit Breaker Enclosures comply with SASO and International Standards. Each of our products undergoes a strict quality control check as per routine verification mentioned in the standard such as:



- o **Dielectric Test:** A high voltage routine test.
- o **Electrical Continuity Test:** To confirm correct assembly and operation
- o **Insulation Resistance Test:** To ensure high insulation resistance
- o **Ingress protection Test (IP):** To ensure meeting of IP requirements
- o Overload tripping tests
- o Short circuit tripping tests
- o Other tests

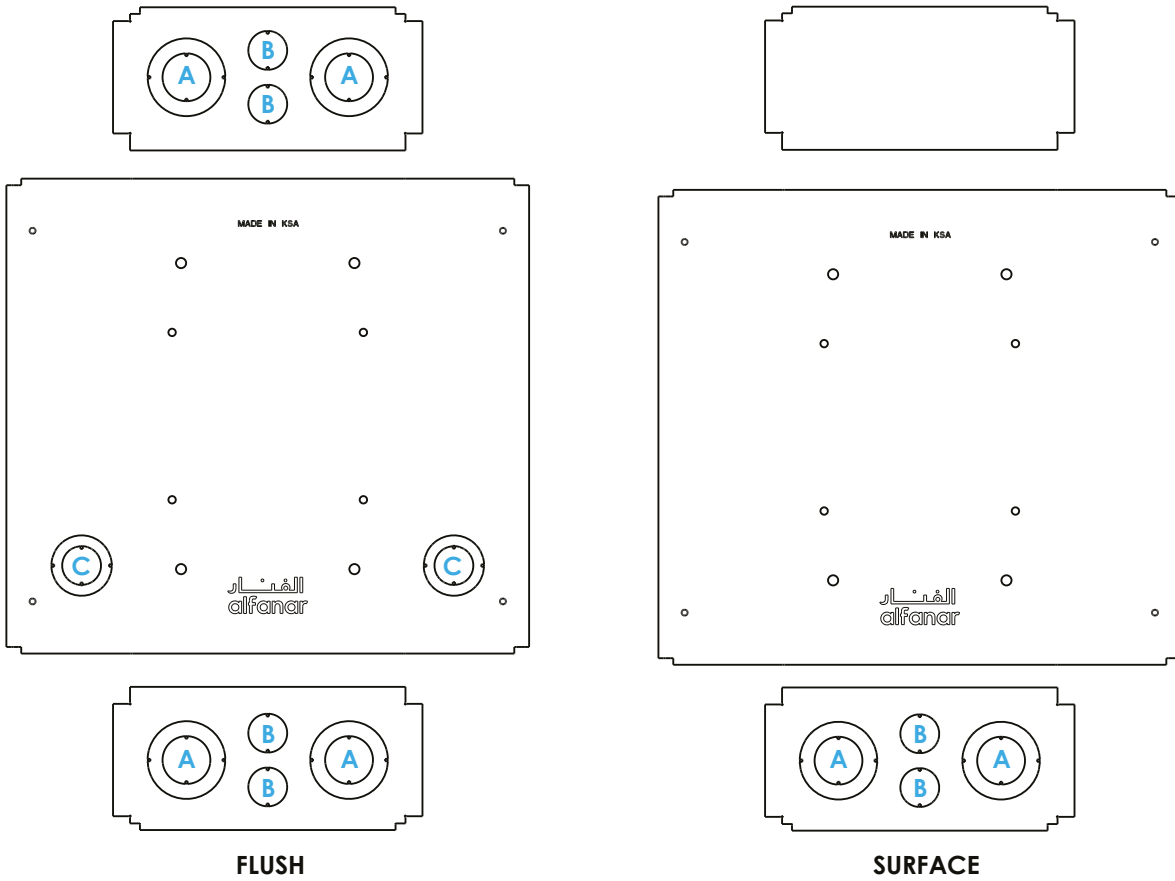


# TECHNICAL SPECIFICATIONS

| Technical Data                  |   |   |   |
|---------------------------------|---|---|---|
| Standard                        | SASO & IEC 61439-3  |   |   |
|                                 | Designed to be operated by an ordinary person   |   |   |
| Electrical                      |   |   |   |
| Varieties                       | 100 A<br>with MCB main  | 100 A<br>with MCCB main   | 225 A<br>with MCCB main   |
| Rated current                   | 40, 50, 63, 80 & 100 A  | 30, 40, 50, 60, 75 & 100 A  | 125, 150, 175, 200 & 225 A  |
| Main breaker (Incomer)          | AZM MCB, 3Pole<br>40, 50, 63, 80 & 100 A  | AF100N MCCB, 3Pole<br>30, 40, 50, 60, 75 & 100 A  | AF250N MCCB, 3Pole<br>125, 150, 175, 200 & 225 A  |
| Voltage range                   | 240/415 V AC  |   |   |
| Frequency                       | 50/60 Hz  |   |   |
| Type                            | Indoor/Outdoor  |   |   |
| Degree of protection            | IP55  |   |   |
| Mechanical impact               | IK05  |   |   |
| Mounting                        | Flush/Surface   |   |   |
| Terminal Capacity (Cable size)  |   |   |   |
| Main MCB/MCCB frame size 100 A  | 50 sq. mm   | 50 sq. mm   | 120 sq. mm  |
| Neutral terminal bar            | 50 sq. mm   | 50 sq. mm   | 120 sq. mm  |
| Earth terminal bar              | 50 sq. mm   | 50 sq. mm   | 50 sq. mm   |
| Environmental/General           |   |   |   |
| Average ambient temperature     | 35 °C   |   |   |
| Operational temperature range   | -5 °C to 40 °C (without derating as per the standard IEC 61439-3)   |   |   |
| Construction Features           |   |   |   |
| Door lock                       | Pad lockable quarter turn lock  |   |   |
| Enclosure material              | Electro-galvanized steel sheet (Corrosion resistant)  |   |   |
| Steel thickness                 | 1.0 mm  |   |   |
| Knockout sizes for Flush Type   | A- 2 No. Ø65/Ø40<br>Double Knockout<br>B- 2 No. Ø32.5<br>Knockout Center<br>C- 2 No. Ø50.5/Ø32.5<br>Double Knockout | A- 2 No. Ø65/Ø40<br>Double Knockout<br>B- 2 No. Ø32.5<br>Knockout Center<br>C- 2 No. Ø50.5/Ø32.5<br>Double Knockout | A- 2 No. Ø77/Ø52<br>Double Knockout<br>B- 2 No. Ø32.5<br>Knockout Center<br>C- 2 No. Ø50.5/Ø32.5<br>Double Knockout |
| Knockout sizes for Surface Type | A- 2 No. Ø65/Ø40<br>Double Knockout<br>B- 2 No. Ø32.5<br>Knockout Center  | A- 2 No. Ø65/Ø40<br>Double Knockout<br>B- 2 No. Ø32.5<br>Knockout Center  | A- 2 No. Ø77/Ø52<br>Double Knockout<br>B- 2 No. Ø32.5<br>Knockout Center  |
| Enclosure color                 | Polyester powder coated in RAL-1013 (Beige)   |   |   |
| Dimensions                      | Refer <b>PRODUCT VARIETIES AND DIMENSIONS</b>   |   |   |

