



d sine

Moulded Case Circuit Breakers



LARSEN & TOUBRO

It's all about Imagination

About us

Larsen & Toubro is a technology-driven USD 8.5 billion company that infuses engineering with imagination. The Company offers a wide range of advanced solutions in the field of Engineering, Construction, Electrical & Automation, Machinery and Information Technology.

L&T Switchgear, which forms part of the Electrical & Automation business, is India's largest manufacturer of low voltage switchgear, with the scale, sophistication and range to meet global benchmarks. With over four decades of experience in this field, the Company today enjoys a leadership position in the Indian market with growing presence in international markets.

It offers a complete range of products including controlgear, powergear, motor starters, energy meters, wires and host of other accessories. Most of our product lines conform to international standards, carry CE marking and are **KEMA** certified.

The **d sine** range, a new generation of MCCBs, stands out due to its state-of-the-art design, contemporary user-friendly features, wide choice of protective releases, ergonomics, aesthetics and compactness.

The **d sine** range complies with the latest standards like IEC 60947-2, EN 60947-2 & IS 13947-2. The products conform to international standards, carry CE markings and are **KEMA** & CB certified. The range is specially designed for tropical conditions, ensuring reliable performance at high ambient and humid environments.

The **d sine** range is designed to meet the changing needs of users after extensive analysis and user feedback. The range can satisfy the most demanding system requirements.

The **d sine** range, complimented by a wide range of accessories, offer total solution to customer applications ensuring operational safety, reliability and versatility.



Switchgear Factory, Mumbai

| | |
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DN4



DN3



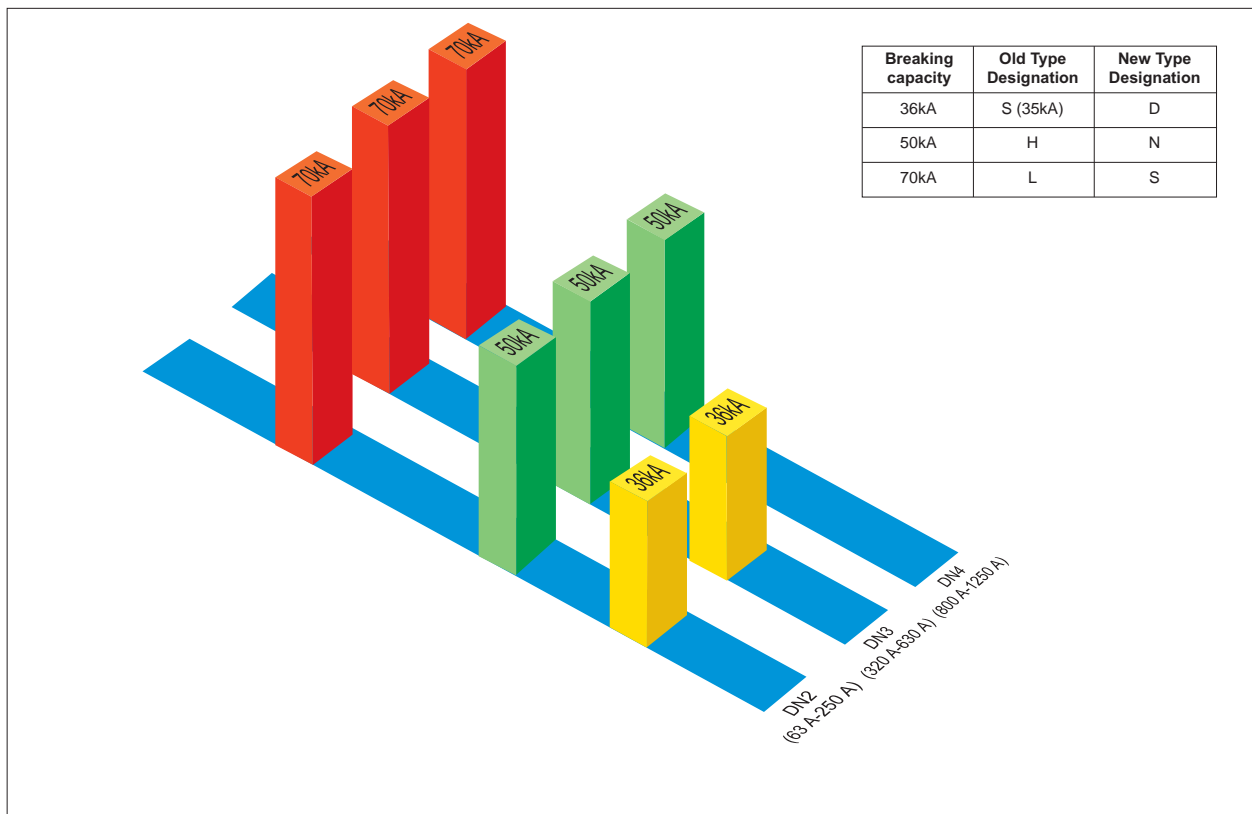
DN2

Features

- ➔ From 63 A to 1250 A
- ➔ 3 Pole & 4 Pole
- ➔ Choice of 36kA/50kA/70kA breaking capacities
- ➔ With protection releases in Microprocessor, Thermal-Magnetic and only Magnetic
- ➔ MCCBs for distribution and SD versions
- ➔ Manual, rotary or motorised versions
- ➔ Wide range of internal and external accessories

| DN2 | | |
|---------------|-----------------------------------|--------------------------|
| Rated Current | 63, 80, 100, 125, 160, 200, 250 A | 40, 63, 100, 160, 250 A |
| Release | Thermal-Magnetic | Microprocessor |
| DN3 | | |
| Rated Current | 320, 400, 500, 630 A | 63, 160, 250, 400, 630 A |
| Release | Thermal-Magnetic | Microprocessor |
| DN4 | | |
| Rated Current | 800, 1000, 1250 A | |
| Release | Microprocessor | |

Breaking Capacities



Note : Since there is no change in the constructional aspect of the MCCBs, the product certification with old designation remain valid with new type designation.

Thermal-Magnetic Release



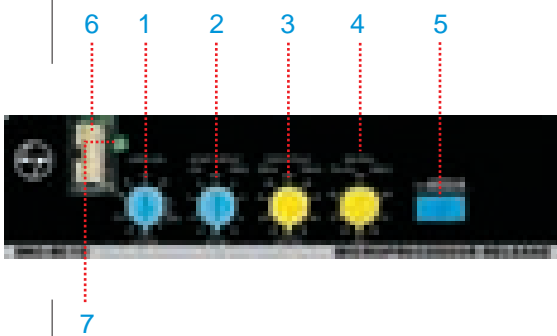
Features of Thermal-Magnetic Release

- Adjustable overload settings
- Adjustable short circuit settings
- True RMS sensing
- No contact with live parts

| Protection | Settings |
|----------------|------------------|
| | DN2 & DN3 |
| Overload | 80% - 100% I_n |
| Short circuit* | 6 - 10 I_n^* |
| Earth fault | External |

*Except for 630A MCCBs. Setting from 3 - 6 I_n available on request.

Microprocessor Release

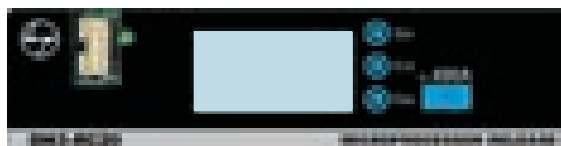


Features of RC10 Microprocessor Release

- Overload protection with inverse time delay ①
- Short circuit protection with selectable time delay ②
- Instantaneous over ride protection
- Earth fault protection with selectable time delay ③
- Neutral protection with selectable time delay ④
- Push to trip button ⑤
- Port for release testing ⑥
- Power ON LED ⑦
- Self powered protections
- True RMS sensing

| RC10 | |
|----------------------------------------------|-----------------------------------------------------------------|
| Rated Current I_n (A) | From 63 to 1250 A |
| Overload (Phase) | |
| Current setting, I_r ($I_r = X I_n$) | OFF, 0.4 to 1.0 in steps of 0.1 |
| Time delay, t_r (Inverse) | 10 sec at $6 I_r$ |
| Protection mode | ON / OFF |
| Overload (Neutral) | |
| Current setting, I_n ($I_{nrl} = X I_r$) | 0.5, 0.75 & 1.00 I_{nrl} |
| | Inverse 10 sec at 6 I_{nrl} / Fixed 200ms |
| Protection mode | ON / OFF |
| Short Circuit | |
| Current setting, I_s ($I_s = X I_r$) | 1.5, 4 & $6 I_r$ |
| Time delay, t_s | Inst. / 100 msec |
| Protection mode | ON / OFF |
| Instantaneous Over ride | |
| Current setting, I_p | DN2- $8 I_n$, DN3-400-12 I_n , DN3-630-8 I_n , DN4-8 I_n |
| Earth Fault | |
| Current setting, I_g | 0.2 to 0.5 I_n steps of 0.1 |
| Time delay, t_g | 100 / 200 msec |
| Protection mode | ON / OFF |

