

Residual current protection circuit breakers

90 RCD

MDC - MONOBLOC COMPACT RCBO'S



90 RCD

MDC 45 - A TYPE - C CURVE - 4500 A (EN 61009-1) - 4.5 KA (EN 60947-2)

BREAKING CAPACITY 1P+N-2P		
230V	EN61009-1	EN60947-2
I _{cn}	I _{cn}	I _{cu}
In=6-32 A	4500 A	6 KA

BREAKING CAPACITY 3-4P		
400V	EN61009-1	EN60947-2
I _{cn}	I _{cn}	I _{cu}
In=6-32 A	4500 A	4.5 KA



GW 94 227

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



Code	I _{dn}	Rated current	Rated voltage	No. of modules EN 50022	Pack Carton
No. of poles: 1P+N					
GW 94 205	30 mA	6 A	230 V	2	1/6
GW 94 206	30 mA	10 A	230 V	2	1/6
GW 94 211	30 mA	13 A	230 V	2	1/6
GW 94 207	30 mA	16 A	230 V	2	1/6
GW 94 208	30 mA	20 A	230 V	2	1/6
GW 94 209	30 mA	25 A	230 V	2	1/6
GW 94 210	30 mA	32 A	230 V	2	1/6
GW 94 215	300 mA	6 A	230 V	2	1/6
GW 94 216	300 mA	10 A	230 V	2	1/6
GW 94 217	300 mA	16 A	230 V	2	1/6
GW 94 218	300 mA	20 A	230 V	2	1/6
GW 94 219	300 mA	25 A	230 V	2	1/6
GW 94 220	300 mA	32 A	230 V	2	1/6
No. of poles: 2P					
GW 94 225	30 mA	6 A	230 V	2	1/6
GW 94 226	30 mA	10 A	230 V	2	1/6
GW 94 231	30 mA	13 A	230 V	2	1/6
GW 94 227	30 mA	16 A	230 V	2	1/6
GW 94 228	30 mA	20 A	230 V	2	1/6
GW 94 229	30 mA	25 A	230 V	2	1/6
GW 94 230	30 mA	32 A	230 V	2	1/6
GW 94 235	300 mA	6 A	230 V	2	1/6
GW 94 236	300 mA	10 A	230 V	2	1/6
GW 94 237	300 mA	16 A	230 V	2	1/6
GW 94 238	300 mA	20 A	230 V	2	1/6
GW 94 239	300 mA	25 A	230 V	2	1/6
GW 94 240	300 mA	32 A	230 V	2	1/6
No. of poles: 3P					
GW 94 245	30 mA	6 A	400 V	3	1/4
GW 94 246	30 mA	10 A	400 V	3	1/4
GW 94 251	30 mA	13 A	400 V	3	1/4
GW 94 247	30 mA	16 A	400 V	3	1/4
GW 94 248	30 mA	20 A	400 V	3	1/4
GW 94 249	30 mA	25 A	400 V	3	1/4
GW 94 250	30 mA	32 A	400 V	3	1/4
GW 94 255	300 mA	6 A	400 V	3	1/4
GW 94 256	300 mA	10 A	400 V	3	1/4
GW 94 257	300 mA	16 A	400 V	3	1/4
GW 94 258	300 mA	20 A	400 V	3	1/4
GW 94 259	300 mA	25 A	400 V	3	1/4
GW 94 260	300 mA	32 A	400 V	3	1/4
No. of poles: 4P					
GW 94 265	30 mA	6 A	400 V	4	1/3
GW 94 266	30 mA	10 A	400 V	4	1/3
GW 94 271	30 mA	13 A	400 V	4	1/3
GW 94 267	30 mA	16 A	400 V	4	1/3
GW 94 268	30 mA	20 A	400 V	4	1/3
GW 94 269	30 mA	25 A	400 V	4	1/3
GW 94 270	30 mA	32 A	400 V	4	1/3
GW 94 275	300 mA	6 A	400 V	4	1/3
GW 94 276	300 mA	10 A	400 V	4	1/3
GW 94 277	300 mA	16 A	400 V	4	1/3
GW 94 278	300 mA	20 A	400 V	4	1/3
GW 94 279	300 mA	25 A	400 V	4	1/3
GW 94 280	300 mA	32 A	400 V	4	1/3

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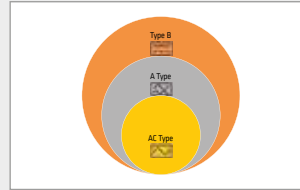


MAXIMUM PROTECTION IN MINIMUM SPACE



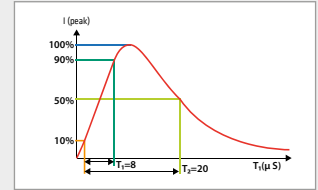
In the same application, the use of compact RCBO's guarantees a saving of the number of modules used which allows the installation of smaller distribution boards and therefore the cost is cheaper.

