



TBX Series Moulded Case Circuit Breaker (MCCB)

Product Code of TBX Series Moulded Case Circuit Breaker (Thermal-magnetic type)

| Basic nominal specifications | Constitutional functions | Number of Poles | Rated Current | Internal accessories |
|------------------------------|---|---|-------------------|----------------------|
| 63L | Blank: for Power distribution; M: for Motor protection | 3=3P | 016=16A | 080=L |
| 63M | | A: 4 poles, no overcurrent tripping components are installed on the N pole, which is always connected, and it is not switched on or off along with the other three poles; | 020=20A | 101=S (AC230V) |
| 63H | | B: 4 poles, no overcurrent tripping components are installed on the N pole, which is switched on or off along with the other three poles, the N pole is switched on first then off; | 025=25A | 102=S (AC400V) |
| 125L | | C: 4 poles, the N pole is equipped with an overcurrent tripping component, and the N pole is switched on or off along with the other three poles; | 032=32A | 103=S (AC110V) |
| 125M | | D: 4 poles, the N pole is equipped with an overcurrent tripping component, and the N pole is always on, and it is not switched on or off along with the other three poles; | 040=40A | 104=S (AC24V) |
| 125H | | | 050=50A | 105=S (DC24V) |
| 250L | | | 063=63A | 301=U (AC230V) |
| 250M | | | 080=80A | 302=U (AC400V) |
| 250H | | | 100=100A | 200=X |
| 400L | | | 125=125A | 181=L+S (AC230V) |
| 400M | | | 140=140A | 182=L+S (AC400V) |
| 400H | | | 160=160A | 183=L+S (AC110V) |
| 630L | | | 180=180A | 184=L+S (AC24V) |
| 630M | | | 200=200A | 185=L+S (DC24V) |
| 630H | | | 225=225A | 280=L+X |
| 800L | | | 250=250A | 381=L+U (AC230V) |
| 800M | | | 315=315A | 382=L+U (AC400V) |
| 800H | | 350=350A | 401=S (AC230V) +X | |
| | | 400=400A | 402=S (AC400V) +X | |
| | | 500=500A | 403=S (AC110V) +X | |
| | | 630=630A | 404=S (AC24V) +X | |
| | | 700=700A | 405=S (DC24V) +X | |
| | | 800=800A | 701=U (AC230V) +X | |
| | | | 702=U (AC400V) +X | |
| | | | 481=A+S (AC230V) | |
| | | | 482=A+S (AC400V) | |
| | | | 483=A+S (AC110V) | |
| | | | 484=A+S (AC24V) | |
| | | | 485=A+S (DC24V) | |
| | | | 780=U (AC230V) +A | |
| | | | 781=U (AC400V) +A | |
| | | | 600=X (左) +X (右) | |
| | | | 680=X+A | |
| | | | 800=A | |
| | | | 880=A+A | |

Note:
X-XAUX: Auxiliaries
L-ALT: Alert
A-AUX+ALT: Auxiliary alert
S-SHT: Shunt
U-UVT: Undervoltage

MCCB TBX Series

Applicable Scope and Purpose

TBX Series Moulded Case Circuit Breaker (hereinafter referred to as “MCCB”) is a new type of circuit breaker developed by our Company with internationally advanced design and manufacture technologies. Its rated insulation voltage is 1000V, suitable for infrequent conversion and infrequent starting of motor in circuits of AC 50Hz, rated operating voltage 690V and below, rated operating current up to 800A. The circuit breaker has overload, short-circuit and undervoltage protection functions to protect the circuits and power supply from damage.

This series of circuit breakers are featured with compact structure, small size, high breaking, short arcing, complete internal and external accessories.

Compliance with standards: IEC60947-1, GB/T14048.1 General Provisions
 IEC60947-2, GB/T 14048.2 Low-voltage Circuit Breakers
 IEC60947-4, GB/T 14048.4 Electromechanical circuit breakers and motor starters
 IEC60947-5-1, GB/T 14048.5 Electromechanical control circuit devices



Normal operating conditions and installation conditions

- ◆ The altitude of the installation location shall not exceed 2000m;
- ◆ The ambient air temperature shall be -5℃ ~ +40℃, and the average temperature of 24 hours shall not exceed +35℃;
- ◆ The relative air humidity at the installation location shall not exceed 50% at the maximum temperature of +40℃. At a lower temperature, the higher relative humidity may be higher, and the monthly mean minimum temperature of the wettest month shall not exceed +25℃; the mean maximum relative humidity of the month shall not exceed 90%, and the condensation occurs on the surface of the product due to temperature changes shall be considered.
- ◆ Pollution level: 3
- ◆ The installation category of the main circuit and undervoltage trip unit of the MCCB is III, and that of the other auxiliary circuits and control circuits is II.
- ◆ Applicable electromagnetic environment: A
- ◆ Capable of withstanding the effects of humid air, salt spray, oil, mold, and nuclear industrial environment
- ◆ Maximum installation inclination: ± 22.5
- ◆ MCCB can work reliably when it is subjected to normal vibration of the ship.
- ◆ MCCB can work reliably under earthquake conditions (4g)
- ◆ MCCB shall be installed in a place where there is no danger of explosion and no conductive dust, no factors that would corrode metal or destroy the insulation.

Tripping method and accessory codes

| Tripping method | Category of Accessories | | | | | | |
|----------------------|-------------------------|--------------------|------------------------|------------------------------------|--|--------------------------------|---|
| | Shunt trip unit | Auxiliary contacts | Undervoltage trip unit | Shunt trip unit Auxiliary contacts | Shunt trip unit Undervoltage trip unit | Two sets of Auxiliary contacts | Auxiliary contacts Undervoltage trip unit |
| Electromagnetic trip | 210 | 220 | 230 | 240 | 250 | 260 | 270 |
| Complex trip | 310 | 320 | 330 | 340 | 350 | 360 | 370 |

| Tripping method | Category of Accessories | | | | | | |
|----------------------|-------------------------|--------------------------------|-----------------------------------|---------------------------------------|---|---|--|
| | Alarm contacts | Shunt trip unit Alarm contacts | Auxiliary contacts Alarm contacts | Undervoltage trip unit Alarm contacts | Shunt trip unit Alarm contacts Auxiliary contacts | Two sets of Auxiliary contacts Alarm contacts | Auxiliary contacts Undervoltage trip unit Alarm contacts |
| Electromagnetic trip | 208 | 218 | 228 | 238 | 248 | 268 | 278 |
| Complex trip | 308 | 318 | 328 | 338 | 348 | 368 | 378 |

Note: 1. If the first digit of the tripping method and the internal accessory code is 2, it indicates the electromagnetic (instantaneous) trip unit, if it's 3, it indicates the thermal-electromagnetic (complex) trip unit; the last two digits indicate the internal accessory code, 00 indicates that there is no accessories.

2. For TBX-400, 630, and 800, the auxiliary contacts in the 248, 348, 278, and 378 specifications are a pair of contacts (ie, one normally on and one normally off), and the auxiliary contacts in the 268 and 368 specifications are three pairs of contacts (ie, three normally on, three normally off)

◆ Sectional area and the corresponding rated current of the connecting lines

| | | | | | | | | | | | | | |
|---|-------|----|----|-------|----|----|-----|---------|-----|----------------|-----|---------|-----|
| Rated current (A) | 16、20 | 25 | 32 | 40、50 | 63 | 80 | 100 | 125、140 | 160 | 180、200 225 | 250 | 315、350 | 400 |
| Sectional area of the line (mm ²) | 2.5 | 4 | 6 | 10 | 16 | 25 | 35 | 50 | 70 | 95 | 120 | 185 | 240 |

| Rated current (A) | Copper bar | | | | Copper bar | | | |
|-------------------|-----------------|--|--|--|-----------------|--|--|--|
| | Number of lines | | Sectional area of each line (mm ²) | | Number of lines | | Sectional area of each line (mm ²) | |
| 500 | 2 | | 150 | | 2 | | 30×5 | |
| 630 | 2 | | 185 | | 2 | | 40×5 | |
| 700 | 2 | | 240 | | 2 | | 50×5 | |
| 800 | 2 | | 240 | | 2 | | 50×5 | |

MCCB TBX Series

■ Main technical performance indicators of TBX circuit breakers (thermomagnetic type)

| Frame capacity (AF) | 63 | | | 125 | | | 250 | | | 400 | | | 630 | | | 800 | | | | | | | | | | | | | | |
|--|-------------------------|-----------------|----|---------------------------------|-----------------|----|---------------------------------|-----------------|----|-------------------------|-----------------|----|-------------------------|-----------------|----|-------------------------|-----------------|----|-----|---|---|---|---|---|---|---|---|---|---|---|
| Type | TBX-63 | | | TBX-125 | | | TBX-250 | | | TBX-400 | | | TBX-630 | | | TBX-800 | | | | | | | | | | | | | | |
| Breaking level | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H | | | | | | | | | | | | |
| Number of poles | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 |
| Rated current (A) | 10,16,20,25,32,40,50,63 | | | 16,20,25,32,40,50,63,80,100,125 | | | 100,125,140,160,180,200,225,250 | | | 225,250,315,350,400 | | | 400,500,630 | | | 630,700,800 | | | | | | | | | | | | | | |
| Reference ambient temperature 40 °C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rated impulse withstand voltage | 12 | | | 12 | | | 12 | | | 12 | | | 12 | | | 12 | | | | | | | | | | | | | | |
| Rated insulation voltage Ui (VAC) | 1000 | | | 1000 | | | 1000 | | | 1000 | | | 1000 | | | 1000 | | | | | | | | | | | | | | |
| Rated operating voltage Ue (VAC) IEC | 400/690 | | | 400/690 | | | 400/690 | | | 400/690 | | | 400/690 | | | 400/690 | | | | | | | | | | | | | | |
| Rated limit short-circuit breaking capacity Icu (kA) | AC690V | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | | | | | | | | | | | |
| | AC400V | 35 | 50 | 65 | 35 | 65 | 85 | 45 | 65 | 85 | 50 | 65 | 100 | 65 | 85 | 100 | 65 | 85 | 100 | | | | | | | | | | | |
| Rated service short-circuit breaking capacity Ics (kA) | AC690V | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | | | | | | | | | | |
| | AC400V | 25 | 35 | 50 | 25 | 50 | 65 | 35 | 50 | 65 | 35 | 50 | 65 | 42 | 65 | 85 | 42 | 65 | 85 | | | | | | | | | | | |
| Overload trip method | Thermal-electromagnetic | | | Thermal-electromagnetic | | | Thermal-electromagnetic | | | Thermal-electromagnetic | | | Thermal-electromagnetic | | | Thermal-electromagnetic | | | | | | | | | | | | | | |
| Endurance | Mechanical | 20000 | | | 20000 | | | 20000 | | | 10000 | | | 10000 | | | 10000 | | | | | | | | | | | | | |
| | Electrical | 8000 | | | 8000 | | | 8000 | | | 7500 | | | 7500 | | | 7500 | | | | | | | | | | | | | |
| Wiring method | Front-panel wiring | ●Crimp terminal | | | ●Crimp terminal | | | ●Crimp terminal | | | ●Crimp terminal | | | ●Crimp terminal | | | ●Crimp terminal | | | | | | | | | | | | | |
| | Back-panel wiring | ★ | | | ★ | | | ★ | | | ★ | | | ★ | | | ★ | | | | | | | | | | | | | |
| | Plug-in wiring | ★ | | | ★ | | | ★ | | | ★ | | | ★ | | | ★ | | | | | | | | | | | | | |

★ Optional

Note: The N poles of 4-pole products are on the right

Retention characteristics

The thermal type trip unit of the circuit breaker has the inverse time limit specificity; the electromagnetic trip unit is instantaneous, and the characteristics are shown in the following table.