# KNOCKOUT DIMENSIONS

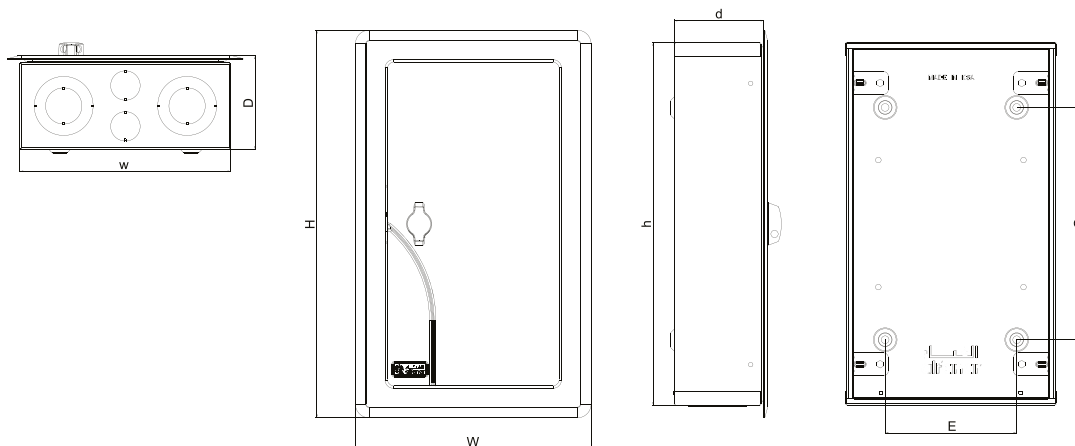
| Flush Type                                      | Surface Type                                |
|---|---|
| <b>KNOCKOUTS FOR 225 A</b>                      | <b>KNOCKOUTS FOR 225 A</b>                  |
| A: KNOCKOUT $\varnothing 77/\varnothing 52$     | A: KNOCKOUT $\varnothing 77/\varnothing 52$ |
| B: KNOCKOUT $\varnothing 32.5$                  | B: KNOCKOUT $\varnothing 32.5$              |
| C: KNOCKOUT $\varnothing 50.5/\varnothing 32.5$ |   |
| <b>KNOCKOUTS FOR 100 A</b>                      | <b>KNOCKOUTS FOR 100 A</b>                  |
| A: KNOCKOUT $\varnothing 65/\varnothing 40$     | A: KNOCKOUT $\varnothing 65/\varnothing 40$ |
| B: KNOCKOUT $\varnothing 32.5$                  | B: KNOCKOUT $\varnothing 32.5$              |
| C: KNOCKOUT $\varnothing 50.5/\varnothing 32.5$ |   |



# PRODUCT VARIETIES AND DIMENSIONS (MM)

## FLUSH TYPE

| RATING                  | TYPE | W   | H   | E   | w   | G   | h   | D     | d   | CAT.NO.   |
|-------------------------|------|-----|-----|-----|-----|-----|-----|-------|-----|-----------|
| <b>MCCB AF100N MAIN</b> |      |     |     |     |     |     |     |       |     |           |
| 30                      | MCCB | 260 | 427 | 145 | 232 | 256 | 400 | 106.6 | 99  | 51-L3030F |
| 40                      | MCCB | 260 | 427 | 145 | 232 | 256 | 400 | 106.6 | 99  | 51-L3040F |
| 50                      | MCCB | 260 | 427 | 145 | 232 | 256 | 400 | 106.6 | 99  | 51-L3050F |
| 60                      | MCCB | 260 | 427 | 145 | 232 | 256 | 400 | 106.6 | 99  | 51-L3060F |
| 75                      | MCCB | 260 | 427 | 145 | 232 | 256 | 400 | 106.6 | 99  | 51-L3075F |
| 100                     | MCCB | 260 | 427 | 145 | 232 | 256 | 400 | 106.6 | 99  | 51-L3100F |
| <b>MCCB AF250N MAIN</b> |      |     |     |     |     |     |     |       |     |           |
| 125                     | MCCB | 310 | 427 | 195 | 282 | 256 | 400 | 131.6 | 124 | 51-L3125F |
| 150                     | MCCB | 310 | 427 | 195 | 282 | 256 | 400 | 131.6 | 124 | 51-L3150F |
| 175                     | MCCB | 310 | 427 | 195 | 282 | 256 | 400 | 131.6 | 124 | 51-L3175F |
| 200                     | MCCB | 310 | 427 | 195 | 282 | 256 | 400 | 131.6 | 124 | 51-L3200F |
| 225                     | MCCB | 310 | 427 | 195 | 282 | 256 | 400 | 131.6 | 124 | 51-L3225F |
| <b>MCB AZM MAIN</b>     |      |     |     |     |     |     |     |       |     |           |
| 40A                     | MCB  | 260 | 427 | 145 | 232 | 256 | 400 | 106.6 | 99  | 51-T3040F |
| 50A                     | MCB  | 260 | 427 | 145 | 232 | 256 | 400 | 106.6 | 99  | 51-T3050F |
| 63A                     | MCB  | 260 | 427 | 145 | 232 | 256 | 400 | 106.6 | 99  | 51-T3063F |
| 80A                     | MCB  | 260 | 427 | 145 | 232 | 256 | 400 | 106.6 | 99  | 51-T3080F |
| 100A                    | MCB  | 260 | 427 | 145 | 232 | 256 | 400 | 106.6 | 99  | 51-T3100F |



### Ordering code examples:

Refer to the below code for required breaker type MCB/MCCB, Ampere Rating and Type (Flush or Surface)

L: MCCB / T: MCB / 3: 3PH / F: FLUSH / S: SURFACE

XXX : Breaker Rating range (MCCB: 030 A to 225 A , MCB: 040 A to 100 A)

e.g.

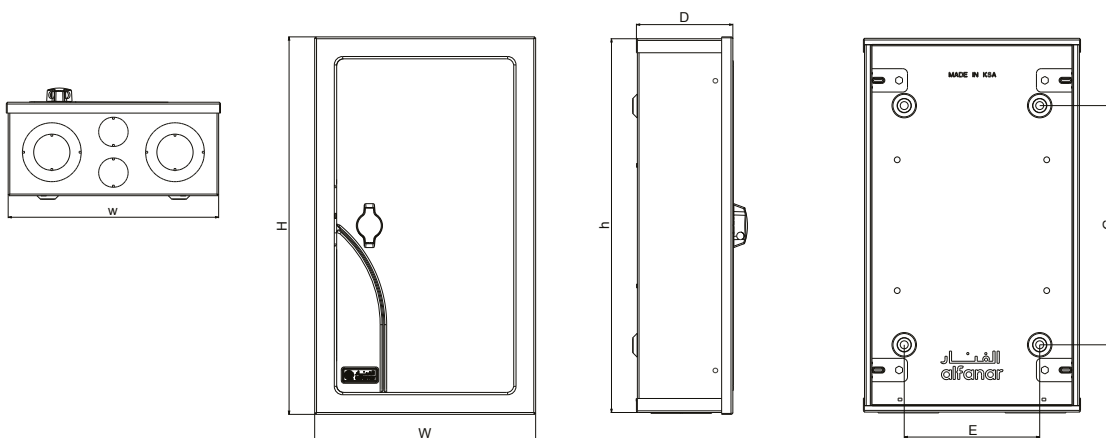
51-L3030F Represents an enclosed circuit breaker with 030 A MCCB, Flush type