Microprocessor Release



Features of RC20 - Communication Capable

- ◆ Communication using RS 485
- ◆ Power on LED
- ◆ Backlit LCD display
- ◆ Scroll buttons
- ◆ Push to trip button
- ◆ All features of RC10 release are incorporated
- ◆ Metering for current parameters
- ◆ Protection against unbalanced load / single phasing
- ◆ I^2t protection
- ◆ Neutral protection
- ◆ Cold load protection
- ◆ User friendly navigation system
- ◆ Self powered
- ◆ MODBUS RTU protocol

| RC20 | |
|---------------------------------------------|----------------------------------------------------------------|
| Rated Current I_n (A) | From 63 to 630 A |
| Overload (Phase) | |
| Current setting (A), I_r ($I_r = xI_n$) | 0.4 to 1.0 in steps of 0.1 |
| Time delay, t_r (s) (Inverse) | 3, 6, 10, 15, 30 at $6I_r$ |
| Protection mode | ON / OFF |
| Preset trip alarm setting | 0.8 to $1.0I_r$ in steps of 0.05 |
| Thermal memory | ON / OFF |
| Overload (Neutral) | |
| Current setting (A), I_r | 50%, 100% I_n |
| Protection mode | ON / OFF |
| Short Circuit | |
| Current setting (A), I_s | 1.5, 4, $6I_r$ |
| Time delay t_s (ms) | For – I^2t OFF 20 to 200 in steps of 20 |
| | For – I^2t ON 60 to 200 in steps of 20 |
| Protection mode | ON / OFF |
| Preset trip alarm setting | 0.8 to 1.0 times I_s in steps of 0.05 I_s |
| Cold load pickup | Enable / Disable |
| Instantaneous | |
| Instantaneous | 1.5 to $8I_n$ in steps of $0.5I_n$ |
| Protection mode | ON / OFF |
| Cold load pickup | Enable / Disable |
| Instantaneous Over ride | |
| Current setting (A), I_p | DN2- $8I_n$, DN3-400-12 I_n , DN3-630-8 I_n , DN4-8 I_n |
| Earth Fault | |
| Current setting (A), I_g | 0.2 to $0.5I_n$ steps of $0.1I_n$ |
| Time delay (ms), t_g | 0.1, 0.2, 0.5, 1, 3 sec. |
| Preset trip alarm setting | 0.8 to 1.0 I_g in steps of 0.05 |
| Protection mode | ON / OFF |
| Cold load pickup | Enable / Disable |

Additional Features of RC20

| Current unbalance | |
|----------------------------|------------------------------------------------------|
| Current setting (A) xI_n | 10% to 100% I_n in steps of 5% |
| Time delay (s) | 1 to 10 in steps of 0.5 |
| Protection mode | ON / OFF |
| Cold load pickup | Enable / Disable |
| Temperature rise | |
| Alarm / Trip | At 80°C / At 100°C |
| Metering | |
| Current | Phase, Neutral and Earth |
| Display | Backlit LCD |
| Communication* | |
| Protocol | MODBUS RTU |
| Link used | RS 485 |
| Event records | Pickup, Trip, Alarm upto 128 records-volatile memory |
| Trip history | Last 5 trips records - non volatile memory |
| Trip counter record | Counts for total number of trips |

* To establish communication with computer every MCCB with RC20 will require a communication module.

→ **Faster tripping**

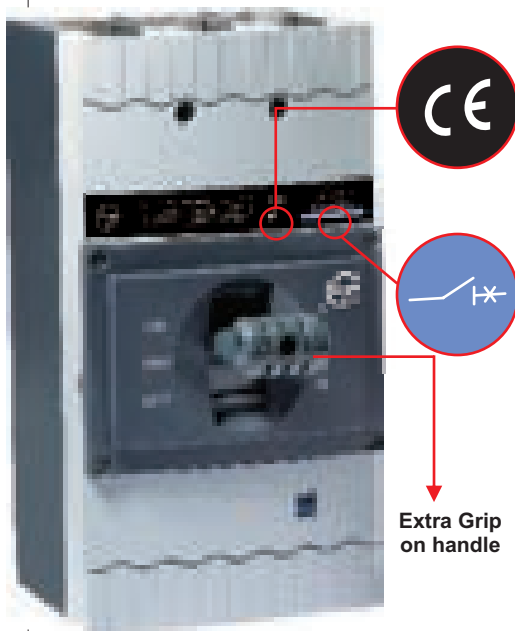
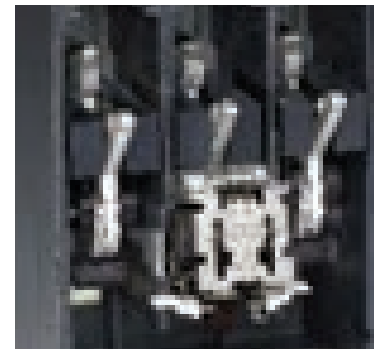
The unique speed contact system accelerates the opening of contacts during short circuit. This ensures faster tripping an ultimate current limiting feature. The result-very low let-through, cut-off current and fault clearing time.

→ **Mechanical Anti-reclosing**

This unique feature ensures that under short circuit conditions, the contacts open and latch even before the release gives a trip command to the mechanism. This avoids contact re-closing and bounce.

→ **Low watt loss**

The entire current carrying path is optimally designed to achieve very low watt loss.



→ **Positive Isolation**

The MCCB knob indicates the true position of the contacts.

→ **Double Insulation**

The internal accessories are housed in insulated casings to ensure first level of insulation. When the front cover is opened for the fixing of internal accessories, the MCCB is totally insulated ensuring the double insulation.

→ **Marking**

CE marking ensures use of superior engineering plastic, meeting all requirements of flammability and glow wire testing path is optimally designed to achieve very low watt loss.

- ➔ **Common Internal accessories**
The internal accessories remain same across DN2 / DN3 / DN4 range* and they are snap fit type easy to install

- ➔ **No load line bias**
Either side of MCCB terminal can be used as load or line

- ➔ **Terminal finger proofing**
Front terminal plates conceal the terminals to prevent human contact thus achieving complete finger proofing
- ➔ **Release shrouding**
Release is shrouded from the front thus preventing tampering by unauthorized person
- ➔ **Safer release adjustments**
No live parts are in contact during release adjustments

- ➔ **Common front adjustments for protection release**
Overload & short circuit setting can be adjusted from front using a common knob for all the poles
- ➔ **Visibility**
Push to trip button and release ratings are visible even when release plate is fitted

* Except under voltage release

Internal Accessories



Auxiliary Contact

d sine range of MCCBs come with snap-fit type, easily installable internal accessories. There is no need to open main cover and no live parts are accessed during installation. TAC, Aux+TAC to be fitted in the right cavity & under voltage release to be fitted in left cavity.

List of Internal Accessories

- Auxiliary Contact 1 C/O
- Auxiliary Contact 2 C/O
- Trip Alarm Contact
- Auxiliary & Trip Alarm Contact
- Shunt Release
- Under Voltage Release (suitable for electrical interlocking)

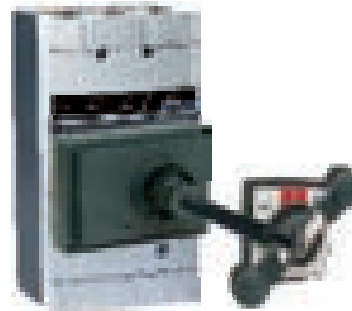


MCCB with mid cover opened & Internal accessories fitted

External Accessories

Extended Rotary Handle (Panel Mounted)

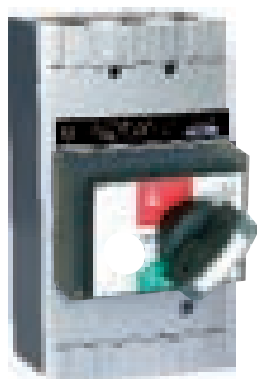
- ROM mounts directly on the MCCB without removal of mid cover
- Clear ON / OFF / TRIP indication
- Clear view of the MCCB rating label with ROM mounted
- Direct access to push to trip button with ROM mounted
- IP 54 degree of protection with extended rotary handle
- Unique coupling to allow $\pm 3\text{mm}$ tolerance
- Door interlock in ON position, with defeat facility
- Door interlock in OFF condition with padlock feature
- Auto restoration of door interlock
- External keylock for mechanical interlocking



Extended Rotary Handle: Panel Mounted



Panel Door Mounted Key lock
(To be used along with extended rotary handles)



Rotary Operating Mechanism

The rotary operating mechanism (ROM) for **d sine** MCCBs are available in Direct & Extended versions.

Direct rotary handle (MCCB mounted)

These versions are available for the entire family of **d sine** MCCBs.

Mechanical Interlocking Schemes

1. Mechanical Interlocking Kit:

Two MCCBs can be interlocked using base plate mechanism, in side-by-side configuration.

Features

- ➔ For 3 Pole & 4 Pole versions
- ➔ For DN2 & DN3 frames
- ➔ Site fittable



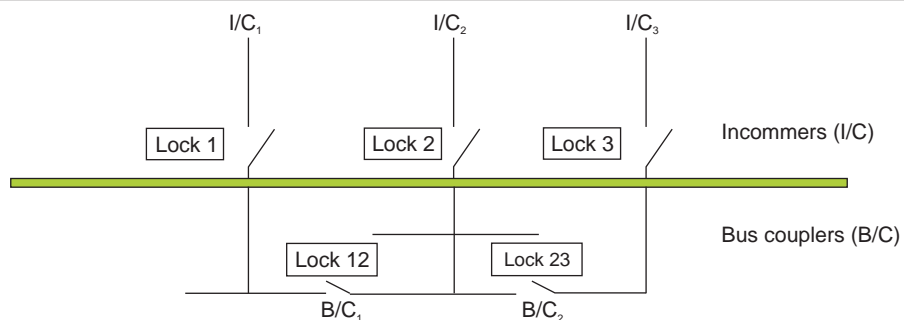
MIL with Base Plate

2. Mechanical Interlocking using key locks:

For mechanical interlocking through extended rotary operating mechanism, a panel mounted key lock is available. The selection of the key lock as per the following details:

| | |
|-----------------|--------------------------------------------------|
| 2 I/C | Any 1 type of lock for both MCCBs |
| 2 I/C and 1 B/C | Lock 1 and Lock 2 for I/C and Lock 12 for B/C |
| 3 I/C and 2 B/C | Locks 1, 2, 3 for I/Cs and Locks 12, 23 for B/Cs |

Key Lock Selection



| Type of lock | Exclusively operable by Key Nos. |
|--------------|----------------------------------|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 12 | 1, 2 & 12 |
| 23 | 2, 3 & 23 |

Electrical Operating Mechanism



Features

- Clear **ON / OFF** indication
- Safety Interlock-EOM will not operate if
 - EOM cover is open
 - EOM is not properly fixed on MCCB
- Permits manual operation, If required
- Padlock facility for locking in OFF position
- Easy access to the protection setting on the MCCBs

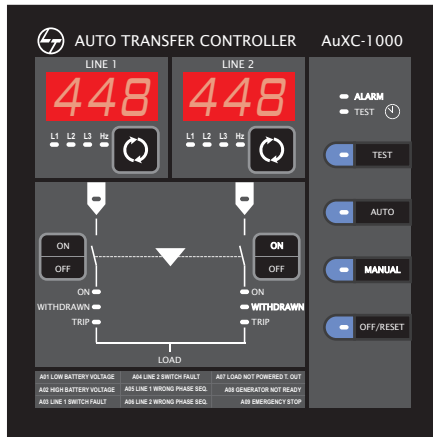
* 240 VAC available on request

External Neutral CTs

The External Neutral CT is an add-on accessory of the 3P MCCB that gives protection against neutral faults. Thus, with an External Neutral CT, a 3P MCCB can be used for full protection of a 3 phase, 4 Wire system*.

