

Residual current protection circuit breakers

90 RCD

MDC - MONOBLOC COMPACT RCBO'S



BD - ADD-ON RESIDUAL CURRENT DEVICES FOR MINIATURE CIRCUIT BREAKERS



page 71

IDP - RESIDUAL CURRENT CIRCUIT BREAKERS



page 75

90 RCD

Selection tables

				COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION								
				IΔn = 30mA				IΔn = 300mA				
												
				1P+N	2P	3P	4P	1P+N	2P	3P	4P	
Icn [A] (EN 61009-1)	Curve	Type	In [A]	2 mod.	2 mod.	3 mod.	4 mod.	2 mod.	2 mod.	3 mod.	4 mod.	
				MDC 45								
4500	C	AC	6	GW 94 005	GW 94 025	GW 94 045	GW 94 065	GW 94 015	GW 94 035	GW 94 055	GW 94 075	
			10	GW 94 006	GW 94 026	GW 94 046	GW 94 066	GW 94 016	GW 94 036	GW 94 056	GW 94 076	
			13	GW 94 011	GW 94 031	GW 94 051	GW 94 071	-	-	-	-	
			16	GW 94 007	GW 94 027	GW 94 047	GW 94 067	GW 94 017	GW 94 037	GW 94 057	GW 94 077	
			20	GW 94 008	GW 94 028	GW 94 048	GW 94 068	GW 94 018	GW 94 038	GW 94 058	GW 94 078	
			25	GW 94 009	GW 94 029	GW 94 049	GW 94 069	GW 94 019	GW 94 039	GW 94 059	GW 94 079	
		A	32	GW 94 010	GW 94 030	GW 94 050	GW 94 070	GW 94 020	GW 94 040	GW 94 060	GW 94 080	
			6	GW 94 205	GW 94 225	GW 94 245	GW 94 265	GW 94 215	GW 94 235	GW 94 255	GW 94 275	
			10	GW 94 206	GW 94 226	GW 94 246	GW 94 266	GW 94 216	GW 94 236	GW 94 256	GW 94 276	
			13	GW 94 211	GW 94 231	GW 94 251	GW 94 271	-	-	-	-	
			16	GW 94 207	GW 94 227	GW 94 247	GW 94 267	GW 94 217	GW 94 237	GW 94 257	GW 94 277	
			20	GW 94 208	GW 94 228	GW 94 248	GW 94 268	GW 94 218	GW 94 238	GW 94 258	GW 94 278	
			25	GW 94 209	GW 94 229	GW 94 249	GW 94 269	GW 94 219	GW 94 239	GW 94 259	GW 94 279	
			32	GW 94 210	GW 94 230	GW 94 250	GW 94 270	GW 94 220	GW 94 240	GW 94 260	GW 94 280	
				MDC 60								
6000	C	AC	6	GW 94 105	GW 94 125	GW 94 145	GW 94 165	GW 94 115	GW 94 135	GW 94 155	GW 94 175	
			10	GW 94 106	GW 94 126	GW 94 146	GW 94 166	GW 94 116	GW 94 136	GW 94 156	GW 94 176	
			13	GW 94 111	GW 94 131	GW 94 151	GW 94 171	-	-	-	-	
			16	GW 94 107	GW 94 127	GW 94 147	GW 94 167	GW 94 117	GW 94 137	GW 94 157	GW 94 177	
			20	GW 94 108	GW 94 128	GW 94 148	GW 94 168	GW 94 118	GW 94 138	GW 94 158	GW 94 178	
			25	GW 94 109	GW 94 129	GW 94 149	GW 94 169	GW 94 119	GW 94 139	GW 94 159	GW 94 179	
		A	32	GW 94 110	GW 94 130	GW 94 150	GW 94 170	GW 94 120	GW 94 140	GW 94 160	GW 94 180	
			2	-	GW 94 322	-	-	-	-	-	-	
			4	-	GW 94 324	-	-	-	-	-	-	
			6	GW 94 305	GW 94 325	GW 94 345	GW 94 365	GW 94 315	GW 94 335	GW 94 355	GW 94 375	
			10	GW 94 306	GW 94 326	GW 94 346	GW 94 366	GW 94 316	GW 94 336	GW 94 356	GW 94 376	
			13	GW 94 311	GW 94 331	GW 94 351	GW 94 371	-	-	-	-	
			16	GW 94 307	GW 94 327	GW 94 347	GW 94 367	GW 94 317	GW 94 337	GW 94 357	GW 94 377	
			20	GW 94 308	GW 94 328	GW 94 348	GW 94 368	GW 94 318	GW 94 338	GW 94 358	GW 94 378	
			25	GW 94 309	GW 94 329	GW 94 349	GW 94 369	GW 94 319	GW 94 339	GW 94 359	GW 94 379	
			32	GW 94 310	GW 94 330	GW 94 350	GW 94 370	GW 94 320	GW 94 340	GW 94 360	GW 94 380	
		A[I/R]	6	-	GW 95 805	-	GW 95 815	-	-	-	-	
			10	-	GW 95 806	-	GW 95 816	-	-	-	-	
			13	-	GW 95 811	-	GW 95 821	-	-	-	-	
			16	-	GW 95 807	-	GW 95 817	-	-	-	-	
			20	-	GW 95 808	-	GW 95 818	-	-	-	-	
			25	-	GW 95 809	-	GW 95 819	-	-	-	-	
		A[S]	32	-	GW 95 810	-	GW 95 820	-	-	-	-	
			16	-	-	-	-	-	GW 95 847	-	GW 95 857	
			20	-	-	-	-	-	GW 95 848	-	GW 95 858	
			25	-	-	-	-	-	GW 95 849	-	GW 95 859	
		F	32	-	-	-	-	-	GW 95 850	-	GW 95 860	
			6	-	GW 95 935	-	-	-	-	-	-	
			10	-	GW 95 936	-	-	-	-	-	-	
			13	-	GW 95 941	-	-	-	-	-	-	
			16	-	GW 95 937	-	-	-	-	-	-	
			20	-	GW 95 938	-	-	-	-	-	-	
		B	A	25	-	GW 95 939	-	-	-	-	-	-
				32	-	GW 95 940	-	-	-	-	-	-
				6	GW 95 105	GW 95 125	GW 95 145	GW 95 165	GW 95 115	GW 95 135	GW 95 155	GW 95 175
				10	GW 95 106	GW 95 126	GW 95 146	GW 95 166	GW 95 116	GW 95 136	GW 95 156	GW 95 176
				13	GW 95 111	GW 95 131	GW 95 151	GW 95 171	-	-	-	-
				16	GW 95 107	GW 95 127	GW 95 147	GW 95 167	GW 95 117	GW 95 137	GW 95 157	GW 95 177
			F	20	GW 95 108	GW 95 128	GW 95 148	GW 95 168	GW 95 118	GW 95 138	GW 95 158	GW 95 178
				25	GW 95 109	GW 95 129	GW 95 149	GW 95 169	GW 95 119	GW 95 139	GW 95 159	GW 95 179
				32	GW 95 110	GW 95 130	GW 95 150	GW 95 170	GW 95 120	GW 95 140	GW 95 160	GW 95 180
				6	-	GW 95 975	-	-	-	-	-	-
				10	-	GW 95 976	-	-	-	-	-	-
				13	-	GW 95 981	-	-	-	-	-	-
				16	-	GW 95 977	-	-	-	-	-	-
				20	-	GW 95 978	-	-	-	-	-	-