51-T3100S Represents an enclosed circuit breaker with 100 A MCB, Surface type

# PRODUCT VARIETIES AND DIMENSIONS (MM)

## SURFACE TYPE

| RATING                  | TYPE | W     | H   | E   | w   | G   | h   | D     | CAT.NO.   |
|-------------------------|------|-------|-----|-----|-----|-----|-----|-------|-----------|
| <b>MCCB AF100N MAIN</b> |      |       |     |     |     |     |     |       |           |
| 30                      | MCCB | 236.5 | 404 | 145 | 232 | 256 | 400 | 106.6 | 51-L3030S |
| 40                      | MCCB | 236.5 | 404 | 145 | 232 | 256 | 400 | 106.6 | 51-L3040S |
| 50                      | MCCB | 236.5 | 404 | 145 | 232 | 256 | 400 | 106.6 | 51-L3050S |
| 60                      | MCCB | 236.5 | 404 | 145 | 232 | 256 | 400 | 106.6 | 51-L3060S |
| 75                      | MCCB | 236.5 | 404 | 145 | 232 | 256 | 400 | 106.6 | 51-L3075S |
| 100                     | MCCB | 236.5 | 404 | 145 | 232 | 256 | 400 | 106.6 | 51-L3100S |
| <b>MCCB AF250N MAIN</b> |      |       |     |     |     |     |     |       |           |
| 125                     | MCCB | 286.5 | 404 | 195 | 282 | 256 | 400 | 131.6 | 51-L3125S |
| 150                     | MCCB | 286.5 | 404 | 195 | 282 | 256 | 400 | 131.6 | 51-L3150S |
| 175                     | MCCB | 286.5 | 404 | 195 | 282 | 256 | 400 | 131.6 | 51-L3175S |
| 200                     | MCCB | 286.5 | 404 | 195 | 282 | 256 | 400 | 131.6 | 51-L3200S |
| 225                     | MCCB | 286.5 | 404 | 195 | 282 | 256 | 400 | 131.6 | 51-L3225S |
| <b>MCB AZM MAIN</b>     |      |       |     |     |     |     |     |       |           |
| 40A                     | MCB  | 236.5 | 404 | 145 | 232 | 256 | 400 | 106.6 | 51-T3040S |
| 50A                     | MCB  | 236.5 | 404 | 145 | 232 | 256 | 400 | 106.6 | 51-T3050S |
| 63A                     | MCB  | 236.5 | 404 | 145 | 232 | 256 | 400 | 106.6 | 51-T3063S |
| 80A                     | MCB  | 236.5 | 404 | 145 | 232 | 256 | 400 | 106.6 | 51-T3080S |
| 100A                    | MCB  | 236.5 | 404 | 145 | 232 | 256 | 400 | 106.6 | 51-T3100S |



### Ordering code examples:

Refer to the below code for required breaker type MCB/MCCB, Ampere Rating and Type (Flush or Surface)

L: MCCB / T: MCB / 3: 3PH / F: FLUSH / S: SURFACE

XXX : Breaker Rating range (MCCB: 030 A to 225 A , MCB: 040 A to 100 A)

e.g.

51-L3030F Represents an enclosed circuit breaker with 030 A MCCB, Flush type

51-T3100S Represents an enclosed circuit breaker with 100 A MCB, Surface type

## AZM CIRCUIT BREAKER, TYPE MCB

alfanar AZM MCB are designed for the circuit protection of low voltage distribution systems.

Available in 3 poles of various frame sizes and interrupting ratings for voltages rated up to 415 V and rated for currents up to 100 A.

AZM circuit breakers protect electrical feeders, circuits and connected devices against overloads and short circuits.



