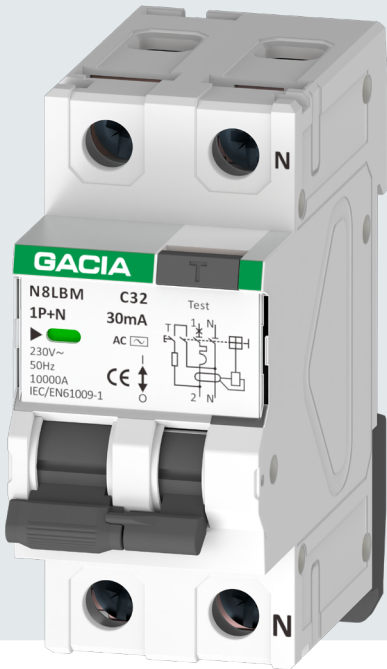


Residual Current Circuit Breaker with Overload Protection N8LBM,10kA

- Residual Current Circuit Breaker with Overload Protection according to IEC/EN 61009-1
- Electromagnetic type
- Rated short circuit breaking capacity 10kA
- 1+N-pole version
- N-pole on the right
- Rated residual current 10, 30, 100, 300mA
- Rated current up to 40A
- 2-module width
- AC and A types



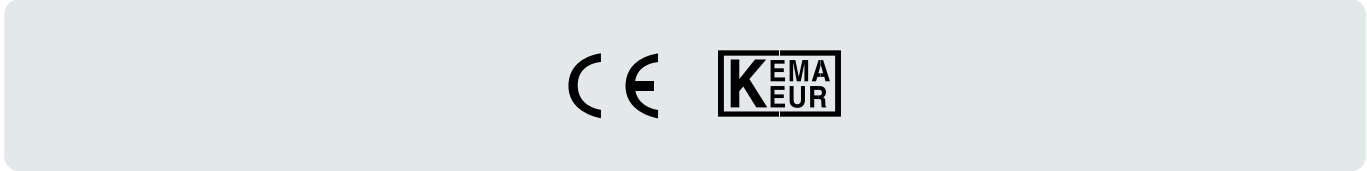
N8LBM residual current circuit breaker are based on combination of residual current device with permanent magnet principle and circuit breaker with thermal overload release and magnetic short circuit current release. It brings the advantage of voltage independent function of the residual current device.

They are common in domestic, commercial and industrial application.

Type Key

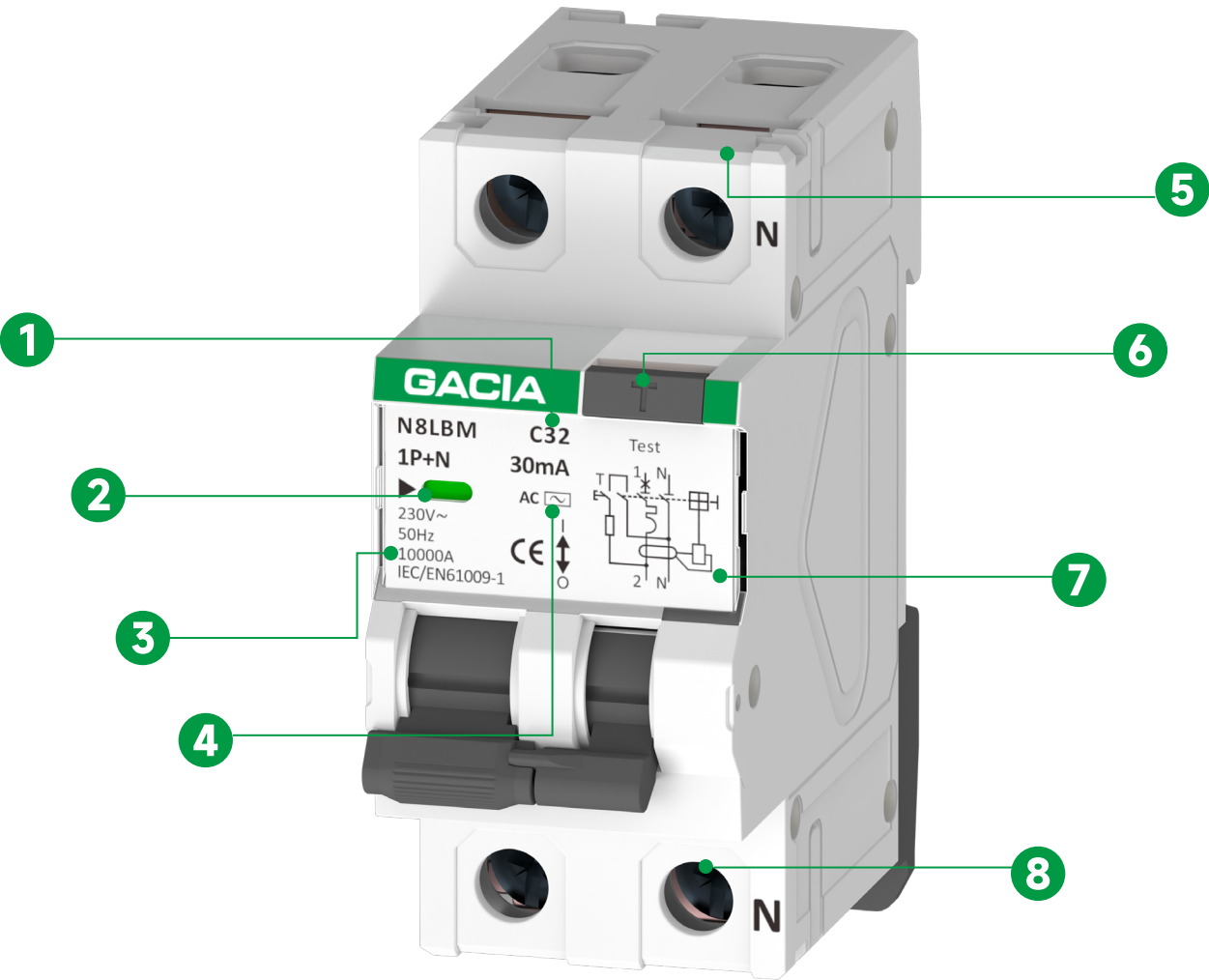
N	8	LB	M	16A	30mA
Product series	Design code	Product category	Structure code	Rated current	Rated residual current
N	8	RCBO-40	Electromagnetic	6-40A	30-300mA

