

3HM2(NS) Series Moulded Case Circuit Breakers



Application

3HM2(NS) series moulded case circuit breaker is one of new type breakers which this company adopts international advance design, manufacture technology to develop. The rated insulating voltage is 950V. Suitable for AC 50Hz (60Hz), rated working voltage 690V or below, rated working current is 12.5 to 630A of circuit and use in distributing electric energy. Non-frequent making and breaking in the normal conditions and protecting when circuit and installation are overload, short circuit and lacking voltage. Rated shell-rack and the breaker which current is under 400A, take protect effect when mousecage motor's non-frequent start, breaking off working and protecting overload, short circuit and lacking voltage.

Classification of MCCB

- Installation type of MCCB: MCCB are suitable for vertical or horizontal installation.
- According to use of MCCB: Distribution circuit protection type, motor protection type;
- According to connection way: Front panel connection, Back panel connection, Plug-in connection;
- According to operation way: For direct handle operating; For external rotary handle operating;
- For motor operating;
- According to overload release type: Magnetic release (only instantaneous) the modynamic type (dual)
- According to number of poles: Two poles, Three poles, Four poles;
- The neutral pole (N pole) of four pole MCCB has four types:
 - Type A: No overload release on N pole, which is making at the time; not closing and opening with the other three poles.
 - Type B: No overload release on N pole, which closing and opening with the other three poles.
 - Type C: With overload release on N pole, which closing and opening with the other three poles.
 - Type D: With overload release on N pole, which making all time; not closing and opening with the other three poles.