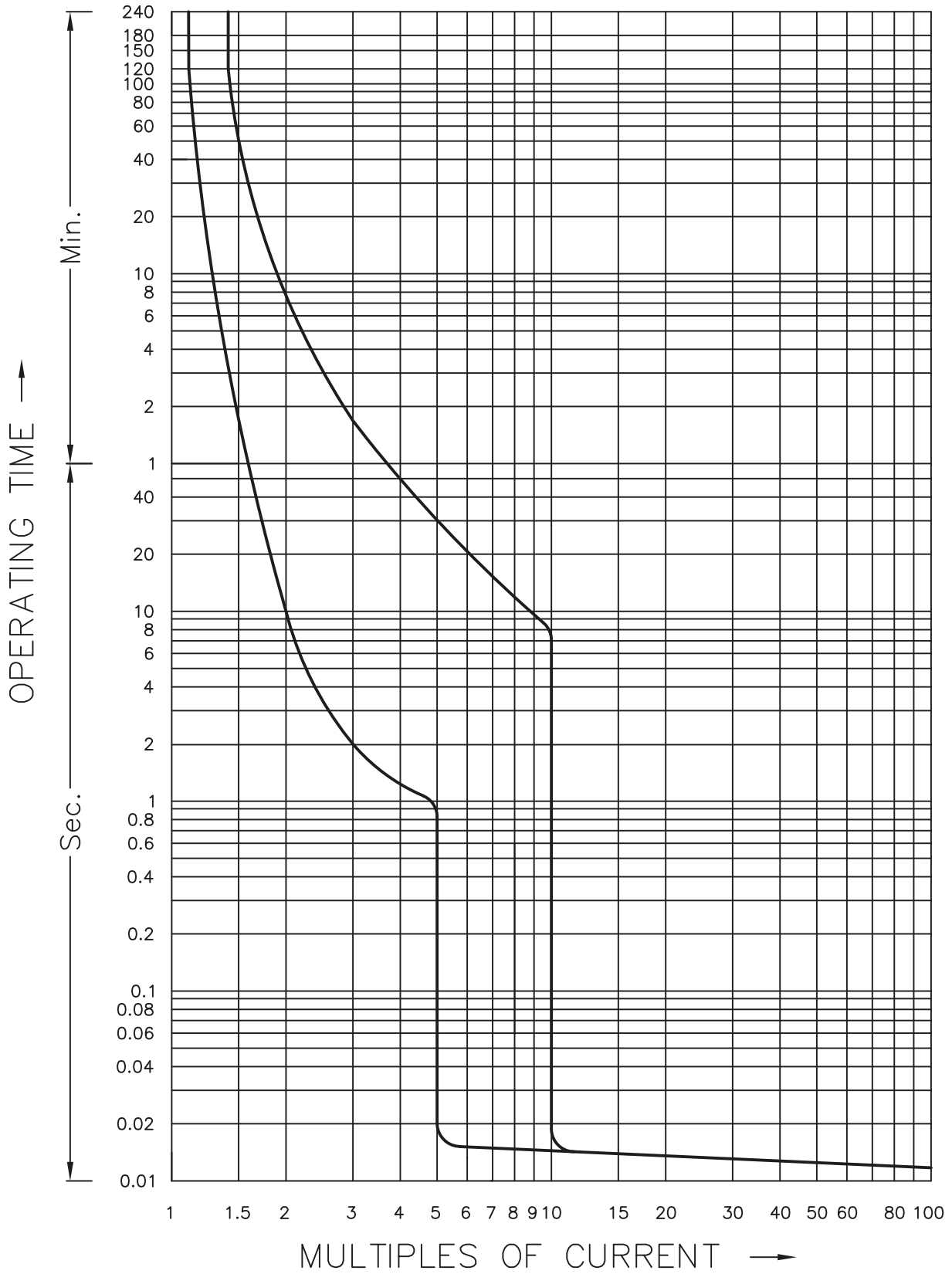
## FEATURES

1. Let-through energy is considerably less, resulting in enhanced lifespan of electrical installation.
2. Rapid closing design for quick make operation.
3. Uniform box terminals for connecting cables up to 50 mm<sup>2</sup> for input and output terminals for 40-100 A MCB range.
4. Positive gripping features are provided on input terminals for cable termination.
5. Finger proof protection (IP20) for termination.
6. Trip-free mechanism.
7. Critical operating mechanism parts and assemblies are made of special engineering plastics/alloy steel with superior mechanical thermal properties facilitating accurate operation of MCBs during its service life.
8. Suitable for busbar connection for incomer terminals.
9. Critical parts and assemblies are manufactured in-house with statistical process controls.
10. Assembly, calibration, and testing are done in controlled temperature and dust free environment.
11. ON/OFF positions are marked on handle and indicator and show true contact position of MCB.
12. Unique identification through bar code system for traceability of internal testing result for individual breakers.
15. Provide short circuit and overload protection for residential as well as commercial installations.

## TECHNICAL SPECIFICATIONS FOR AZM MCB

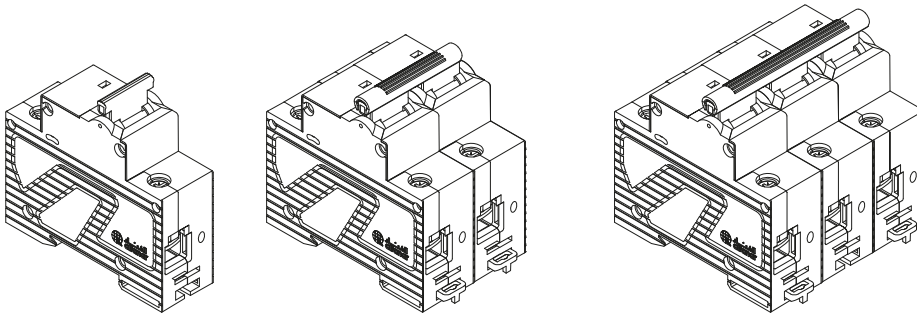
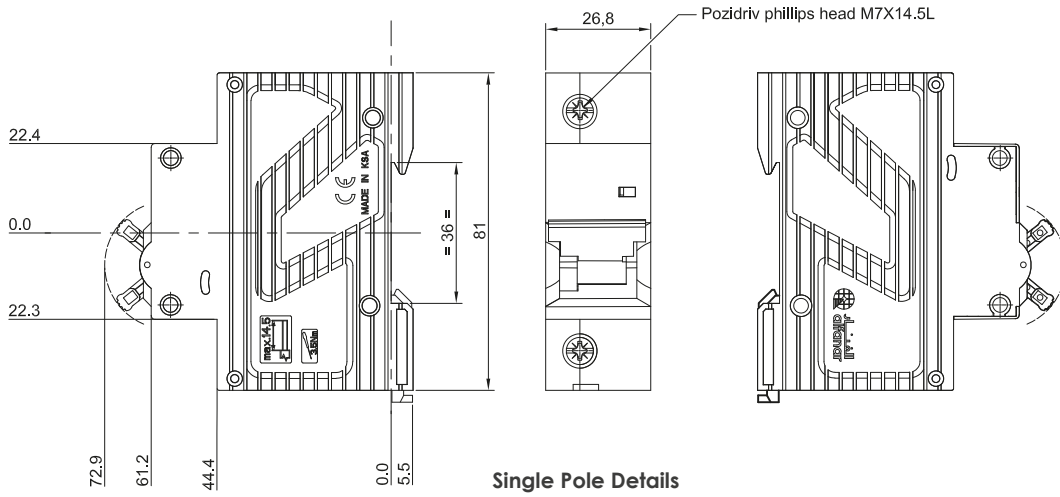
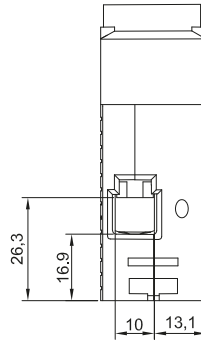
| MCB AZM Technical data  |                            |       |
|---|----------------------------|-------|
| Product standard  | IEC 60898-1                |       |
| Tripping characteristics  | C Curve                    |       |
| Electrical  |                            |       |
| Rated current range (A)   | 40, 50, 63, 80, 100        |       |
| Number of poles   | 3P                         |       |
| Rated operational voltage (Ue) V AC                               | 415                        |       |
| Rated insulation voltage (Ui) V AC                                | 600                        |       |
| Rated impulse voltage (Uimp) kV                                   | 4                          |       |
| Rated ultimate short circuit breaking capacity Icn (A) at 415V AC | 10000                      |       |
| Rated frequency (Hz)  | 50/60                      |       |
| Suitability for isolation   | Yes                        |       |
| Thermal tripping characteristics                                  | > 2 hour @ 1.13 In @ 50 °C |       |
|   | < 2 hour @ 1.45 In @ 50 °C |       |
| Magnetic operating limit  | $(5-10) \times I_n$        |       |
| Endurance (Number of operations cycles)                           | Mechanical                 | 10000 |
|   | Electrical                 | 4000  |
| Environmental/General   |                            |       |
| Reference ambient air temperature                                 | 50 °C                      |       |
| Operating temperature range                                       | - 5 °C to + 65 °C          |       |
| Storage temperature range   | - 5 °C to + 70 °C          |       |
| Mechanical  |                            |       |
| Protection degree   | For Housing                | IP 40 |
|   | For Terminals              | IP 20 |
| Terminal capacity (mm <sup>2</sup> )                              | 50                         |       |
| Tightening torque (Nm)  | 3.5                        |       |
| Mounting type   | Din Rail                   |       |
| Type of termination incoming                                      | Cables                     |       |
| Type of termination outgoing                                      | Cables                     |       |
| Frame width (mm)  | 27 mm per pole             |       |
| Dimensions 3 Pole (W × H × D) (mm)                                | (80.4 × 80.5 × 83.5)       |       |
| Weight 3P (g)   | 500                        |       |

# I-T CHARACTERISTICS FOR AZM MCB

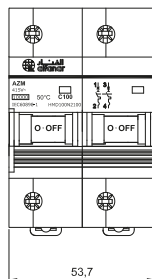




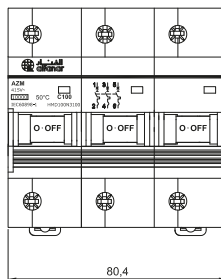
# DIMENSION DRAWINGS FOR AZM MCB



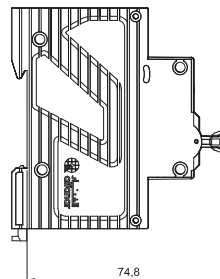
2 POLE



3 POLE



2 POLE / 3 POLE



## AF SERIES CIRCUIT BREAKER, TYPE MCCB

alfanar AF series of molded case circuit breakers are designed for circuit protection of low voltage distribution systems.