◆ For Power Distribution

| Rated current of the circuit breaker (A) | Thermal type trip unit (ambient temperature +40°C) | | Action current (A) of Electromagnetic trip unit |
|--|--|-----------------------------|---|
| | 1.05In (Cold) Idle time (h) | 1.3In (Hot) Action time (h) | |
| 10 ≤ In ≤ 63 | ≤ 1 | ≤ 1 | 10In ± 20% |
| 63 < In ≤ 800 | ≤ 2 | ≤ 2 | |

◆ For Motor Protection

| Rated current of frame size (A) of circuit breakers | Thermal release (ambient temperature +40 ° C) | | | | | Action current (A) of Electromagnetic trip unit |
|---|---|-----------------------------|-------------------------------|------------------------------|----------------|---|
| | 1.0In (Cold) Idle time (h) | 1.2In (Hot) Action time (h) | 1.5In (Hot) Action time (min) | 7.2In (Cold) Action time (s) | Tripping level | |
| 63, 125, 250 | > 2 | ≤ 2 | ≤ 4 | 4 < Tp ≤ 10 | 10 | 12In ± 20% |
| 400, 630 | | | ≤ 8 | 6 < Tp ≤ 20 | 20 | |

◆ Power consumption sheet

| Type | Power-on Current (A) | Total power consumption of 3-/4-pole breakers (W) | |
|---|----------------------|---|-----------------------|
| | | Front-panel / Back-panel wiring | Plug-in buckle wiring |
| TBX-63 Direct thermal type (10 ~ 25A) | 25 | 2.6 | 2.7 |
| TBX-125 Direct thermal type (10 ~ 25A) | 25 | 1.7 | 1.8 |
| TBX-63 Indirect thermal type (32 ~ 63A) | 63 | 16.7 | 16.8 |
| TBX-125 Indirect thermal type (32 ~ 125A) | 125 | 27 | 27.2 |
| TBX-250 | 250 | 33.4 | 33.6 |
| TBX-400 | 400 | 48 | 48.2 |
| TBX-630 | 630 | 107.2 | 107.4 |
| TBX-800 | 800 | 96 | 73.7(In=700A) |

◆ Derating factors of rated operating current of thermal trip unit varying with ambient temperatures

| Circuit breaker model | Ambient temperature | | | | |
|-----------------------|---------------------|--------|--------|--------|--------|
| | +40°C | +45°C | +50°C | +55°C | +60°C |
| TBX-63 | 1.0In | 0.94In | 0.88In | 0.80In | 0.72In |
| TBX-125 | 1.0In | 0.95In | 0.89In | 0.84In | 0.76In |
| TBX-250 | 1.0In | 0.96In | 0.91In | 0.87In | 0.82In |
| TBX-400 | 1.0In | 0.94In | 0.91In | 0.81In | 0.73In |
| TBX-630 | 1.0In | 0.93In | 0.88In | 0.83In | 0.76In |
| TBX-800 | 1.0In | 0.88In | 0.83In | 0.79In | 0.76In |

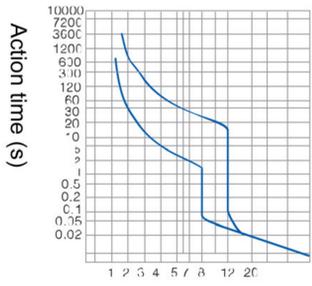
Altitude capacity reduction

◆ If the altitude exceeds 2000m of the applicable operating environment, the electrical performance of the circuit breaker may refer to the following table.

| | | | | |
|--|------|------|------|------|
| Altitude (m) | 2000 | 3000 | 4000 | 5000 |
| Operating withstand voltage | 3000 | 2500 | 2000 | 1800 |
| Modifying coefficient of operating currents | 1 | 0.94 | 0.88 | 0.83 |
| Modifying coefficient of Short-circuit breaking capacity | 1 | 0.83 | 0.71 | 0.63 |

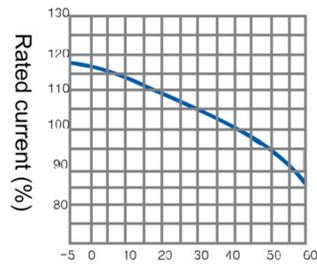
■ Characteristic curve

Note: The following characteristic curves are measured under cold state and three-phase load.



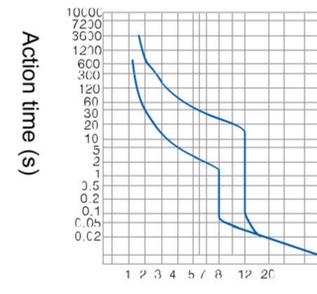
Rated current times

TBX-63 (16A-32A), TBX-125 (16A-32A) action characteristic curve



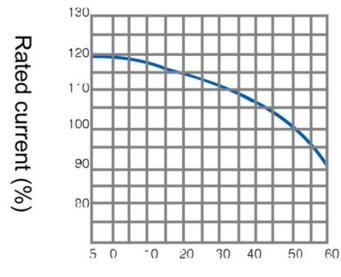
Ambient temperature (°C)

TBX-63 (16A-32A), TBX-125 (16A-32A) temperature compensation curve



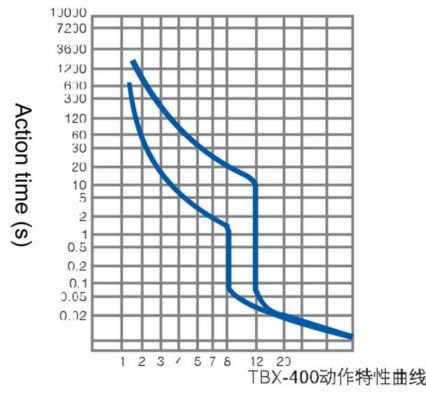
Rated current times

TBX-63 (40A-63A), TBX-125 (40A-125A) action characteristic curve



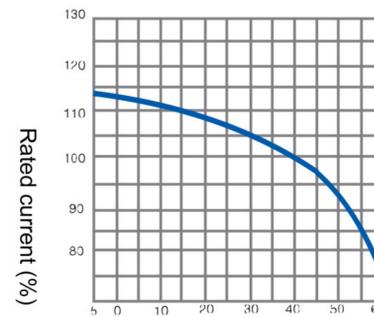
Ambient temperature (°C)

TBX-63 (40A-63A), TBX-125 (40A-125A) temperature compensation curve



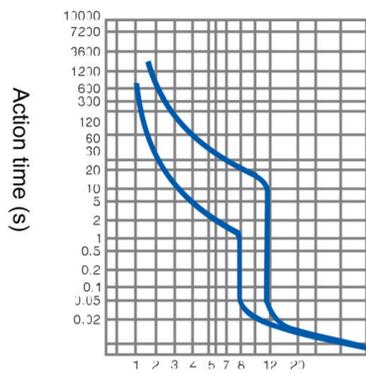
Rated current times

TBX-250 action characteristic curve



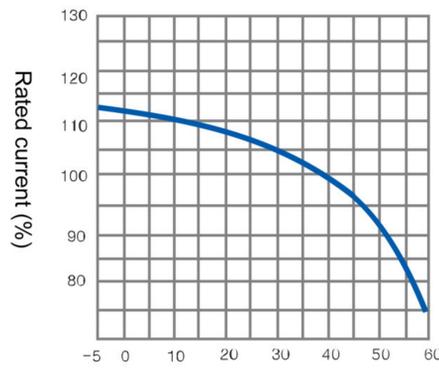
Ambient temperature (°C)

TBX-250 temperature compensation curve



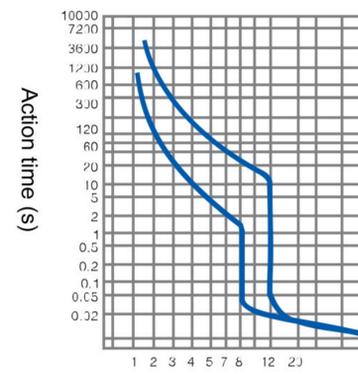
Rated current times

TBX-400 action characteristic curve



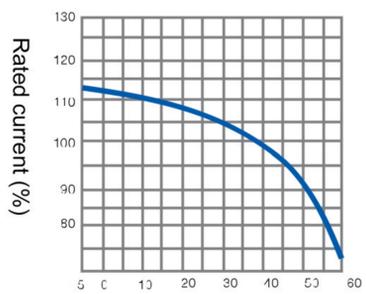
Ambient temperature (°C)

TBX-400 temperature compensation curve



Rated current times

TBX-630/800 action characteristic curve



Ambient temperature (°C)

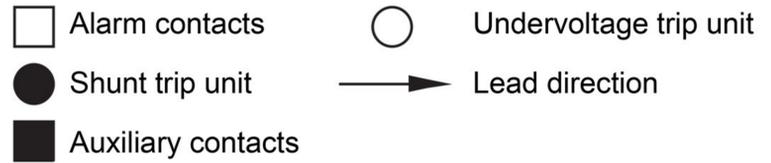
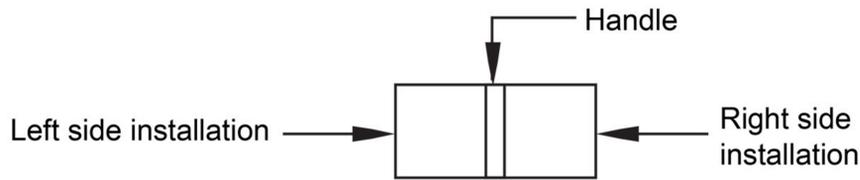
TBX-630/800 temperature compensation curve

MCCB TBX Series

Internal accessories

Electrical accessories for internal accessories of circuit breakers

According to the needs of users, the circuit breaker accessories can be led out directly with wires (wire length is 50cm, if there are special requirements, please explain), or install terminal blocks



| Tripping method and accessory code | Accessory name | Type | | TBX-63 | | TBX-125 | | TBX-250 | | TBX-400 | | TBX-630 | | TBX-800 | |
|------------------------------------|--|-----------------|--|-----------|---|-----------|---|-----------|---|-----------|---|-----------|---|-----------|---|
| | | Number of poles | | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 |
| 208、308 | Alarm contacts | ← □ □ | | ← □ □ | | ← □ □ | | ← □ □ | | ← □ □ | | ← □ □ | | ← □ □ | |
| 210、310 | Shunt trip unit | ← ● □ | | ← ● □ | | ← ● □ | | ← ● □ | | ← ● □ | | ← ● □ | | ← □ ● → | |
| 220、320 | Auxiliary contacts | ← ■ □ | | ← ■ □ | | ← ■ □ | | ← ■ □ | | ← ■ □ | | ← ■ □ | | ← ■ □ | |
| 230、330 | Undervoltage trip unit | □ ○ → | | □ ○ → | | □ ○ → | | □ ○ → | | □ ○ → | | □ ○ → | | ○ □ → | |
| 240、340 | Shunt trip unit Auxiliary contacts | ← ● ■ □ | | ← ● ■ □ | | ← ● ■ □ | | ← ● ■ □ | | ← ● ■ □ | | ← ● ■ □ | | ← ● ■ □ | |
| 250、350 | Shunt trip unit Undervoltage trip unit | ← ● ○ □ | | ← ● ○ □ | | ← ● ○ □ | | ← ● ○ □ | | ← ● ○ □ | | ← ● ○ □ | | ← ● ○ □ | |
| 260、360 | Two sets of Auxiliary contacts | ← ■ □ □ | | ← ■ □ □ | | ← ■ □ □ | | ← ■ □ □ | | ← ■ □ □ | | ← ■ □ □ | | ← ■ □ □ | |
| 270、370 | Auxiliary contacts Undervoltage trip unit | ← ■ □ ○ | | ← ■ □ ○ | | ← ■ □ ○ | | ← ■ □ ○ | | ← ■ □ ○ | | ← ■ □ ○ | | ○ □ ■ → | |
| 218、318 | Shunt trip unit Alarm contacts | ← □ ● □ | | ← □ ● □ | | ← □ ● □ | | ← ● □ □ | | ← □ ● □ | | ← □ ● □ | | ← □ ● □ | |
| 228、328 | Auxiliary contacts Alarm contacts | ← ■ □ □ | | ← ■ □ □ | | ← ■ □ □ | | ← □ ■ □ | | ← □ ■ □ | | ← □ ■ □ | | ← □ ■ □ | |
| 238、338 | Alarm contacts Undervoltage trip unit | ← □ ○ □ | | ← □ ○ □ | | ← □ ○ □ | | ← □ ○ □ | | ← □ ○ □ | | ← □ ○ □ | | ○ □ □ → | |
| 248、348 | Shunt trip unit Alarm contacts Auxiliary contacts | ← ■ □ ● □ | | ← ■ □ ● □ | | ← ■ □ ● □ | | ← ● □ ■ □ | | ← ■ □ ● □ | | ← ■ □ ● □ | | ← ■ □ ● □ | |
| 268、368 | Two sets of Auxiliary contacts Alarm contacts | ← ■ □ □ □ | | ← ■ □ □ □ | | ← ■ □ □ □ | | ← ■ □ □ □ | | ← ■ □ □ □ | | ← ■ □ □ □ | | ← ■ □ □ □ | |
| 278、378 | Alarm contacts Undervoltage trip unit Auxiliary contacts | ← ■ □ ○ □ | | ← ■ □ ○ □ | | ← ■ □ ○ □ | | ← ■ □ ○ □ | | ← ■ □ ○ □ | | ← ■ □ ○ □ | | ○ □ ■ → | |

Note:

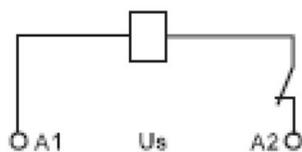
1. 200: indicates circuit breakers with only electromagnetic trip units, 300: indicates a circuit breaker with thermal-electromagnetic trip units
2. For TBX-400, TBX-630 and TBX-800, the auxiliary contacts in 248, 348, 278, 378 specifications are a pair of contacts (ie, one normally on, one normally off), the auxiliary contacts in 268, 368 specifications are three pairs of contacts (ie, three normally on, three normally off).
3. For TBX-63, TBX-125 and TBX-250, the auxiliary contacts in 220, 320, 240, 340, 270, 370 specifications can provide two pairs of contacts, (ie two normally on, two normally off), the auxiliary contacts in 260, 360 specifications can provide three pairs of contacts (ie, three normally on, three normally off), please pay attention when ordering.