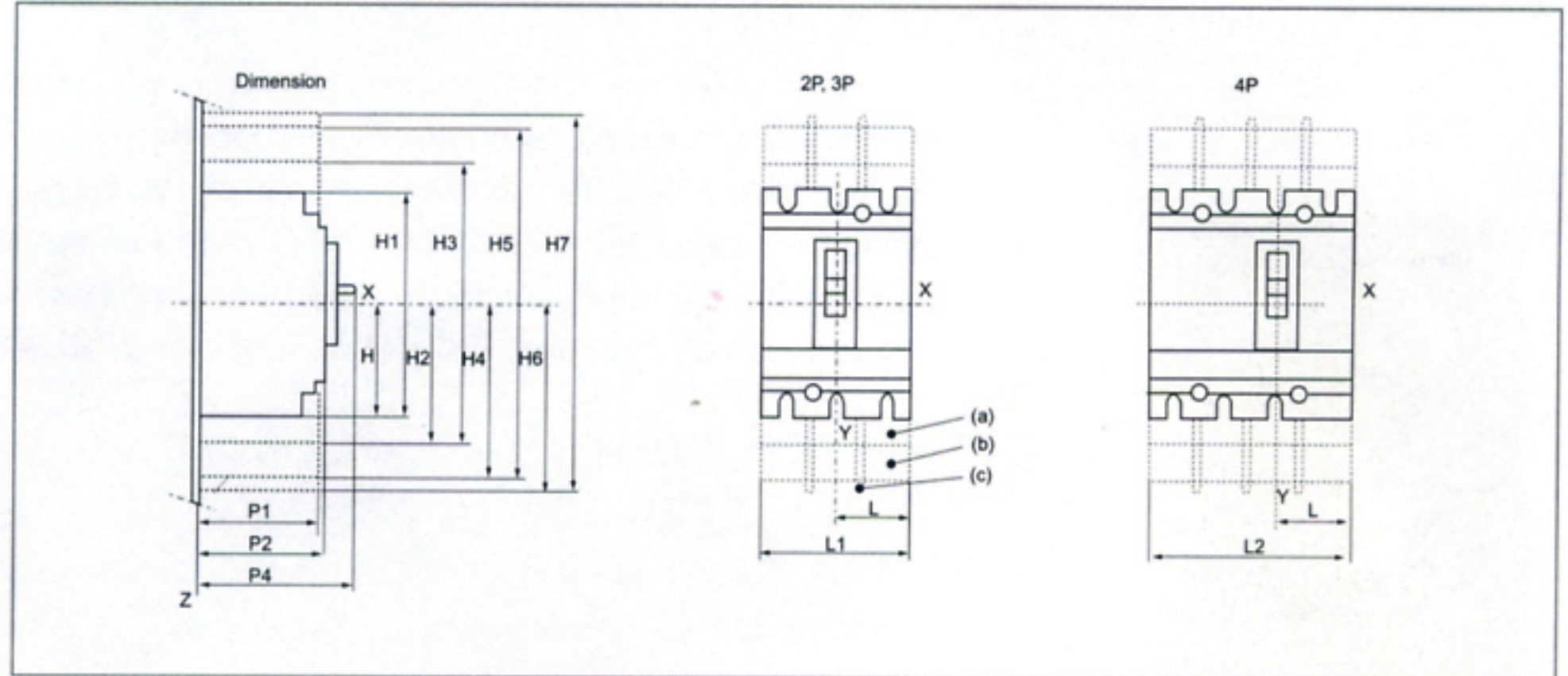
Main technical specification

| Type | Rated current (A) | Pole number | Rated insulating voltage (V) | Rated operating voltage (V) | Arcing-over distance (mm) | Ultimate short circuit breaking capacity (KA) | Servies short circuit breaking capacity (KA) | Operation performance | |
|-----------|---------------------------------------|-----------------|------------------------------|-----------------------------|---------------------------|---|--|-----------------------|------|
| | | | | | | | | ON | OFF |
| 3HM2-100D | 12.5,16,20, 25,32,40,50, 63,80,100 | | | | | 18 | 18 | 1500 | 8500 |
| 3HM2-100N | | | | | | 25 | 25 | | |
| 3HM2-100H | | | | | | 70 | 70 | | |
| 3HM2-100L | | | | | | 150 | 150 | | |
| 3HM2-160D | 16,20,25,32, 40,50,63,80, 100,125,160 | | | | | 25 | 25 | 1000 | 7000 |
| 3HM2-160N | | | | | | 36 | 36 | | |
| 3HM2-160H | | | | | | 70 | 70 | | |
| 3HM2-160L | | | | | | 150 | 150 | | |
| 3HM2-250D | 160,180, 200,225,250 | Three four pole | 950V | 690V below | 0 | 25 | 25 | 1000 | 7000 |
| 3HM2-250N | | | | | | 36 | 36 | | |
| 3HM2-250H | | | | | | 70 | 70 | | |
| 3HM2-250L | | | | | | 150 | 150 | | |
| 3HM2-400D | 200,225, 250,300, 315,400 | | | | | 35 | 35 | 1000 | 4000 |
| 3HM2-400N | | | | | | 45 | 45 | | |
| 3HM2-400H | | | | | | 70 | 70 | | |
| 3HM2-400L | | | | | | 150 | 150 | | |
| 3HM2-630D | 315,350, 400,500, 600,630 | | | | | 35 | 35 | 1000 | 4000 |
| 3HM2-630N | | | | | | 45 | 45 | | |
| 3HM2-630H | | | | | | 70 | 70 | | |
| 3HM2-630L | | | | | | 150 | 150 | | |