Available in 3 poles of various frame sizes and interrupting ratings for voltages rated up to 415 V and rated for currents up to 225 A.

AF molded case circuit breakers protect electrical feeders, circuits and connected devices against overloads and short circuit.



## FEATURES

- 1 - Handle is protected for IP30 protection where >2.5 mm wires are unable to enter inside the breaker and touch live parts.
- 2 - MCCB can be easily identified for "OFF", "ON" and "Tripped" positions.
- 3 - Trip Free Mechanism – The breaker trips in case of fault and ensures safety even if a padlock is used to hold the handle in the ON position.
- 4 - All positions of circuit breakers are suitable for isolation as defined in IEC standard 60947-2.
- 5 - MCCB arc chamber is specially designed to Improve the capability of extinguishing the arc and reducing the arc distance.
- 6 - Arc chutes are designed for efficient and faster arc quenching.
- 7 - Optimized arc runner profile for effective arc pulling.
- 8 - Fixed contacts with serrations for better grip.
- 9 - Accelerate movable contact speed by arcing extinguishing gas generated from the special resin located close to movable contact.
- 10 - Line Load Reversibility – Incoming supply can be connected to both upper and lower side and load to the opposite side without compromising the breaking capacity and isolation.
- 11 - Current Limiting Breaker - Low let through energy.
- 12 - MCCB's are designed for easy installation in the various types of switchboards. They can be mounted Vertically, horizontally, or flat on their back without any de-rating of characteristics.
- 13 - Box clamps made of higher strength material, more than the standard specification, to withstand higher torque values.
- 15 - 100 A and 225 A MCCB grub screw rivets with box clamp assembly ensure they can't get lost.
- 16 – Higher electrical and mechanical life than specified in the standard.
- 17 - Low watt loss through optimally designed current carrying path.

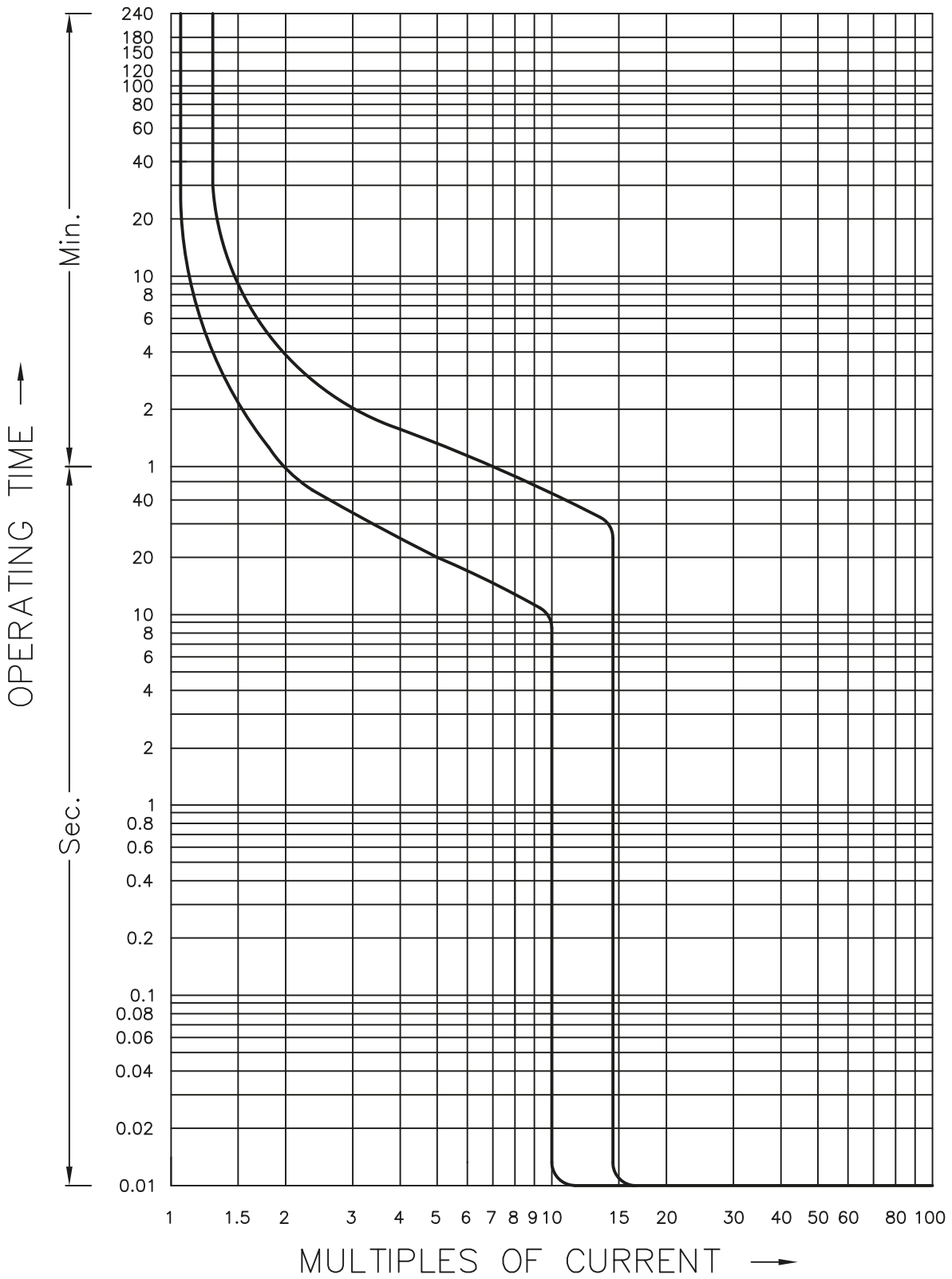
## TECHNICAL SPECIFICATIONS FOR AF SERIES MCCB – AF100N

| AF100N   |                            |
|--|----------------------------|
| Product standard   | IEC 60947-2                |
| Frame size (AF)  | AF100N                     |
| Rated current range (A)                                    | 30, 40, 50, 60, 75, 100    |
| Number of poles  | 3P                         |
| Rated operational voltage (Ue) V                           | 415                        |
| Rated insulation voltage (Ui) V AC                         | 690                        |
| Rated impulse voltage (Uimp) kV                            | 8                          |
| Ambient temperature (°C)                                   | 55                         |
| Rated frequency (Hz)                                       | 50/60                      |
| Utilization category                                       | Cat. A                     |
| Pollution degree   | 3                          |
| Rated ultimate short circuit breaking capacity Icu (kA):   |                            |
| @ 400 V  | 15                         |
| @ 230 V  | 25                         |
| Rated service short circuit breaking capacity Ics (% Icu): |                            |
| @ 400 V  | 75% Icu                    |
| @ 230 V  | 75% Icu                    |
| Trip release type  | Fixed - Thermal & Magnetic |
| Magnetic release setting (In)                              | 12In ± 20%                 |
| Electrical endurance life (No. of operations cycles)       | 1500                       |
| Mechanical endurance life (No. of operations cycles)       | 8500                       |
| Phase barrier  | Yes                        |
| Operating temperature range (without de-rating)            | - 5 °C to + 55 °C          |
| Storage temperature range                                  | - 5 °C to + 75 °C          |
| Method of connection                                       | Cables / Busbar            |
| Box clamp screw size (mm)/ Tightening torque (N.m)         | Allen key 4 / 7            |
| Maximum terminal capacity - Copper cable (mm²)             | 50                         |
| Weight of the breaker (kg)                                 | 1.2                        |
| Dimensions (W × H × D) (mm) (max.)                         | 91 x 150 x 66              |