■ Accessories and functions (internal accessories)

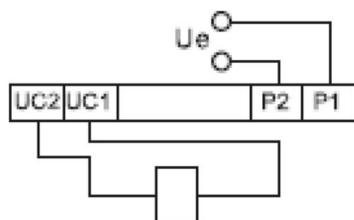
Shunt trip unit

- ◆ May be used for long-distance tripping of circuit breakers;
Note: When a DC24V shunt trip unit is selected, the power supply of the shunt trip terminal must be $\geq 50W$.



Undervoltage trip unit

- ◆ When the power supply voltage drops to 35~70% of the rated voltage, the circuit breaker is instantaneously tripped;
- ◆ When the voltage is $< 35\% U_e$, it shall be able to prevent the circuit breaker from closing; when the voltage is $\geq 85\% U_e$, it shall ensure the reliable close of the circuit breaker;
- ◆ When an undervoltage trip unit is applied, the power supply must be turned on before the circuit breaker can be switched-on or off.



Auxiliary contacts

- ◆ Being used for indicating whether the circuit breaker is in switch on or off status;
- ◆ One set of contacts is used for I_{nm} of 63, 125, 250, which is featured with one contact normally on and one contact normally off;
- ◆ Another set of contracts is used for I_{nm} of 400, 630, 800, which is featured with two contacts normally on and two contracts normally off;

Alarm contacts

- ◆ Being used for indicating the fault trip status of the circuit breaker;
- ◆ The alarm contacts do not operate when the circuit breaker is normally on or off, and only operate under the situation of free trip or the fault trip. When the circuit breaker is reclosed, the alarm contacts return to their original state.



Note: Lead-type ones can be selected for all internal accessories except the undervoltage trip units if the installation dimensions are affected by external terminals.

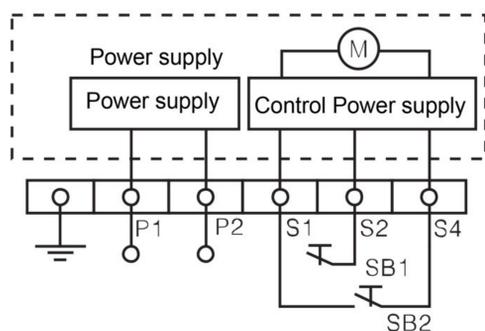
CD2 type electric motor-operated mechanism

- ◆ This can be used for electric switch on and off operations of circuit breakers;



| | | |
|---------------------------------|-----------------|-------------|
| Rated voltage: U_s | AC230V 50Hz | AC400V 50Hz |
| | DC24V、110V、220V | |
| Current of frame size: I_{nm} | 63-250 | 400-800 |
| Starting power (W) | 14 | 35 |
| Endurance (times) | 20000 | 10000 |

Reliable operating range: 85%-110% U_s



Description:

P1-P2: external power inputs;

SB1, SB2: operation button (user-supplied)

Voltage specification: AC50Hz/60Hz 110V, 230V
DC24V, 110V, 220V

Symbol Description:

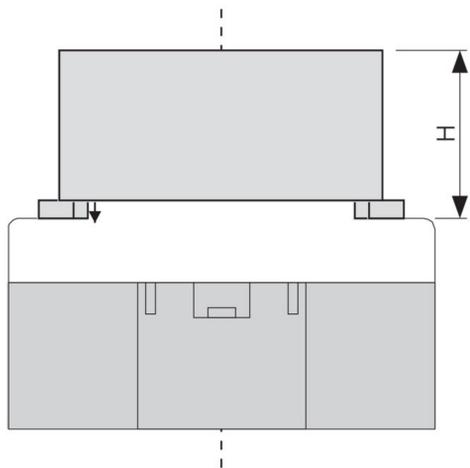
SB1, SB2 are operation buttons (user-supplied)

X is the terminal block, P1 and P2 are external power inputs

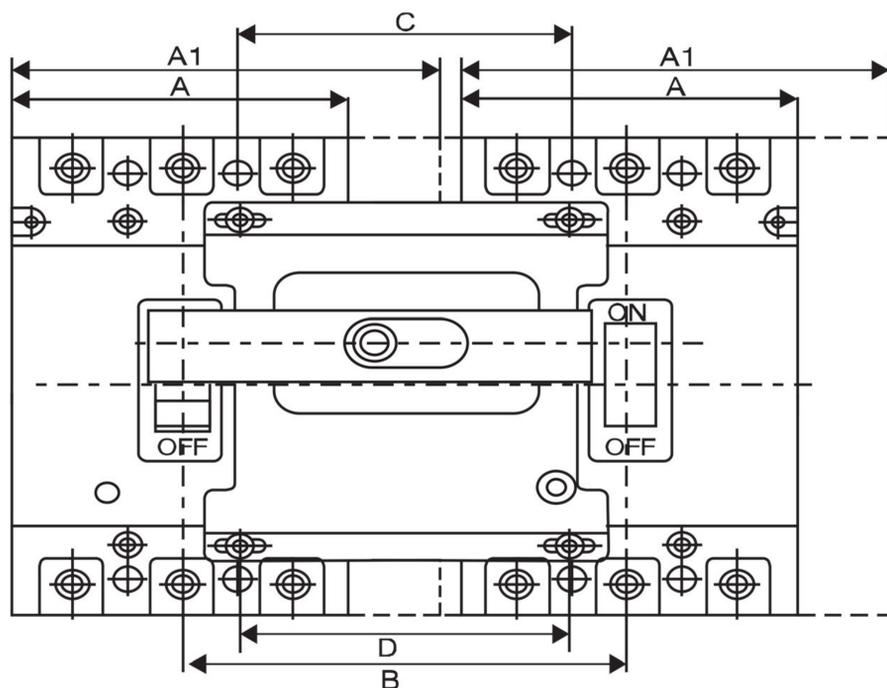
| | | | | | | |
|---------------------------------|----|-----|-----|-----|-----|-----|
| Current of frame size: I_{nm} | 63 | 125 | 250 | 400 | 630 | 800 |
| Hight: H (mm) | 91 | 94 | 94 | 143 | 143 | 147 |

CD2 motor type wiring schematic

Note: The dotted line frame is the wiring diagram of the internal accessories of the circuit breaker.



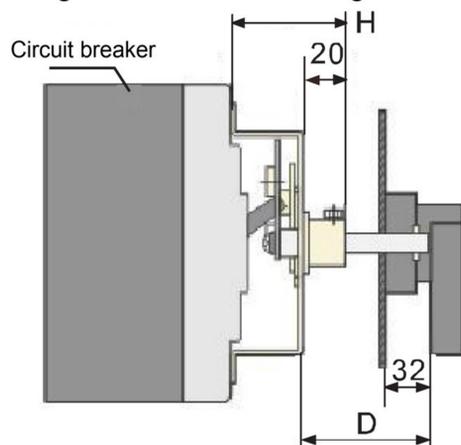
- External Accessories
- ◆ Mechanical interlocking mechanisms of two circuit breakers



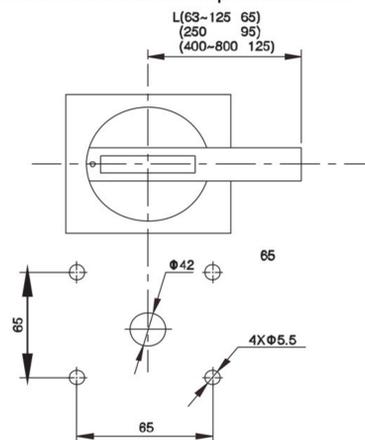
MCCB TBX Series

| Type/Specification | A | A1 | B | C | D |
|--------------------|-----|-----|-----|-----|-----|
| TBX-63 | 78 | — | 102 | 80 | 80 |
| TBX-125 | 92 | — | 120 | 90 | 90 |
| TBX-250 | 107 | — | 135 | 100 | 100 |
| TBX-400 | 150 | — | 190 | 136 | 40 |
| TBX-630 | 182 | — | 220 | 172 | 62 |
| TBX-800 | 210 | — | 240 | 167 | 40 |
| TBX-63/4P | — | 103 | 132 | 80 | 80 |
| TBX-125/4P | — | 122 | 152 | 90 | 90 |
| TBX-250/4P | — | 142 | 173 | 100 | 100 |
| TBX-400/4P | — | 198 | 240 | 136 | 40 |
| TBX-630/4P | — | 240 | 280 | 172 | 62 |
| TBX-800/4P | — | 280 | 310 | 167 | 40 |

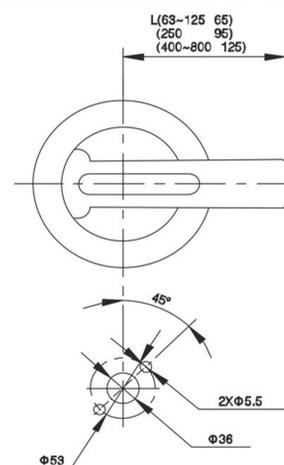
◆ Operating mechanism of turning handles