Icn [A] (EN 61009-1)				COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION							
				IΔn = 30mA		IΔn = 100mA		IΔn = 300mA			
											
				2P		3P		2P			
Curve	Type	In [A]	2 mod.		3 mod.		2 mod.		2 mod.		
MDC 100											
10000	C	AC	6	GW 95 025	GW 95 025 MA*	-	-	GW 95 035	GW 95 035 MA*		
			10	GW 95 026	GW 95 026 MA*	-	-	GW 95 036	GW 95 036 MA*		
			13	GW 95 031	GW 95 031 MA*	-	-	-	-		
			16	GW 95 027	GW 95 027 MA*	-	-	GW 95 037	GW 95 037 MA*		
			20	GW 95 028	GW 95 028 MA*	-	-	GW 95 038	GW 95 038 MA*		
			25	GW 95 029	GW 95 029 MA*	-	-	GW 95 039	GW 95 039 MA*		
			32	GW 95 030	GW 95 030 MA*	-	-	GW 95 040	GW 95 040 MA*		
		A	6	GW 95 225	GW 95 225 MA*	GW 95 245**	GW 95 785	GW 95 235	GW 95 235 MA*		
			10	GW 95 226	GW 95 226 MA*	GW 95 246**	GW 95 786	GW 95 236	GW 95 236 MA*		
			13	GW 95 231	GW 95 231 MA*	-	GW 95 791	-	-		
			16	GW 95 227	GW 95 227 MA*	GW 95 247**	GW 95 787	GW 95 237	GW 95 237 MA*		
			20	GW 95 228	GW 95 228 MA*	GW 95 248**	GW 95 788	GW 95 238	GW 95 238 MA*		
			25	GW 95 229	GW 95 229 MA*	GW 95 249**	GW 95 789	GW 95 239	GW 95 239 MA*		
			32	GW 95 230	GW 95 230 MA*	GW 95 250**	GW 95 790	GW 95 240	GW 95 240 MA*		
		A[IR]	6	GW 95 825	-	-	-	-	-		
			10	GW 95 826	-	-	-	-	-		
			13	GW 95 831	-	-	-	-	-		
			16	GW 95 827	-	-	-	-	-		
			20	GW 95 828	-	-	-	-	-		
			25	GW 95 829	-	-	-	-	-		
	32		GW 95 830	-	-	-	-	-			
	F	6	GW 95 955	-	-	-	-	-			
		10	GW 95 956	-	-	-	-	-			
		13	GW 95 961	-	-	-	-	-			
		16	GW 95 957	-	-	-	-	-			
		20	GW 95 958	-	-	-	-	-			
		25	GW 95 959	-	-	-	-	-			
		32	GW 95 960	-	-	-	-	-			
	B	A	6	GW 95 325	-	GW 95 795	GW 95 335	-			
			10	GW 95 326	-	GW 95 796	GW 95 336	-			
			13	GW 95 331	-	GW 95 801	-	-			
			16	GW 95 327	-	GW 95 797	GW 95 337	-			
			20	GW 95 328	-	GW 95 798	GW 95 338	-			
			25	GW 95 329	-	GW 95 799	GW 95 339	-			
			32	GW 95 330	-	GW 95 800	GW 95 340	-			
		A[IR]	6	GW 95 835	-	-	-	-			
			10	GW 95 836	-	-	-	-			
			13	GW 95 841	-	-	-	-			
			16	GW 95 837	-	-	-	-			
			20	GW 95 838	-	-	-	-			
			25	GW 95 839	-	-	-	-			
			32	GW 95 840	-	-	-	-			
		F	6	GW 95 965	-	-	-	-			
			10	GW 95 966	-	-	-	-			
			13	GW 95 971	-	-	-	-			
			16	GW 95 967	-	-	-	-			
			20	GW 95 968	-	-	-	-			
			25	GW 95 969	-	-	-	-			
	32		GW 95 970	-	-	-	-				