Certification Marks



Residual Current Circuit Breaker
with Overload Protection
N8LBM,10kA

Product Tips



- 1

Rated current up to 40A
- 2

Contacts position indication window
- 3

Rated short circuit breaking capacity 10000A
- 4

Sensitivity to residual current A
- 5

Busbar interface
- 6

Test button
- 7

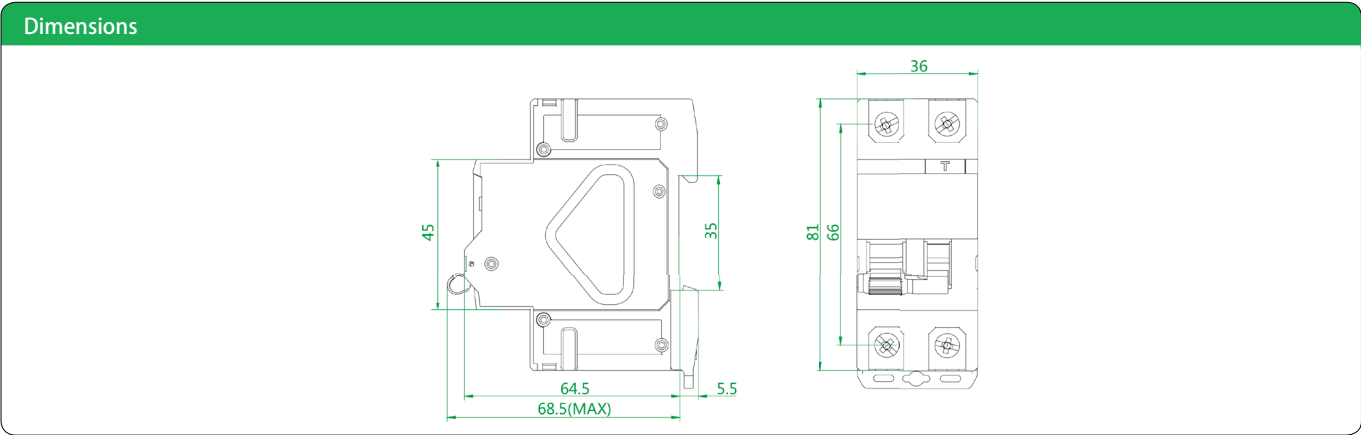
Electromagnetic circuit diagram with overload protection
- 8