Installation dimensions for square handles



Installation dimensions for round handles

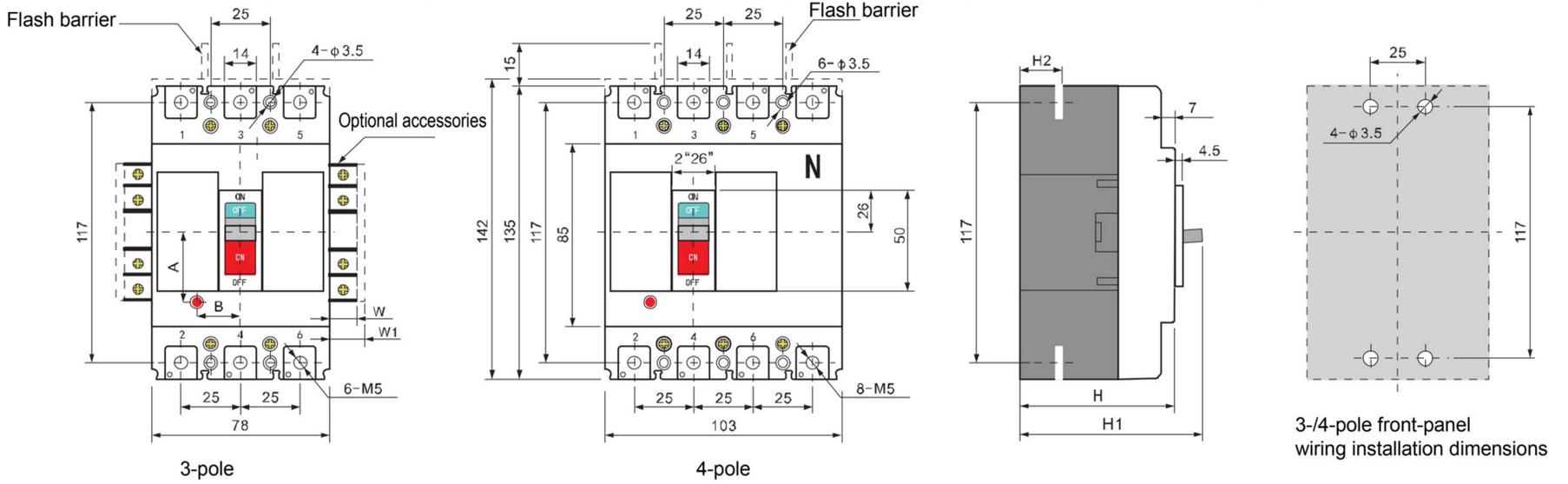


D: The torsion bar of the handles shall not be less than 50mm

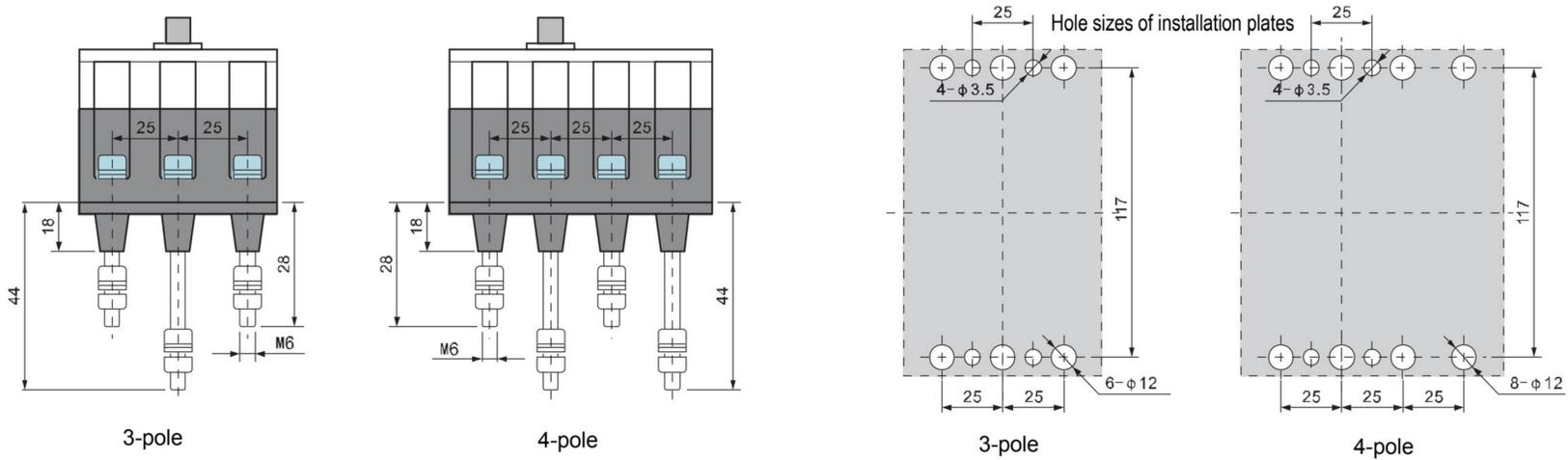
| Type | 63 | 125 | 250 | 400 | 630 | 800 |
|---------------------------------|----|-----|-----|-----|-----|-----|
| TBX installation dimensions (H) | 49 | 51 | 54 | 88 | 89 | 76 |
| TBX installation dimensions (H) | | 56 | 56 | 88 | 63 | 63 |
| TBX installation dimensions (H) | | 56 | 56 | 88 | 63 | 63 |
| Handle dimensions (L) | 65 | | 95 | 125 | | |

1. The square shafts of handles have three kinds of lengths: 50mm, 100mm, and 150mm (special specifications shall be stated when ordering);
2. The 3-pole and 4-pole circuit breakers have the same parameters for turning handles.

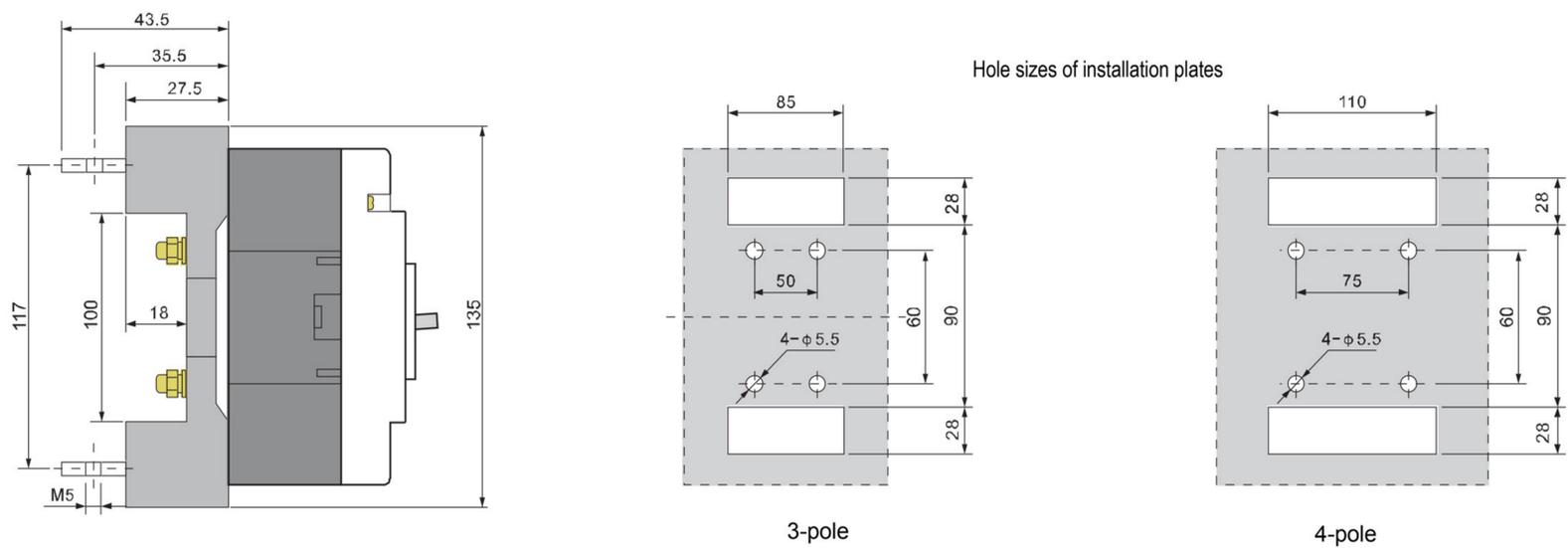
TBX-63 front-panel wiring installation dimensions (for 3- and 4-pole circuit breakers)



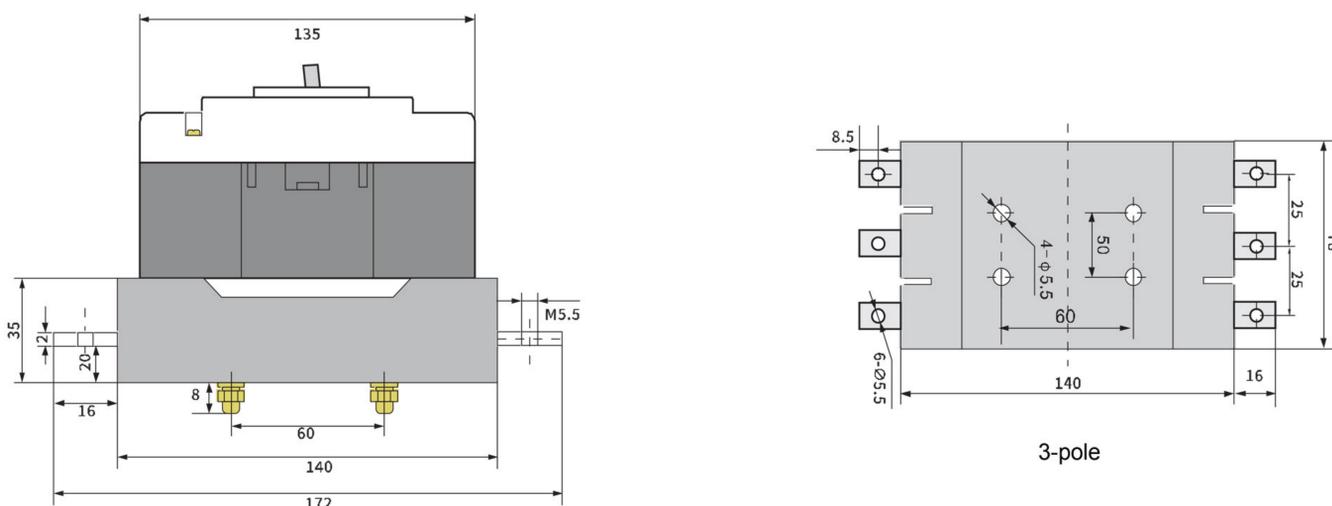
TBX-63 back-panel wiring installation dimensions (for 3- and 4-pole circuit breakers)



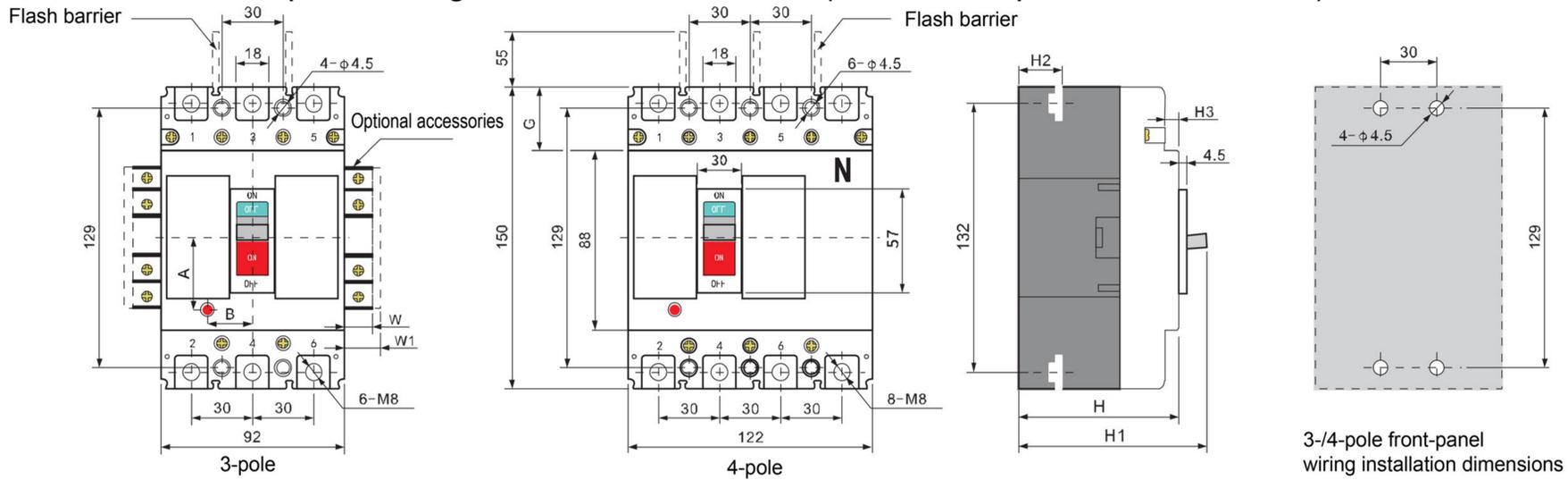
TBX-63 plug-in back-panel wiring installation dimensions (for 3- and 4-pole circuit breakers)



TBX-63 plug-in front-panel wiring installation dimensions (for 3-pole circuit breakers)