* Rated operating voltage equal to 110V ac ** Rated operating voltage equal to 230V ac

		ADD-ON RESIDUAL CURRENT DEVICES								
		BD						BDHP		
										
		2 mod.		3.5 mod.		3.5 mod.		4 mod.	6 mod.	6 mod.
Type	IΔn [mA]	≤25 A	≤63 A	≤25 A	≤63 A	≤25 A	≤63 A	≤125 A	≤125 A	≤125 A
AC	10	GW 94 401	-	-	-	-	-	-	-	-
	30	GW 94 402	GW 94 412	GW 94 442	GW 94 448	GW 94 422	GW 94 432	GW 95 406	GW 95 416	GW 95 426
	300	GW 94 403	GW 94 413	GW 94 443	GW 94 449	GW 94 423	GW 94 433	GW 95 408	GW 95 418	GW 95 428
	500	GW 94 404	GW 94 414	GW 94 444	GW 94 450	GW 94 424	GW 94 434	-	-	-
A	30	GW 94 502	GW 94 512	GW 94 542	GW 94 547	GW 94 522	GW 94 532	GW 95 436	GW 95 446	GW 95 456
	300	GW 94 503	GW 94 513	GW 94 543	GW 94 548	GW 94 523	GW 94 533	GW 95 438	GW 95 448	GW 95 458
	500	GW 94 504	GW 94 514	GW 94 544	GW 94 549	GW 94 524	GW 94 534	-	-	-
A[I/R]	30	GW 94 566		GW 94 595		GW 94 586		-	-	-
A[S]	300	GW 94 563		GW 94 598		GW 94 583		GW 95 468	GW 95 478	GW 95 488
	1000	GW 94 565		GW 94 600		GW 94 585		GW 95 470	GW 95 480	GW 95 490
A rep.	300-3000	-		-		-		-	-	GW 95 512