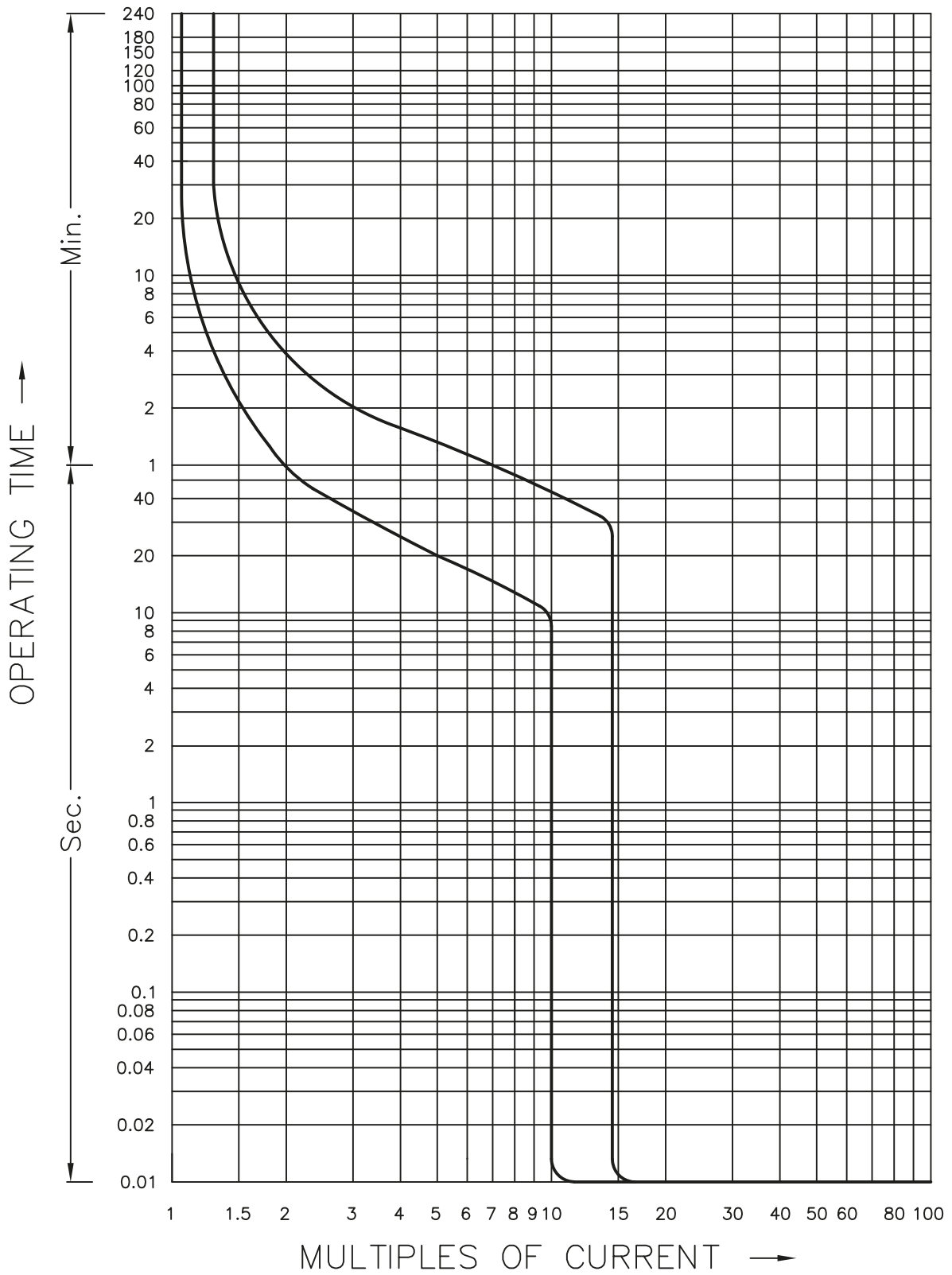
## TECHNICAL SPECIFICATIONS FOR AF SERIES MCCB – AF250N

| AF250N  |                            |
|---|----------------------------|
| Product standard  | IEC 60947-2                |
| Frame size (AF)   | AF250N                     |
| Rated current range (A)                                     | 125, 150, 175, 200, 225    |
| Number of poles   | 3P                         |
| Rated operational voltage (Ue) V                            | 415                        |
| Rated insulation voltage (Ui) V AC                          | 690                        |
| Rated impulse voltage (Uimp) kV                             | 8                          |
| Ambient temperature (°C)                                    | 55                         |
| Rated frequency (Hz)  | 50/60                      |
| Utilization category  | Cat. A                     |
| Pollution degree  | 3                          |
| Rated ultimate short circuit breaking capacity Icu (kA):    |                            |
| @ 400 V   | 15                         |
| @ 230 V   | 25                         |
| Rated service short circuit breaking capacity Ics (% Icu)   |                            |
| @ 400 V   | 75% Icu                    |
| @ 230 V   | 75% Icu                    |
| Trip Release type   | Fixed - Thermal & Magnetic |
| Magnetic release setting (In)                               | 12In ± 20%                 |
| Electrical endurance life (No. of operations cycles)        | 1000                       |
| Mechanical endurance life (No. of operations cycles)        | 7000                       |
| Phase barrier   | Yes                        |
| Operating temperature range (without de-rating)             | - 5 °C to + 55 °C          |
| Storage temperature range                                   | - 5 °C to + 75 °C          |
| Method of connection  | Cables                     |
| Box clamp screw size (mm) / Tightening torque (N.m)         | Allen key 5 / 12           |
| Maximum terminal capacity - Copper cable (mm <sup>2</sup> ) | 120                        |
| Weight of the breaker (kg)                                  | 1.9                        |
| Dimensions (W × H × D) (mm) (max.)                          | 106 x 65 x 103             |