A CIRCUIT BREAKER FOR EVERY NEED



The 90 RCD range allows to meet all the needs of protection in electrical circuit with different types of earth fault currents, from sinusoidal alternating shape (AC type) and pulsating (A type), up to smooth DC shape (B type).

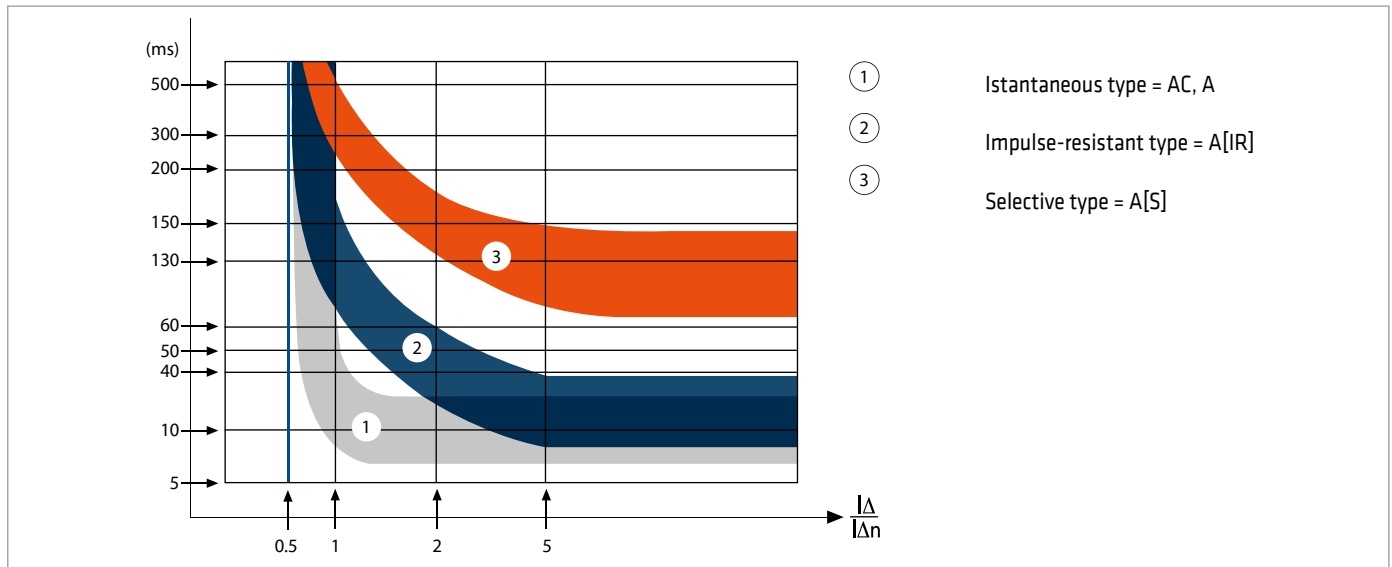
WITHOUT INTERRUPTION



The 90 RCD range also includes Impulse Resistant IR versions with high resistance to untimely tripping due to overvoltage impulses. These versions are particularly suitable for installations where the continuity of service is extremely important.

Residual current circuit breaker tripping characteristics

The following diagram shows the tripping range (relation between leakage current and tripping time) of the different type of RCCBs:



RCD TYPE	AC	A	B	Level of immunity (8/20μs)
RESIDUAL FAULT CURRENT TYPE	 • sinusoidal alternating	 • sinusoidal alternating • pulsating	 • sinusoidal alternating • pulsating • smooth DC	
1. INSTANTANEUS First level of residual-current protection against direct and indirect contacts	✓	✓		250A
2. IMPULSE RESISTANT Prevention of untimely tripping caused by: • overvoltages due to indirect lightning strikes (8/20 μs impulse current waveform up to 3000A) • overvoltages due to manoeuvres on electrical network • overvoltages due to earth fault on three-phase system • permanent harmonics due electronic devices (immunity to currents with frequency higher than 50Hz) • starting current (immunity to the ring wave waveform)		✓	✓	3000A
3. SELECTIVE Second level of residual-current protection for total or chronometric selectivity with downstream RCDs		✓	✓	3000A 5000A