90 RCD

Selection tables

			RCCB					
			2P		4P			
								
In [A]	Type	IΔn [mA]	2 mod. (NA)*	2 mod.	3 mod.	4 mod. (NA)*	4 mod.	4 mod.***
25	AC	10	-	GW D4 001	-	-	-	-
		30	GW D4 617	GW D4 002	GW 94 662	GW D4 427	GW D4 102	GW D4 302
		100	-	GW D4 003	-	-	GW D4 103	-
		300	-	GW D4 004	GW 94 664	GW D4 429	GW D4 104	GW D4 304
	A	10	-	GW D4 011	GW 94 866	-	GW D4 111	-
		30	GW D4 817	GW D4 012	GW 94 867	GW D4 439	GW D4 112	GW D4 312
		100	-	GW D4 013	-	-	GW D4 113	-
		300	-	GW D4 014	GW 94 869	GW D4 441	GW D4 114	GW D4 314
	A[IR]	30	-	GW D4 202	-	-	GW D4 217	-
		300	-	GW D4 203	-	-	GW D4 218	-
	F	30	-	GW D4 261	-	-	GW D4 281	-
	B	30	-	GW D4 502 **	-	-	GW D4 527	-
		300	-	GW D4 504 **	-	-	GW D4 529	-
40	AC	30	GW D4 627	GW D4 022	GW 94 667	GW D4 431	GW D4 122	GW D4 322
		100	-	GW D4 023	GW 94 668	-	GW D4 123	-
		300	-	GW D4 024	GW 94 669	GW D4 433	GW D4 124	GW D4 324
		500	-	GW D4 025	GW 94 670	-	GW D4 125	-
	A	30	GW D4 827	GW D4 032	GW 94 897	GW D4 443	GW D4 132	GW D4 332
		100	-	GW D4 033	GW 94 898	-	GW D4 133	-
		300	-	GW D4 034	GW 94 899	GW D4 445	GW D4 134	GW D4 334
		500	-	GW D4 035	GW 94 900	-	GW D4 135	-
	A[IR]	30	-	GW D4 205	-	-	GW D4 220	-
		300	-	GW D4 206	-	-	GW D4 221	-
	A[S]	300	-	GW D4 234	-	-	GW D4 249	-
		500	-	GW D4 235	-	-	GW D4 250	-
	F	30	-	GW D4 265	-	-	GW D4 285	-
	B	30	-	GW D4 507 **	-	-	GW D45 32	GW D4 342
		300	-	GW D4 509 **	-	-	GW D4 534	-
		500	-	GW D4 042	-	-	GW D4 142	GW D4 344
63	AC	30	-	GW D4 043	-	-	GW D4 143	-
		100	-	GW D4 044	-	-	GW D4 144	GW D4 352
		300	-	GW D4 045	-	-	GW D4 145	-
		500	-	GW D4 052	-	-	GW D4 152	GW D4 354
	A	30	-	GW D4 053	-	-	GW D4 153	-
		100	-	GW D4 054	-	-	GW D4 154	-
		300	-	GW D4 055	-	-	GW D4 155	-
		500	-	GW D4 208	-	-	GW D4 223	-
	A[IR]	300	-	GW D4 209	-	-	GW D4 224	-
		500	-	GW D4 237	-	-	GW D4 252	-
	A[S]	300	-	GW D4 238	-	-	GW D4 253	-
		500	-	GW D4 269	-	-	GW D4 289	-
	B	30	-	GW D4 512 **	-	-	GW D4 537	-
		300	-	GW D4 514 **	-	-	GW D4 539	-
		500	-	GW D4 062	-	-	GW D4 162	-
80	AC	30	-	GW D4 063	-	-	GW D4 163	-
		100	-	GW D4 064	-	-	GW D4 164	-
		300	-	GW D4 072	-	-	GW D4 172	-
	A	30	-	GW D4 073	-	-	GW D4 173	-
		100	-	GW D4 074	-	-	GW D4 174	-
		300	-	GW D4 082	-	-	GW D4 182	-
100	AC	100	-	-	-	-	GW D4 183	-
		300	-	GW D4 084	-	-	GW D4 184	-
		500	-	-	-	-	GW D4 185	-
		500	-	GW D4 092	-	-	GW D4 192	-
	A	30	-	GW D4 093	-	-	GW D4 193	-
		100	-	GW D4 094	-	-	GW D4 194	-
		300	-	-	-	-	GW D4 195	-
		500	-	GW D4 211	-	-	GW D4 226	-
	A[IR]	300	-	-	-	-	GW D4 227	-
		500	-	GW D4 243	-	-	GW D4 258	-
	A[S]	300	-	GW D4 244	-	-	GW D4 259	-
		500	-	-	-	-	GW 95 601	-
125	AC	30	-	-	-	-	GW 95 603	-
		100	-	-	-	-	GW 95 604	-
		300	-	-	-	-	GW 95 606	-
	A	30	-	-	-	-	GW 95 608	-
		100	-	-	-	-	GW 95 609	-
		300	-	-	-	-	-	-