# I-T CHARACTERISTIC FOR AF100N MCCB

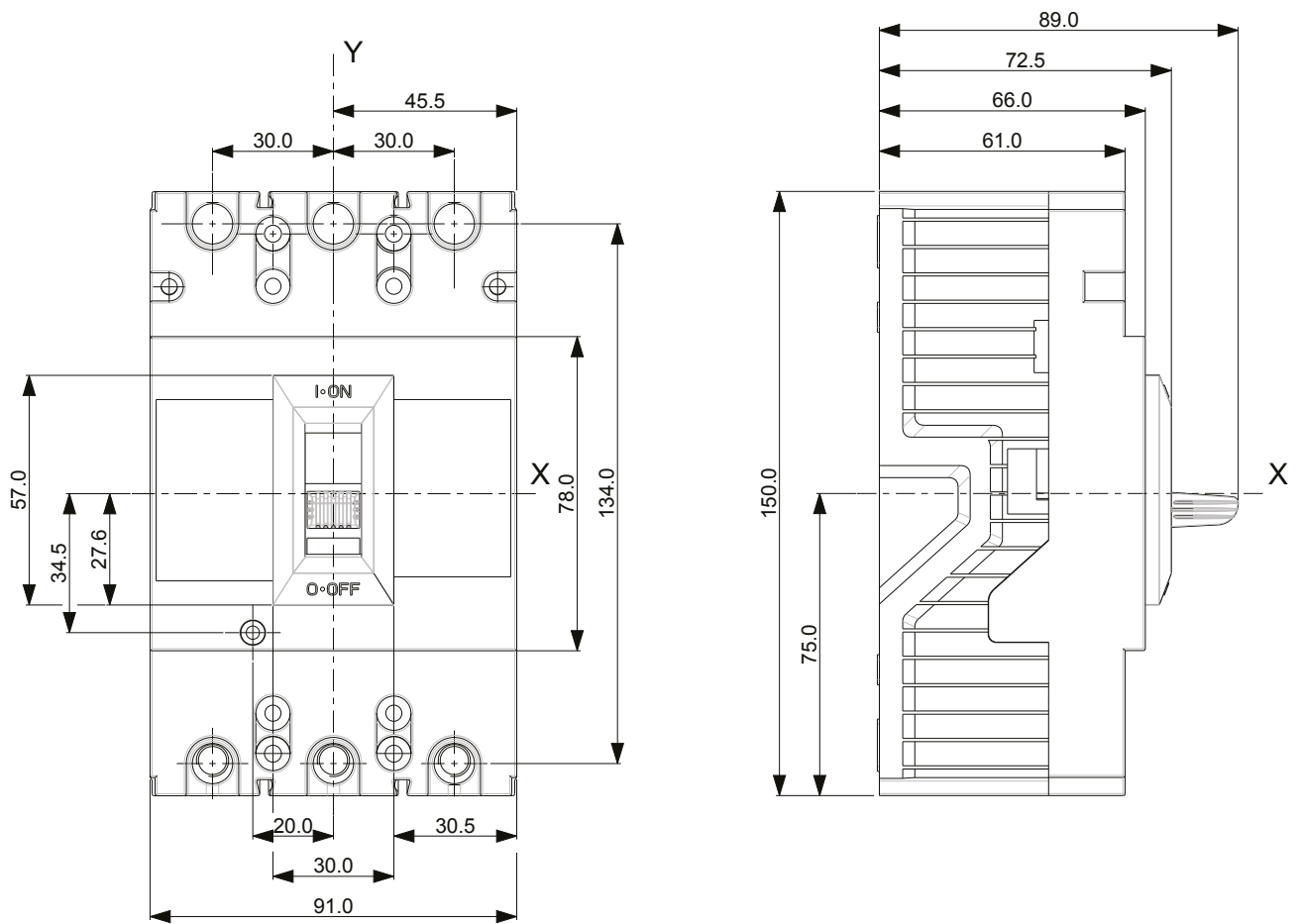


# I-T CHARACTERISTIC FOR AF250N MCCB

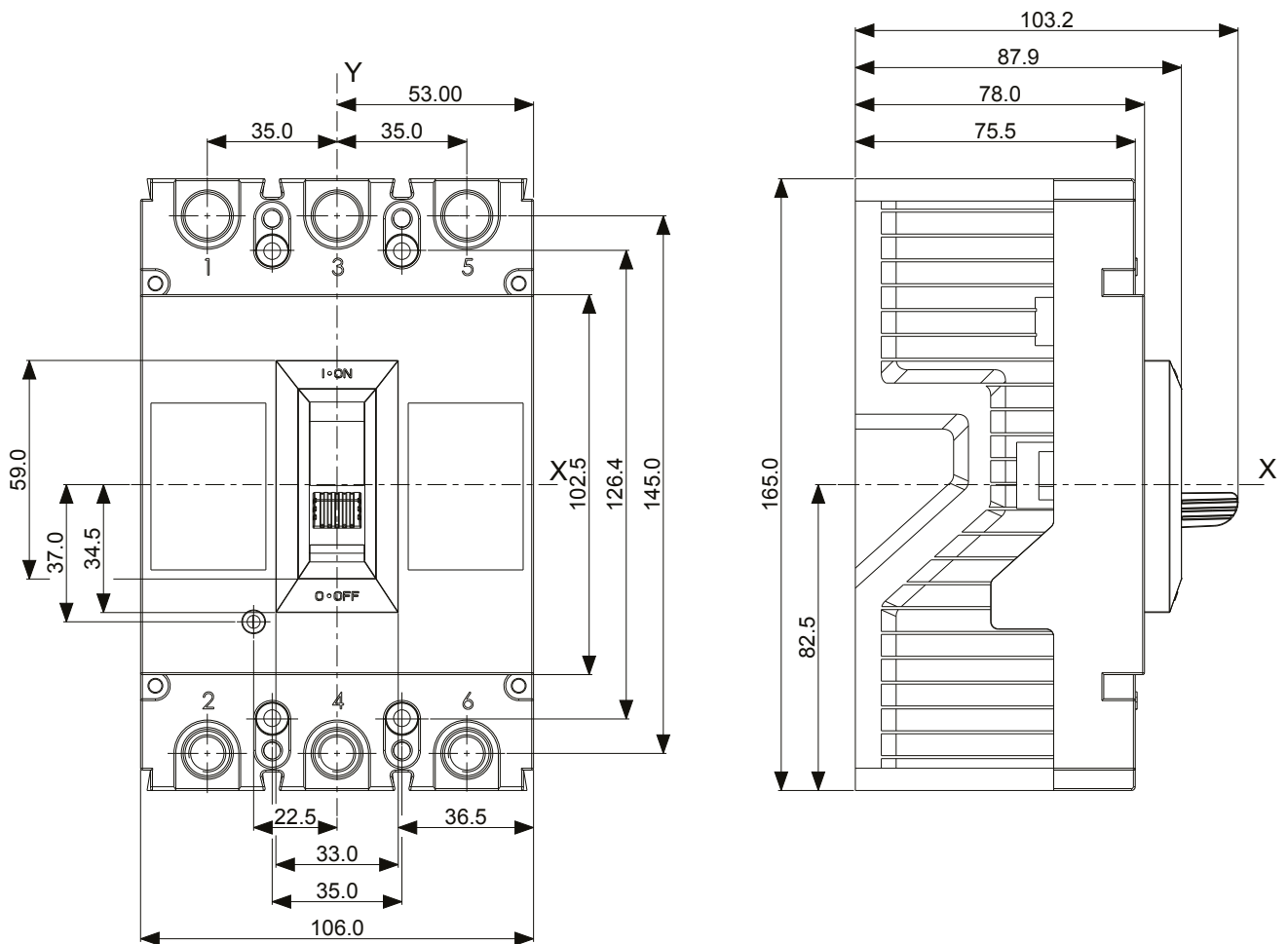


# DIMENSIONS DRAWINGS FOR AF SERIES MCCB

## AF100N DIMENSIONS



## AF250N DIMENSIONS





# BUSBAR CHAMBERS

## APPLICATIONS

ELETRA Busbar Chamber is designed for safe and reliable distribution of electrical power. It facilitates ease and flexibility in connecting cables, allowing up to four outgoing connections.