* Contact nearest branch for details & availability

Automatic Source Transfer Switch Controller AuXC-1000



The AuXC-1000 controller brings simplicity and flexibility to an auto source transfer system. It has been developed to control and supervise the automatic or manual transfer of a utility load from a principal power supply source to a stand-by. It sets a new benchmark in Auto source transfer switch controller technology.

It includes all the necessary features to supervise and control power supply sources, composed by energy distribution systems or generating sets, and the relative transfer equipment, such as contactors, motorized moulded case circuit breakers and air circuit breakers.

The automatic transfer takes place through AuXC-1000 whenever conditions predefined by the user takes place, for example:

- Power supply source not respecting programmed limits
- The need to have a very reliable power source
- The need to use the most economical power source

Some of the key features of this controller are:

- Front display for monitoring the system voltage and frequency and for onsite controller programming
- Six programmable inputs and five programmable outputs
- Front test feature to simulate the operation of the diesel generator set
- Status indication through 22 LEDs
- Flush mounting arrangement
- Communication capable

The AuXC-1000 controller is compatible with U-Power range of Air circuit breakers, range of MCCBs and MCX range of contactors.



MIL with Base Plate & EOM

Technical Data

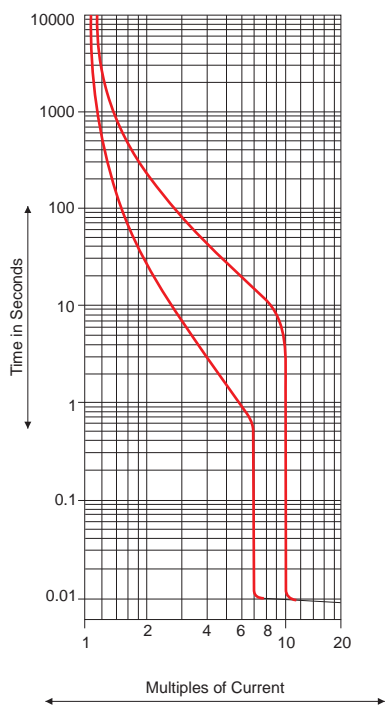


| Frame | | 250 A | | | 400 A | | | 630 A | | | 800 / 1000 / 1250 A | | |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------------|------|-------------------------------------|------------------------------------------------|------|-------------------------------------|------------------------------------------------|------|-------------------------------------|------------------------------------------------|-----|
| Type | | DN2-250 | | | DN3-400 | | | DN3-630 | | | DN4-1250 | | |
| | | D | N | S | D | N | S | D | N | S | N | S | |
| Current Range (A) | | 63, 100, 125, 160, 200 & 250 A | | | 63, 160, 250, 320, 400 | | | 63, 160, 250, 320, 400, 630 A | | | 800, 1000, 1250 | | |
| Poles | | 3 / 4 | | | 3 / 4 | | | 3 / 4 | | | 3 / 4 | | |
| Impulse withstand Voltage (kV) | | 8 | | | 8 | | | 8 | | | 8 | | |
| Rated Operational Voltage (V) (max) | | 690 | | | 690 | | | 690 | | | 690 | | |
| Rated Insulation Voltage (V) | | 750 | | | 750 | | | 750 | | | 750 | | |
| Utilisation Category | | A | | | A | | | A | | | A | | |
| Standard | | IEC / EN / IS / GB | | | IEC / EN / IS / GB | | | IEC / EN / IS / GB | | | IEC / EN / IS / GB | | |
| IEC-60947-2 | Icu (kA) | 230 / 240 V | 65 | 85 | 100 | 65 | 85 | 100 | 65 | 85 | 100 | 85 | 100 |
| | | 400 / 415 V | 36 | 50 | 70 | 36 | 50 | 70 | 36 | 50 | 70 | 50 | 70 |
| | | 500 V | 25 | 36 | 50 | 25 | 36 | 50 | 25 | 36 | 50 | 25 | 36 |
| | | 550 V | 18 | 25 | 36 | 15 | 20 | 25 | 15 | 20 | 25 | 20 | 25 |
| | | 600 V | 16 | 18 | 22 | 12 | 18 | 22 | 12 | 18 | 22 | 16 | 20 |
| | | 690 V | 10 | 15 | 20 | 8 | 15 | 20 | 8 | 10 | 15 | 10 | 18 |
| | | 250 V DC (3P in series) | 15 | 25 | 36 | 15 | 25 | 36 | 15 | 25 | 36 | - | - |
| | 500 V DC (3P in series) L/ R<15msec | 5 | 10 | 20 | 5 | 10 | 20 | 5 | 10 | 16 | - | - | |
| Ics as % Icu | | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | |
| Life span | | Mechanical | | | 25000 | | | 15000 | | | 8000 | | |
| | | Electrical @1.0 In | | | 10000 | | | 4000 | | | 750 | | |
| Operating Frequency (Hz) | | 50 / 60 | | | 50 / 60 | | | 50 / 60 | | | 50 / 60 | | |
| Total Opening Time | | <10 msec | | | <10 msec | | | <10 msec | | | <20 msec | | |
| Finger-proof Terminals | | Yes | | | Yes | | | Yes | | | Yes | | |
| Ambient Temperature | | -5° to 55° C | | | -5° to 55° C | | | -5° to 55° C | | | -5° to 55° C | | |
| Storage Temperature | | -35° to 70° C | | | -35° to 70° C | | | -35° to 70° C | | | -35° to 70° C | | |
| Mounting Positions | | Vertical and 90° in both directions | | | Vertical and 90° in both directions | | | Vertical and 90° in both directions | | | Vertical and 90° in both directions | | |
| Dimensions (W x D x H) | | 3-Pole | 105 x 96 x 179 | | | 140 x 111.5 x 266 | | | 140 x 111.5 x 266 | | | 278 x 143 x 370 | |
| | | 4-Pole | 140 x 96 x 179 | | | 183.5 x 111.5 x 266 | | | 183.5 x 111.5 x 266 | | | 278 x 143 x 370 | |
| Weight (kg) (3/4 Pole) | | 2.5 / 3.3 | | | 5.5 / 7.2 | | | 6 / 7.8 | | | 15 / 16 | | |
| ACCESSORIES | Internal | Auxiliary Contact | 1C/O or 2C/O | | | 1C/O or 2C/O | | | 1C/O or 2C/O | | | 1C/O or 2C/O | |
| | | Trip Alarm Contact | 1C/O | | | 1C/O | | | 1C/O | | | 1C/O | |
| | | Auxiliary & Trip Alarm Contact | 1C/O + 1C/O | | | 1C/O + 1C/O | | | 1C/O + 1C/O | | | 1C/O+1C/O | |
| | | Shunt Release \$ | 110 - 415 V AC 50 / 60 Hz, 110 - 220 V DC | | | 110 - 415 V AC 50 / 60 Hz, 110 - 220 V DC | | | 110 - 415 V AC 50 / 60 Hz, 110 - 220 V DC | | | 110 - 415 V AC 50 / 60 Hz, 110 - 220 V DC | |
| | Under Voltage Release | 220 - 240 V AC 50 Hz | | | 220 - 240 V AC 50 Hz | | | 220 - 240 V AC 50 Hz | | | 220 - 240 V AC 50 Hz | | |
| | Rotary Operating Mechanism | ✓ | | | ✓ | | | ✓ | | | ✓ | | |
| | Electrical Operating Mechanism | ✓ | | | ✓ | | | ✓ | | | x | | |
| | External | Earth Fault Release | ✓ | | | Inbuilt protection with Microprocessor release | | | Inbuilt protection with Microprocessor release | | | Inbuilt protection with Microprocessor release | |
| Mechanical Interlock | | ✓ | | | ✓ | | | ✓ | | | ✓ | | |
| Spreader Links | | ✓ | | | ✓ | | | ✓ | | | ✓ | | |
| Key lock / Pad lock | | ✓ | | | ✓ | | | ✓ | | | ✓ | | |

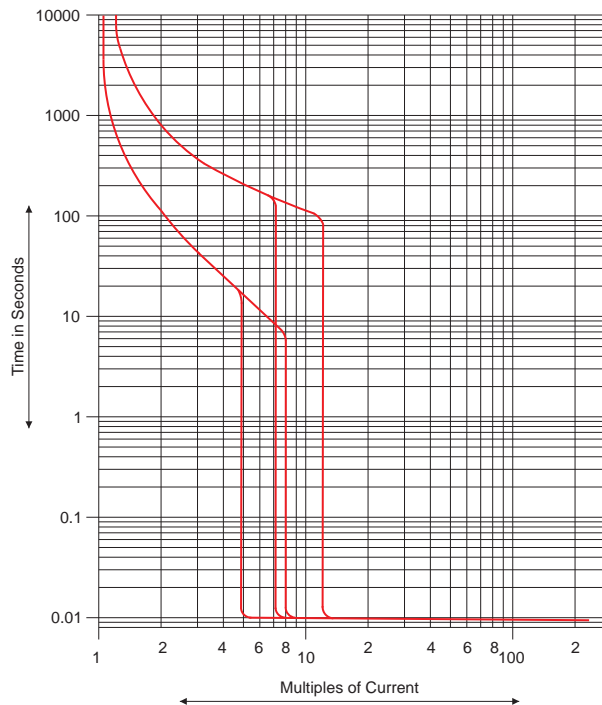
\$: 'NO' of control contactor to be connected in series for 220V DC application.
 Note: • Any two internal accessories can be mounted at a time
 • For special application like capacitor switching, DC please contact nearest branch office
 • For motor application, use 'M' series MCCBs (DN2M, DN3M)