* Accessories not available

** 4 Modules

*** RCCBs with left neutral

RCBO - MDC

Technical data

TYPE				MDC 45		MDC 60		MDC 100		MDC 100 MA		
												
Standards				IEC EN 61009-1 IEC EN 61009-2-1		IEC EN 61009-1 IEC EN 61009-2-1		IEC EN 61009-1 IEC EN 61009-2-1		IEC EN 61009-1 IEC EN 61009-2-1		
Rated current (In) (A)				6-32		2-32		6-32		6-32		
Utilization category				A		A		A		A		
Rated operational voltage (Ue) (V AC)				230/400 - 240/415		230/400 - 240/415		230 - 240		110		
Insulation voltage (Ui) (V)				500		500		500		500		
Rated frequency (Hz)				50/60		50/60		50/60		50/60		
Rated impulse withstand voltage (Uimp) (kV)				4		4		4		4		
Overvoltage category:				III		III		III		III		
Number of poles				1+N,2	3, 4	1+N,2	3, 4	2, 3		2		
Energy limiting class (B and C)				3	1	3	1	3		3		
Breaking capacity												
Alternating current	IEC/EN 61009-1	Icn	(A)	4500		6000		10000		10000		
		Ics	(A)	1 Icn		1 Icn		0.75 Icn		0.75 Icn		
	IEC/EN 60947-2	Icu	230/240 V (kA)	6	-	10	-	15		15		
			400/415 V (kA)	-	4,5	-	6	-		-		
		Ics	(kA)	100% Icu		100% Icu		75% Icu		75% Icu		
Rated residual operating current (IΔn) (mA)												
Type		AC		30		30		30		30		
				300		300		300		300		
		A		30		30		30		30		
				-		-		100		-		
		A[IR]	-		30		30		-		-	
		A[S]	-		300		-		-		-	
		F	-		30		30		-		-	
Level of immunity (8/20 μs) (A)				250		250 (for AC and A types) 3000 (for A[IR] and A[S] types)		250 (for AC and A types) 3000 (for type A[IR])		250		
Residual making and breaking capacity (IΔm) (A)				4500		4500		4500		4500		
Voltage independent working:				YES		YES		YES		YES		
Wiring	cable section (mm²)	rigid	≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10		≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10		≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10		≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10			
		flexible	≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10		≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10		≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10		≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10			
Electrical endurance				10000		10000		10000		10000		
Mechanical endurance				20000		20000		20000		20000		
Max. no. of usable modular accessories				2		2		2		2		
Upline/Downline power supply				YES		YES		YES		YES		
Status displayed				YES		YES		YES		YES		
Mounting position:				any		any		any		any		
Rated tightening torque: (Nm)				2		2		2		2		
Screwdriver suggested				PZ2		PZ2		PZ2		PZ2		
Degree of protection	terminals front		IP20		IP20		IP20		IP20			
			IP40		IP40		IP40		IP40			
Pollution degree:				2		2		2		2		
Tropicalization				55°C - RH 95%		55°C - RH 95%		55°C - RH 95%		55°C - RH 95%		
Reference temperature (°C)				30		30		30		30		
Operating temperature (°C)				-25 +40		-25 +40		-25 +40		-25 +40		
Stocking temperature (°C)				-40 +70		-40 +70		-40 +70		-40 +70		
Double connection (cable+fork busbar)				yes (only downstream terminals)		yes (only downstream terminals)		yes (only downstream terminals)		yes (only downstream terminals)		
Weight per pole (g)				120		120		120		120		
Curve				C		C	B	C	B	C		
Rated currents available (In) (A)				-		2	-	-	-	-		
				-		4	-	-	-	-		
				6		6	6	6	6	6		
				10		10	10	10	10	10		
				13		13	13	13	13	13		
				16		16	16	16	16	16		
				20		20	20	20	20	20		
				25		25	25	25	25	25		
				32		32	32	32	32	32		

ADD-ON RCD - BD - BDHP

Technical data

TYPE			BD	BDHP	BDHP ADJUSTABLE
					
Standards			IEC EN 61009-1 Annex G IEC EN 61009-2-1		EN 60947-2 app. B
Rated current (I _n)	(A)		≤ 25	≤ 63	≤ 125
Rated operational voltage (U _e)	(V AC)		230/400		400
Insulation voltage (U _i)	(V)		500		500
Rated frequency	(Hz)		50/60		50
Rated impulse withstand voltage (U _{imp})	(kV)		4		4
Overvoltage category:			III		III
Number of poles			2,3,4		4
Rated residual operating current (I _{Δn})	(mA)				
Type	AC		10 ⁽¹⁾	-	-
			30	30	-
			300	300	-
			500	500	-
	A		30	30	-
			300	300	-
			500	-	-
	A[IR]		-	30	-
	A[S]		-	300	-
			-	1000	-
	A[Adj.]		-	-	300 - 500 - 1000 - 3000
Adjustable tripping time (t)	(ms)		-		0 - 60 - 150
Level of immunity (8/20 μs)	(A)		250 (for AC and A types) 3000 (for A[IR] and A[S] types)		3000
Residual making and breaking capacity (I _{Δm})	(A)		I _{cn} circuit breaker		I _{cn} circuit breaker
Voltage independent working:			YES		YES
Wiring	cable section (mm ²)	rigid	≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10		≤ 1x70 - ≤ 2x25 - ≤ 2x25+1x10
		flexible	≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10		≤ 1x50 - ≤ 2x25 - ≤ 3x16
Upline/Downline power supply			YES		YES
Mounting position:			any		any
Rated tightening torque:	(Nm)		2		3.5 / 3 (terminal)
Screwdriver suggested			PZ2		PZ2
Degree of protection	terminals		IP20		IP20
	front		IP40		IP40
Pollution degree:			2		2
Tropicalization			55°C - RH 95%		55°C - RH 95%
Reference temperature	(°C)		30		30
Operating temperature	(°C)		-25 +40		-25 +40
Stocking temperature	(°C)		-40 +70		-40 +70
Weight per pole	(g)		100		200