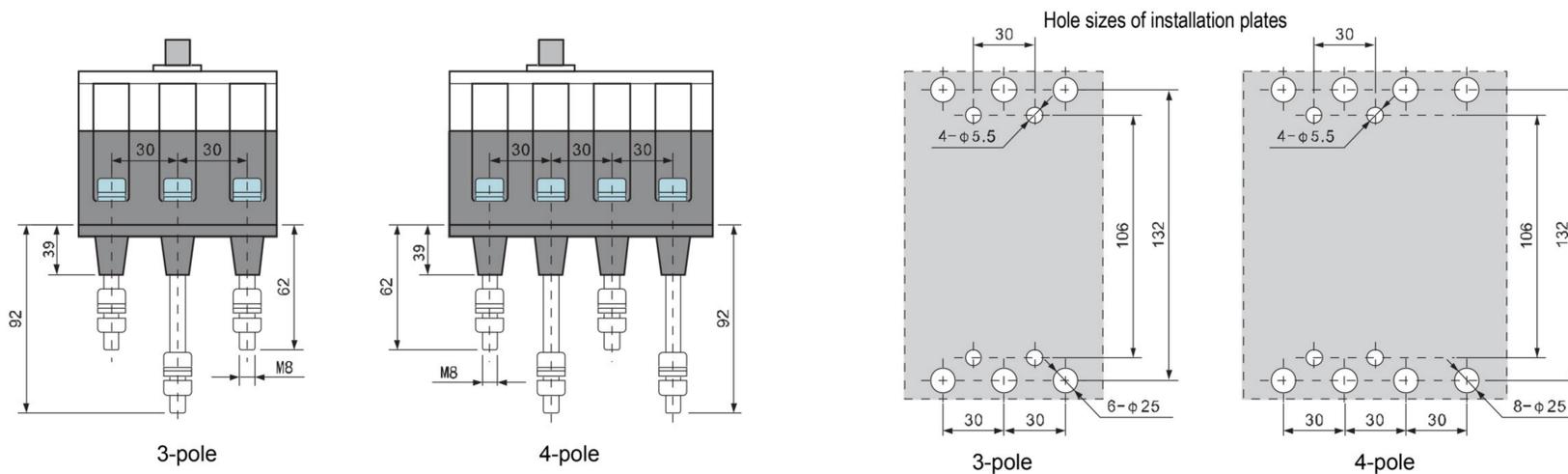
TBX-125 front-panel wiring installation dimensions (for 3- and 4-pole circuit breakers)



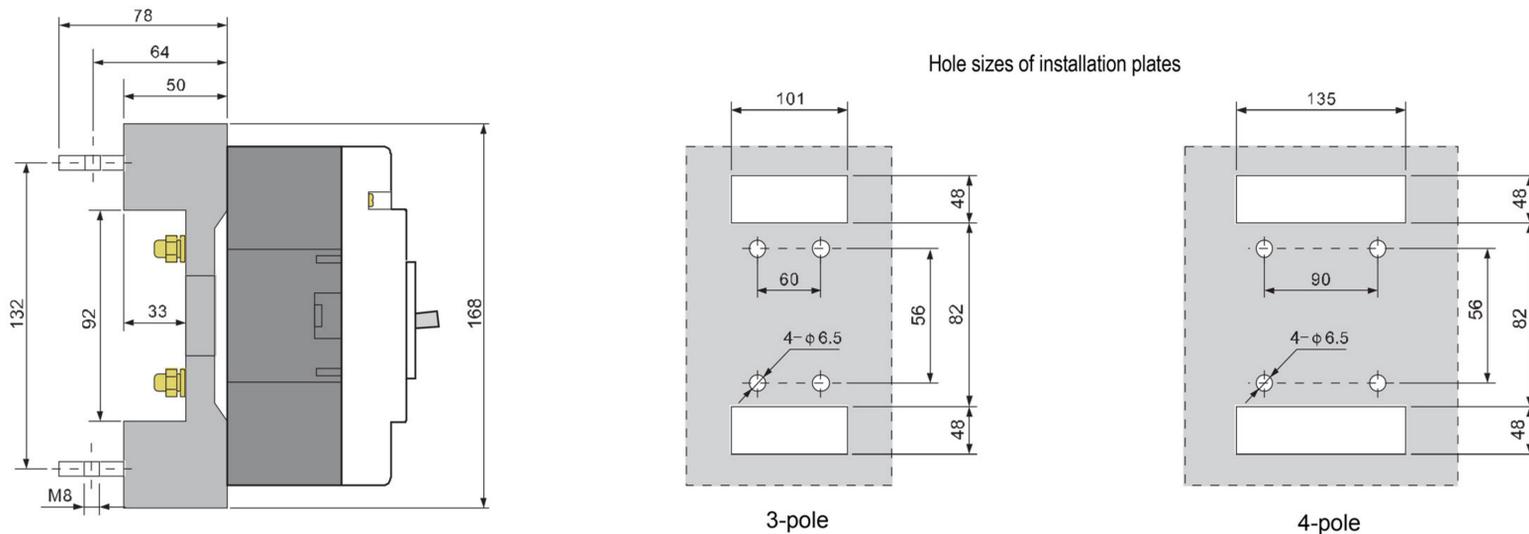
| Type | Product height | | | | | Auxiliary, shunt, alarm widths | Leakage, overload, undervoltage module widths | Trip hole size | |
|---------------|----------------|-----|----|----|----|--------------------------------|---|----------------|----|
| | H | H1 | H2 | H3 | G | W | W1 | A | B |
| TBX-125(L 3P) | 69 | 86 | 24 | 7 | 31 | 17 | 21 | 33 | 20 |
| TBX-125(M3P) | 86 | 104 | | | | | | | |
| TBX-125(LM4P) | | | | | | | | | |

MCCB TBX Series

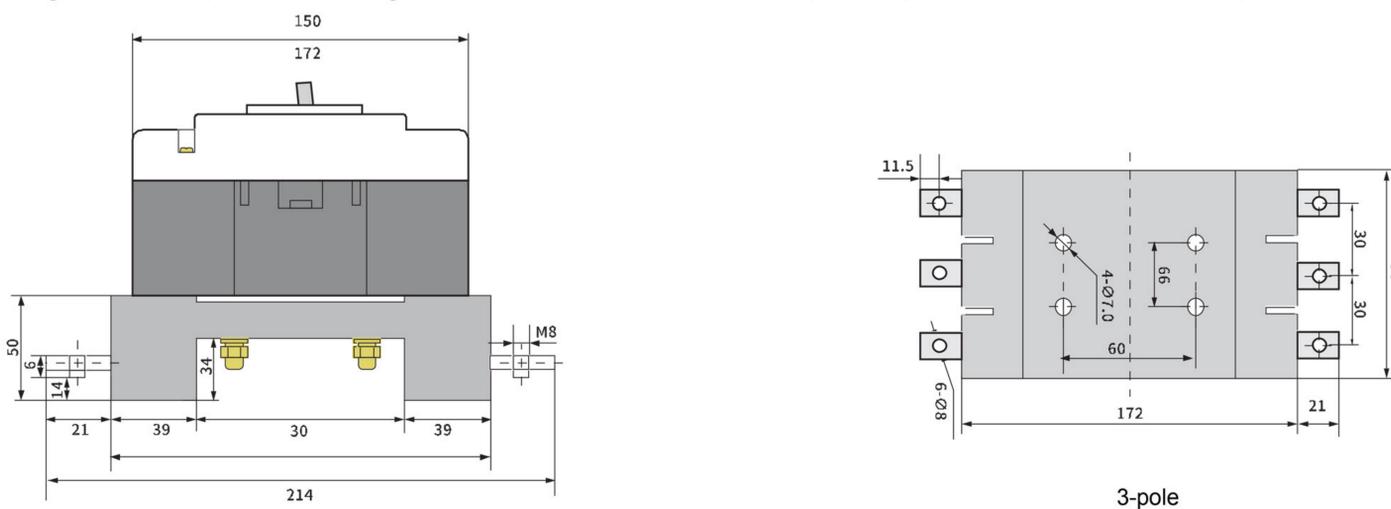
TBX-125 back-panel wiring installation dimensions (for 3- and 4-pole circuit breakers)



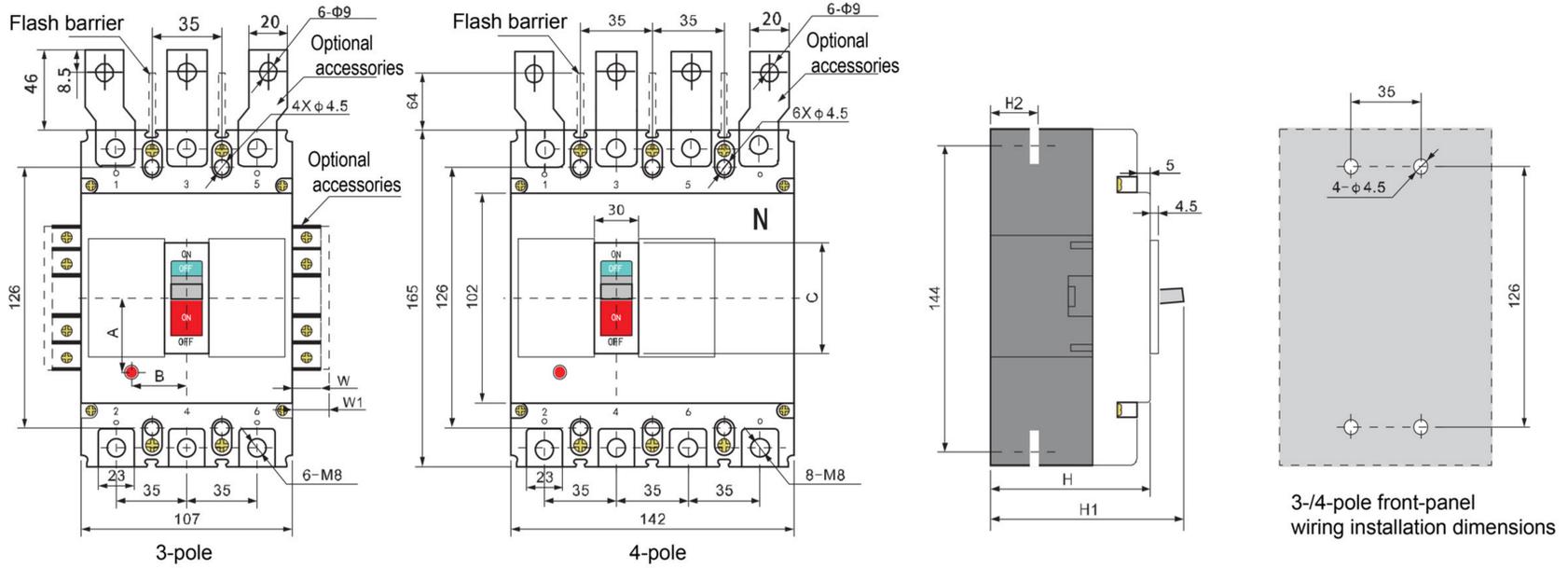
TBX-125 plug-in back-panel wiring installation dimensions (for 3- and 4-pole circuit breakers)



TBX-125 plug-in front-panel wiring installation dimensions (for 3-pole circuit breakers)

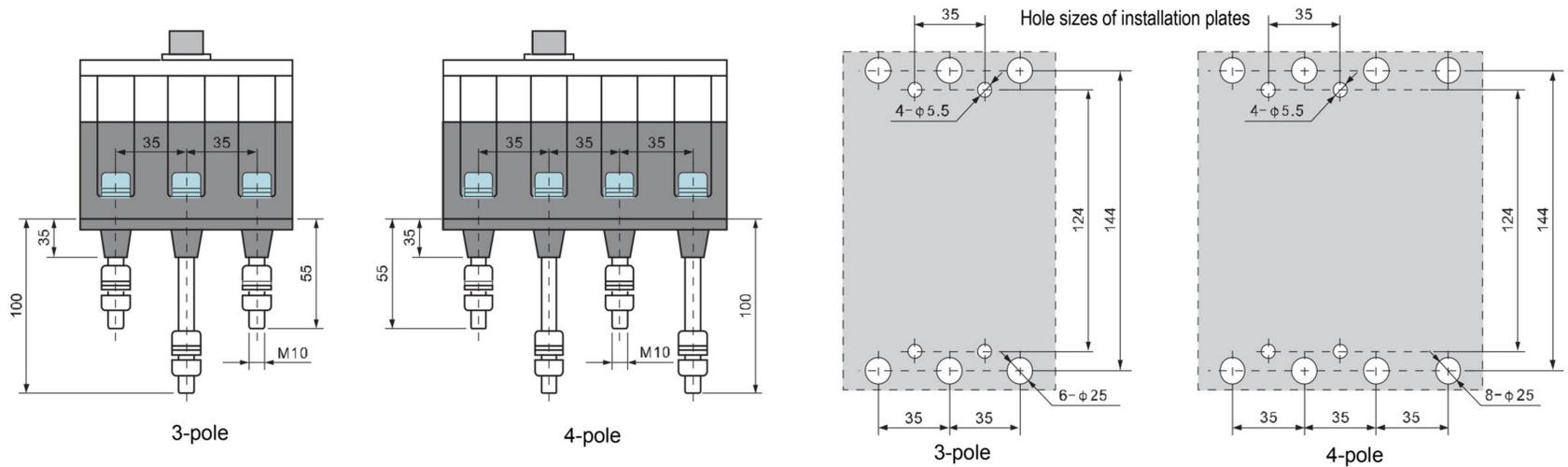


TBX-250 front-panel wiring installation dimensions (for 3- and 4-pole circuit breakers)