Thermal-Magnetic Release

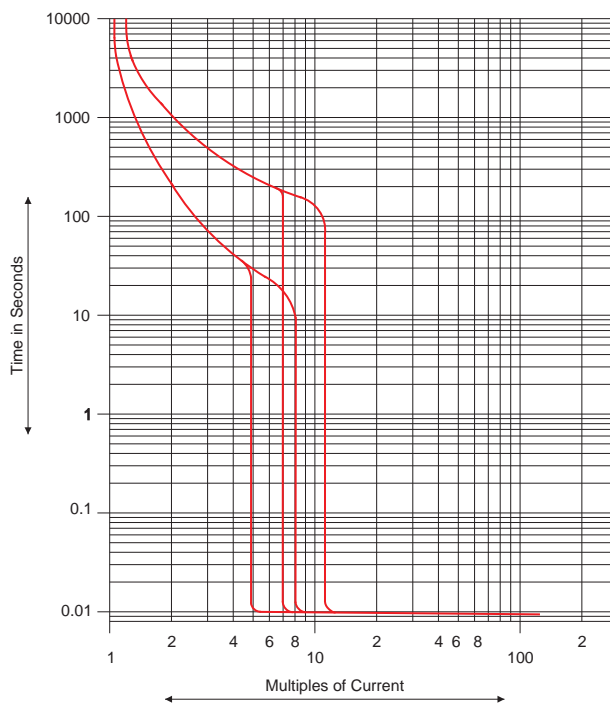
DN0-100



DN2-160/250

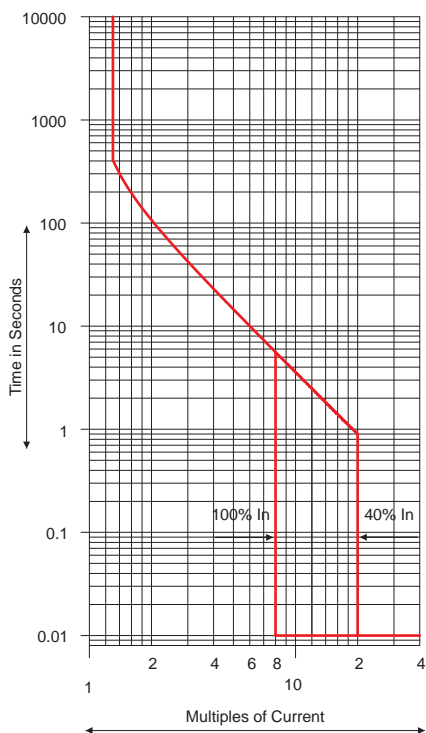


DN3-400/630

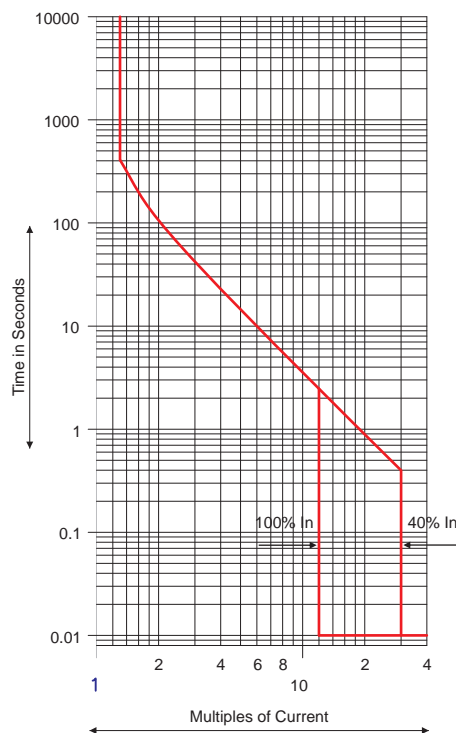


Microprocessor Release-RC10

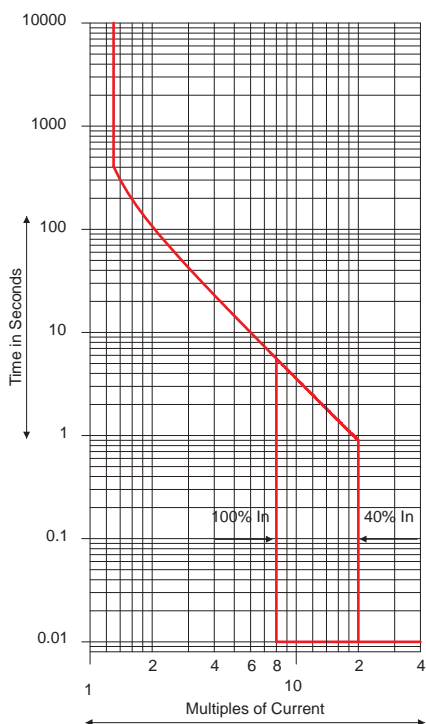
DN2-250A



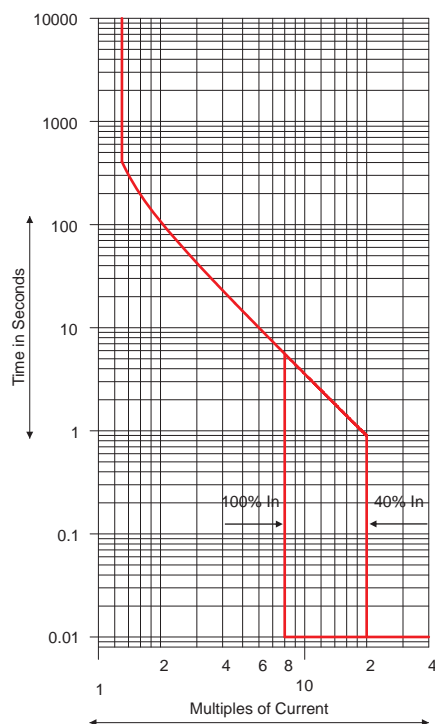
DN3-400A



DN3-630A

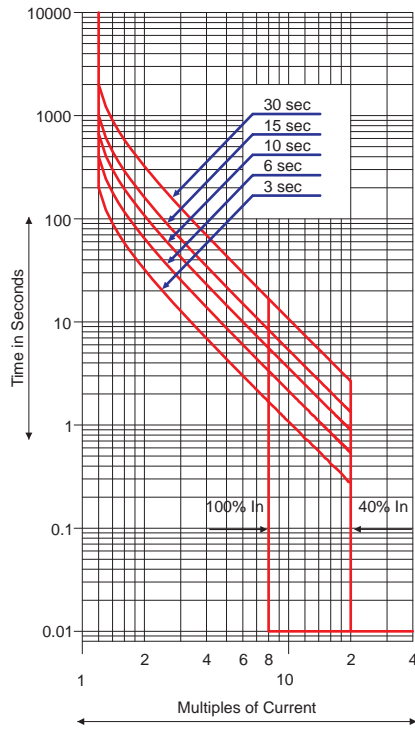


DN4-1250A

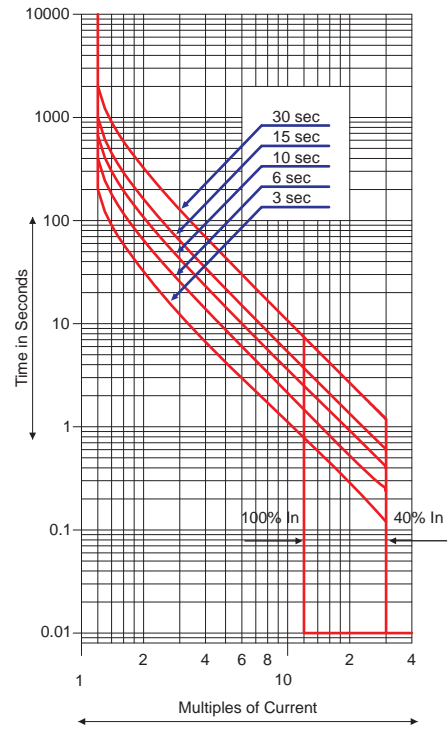


Microprocessor Release-RC20

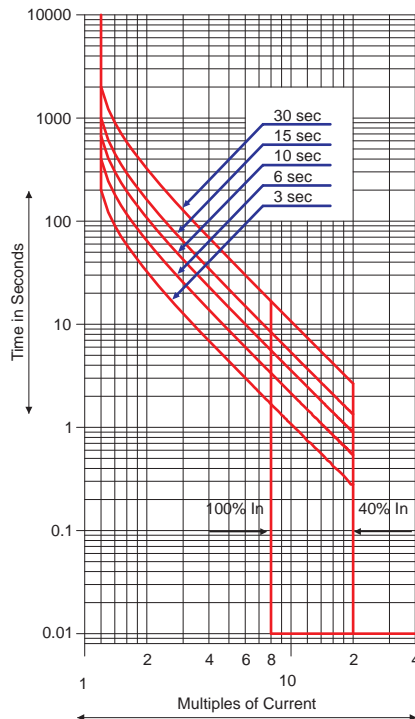
DN2-250A



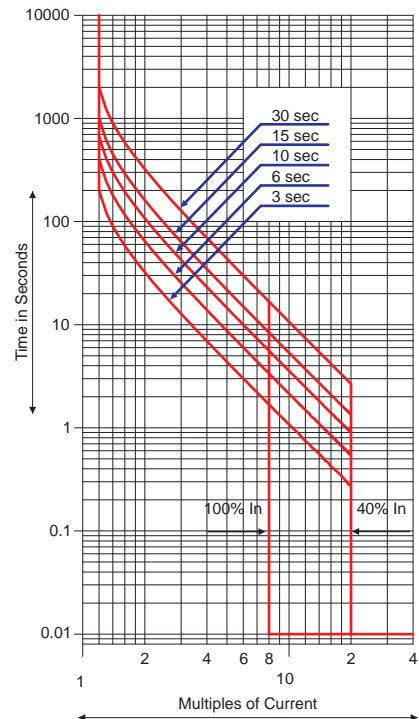
DN3-400A