⁽¹⁾ Only for 2P versions

RCCB - IDP

Technical data

TYPE			IDP NA	IDP	IDP 4P (3M)	IDP 125A
						
Standard			IEC EN 61008-1 IEC EN 61008-2-1	IEC EN 61008-1 IEC EN 61008-2-1 IEC EN 62423 (Type B) EN 62423 (Type B)	IEC EN 61008-1 IEC EN 61008-2-1	IEC EN 61008-1 IEC EN 61008-2-1
Rated current (In) (A)			25-40	25-100	25-40	125
Rated operational voltage (Ue) (V AC)			230 - 240	230/400 - 240/415	400	400
Insulation voltage (Ui) (V)			500	500	500	500
Rated impulse withstand voltage (Uimp) kV			4	4	4	4
Overvoltage category:			III	III	III	III
Rated frequency (Hz)			50	50/60	50/60	50
Number of poles			2	2, 4	4	4
Number of modules			2 (2P)	2 (2P) 4 (4P) 4 (2P/4P) for Type B	3	4
Rated residual operating current (IΔn) (mA)						
Type	AC		-	10 ⁽¹⁾		-
			30	30	30	30
			-	100	100	-
			-	300	300	300
			-	500	500	500
			-	10 ⁽¹⁾	10 ⁽¹⁾	-
	A		30	30	30	30
			-	100	100	-
			-	300	300	300
			-	500	500	500
	IR - Impulse		-	30	-	-
			-	300	-	-
	S - Selective		-	300	-	-
			-	500	-	-
	F		-	30	-	-
			-	30	-	-
	B		-	30	-	-
			-	300	-	-
Level of immunity (8/20μs) (A)			250	250 (for AC and A types) 3000 (for A[IR] and A[S], F and B types)	250	250
Residual making and breaking capacity (I _{dm}) (A)			10 x In (500A min)	10xIn (500A min)	630	1250
Making and breaking capacity (I _m) (A)			10 x In (500A min)	10xIn (500A min)	630	1250
Voltage independent working			YES	YES	YES	YES
Wiring	Cable section (mm²)	rigid	≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10	≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10	≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10	≤50
		flexible	≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10	≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10	≤ 1x25 - ≤ 1x16+1x10 - ≤ 3x6	≤50
Electrical endurance			5000	10000	5000	10000
Mechanical endurance			10000	20000	10000	10000
Upline/Downline power supply			YES	YES	YES	YES
Mounting position:			any	any	any	any
Rated tightening torque: (Nm)			2	3	2	3
Screwdriver suggested			PZ2	PZ2	PZ2	PZ2
Pollution degree			2	2	2	2
Fire resistance			Glow wire Test IEC 60695-2-11 according with IEC 61008-1			
IP degree (inside the distribution board)			IP40	IP40	IP40	IP40
Tropicalization			55°C - RH 95%	55°C - RH 95%	55°C - RH 95%	55°C - RH 95%
Installation altitude (m)			≤ 2000	≤ 2000	≤ 2000	≤ 2000
Operating temperature (average daily temperature ≤35°C) (°C)			-5 +40	-25 +60	-25 +40	-25 +40
Operating temperature (average daily temperature ≤35°C) (°C)			-40 +70	-40 +70	-40 +70	-40 +70
Double connection (cable + fork busbar)			NO	yes (only upper and lower terminals)	yes (only upper and lower terminals)	NO
Signalization of the relay tripping			NO	YES	NO	NO

⁽¹⁾ Up to 25A

RATED CONDITIONAL RESIDUAL SHORT-CIRCUIT CURRENT IΔc (kA)											
Rated current In		25A / 40A (NA)		25A / 40A		63A		80A		100A	
Poles		2P	4P	2P	4P	2P	4P	2P	4P	2P	4P
Fuse	gG 63A	6	10	10	6	10*	10*	-	-	-	-
	gG 80A	-	-	-	-	10	10	-	-	-	-
	gG 100A	-	-	-	-	-	-	6	6	6	6
	gG 125A	-	-	-	-	-	-	-	-	-	10
Miniature circuit breakers	MTC 45	4.5									
	MTC 60	6									
	MTC 100	10									
	MT 60	6				6					
	MT 100	10				10					
	MT 250	10				10					
	MTHP 160	-				10		10		10	
	MTHP 250	10				10					

* Only F and B RCCBs

90 RCD

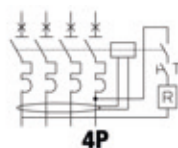
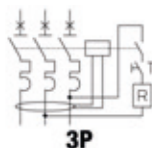
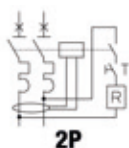
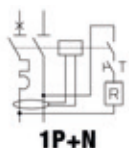
Modular circuit breakers for residual current protection

The 90 RCD range meets any ground fault protection requirement for any area of application. The range comprises MDC compact residual current c.b. with overcurrent protection (from 6 to 32 A, curves B and C, up to 10 kA and $I_{\Delta n}$ from 30 and 300 mA type AC, A, A[IR] and A[S]) BD and BDHP, add-on residual current devices for circuit breakers MT and MTHP ($I_{\Delta n}$ from 10 mA to 3 A type AC, A, A[IR], A[S] and A adjustable) SD residual current circuit breakers (up to 125 A, $I_{\Delta n}$ from 10 to 500 mA type AC, A, A[IR], A[S], B[IR] and B[S]).