Neutral line interface

Technical Data

Electrical Features	
International standard	IEC/EN 61009-1
Poles	1P+N
Tripping characteristics of MCB	B, C
Rated current	6-40A
Rated residual current $I_{\Delta n}$	30, 100, 300mA
Residual current protection type	Electromagnetic
Rated breaking capacity I_{cn}	10kA
Rated operational voltage U_e	230/400V AC
Voltage range of the test button T	195.5 - 253V AC
Sensitivity to residual current	AC type- AC residual current A type- residual AC and pulsating DC current
Rated frequency	50/60Hz
Rated insulated voltage U_i	400V AC
Rated impulse withstand voltage U_{imp}	4kV
Dielectric test voltage	2.5kV
Mechanical service life	10000 operation cycles
Electrical service life	4000 operation cycles
Time characteristic of RCD	Undelayed type
Line voltage connection	Arbitrary above or below

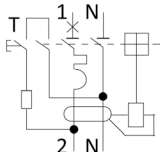
Installation Parameters	
Degree of protection (IP)	IP20, IP40 (when fitted)
Operating ambient temperature	-25°C ~+70°C
Terminal connection type	Cable/Busbar
Connectable conductor cross section	1-25mm ²
Mounting	IEC/EN 60715 top-hat rail 35mm
Fastening torque of terminals	2-3.0N.m
Pollution degree	2
Reference temperature for setting of thermal element	30°C
Altitude	≤ 2000m
Relative humidity	≤ 95%
Resistance to humidity and heat	Class 2
Installation class	III



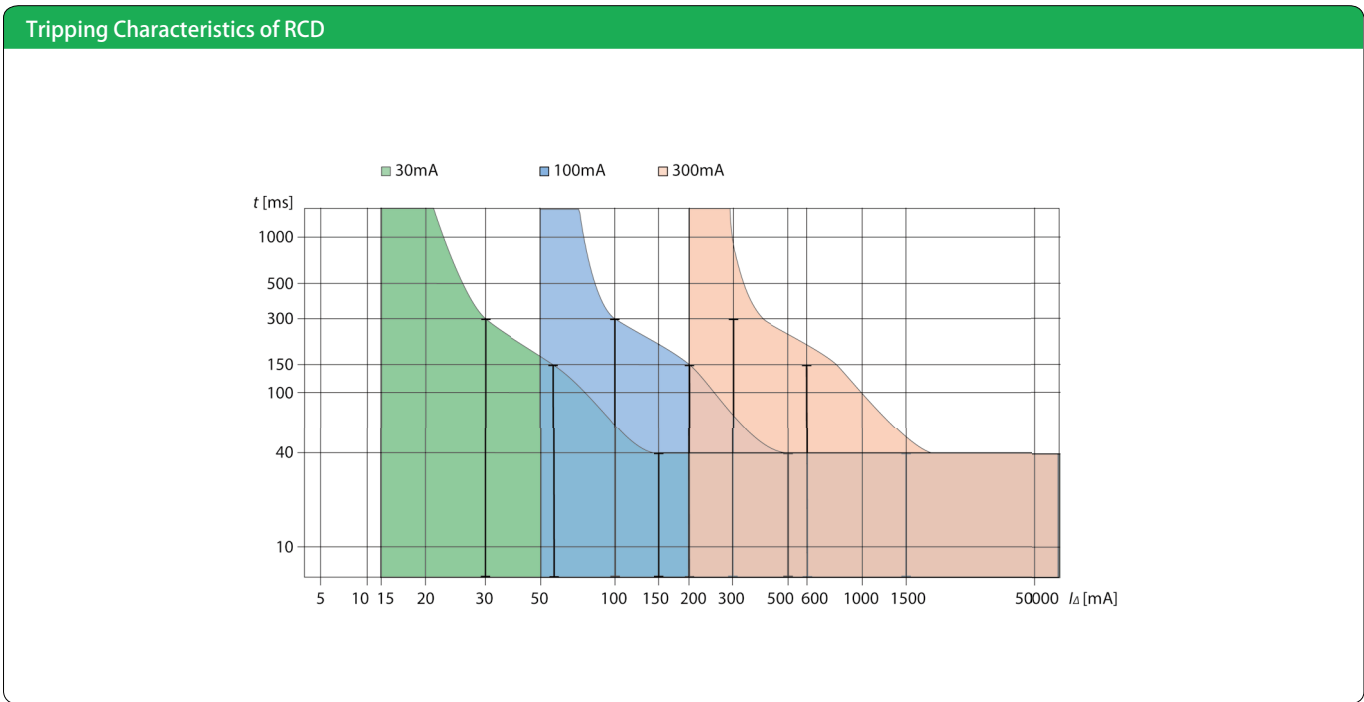
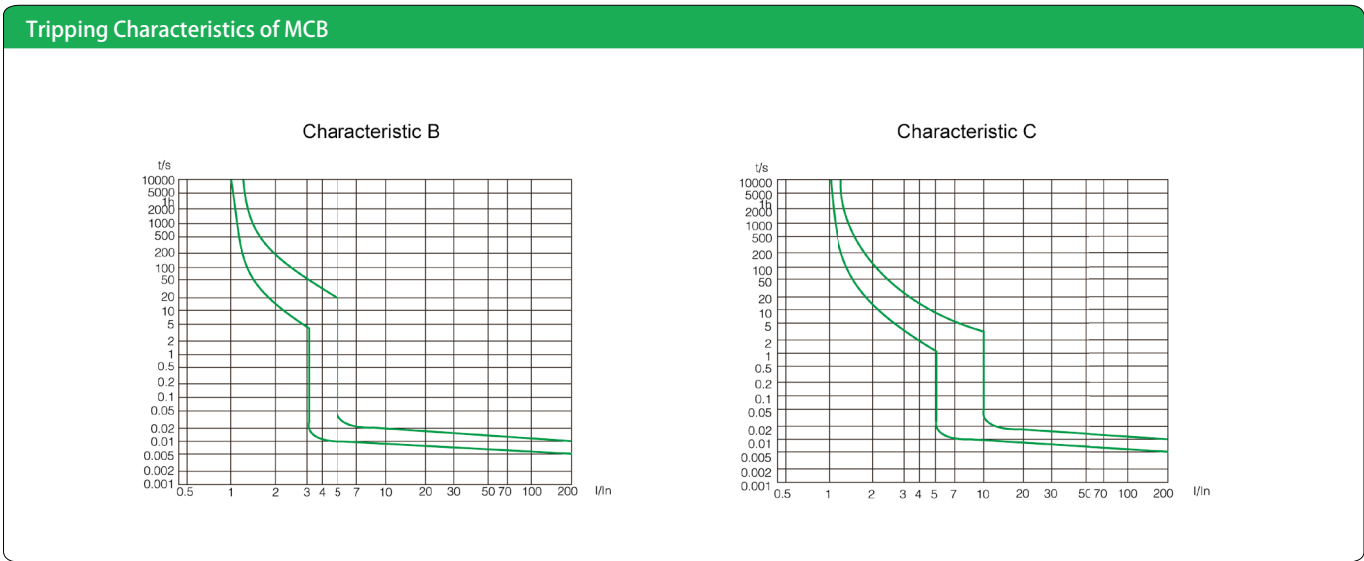
Residual Current Circuit Breaker
with Overload Protection
N8LBM,10kA