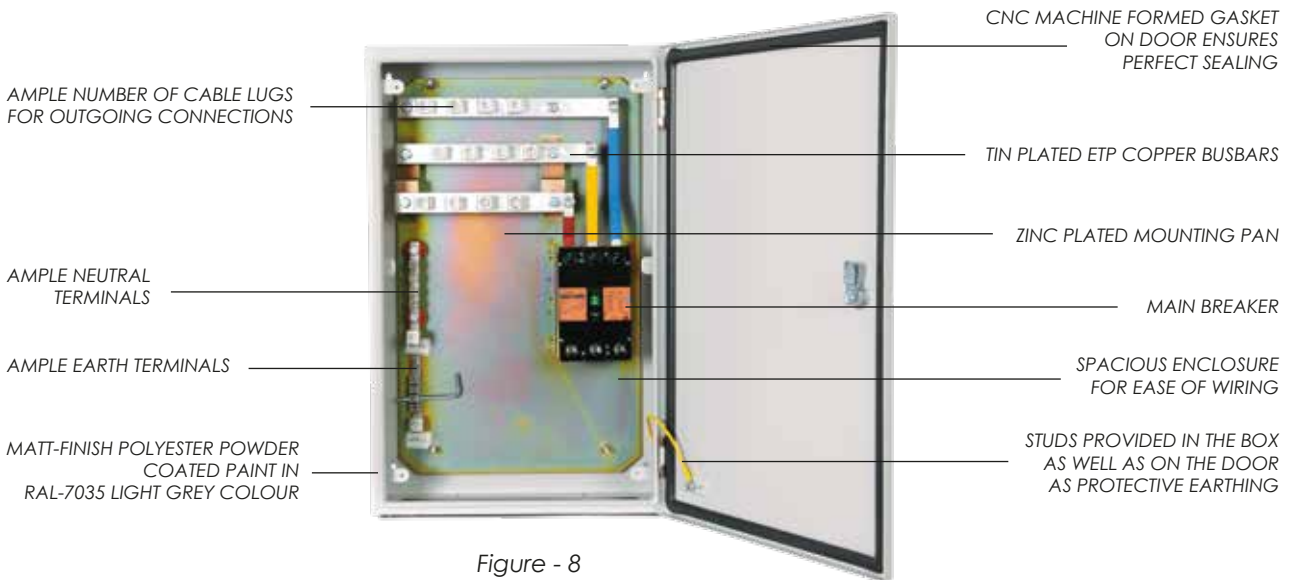


Figure - 8

# BUSBAR CHAMBERS

## FEATURES

- Made of high quality Electro-galvanized steel sheet
- Matt- finish polyester powder coated in RAL-7035 light grey colour (other colours available on request)
- CNC Machine formed polyurethane door gasket ensures better sealing
- CNC Corner formed door with smooth finish
- Earthing studs are provided on both the enclosure and the door
- Provided with neutral and earth terminals Shrouded Busbar Chamber
- Safety dead front cover is provided to avoid accidental contact Figure 9 with live part (busbar chamber only)
- Tin plated ETP Copper Busbar with 1.5A/mm<sup>2</sup> current density (busbar chamber only)
- Provided with brass terminal (shrouded busbar chamber only)
- Flame retardant polycarbonate shroud material (shrouded busbar chamber only)



Shrouded Busbar chamber  
Figure - 9

### Shrouded Busbar chamber ( Technical Data )

| SL.NO. | DESCRIPTION                             | 100A              | 225A               |
|--------|---|-------------------|--------------------|
| 1      | No of outgoing per ease phase & neutral | 4nos              | 4nos               |
| 2      | Outgoing terminal size                  | 25mm <sup>2</sup> | 50mm <sup>2</sup>  |
| 3      | Incoming Terminal size                  | 50mm <sup>2</sup> | 120mm <sup>2</sup> |

# BUSBAR CHAMBERS

## SPECIFICATIONS

|                          |                   |
|--------------------------|-------------------|
| Rated Voltage            | : 415/240/120V AC |
| Rated Insulation Voltage | : 600VAC          |
| Frequency                | : 50/60 Hz        |
| Ambient Temperature      | : 50 °C           |
| Standard                 | : IEC&NEMA        |
| Degree of protection     | : IP54/NEMA-3R    |



## PRODUCT VARIETIES AND DIMENSIONS

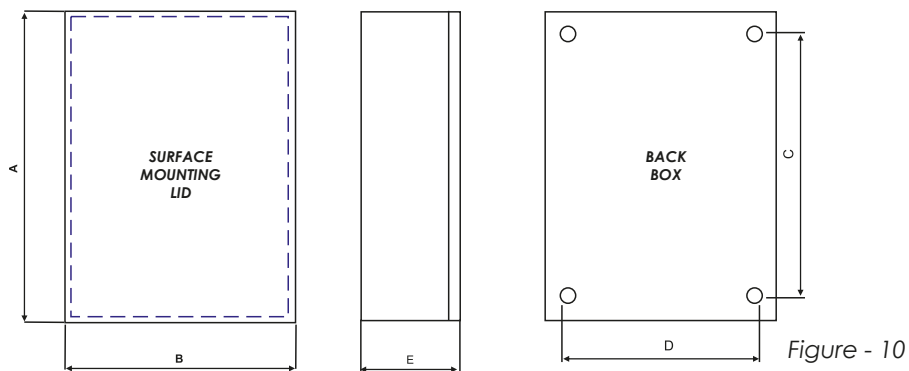


Figure - 10

| Outdoor Busbar Chamber |          |               |      |     |     |     |     |            |
|------------------------|----------|---------------|------|-----|-----|-----|-----|------------|
| DESCRIPTION            | RATING   | MAIN TYPE     | A    | B   | C   | D   | E   | CAT. NO.   |
| Busbar Chamber         | 30-100A  | 3P MCCB100AF  | 555  | 355 | 484 | 304 | 175 | 032-L33100 |
| Busbar Chamber*        | 100A     | Lugs Only     | 400  | 500 | 351 | 451 | 150 | 035-33100  |
| Busbar Chamber         | 125-225A | 3P MCCB 225AF | 665  | 425 | 595 | 388 | 165 | 032-L33225 |
| Busbar Chamber*        | 225A     | Lugs Only     | 500  | 600 | 451 | 551 | 200 | 035-33250  |
| Busbar Chamber         | 250A     | 3P MCCB 250A  | 745  | 425 | 675 | 385 | 190 | 032-33225  |
| Busbar Chamber         | 300-400A | 3P MCCB 400AF | 915  | 515 | 855 | 465 | 185 | 032-33400  |
| Busbar Chamber         | 500-600A | 3P MCCB 600AF | 1000 | 600 | 951 | 551 | 250 | 032-33600  |

\* Shrouded busbar chamber

Change last three digits for required ratings

For example

032-L33100 Represents outdoor bus bar chamber with 100A MCCB main

032-33400 Represents outdoor busbar chamber with 400A MCCB main

035-33225 Represents outdoor shrouded busbar chamber 225A

## TESTING

Each of our products undergo strict quality control check and is routinely checked for:

|                                       |   |
|---------------------------------------|---|
| Dielectric Test                       | : A high voltage routine test               |
| Electrical Continuity Test Insulation | : To confirm correct assembly and operation |
| Resistance Test                       | : To ensure high insulation resistance      |

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on services delivered by our Technical Support team.

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free maintenance service







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