Technical characteristics page 81

MDC - MONOBLOC COMPACT RCBO'S



MDC 45 - AC 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_{nB}	I_{nC}	I_{nS}	
In=6-32 A	4500 A	6 kA	

BREAKING CAPACITY 3-4P			
400V	EN61009-1	EN60947-2	
I_{nB}	I_{nC}	I_{nS}	
In=6-32 A	4500 A	4.5 kA	



GW 94 027

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



AC

Code	$I_{\Delta n}$	Rated current	Rated voltage	No. of modules EN 50022	Conf. Imb.
No. of poles: 1P+N					
GW 94 005	30 mA	6 A	230 V	2	1/6
GW 94 006	30 mA	10 A	230 V	2	1/6
GW 94 011	30 mA	13 A	230 V	2	1/6
GW 94 007	30 mA	16 A	230 V	2	1/6
GW 94 008	30 mA	20 A	230 V	2	1/6
GW 94 009	30 mA	25 A	230 V	2	1/6
GW 94 010	30 mA	32 A	230 V	2	1/6
GW 94 015	300 mA	6 A	230 V	2	1/6
GW 94 016	300 mA	10 A	230 V	2	1/6
GW 94 017	300 mA	16 A	230 V	2	1/6
GW 94 018	300 mA	20 A	230 V	2	1/6
GW 94 019	300 mA	25 A	230 V	2	1/6
GW 94 020	300 mA	32 A	230 V	2	1/6
No. of poles: 2P					
GW 94 025	30 mA	6 A	230 V	2	1/6
GW 94 026	30 mA	10 A	230 V	2	1/6
GW 94 031	30 mA	13 A	230 V	2	1/6
GW 94 027	30 mA	16 A	230 V	2	1/6
GW 94 028	30 mA	20 A	230 V	2	1/6
GW 94 029	30 mA	25 A	230 V	2	1/6
GW 94 030	30 mA	32 A	230 V	2	1/6
GW 94 035	300 mA	6 A	230 V	2	1/6
GW 94 036	300 mA	10 A	230 V	2	1/6
GW 94 037	300 mA	16 A	230 V	2	1/6
GW 94 038	300 mA	20 A	230 V	2	1/6
GW 94 039	300 mA	25 A	230 V	2	1/6
GW 94 040	300 mA	32 A	230 V	2	1/6

CONTINUE

Code	I _{dn}	Rated current	Rated voltage	No. of modules EN 50022	Conf. Imb.
No. of poles: 3P					
GW 94 045	30 mA	6 A	400 V	3	1/4
GW 94 046	30 mA	10 A	400 V	3	1/4
GW 94 051	30 mA	13 A	400 V	3	1/4
GW 94 047	30 mA	16 A	400 V	3	1/4
GW 94 048	30 mA	20 A	400 V	3	1/4
GW 94 049	30 mA	25 A	400 V	3	1/4
GW 94 050	30 mA	32 A	400 V	3	1/4
GW 94 055	300 mA	6 A	400 V	3	1/4
GW 94 056	300 mA	10 A	400 V	3	1/4
GW 94 057	300 mA	16 A	400 V	3	1/4
GW 94 058	300 mA	20 A	400 V	3	1/4
GW 94 059	300 mA	25 A	400 V	3	1/4
GW 94 060	300 mA	32 A	400 V	3	1/4
No. of poles: 4P					
GW 94 065	30 mA	6 A	400 V	4	1/3
GW 94 066	30 mA	10 A	400 V	4	1/3
GW 94 071	30 mA	13 A	400 V	4	1/3
GW 94 067	30 mA	16 A	400 V	4	1/3
GW 94 068	30 mA	20 A	400 V	4	1/3
GW 94 069	30 mA	25 A	400 V	4	1/3
GW 94 070	30 mA	32 A	400 V	4	1/3
GW 94 075	300 mA	6 A	400 V	4	1/3
GW 94 076	300 mA	10 A	400 V	4	1/3
GW 94 077	300 mA	16 A	400 V	4	1/3
GW 94 078	300 mA	20 A	400 V	4	1/3
GW 94 079	300 mA	25 A	400 V	4	1/3
GW 94 080	300 mA	32 A	400 V	4	1/3

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

BREAKING CAPACITY 2-3-4P			
230V	EN61009-1	EN60947-2	
$I_{n0.6+32A}$	4500 A	6 kA	

BREAKING CAPACITY 1P+N-2P			
230V	EN61009-1	EN60947-2	
$I_{n0.6+32A}$	4500 A	6 kA	

BREAKING CAPACITY 3-4P			
400V	EN61009-1	EN60947-2	
$I_{n0.6+32A}$	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	Conf. Imb.
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

MDC 60 - AC TYPE - C CURVE - 6000 A (EN 61009-1) - 6 KA (EN 60947-2)