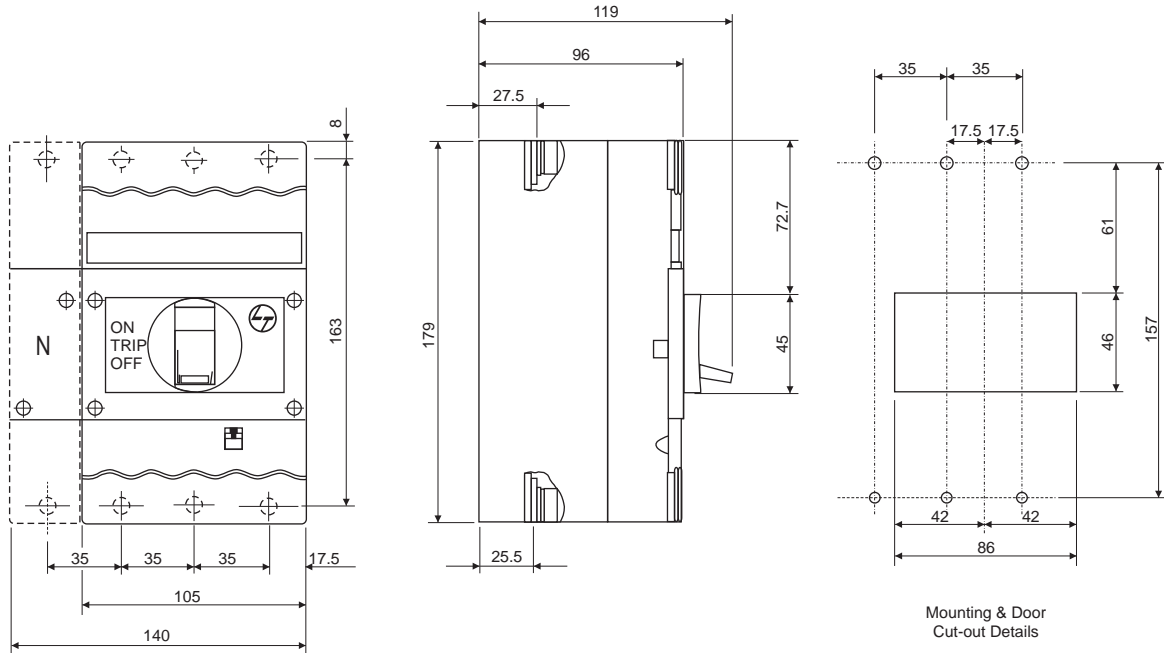
DN3-630A



DN4-1250A

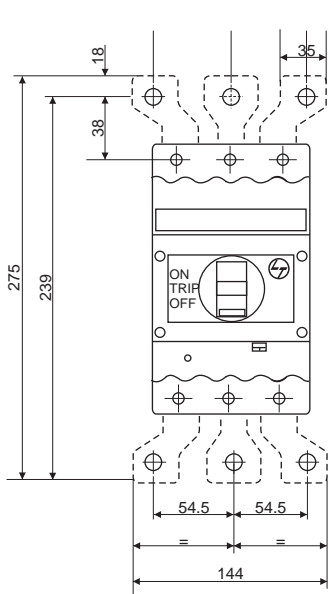


DN2-250 MCCB

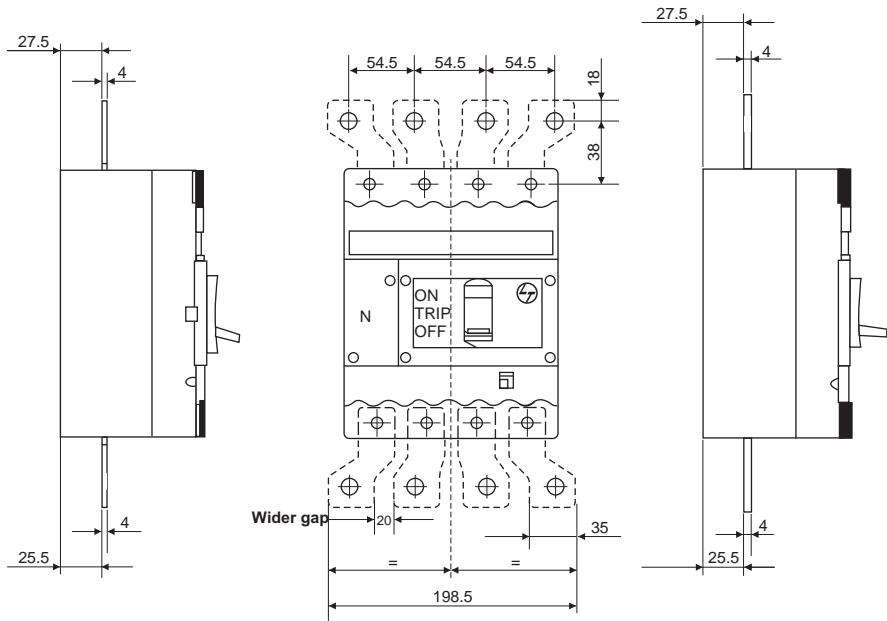


Terminal width = 25.5mm

DN2-250 3P with Spreader Links



DN2-250 4P with Spreader Links



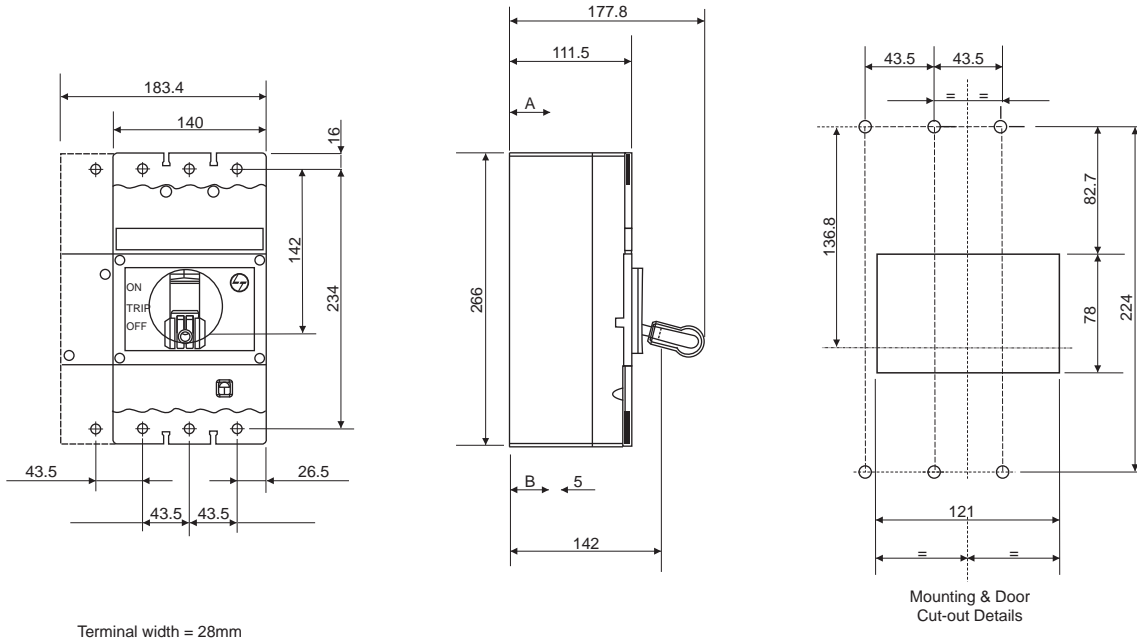
Recommended CAT number for DN2 spreaders

| 3P | 4P |
|-------------|-------------|
| ST980530000 | CM920070000 |

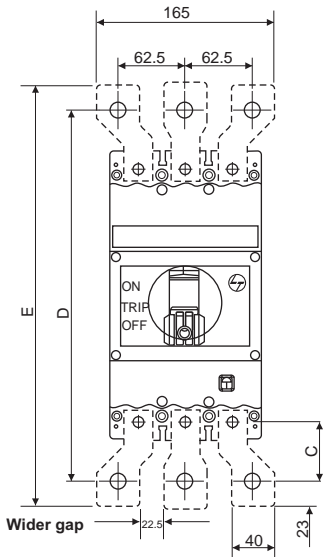
Note : Spreader links are available as spare. It is recommended to use spreader links for enhancing termination capacity.