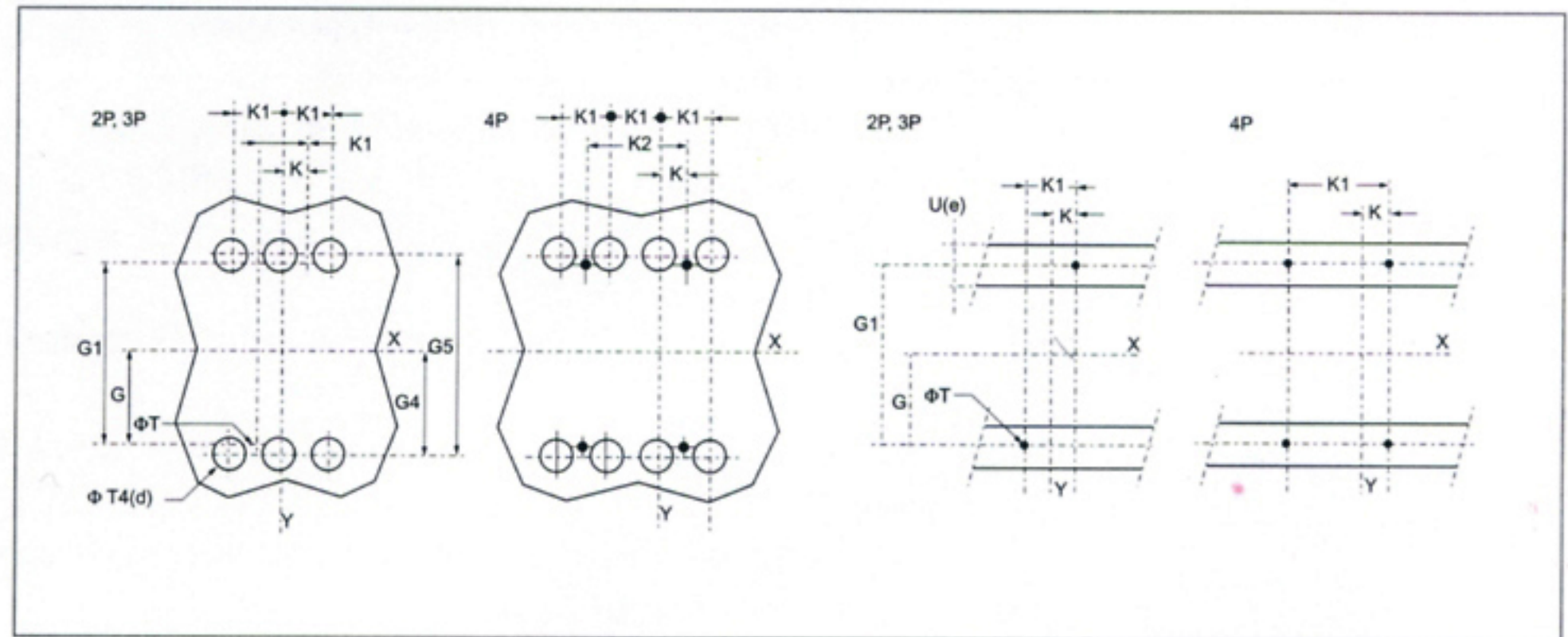


Outline and installation dimensions

Installation about 3HM2-100 ~ 3HM2-630



Installation



| MM | C | C1 | C2 | C3 | C6 | C7 | C20 | C21 | G | G1 | G4 |
|-------------------------|------|-----|------|-----|----|-----|------|-----|------|-----|-------|
| 3HM2 100/160/250D/N/H/L | 29 | 76 | 54 | 108 | 43 | 104 | 34 | 86 | 62.5 | 125 | 70 |
| 3HM2 400/630D/N/H/L | 41.5 | 116 | 92.5 | 184 | 53 | 146 | 46.5 | 126 | 100 | 200 | 113.5 |

| MM | G5 | H | H1 | H2 | H3 | H4 | H5 | H6 | H7 | K | K1 |
|-------------------------|-----|-------|-----|-------|-----|-------|-----|-------|-----|------|----|
| 3HM2 100/160/250D/N/H/L | 140 | 80.5 | 161 | 94 | 188 | 160.5 | 321 | 178.5 | 357 | 17.5 | 35 |
| 3HM2 400/630D/N/H/L | 227 | 127.5 | 255 | 142.5 | 285 | 240 | 480 | 237 | 474 | 22.5 | 45 |

| MM | K2 | L | L1 | L2 | P1 | P2 | P4 | P5 | P6 | R | R1 |
|-------------------------|----|------|-----|-----|------|-----|------|-----|-----|------|----|
| 3HM2 100/160/250D/N/H/L | 70 | 52.5 | 105 | 140 | 81 | 86 | 111* | 83 | 88 | 14.5 | 29 |
| 3HM2 400/630D/N/H/L | 90 | 70 | 140 | 185 | 95.5 | 110 | 168 | 107 | 112 | 31.5 | 63 |

| MM | R2 | R4 | R5 | R6 | R7 | R12 | R13 | ϕT | ϕT4 | U(e) |
|-------------------------|------|-----|-----|------|----|-----|-----|----|-----|------|
| 3HM2 100/160/250D/N/H/L | 54 | 108 | 143 | 29 | 58 | 43 | 86 | 6 | 22 | < 32 |
| 3HM2 400/630D/N/H/L | 71.5 | 143 | 188 | 46.5 | 93 | 63 | 126 | 6 | 32 | < 32 |

* P4=126 Compact AM2 250D/N/H/L