Technical Data

Wiring Diagrams



1P+N



Technical Data

Dependence of Tripping Characteristics on Ambient Temperature

T [°C]	In (T) [A]							
	6 A	10 A	13 A	16 A	20 A	25 A	32 A	40 A
-20	8	13.5	17	20	24.5	29.8	39.5	50.5
-15	7.8	13.3	16.8	19.8	24.3	29.7	39.3	50.4
-10	7.6	13	16.5	19.5	24	29.5	39	50.2
-5	7.3	12.7	16.1	19.2	23.8	29.3	38.8	50
0	7.2	12.5	15.8	19.1	23.7	29.2	38.6	48.8
5	7	12.3	15.5	18.8	23.5	29	38.4	48.6
10	6.8	12.1	15.2	18.6	23.3	28.8	38.2	48.4
15	6.6	12	14.9	18.5	23.1	28.6	38	48.1
20	6.4	11.8	14.7	18.3	22.8	28.4	37.8	47.8
25	6.2	11.5	14.1	18	22.6	28.2	37.5	47
30	6	10	13	16	20	25	32	40
35	6	9.9	12.8	15.7	19.7	24.6	31.5	39.2
40	5.9	9.8	12.5	15.4	19.3	24.3	31.1	38.8
45	5.83	9.8	12.2	15.1	18.8	24	30.8	38.3
50	5.72	9.6	11.7	14.9	18.5	23.8	30.1	38
55	5.65	9.5	11.5	14.7	18.2	23.5	29.5	36.5
60	5.5	9	11.2	14.5	17.8	23	28.5	35
65	5.4	8.6	11	14	17.5	22	27.5	34
70	5.2	8	10.8	13.8	17.3	21.5	27	32.5

Power Loss

In [A]	6 A	10 A	13 A	16 A	20 A	25 A	32 A	40 A
P[W]	1.8	2.5	3.5	4	5	5.8	6.5	7.8