All dimension are in mm

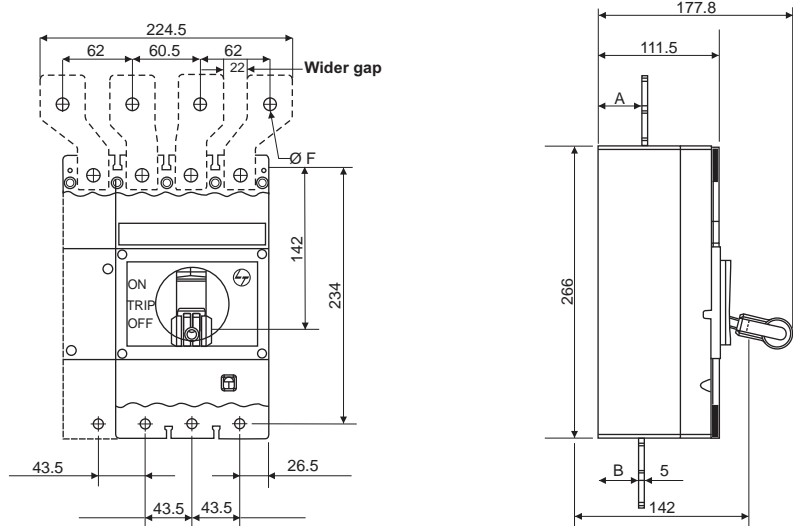
DN3-400/630 MCCB



DN3-400/630 3P with Spreader Links



DN3-400/630 4P with Spreader Links



| Type | DN3-400 | DN3-630 |
|------|---------|---------|
| A | 39 | 41 |
| B | 37 | 38 |
| C | 45 | 55 |
| D | 324 | 344 |
| E | 370 | 390 |
| F | 13 | 11 |

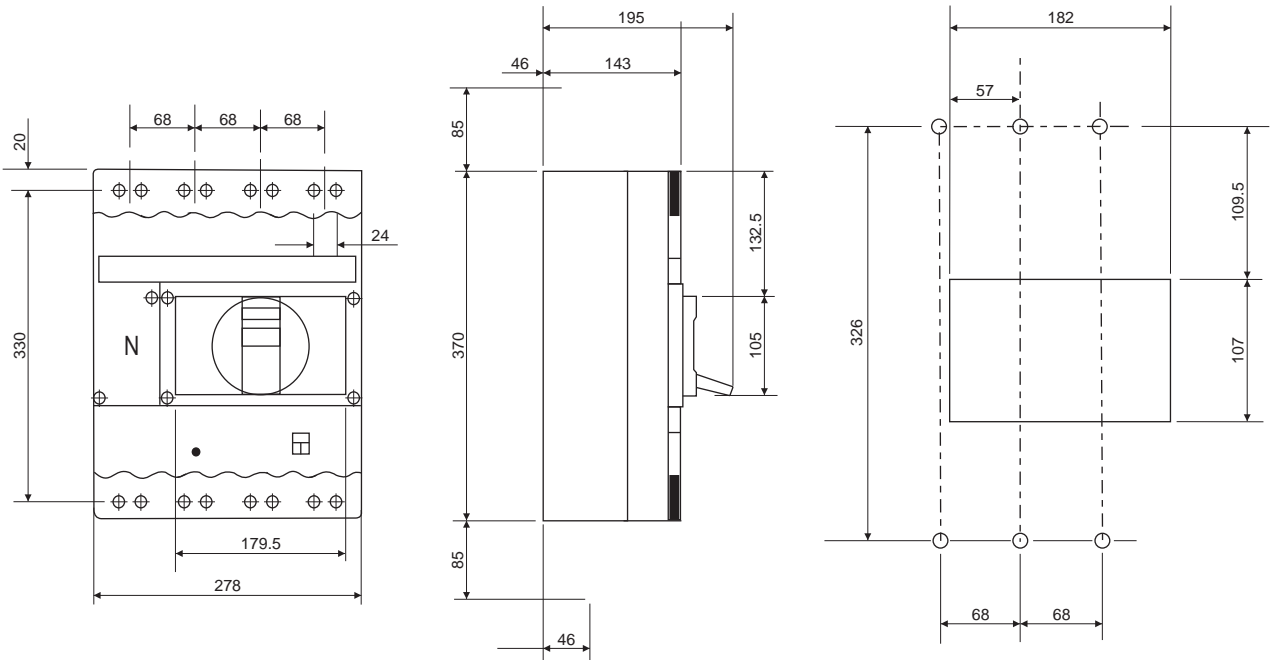
Recommended CAT numbers for DN3 spreaders

| Rating | 3P | 4P |
|--------|-------------|-------------|
| 400A | ST980650000 | ST980660000 |
| 630A | ST980540000 | CM920040000 |

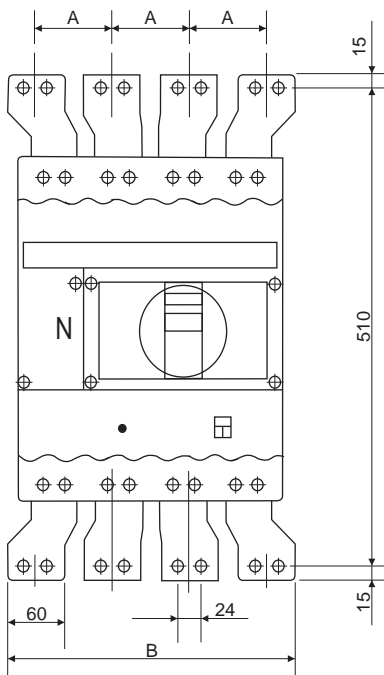
Note : Spreader links are available as spare. It is recommended to use spreader links for enhancing termination capacity.

All dimension are in mm

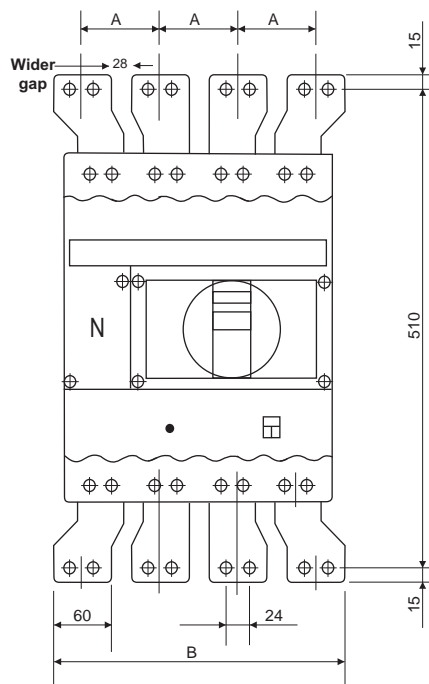
DN4-800/1000/1250 MCCB



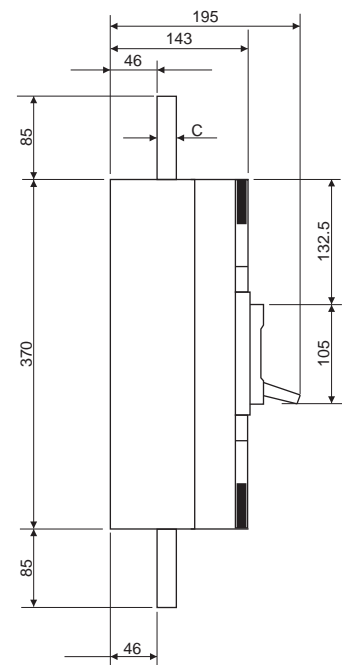
DN4-800 MCCB with Spreader Links



DN4-1000/1250 MCCB with Spreader Links



DN4-800/1000/1250 MCCB



Dimensions

| Type | A | B | C |
|-----------------|----|-----|----|
| 800A | 88 | 324 | 6 |
| 1000/1250/1600A | 80 | 300 | 20 |

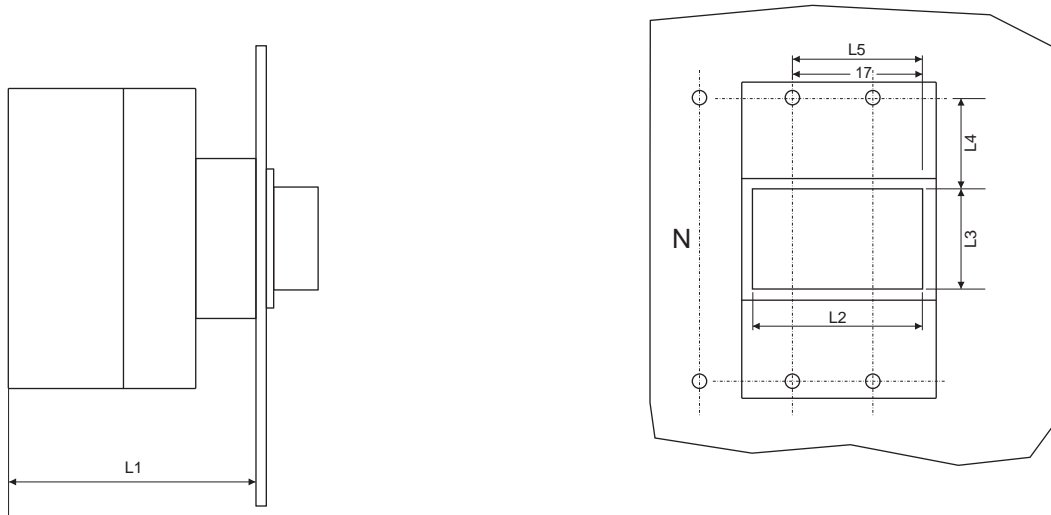
Recommended CAT numbers for DN4 spreaders

| Rating | 3P | 4P |
|--------------|-------------|-------------|
| 800A | ST90361O000 | ST90362O000 |
| 1000A /1250A | ST98055O000 | ST98058O000 |

Note : Spreader links are available as spare. It is recommended to use spreader links for enhancing termination capacity.