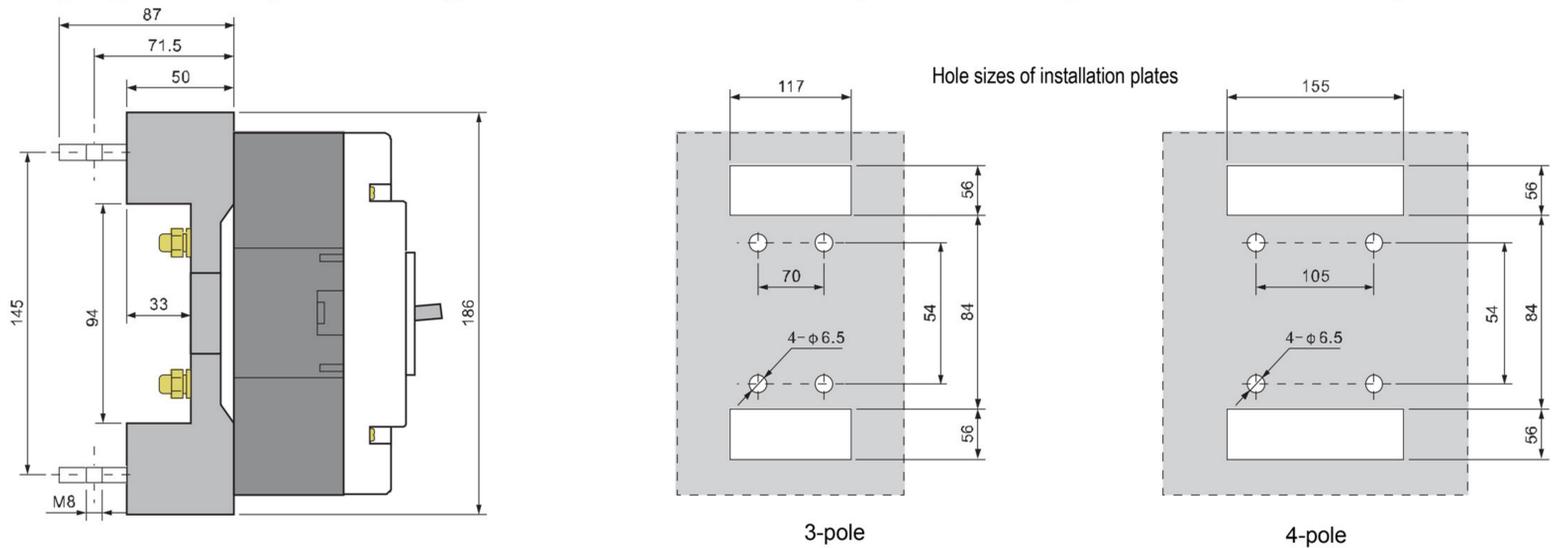


| Type | Product height | | | Auxiliary, shunt, alarm widths | Leakage, overload, undervoltage module widths | Trip hole size | | Handle Hole size |
|----------------|----------------|-----|----|--------------------------------|---|----------------|------|------------------|
| | H | H1 | H2 | W | W1 | A | B | C |
| TBX-250(L\3P) | 86 | 110 | 24 | 17 | 21 | 37 | 23.5 | 62 |
| TBX-250(M\3P) | 103 | 124 | | | | | | |
| TBX-250(L\M4P) | | | | | | | | |

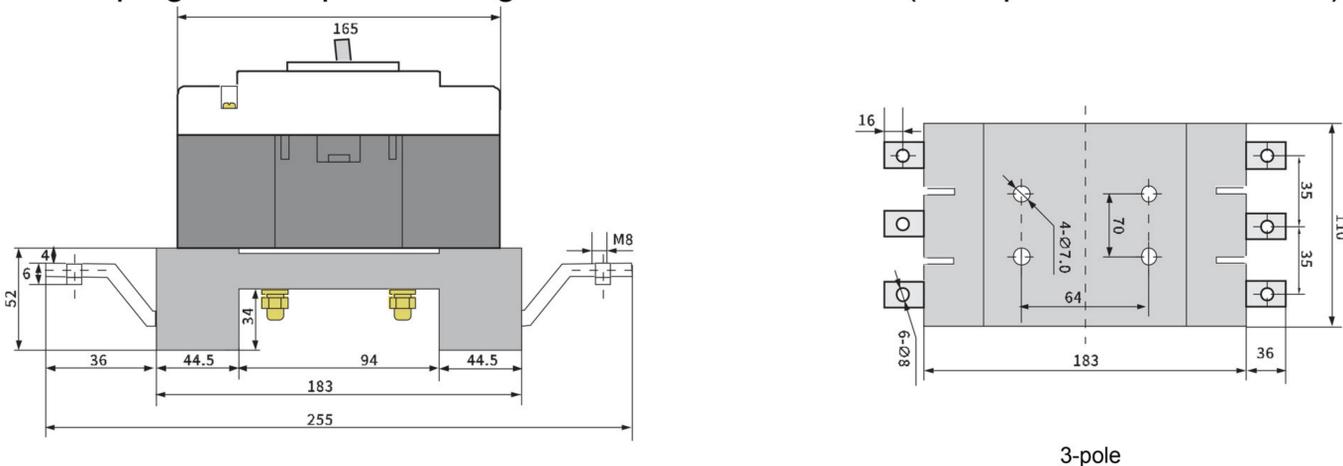
TBX-250 back-panel wiring installation dimensions (for 3- and 4-pole circuit breakers)



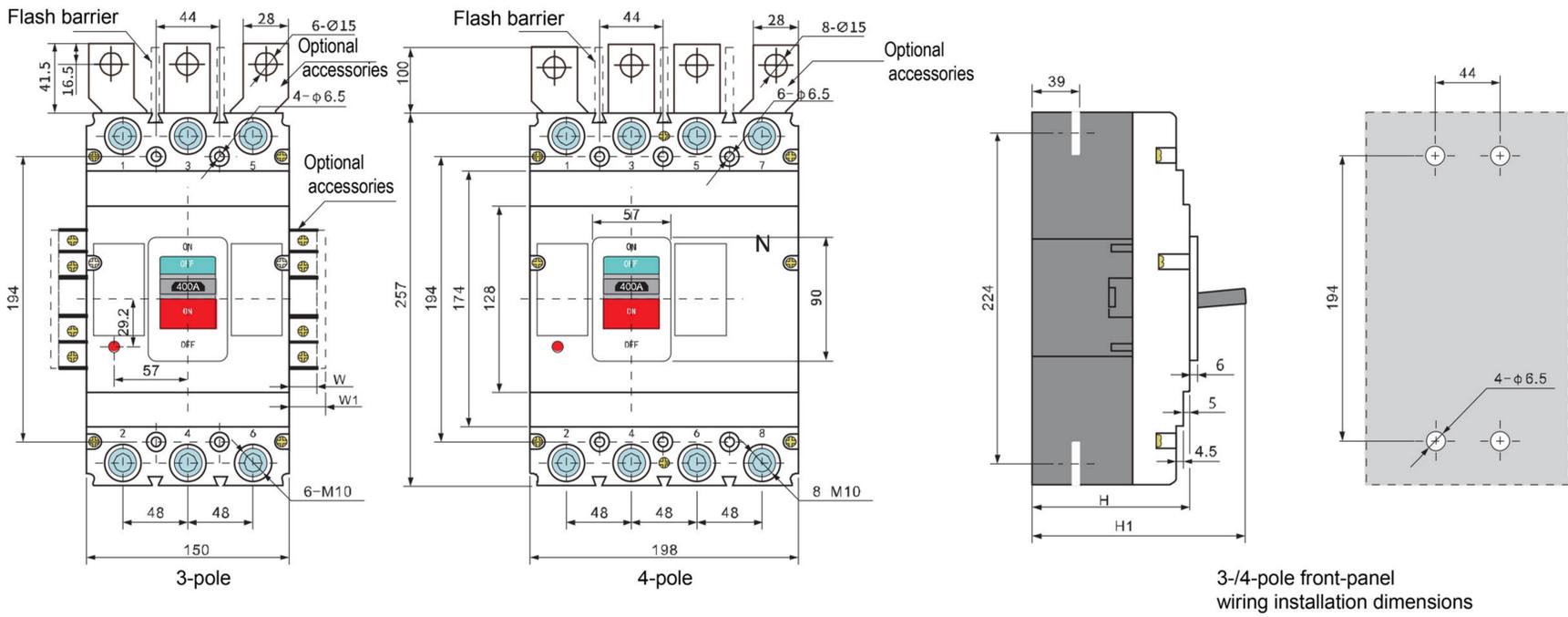
TBX-250 plug-in back-panel wiring installation dimensions (for 3- and 4-pole circuit breakers)



TBX-250 plug-in front-panel wiring installation dimensions (for 3-pole circuit breakers)



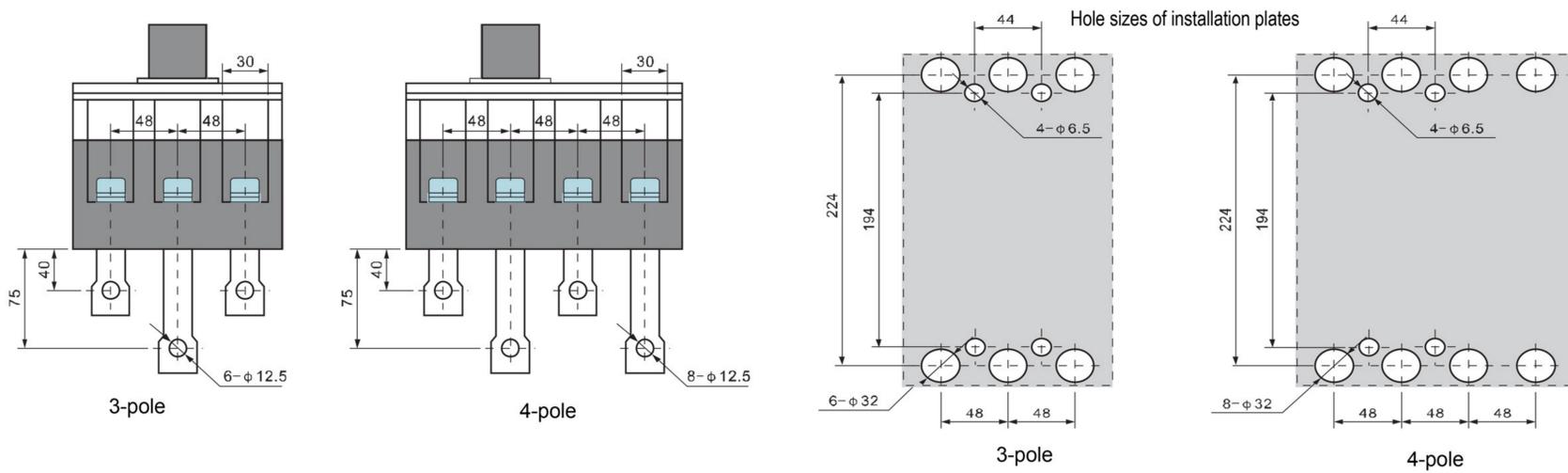
TBX-400 front-panel wiring installation dimensions (for 3- and 4-pole circuit breakers)



