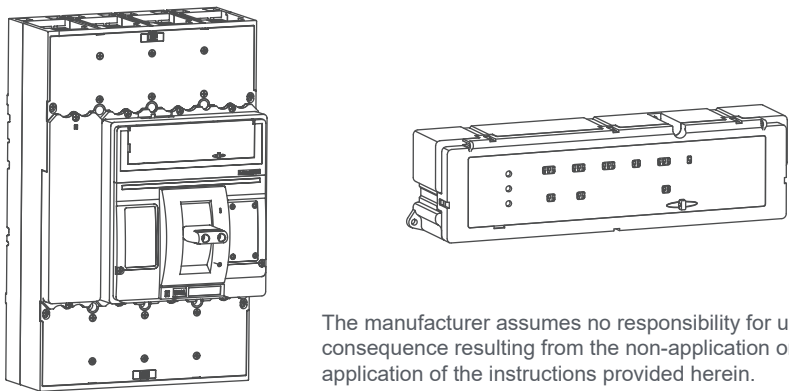


M6 Electronic Molded Case Circuit Breaker

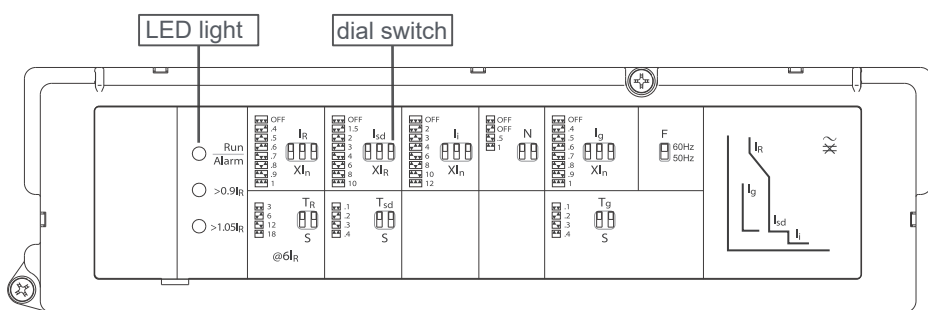


The manufacturer assumes no responsibility for unfavourable consequence resulting from the non-application or incorrect application of the instructions provided herein.

If Setting is set to NONE, it defeats that protection!



Operation panel



LED indication

- Monitor status**
In normal mode, "Working" light flashes, when there is any error in magnetic flux connection, sensor connection, control voltage or MCU unit, "Working" light will stop flashing and remain OFF.
- Alarm indication**
If actual current $I \geq 90\%I_R$, LED indicates Yellow. $I < 90\%I_R$, Yellow is OFF.
- Overload indication**
If actual current $I \geq 105\%I_R$, LED indicates Red. $I < 105\%I_R$, Red is OFF.

Long-time delay protection current setting

Long-time delay current setting dials, customer use proper tools for 8 specific settings including OFF + (0.4-1)I_n

OFF
.4
.5
.6
.7
.8
.9
1

I_R
 $X I_n$

e.g.: I_n = 1200A
I_R dial settings: OFF, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1
I_R = 0.4 × 1200A (I_n) = 480A

Thermal memory function: protect load circuits against the affects of repeated overload conditions. When circuit breaker immediately closes after a long-time trip, and the continuous current exceeds the long-time setting value (I_R), thermal memory function will automatically reduce the trip time. Given repeated overload current, thermal memory function will make circuit breaker trip in gradually reduced time. When the load current resumes normally, thermal current function will start to reset. It will totally reset in about 1 hour. So next long-time trip time will correspond to the setting value. Thermal memory function will be cleared in OFF setting.

Long-time delay protection time setting

Long-time delay time setting dials, customer use proper tools for 4 specific settings (3-18)s of overcurrent at 6I_R

3
6
12
18

T_R
 S
@6I_R

I	T _R
$\leq 1.05I_R$	$\geq 2h$ not trip
$\leq 1.3I_R$	<1h trip
6I _R	3s
	6s
	12s
	18s

Instantaneous protection current setting

Instantaneous current setting dials, customer use proper tools for 8 specific settings including OFF + (2-12)I_n

OFF
2
3
4
6
8
10
12

I_i
 $X I_n$

e.g.: I_n = 1200A
I_i dial settings: OFF, 2, 3, 4, 6, 8, 10, 12
I_i = 3 × 1200A (I_n) = 3600A

Neutral protection setting

Neutral setting dials, customer use proper tools for 4 specific settings including (OFF + OFF + 0.5I_n + 1I_n)

OFF
OFF
.5
1

N
 $X I_n$
N

e.g.: I_n = 1200A, I_{sd} = 1.5I_R, I_i = 3I_n

N(neutral) dial settings: OFF, OFF, 0.5, 1

I_R(N) = 1 × I_n = 1200A
I_{sd}(N) = 1.5 × I_R(N) = 1800A
I_i(N) = 3 × I_n = 3600A

Short-time delay protection current setting

Short-time delay current setting dials, customer use proper tools for 8 specific settings including OFF + (1.5-10)I_R

OFF
1.5
2
3
4
6
8
10

I_{sd}
 $X I_R$

e.g.: I_n = 1200A, I_R = 0.4I_n = 480A
I_{sd} dial settings: OFF, 1.5, 2, 3, 4, 6, 8, 10
I_{sd} = 1.5 × 480A (I_R) = 720A

Short-time delay protection time setting

Short-time delay time setting dials, customer use proper tools 4 specific settings 0.1s, 0.2s, 0.3s and 0.4s.

.1
.2
.3
.4

T_{sd}
 S

Ground fault protection current setting

Ground fault current setting dials, customer use proper tools for 8 specific settings including OFF + (0.4-1)I_n

OFF
.4
.5
.6
.7
.8
.9
1

I_g
 $X I_n$

e.g.: I_n = 1200A
I_g dial settings: OFF, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1
I_g = 0.4 × 1200A (I_n) = 480A

Ground fault protection time setting

Ground fault current setting dials, customer use proper tools for 4 specific settings 0.1s, 0.2s, 0.3s and 0.4s.

.1
.2
.3
.4

T_g
 S

Frequency selection setting

Frequency setting dials, customer use proper tools for setting 50Hz and 60Hz according to the actual grid frequency.

50Hz
60Hz

F