All dimension are in mm

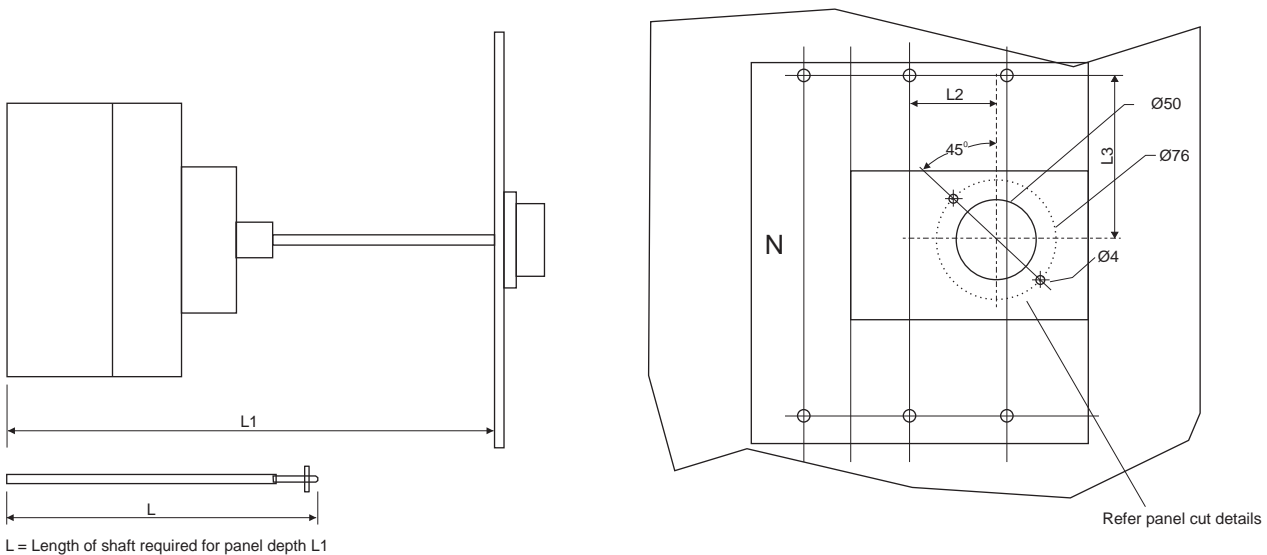
Direct ROM door cut-out detail



L1 = Mounting depth
 L2/L3 = Panel cut-out
 L4/L5 = Breaker mounting reference

| Type | L1 | L2 | L3 | L4 | L5 |
|------|------|-----|----|----|----|
| DN0 | 96.5 | 58 | 52 | 44 | 37 |
| DN2 | 122 | 96 | 63 | 53 | 66 |
| DN3 | 156 | 121 | 87 | 78 | 82 |

Extended ROM door cut-out detail

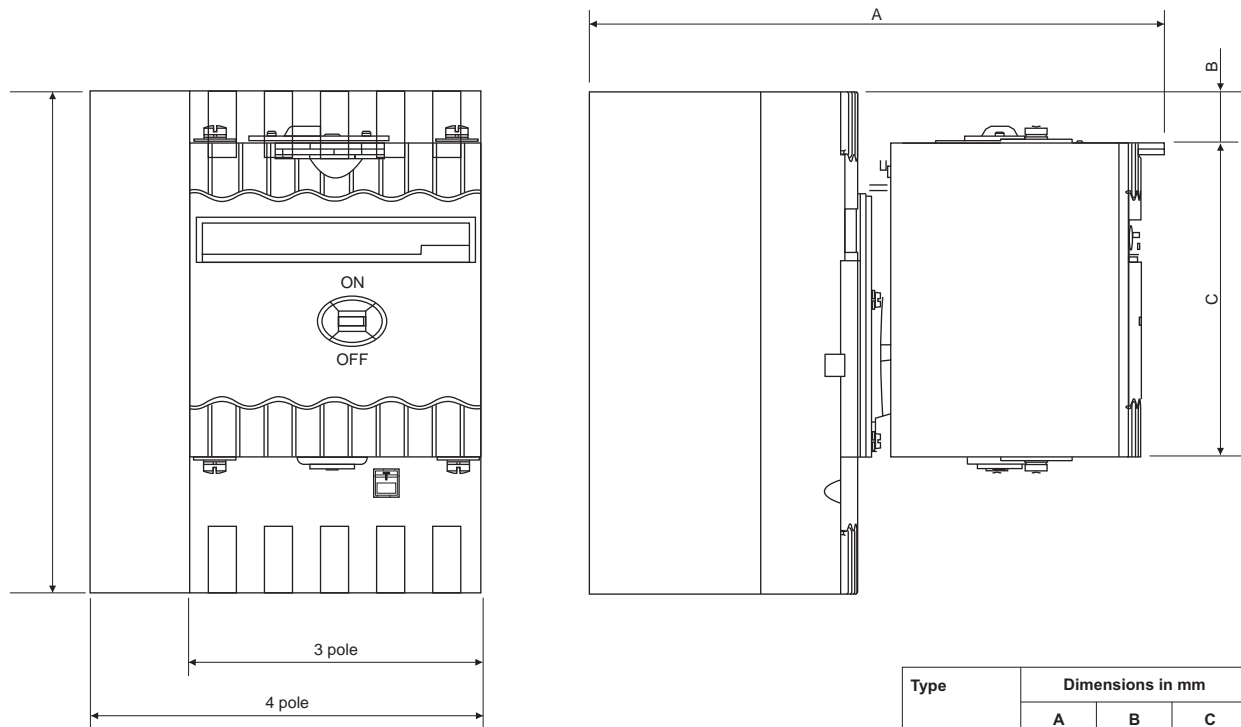


L = Length of shaft required for panel depth L1

| Type | L1 | L | L2 | L3 |
|------|-----|----------|-----|------|
| DN0 | 169 | L1 - 119 | 7.5 | 69.5 |
| DN2 | 202 | L1 - 152 | 27 | 84 |
| DN3 | 233 | L1 - 183 | 39 | 122 |
| DN4 | 302 | L1 - 252 | 69 | 170 |

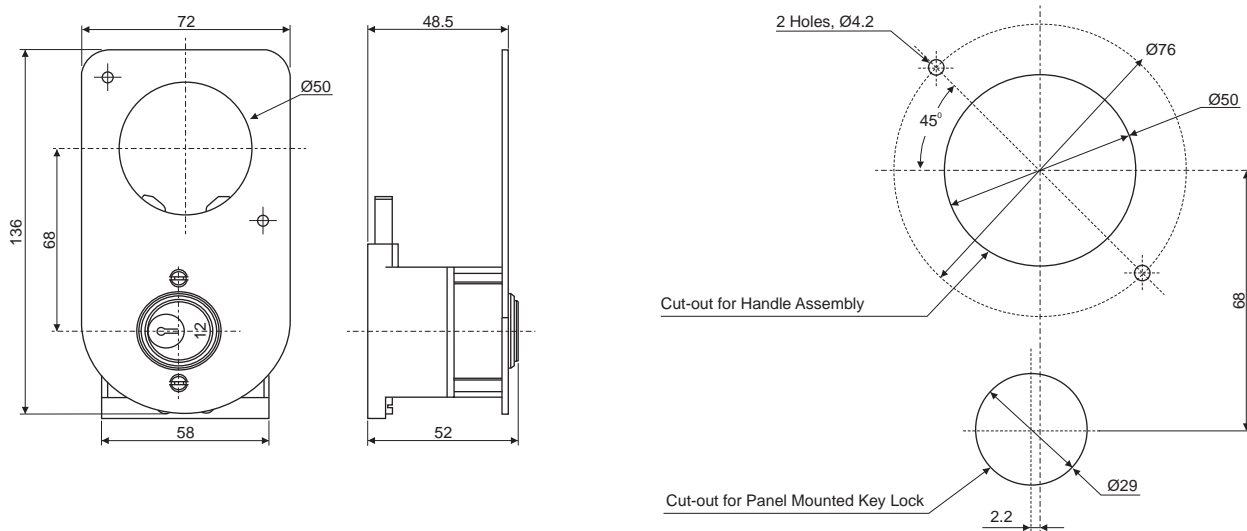
All dimension are in mm

MCCB with EOM



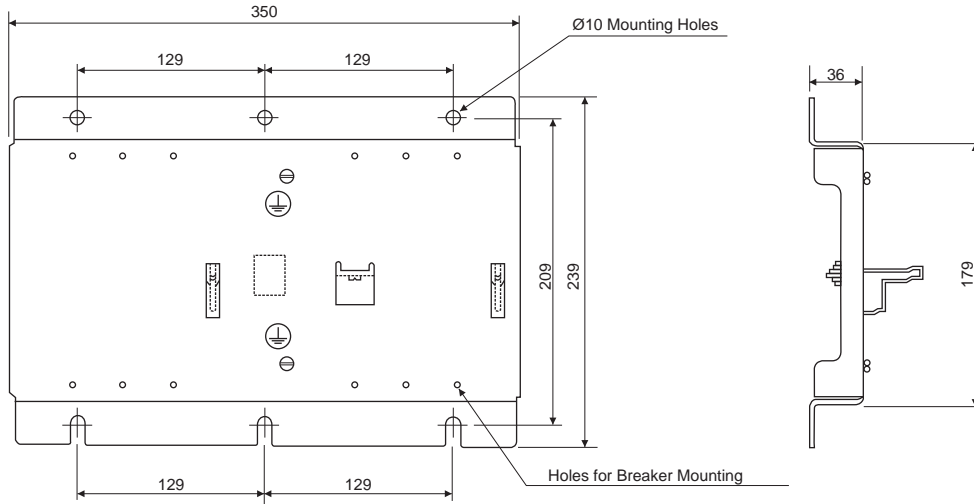
| Type | Dimensions in mm | | |
|-------------|------------------|------|-------|
| | A | B | C |
| For DN2 EOM | 205 | 18 | 112.3 |
| For DN3 EOM | 226 | 46.5 | 147.3 |