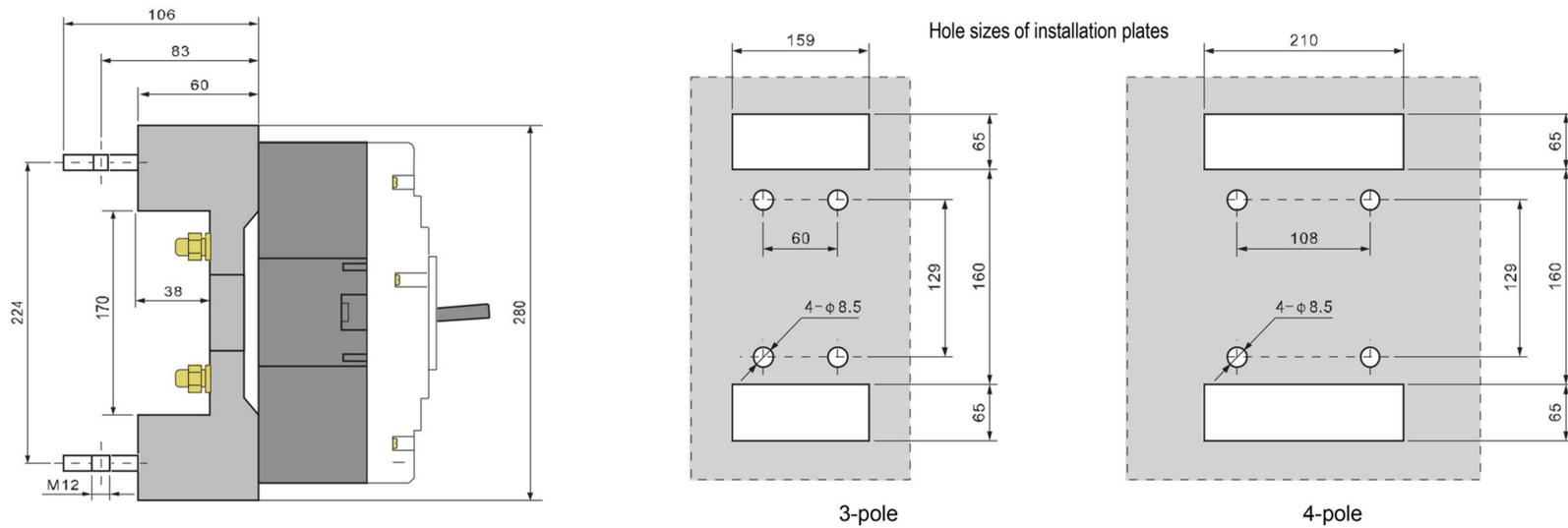
| Type | Product height | | Auxiliary, shunt, alarm widths | Leakage, overload, undervoltage module widths |
|-----------------|----------------|-----|--------------------------------|---|
| | H | H1 | W | W1 |
| TBX-400 (L\M\H) | 108 | 151 | 17 | 21 |

MCCB TBX Series

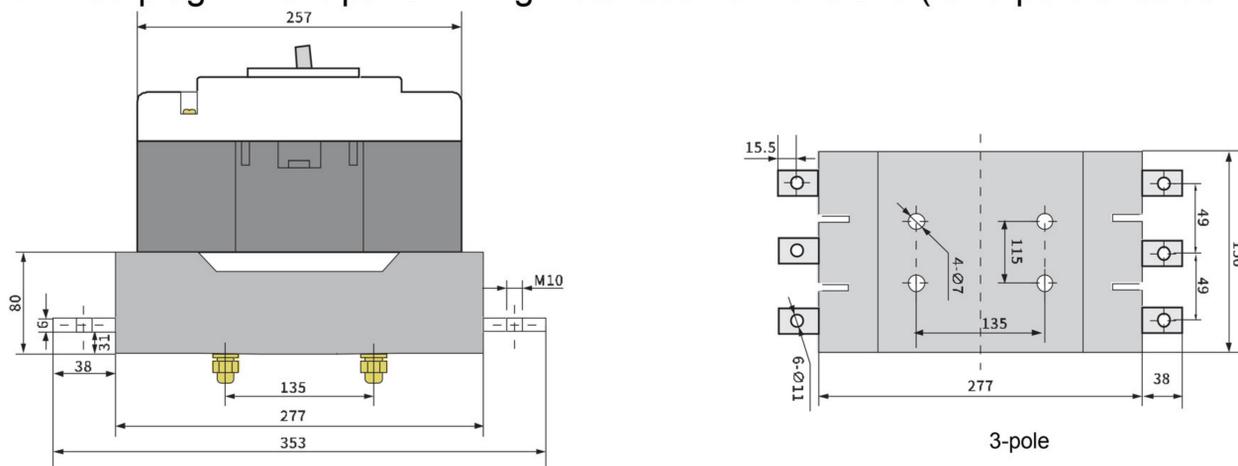
TBX-400 back-panel wiring installation dimensions (for 3- and 4-pole circuit breakers)



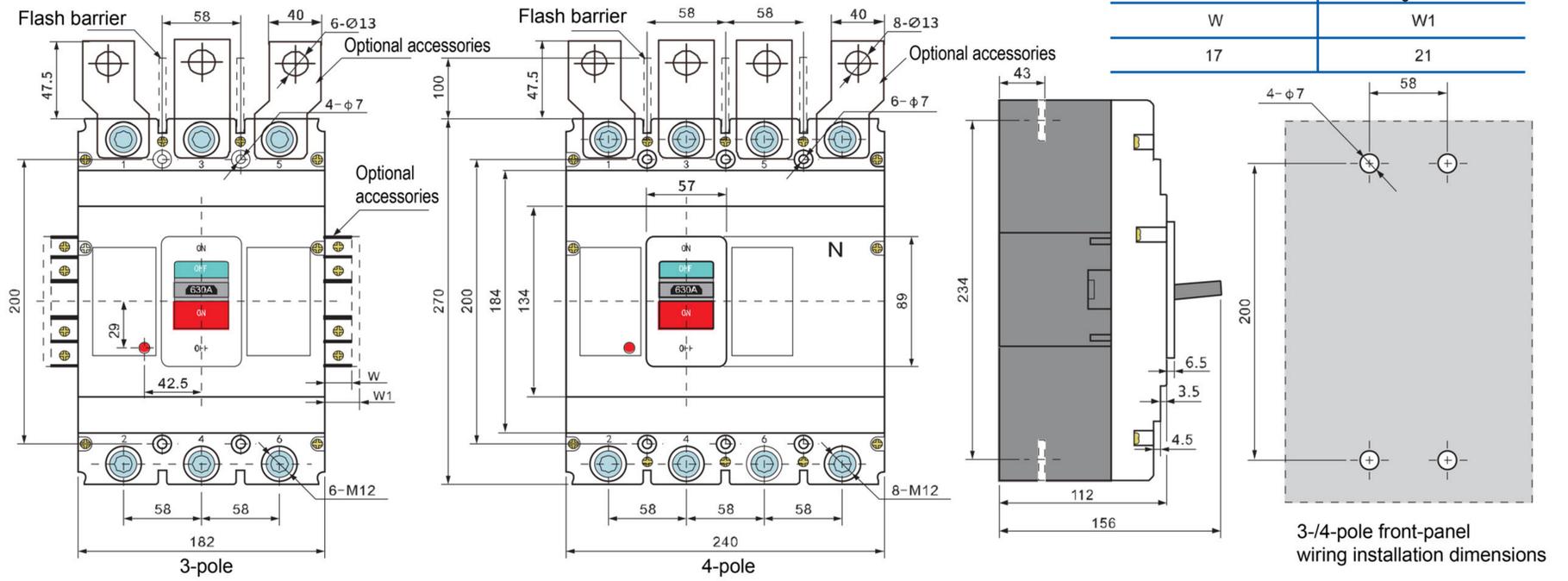
TBX-400 plug-in back-panel wiring installation dimensions (for 3- and 4-pole circuit breakers)



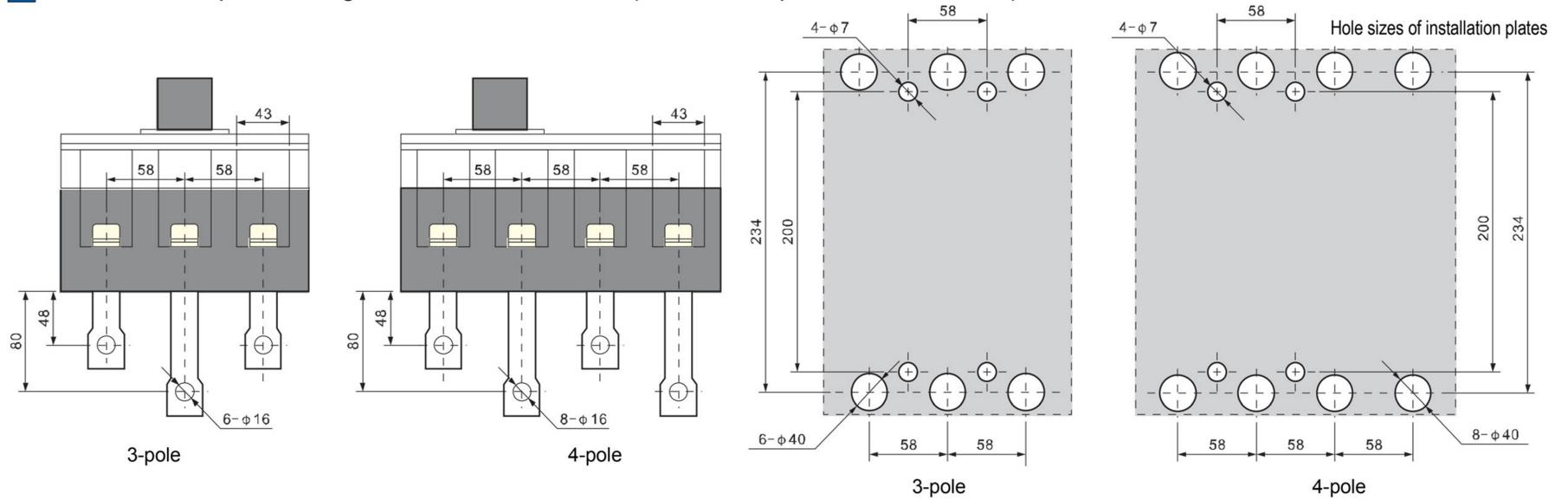
TBX-400 plug-in front-panel wiring installation dimensions (for 3-pole circuit breakers)



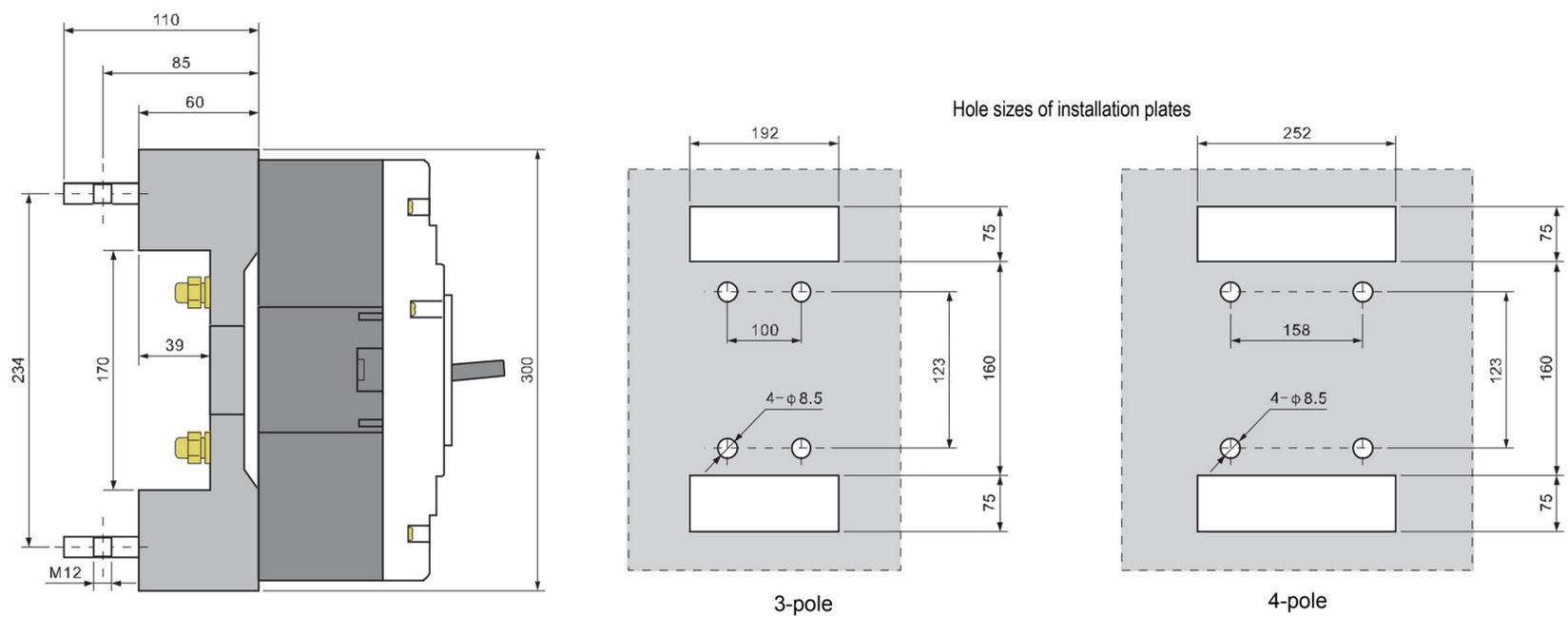
TBX-630 front-panel wiring installation dimensions



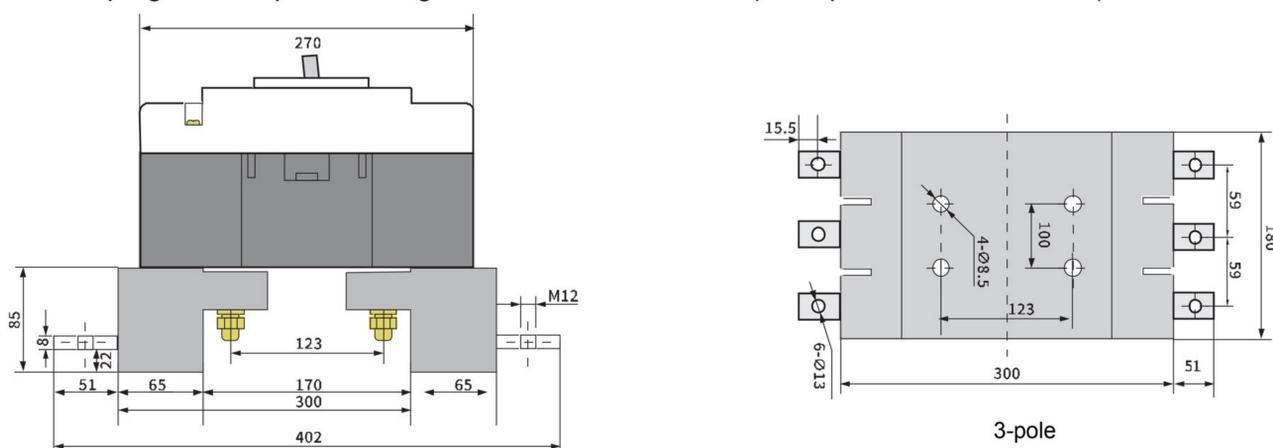
TBX-630 back-panel wiring installation dimensions (for 3- and 4-pole circuit breakers)



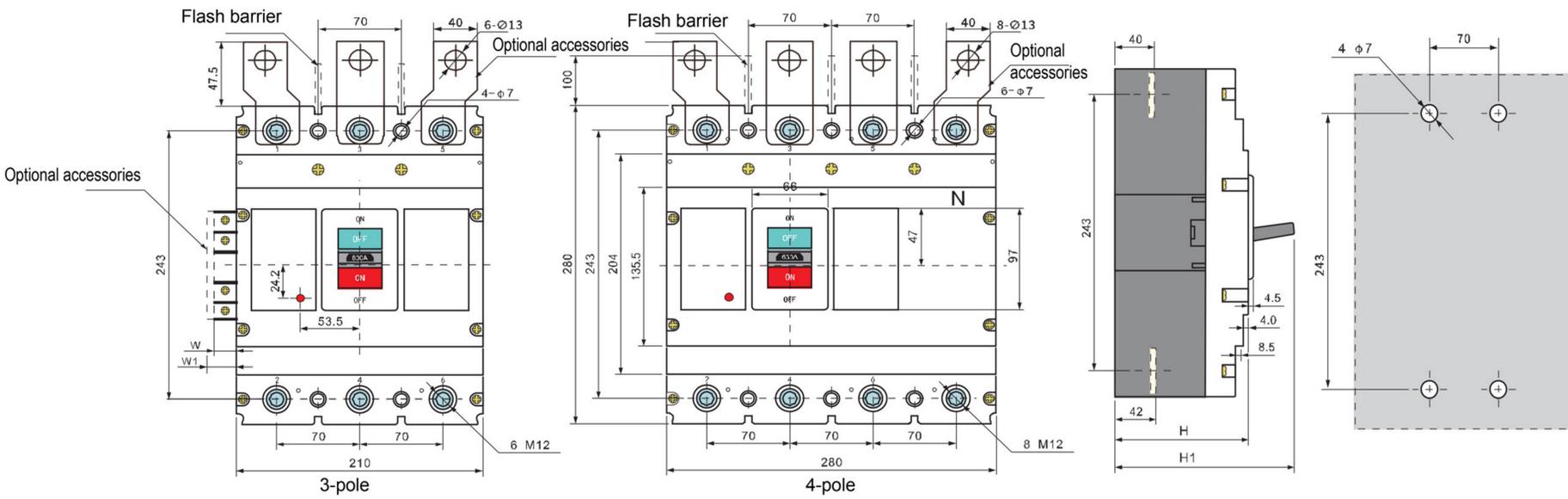
TBX-630 plug-in back-panel wiring installation dimensions (for 3- and 4-pole circuit breakers)



TBX-630 plug-in front-panel wiring installation dimensions (for 3-pole circuit breakers)



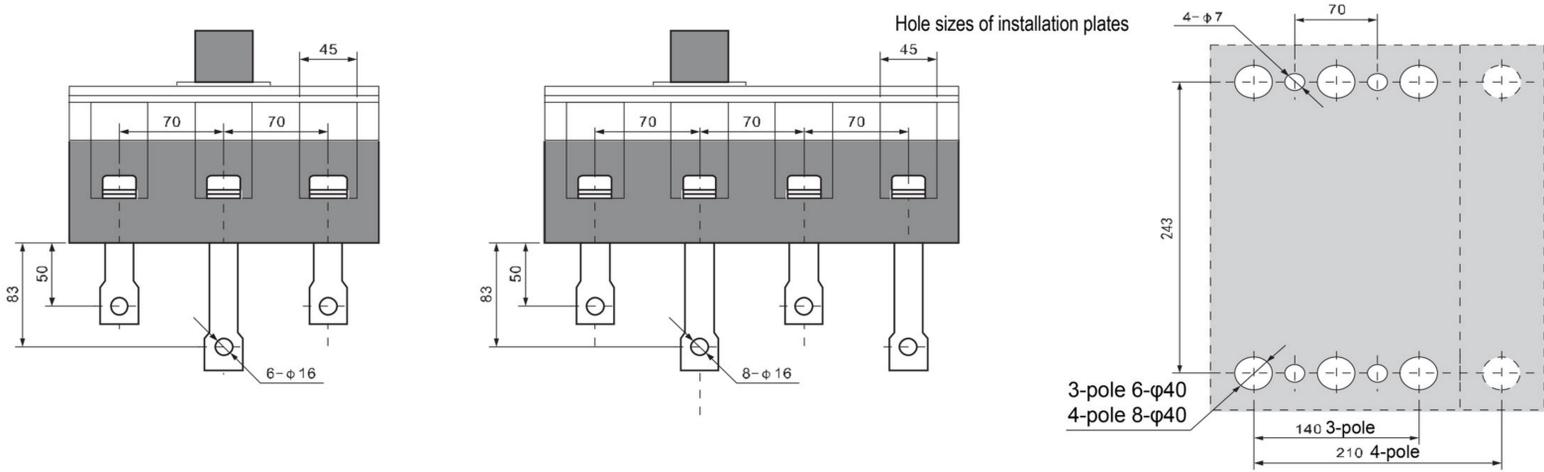
TBX-800 front-panel wiring installation dimensions (for 3- and 4-pole circuit breakers)



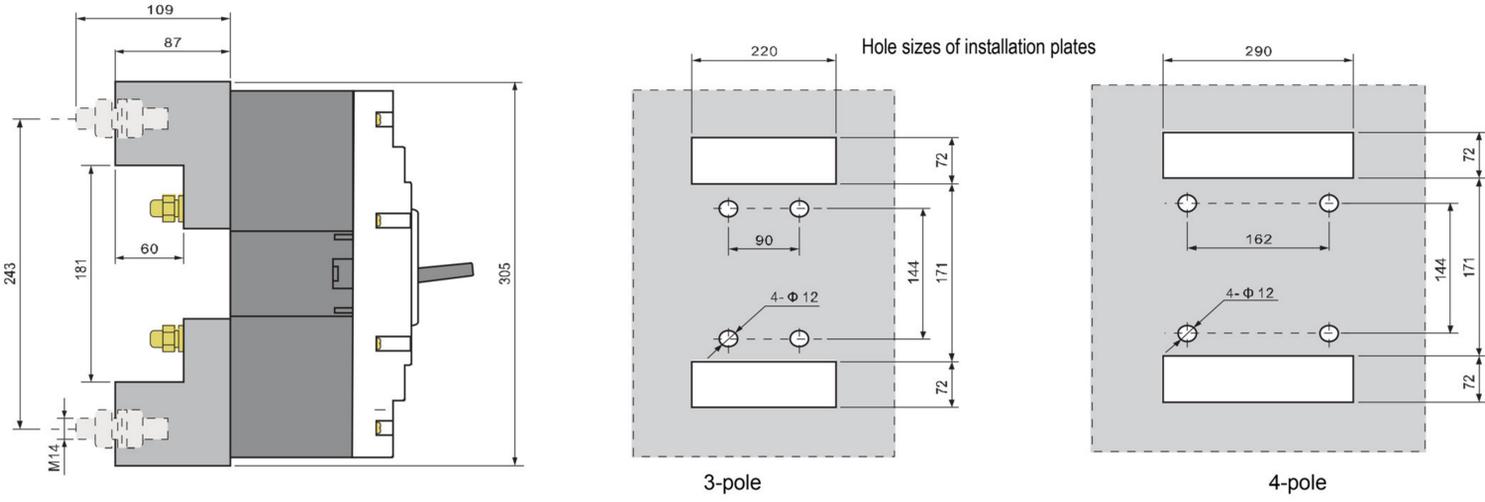
| Flash barrier | Product height | | Auxiliary, shunt, alarm widths | Leakage, overload, undervoltage module widths |
|---------------|----------------|-----|--------------------------------|---|
| | H | H1 | W | W1 |
| TBX-800 (L) | 116 | 156 | 17 | 21 |

MCCB TBX Series

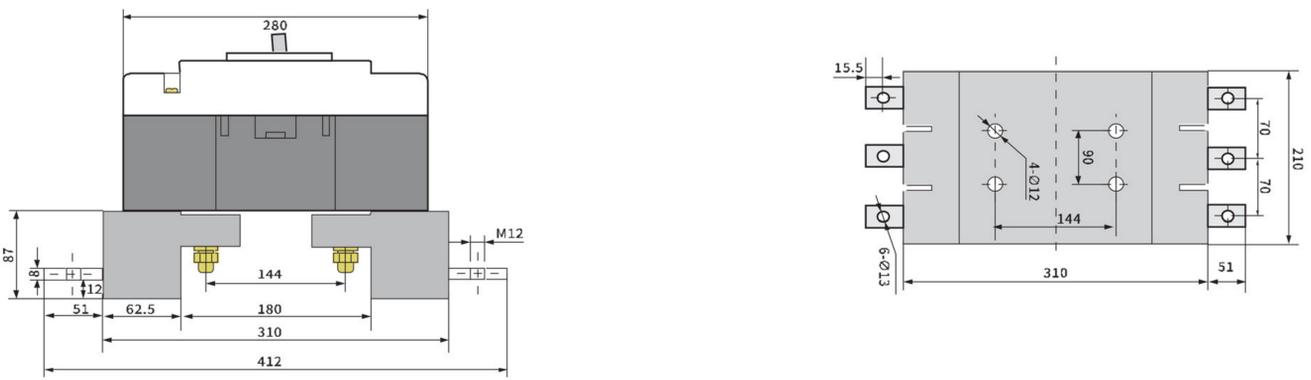
TBX-800 back-panel wiring installation dimensions (for 3- and 4-pole circuit breakers)



TBX-800 plug-in back-panel wiring installation dimensions (for 3- and 4-pole circuit breakers)



TBX-800 plug-in front-panel wiring installation dimensions (for 3-pole circuit breakers)



Taian Technology (Wuxi) Co., Ltd.

Address in Wuxi:

No. 29, Gao Lang East Road, New District,
Wuxi City, Jiangsu Province

Tel: 0510-85227555

After-sales address:

No. 29, Gao Lang East Road, New District,
Wuxi City, Jiangsu Province

Tel: 0510-85227555