Panel Mounted Key Lock

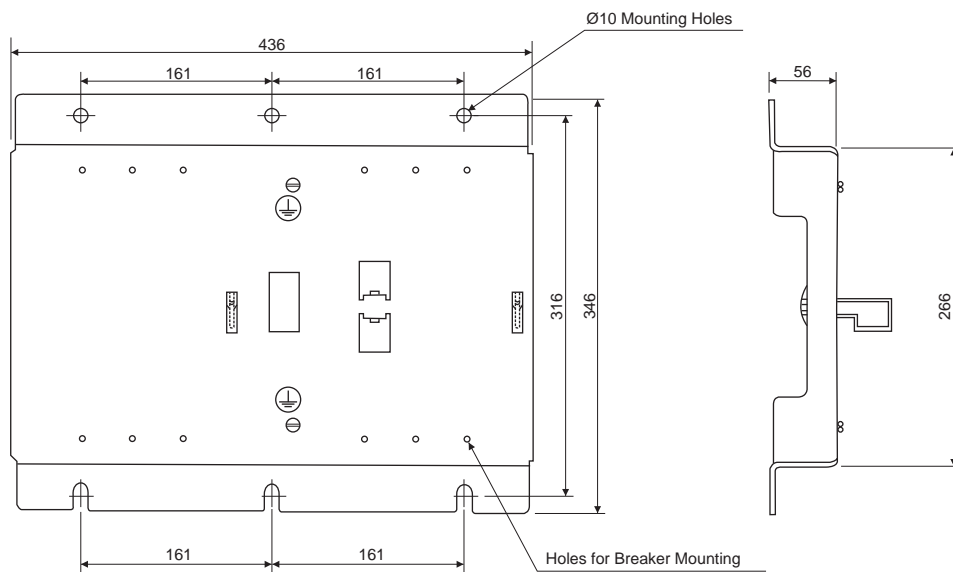


All dimension are in mm

DN2 MIL Kit

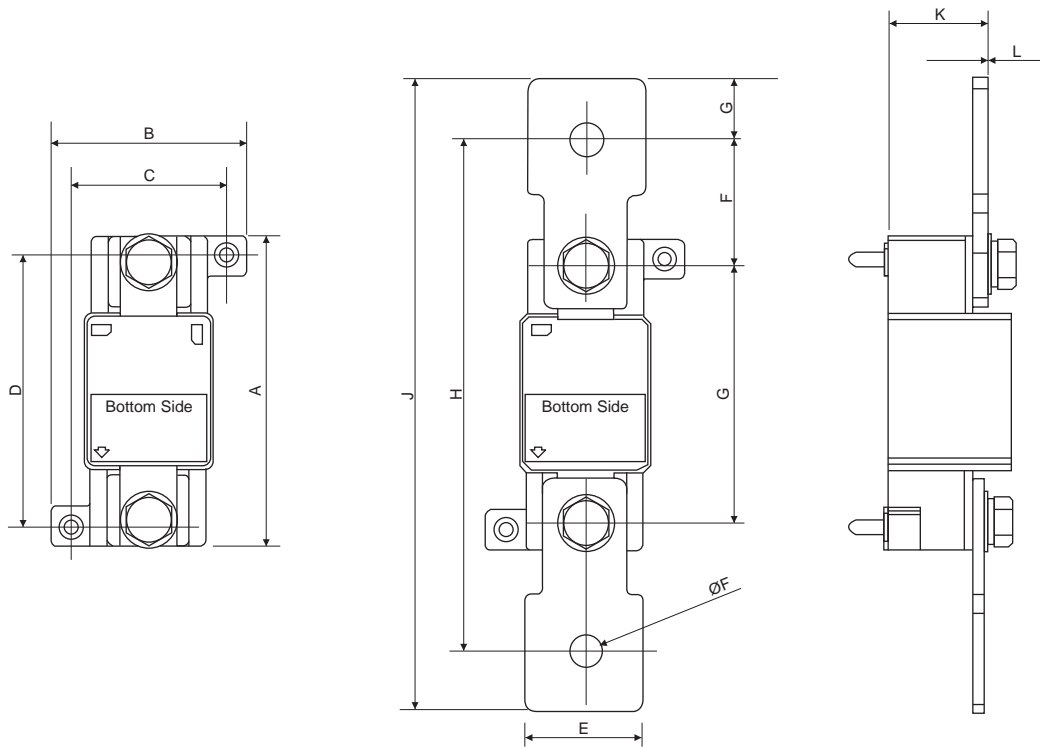


DN3 MIL Kit



All dimension are in mm

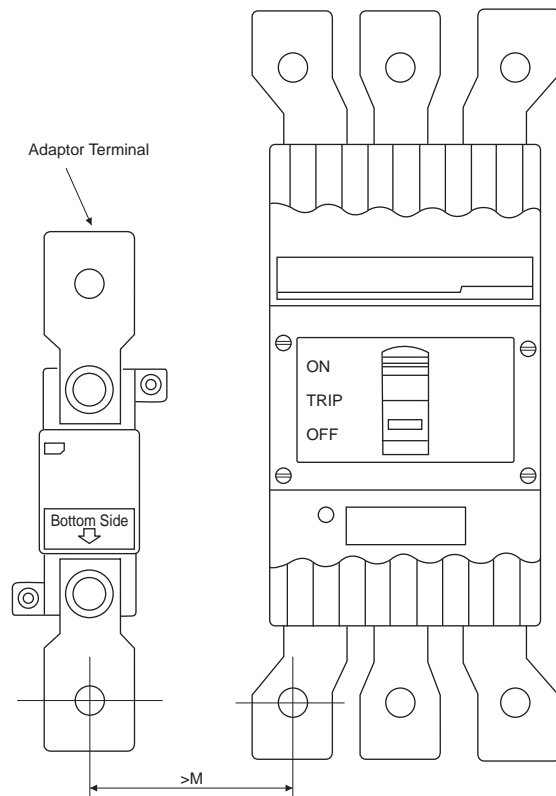
External Neutral CTs



| | A | B | C | D | E | F | G |
|----------|------|----|----|------|----|------|------|
| DN2 250A | 93 | 59 | 47 | 81 | 35 | 10.2 | 77 |
| DN3 400A | 93.5 | 58 | 46 | 81.5 | 40 | 13 | 63.5 |
| DN3 630A | 93.5 | 58 | 46 | 81.5 | 40 | 10.5 | 63.5 |

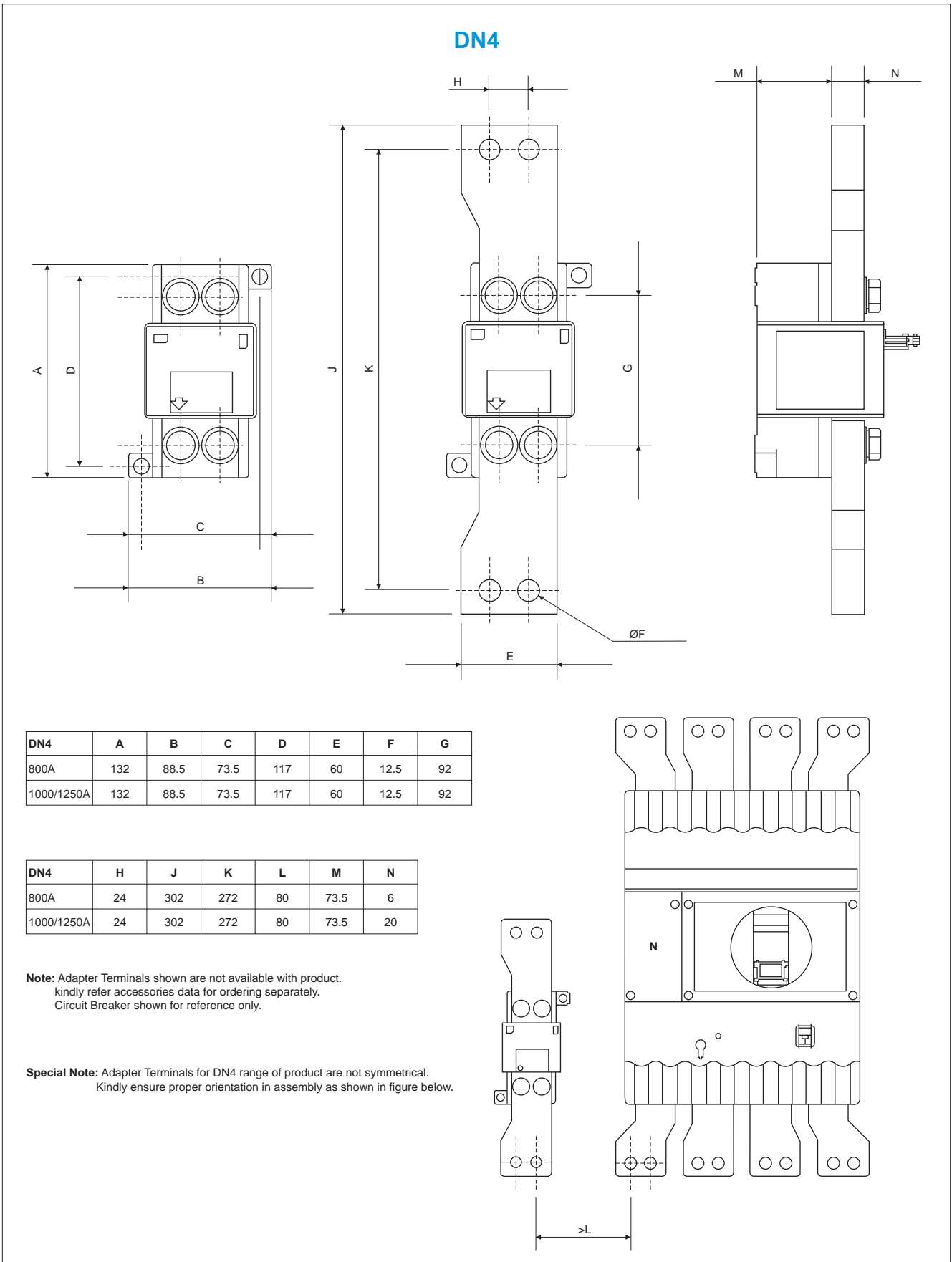
| | H | J | K | L | M |
|----------|-------|-------|----|---|----|
| DN2 250A | 153 | 189 | 26 | 4 | 55 |
| DN3 400A | 153.5 | 199.5 | 39 | 5 | 60 |
| DN 630A | 173.5 | 219.5 | 39 | 5 | 60 |

Note: Adaptor Terminals shown are not available with product. kindly refer accessories data for ordering separately. Circuit Breaker shown for reference only.



All dimension are in mm

External Neutral CTs



All dimension are in mm