BREAKING CAPACITY 2P			
230V	EN61009-1	EN60947-2	
$I_{n=6+32}$ A	6000 A	I_{cu}	7.5 kA

BREAKING CAPACITY 1P+N-2P			
230V	EN61009-1	EN60947-2	
$I_{n=6+32}$ A	6000 A	I_{cu}	10 kA

BREAKING CAPACITY 3-4P			
400V	EN61009-1	EN60947-2	
$I_{n=6+32}$ A	6000 A	I_{cu}	6 kA



GW 94 168

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



Code	I_{dn}	Rated current	Rated voltage	No. of modules EN 50022	Conf. Imb.
No. of poles: 1P+N					
GW 94 105	30 mA	6 A	230 V	2	1/6
GW 94 106	30 mA	10 A	230 V	2	1/6
GW 94 111	30 mA	13 A	230 V	2	1/6
GW 94 107	30 mA	16 A	230 V	2	1/6
GW 94 108	30 mA	20 A	230 V	2	1/6
GW 94 109	30 mA	25 A	230 V	2	1/6
GW 94 110	30 mA	32 A	230 V	2	1/6
GW 94 115	300 mA	6 A	230 V	2	1/6
GW 94 116	300 mA	10 A	230 V	2	1/6
GW 94 117	300 mA	16 A	230 V	2	1/6
GW 94 118	300 mA	20 A	230 V	2	1/6
GW 94 119	300 mA	25 A	230 V	2	1/6
GW 94 120	300 mA	32 A	230 V	2	1/6
No. of poles: 2P					
GW 94 125	30 mA	6 A	230 V	2	1/6
GW 94 126	30 mA	10 A	230 V	2	1/6
GW 94 131	30 mA	13 A	230 V	2	1/6
GW 94 127	30 mA	16 A	230 V	2	1/6
GW 94 128	30 mA	20 A	230 V	2	1/6
GW 94 129	30 mA	25 A	230 V	2	1/6
GW 94 130	30 mA	32 A	230 V	2	1/6
GW 94 135	300 mA	6 A	230 V	2	1/6
GW 94 136	300 mA	10 A	230 V	2	1/6
GW 94 137	300 mA	16 A	230 V	2	1/6
GW 94 138	300 mA	20 A	230 V	2	1/6
GW 94 139	300 mA	25 A	230 V	2	1/6
GW 94 140	300 mA	32 A	230 V	2	1/6
No. of poles: 3P					
GW 94 145	30 mA	6 A	400 V	3	1/4
GW 94 146	30 mA	10 A	400 V	3	1/4
GW 94 151	30 mA	13 A	400 V	3	1/4
GW 94 147	30 mA	16 A	400 V	3	1/4
GW 94 148	30 mA	20 A	400 V	3	1/4
GW 94 149	30 mA	25 A	400 V	3	1/4
GW 94 150	30 mA	32 A	400 V	3	1/4
GW 94 155	300 mA	6 A	400 V	3	1/4
GW 94 156	300 mA	10 A	400 V	3	1/4
GW 94 157	300 mA	16 A	400 V	3	1/4
GW 94 158	300 mA	20 A	400 V	3	1/4
GW 94 159	300 mA	25 A	400 V	3	1/4
GW 94 160	300 mA	32 A	400 V	3	1/4
No. of poles: 4P					
GW 94 165	30 mA	6 A	400 V	4	1/3
GW 94 166	30 mA	10 A	400 V	4	1/3
GW 94 171	30 mA	13 A	400 V	4	1/3
GW 94 167	30 mA	16 A	400 V	4	1/3
GW 94 168	30 mA	20 A	400 V	4	1/3
GW 94 169	30 mA	25 A	400 V	4	1/3
GW 94 170	30 mA	32 A	400 V	4	1/3
GW 94 175	300 mA	6 A	400 V	4	1/3
GW 94 176	300 mA	10 A	400 V	4	1/3
GW 94 177	300 mA	16 A	400 V	4	1/3
GW 94 178	300 mA	20 A	400 V	4	1/3
GW 94 179	300 mA	25 A	400 V	4	1/3
GW 94 180	300 mA	32 A	400 V	4	1/3

90 RCD

MDC 60 - A TYPE - C CURVE - 6000 A (EN 61009-1) - 6 KA (EN 60947-2)

BREAKING CAPACITY 2P			
230V	EN61009-1	EN60947-2	
I _{cs}	I _{cs}	I _{cs}	
I _{nu} 6=32 A	6000 A	7.5 kA	

BREAKING CAPACITY 1P+N-2P			
230V	EN61009-1	EN60947-2	
I _{cs}	I _{cs}	I _{cs}	
I _{nu} 2=32 A	6000 A	10 kA	

BREAKING CAPACITY 3-4P			
400V	EN61009-1	EN60947-2	
I _{cs}	I _{cs}	I _{cs}	
I _{nu} 6=32 A	6000 A	6 kA	



GW 94 347

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



Code	I _{dn}	Rated current	Rated voltage	No. of modules EN 50022	Conf. Imb.
No. of poles: 1P+N					
GW 94 305	30 mA	6 A	230 V	2	1/6
GW 94 306	30 mA	10 A	230 V	2	1/6
GW 94 311	30 mA	13 A	230 V	2	1/6
GW 94 307	30 mA	16 A	230 V	2	1/6
GW 94 308	30 mA	20 A	230 V	2	1/6
GW 94 309	30 mA	25 A	230 V	2	1/6
GW 94 310	30 mA	32 A	230 V	2	1/6
GW 94 315	300 mA	6 A	230 V	2	1/6
GW 94 316	300 mA	10 A	230 V	2	1/6
GW 94 317	300 mA	16 A	230 V	2	1/6
GW 94 318	300 mA	20 A	230 V	2	1/6
GW 94 319	300 mA	25 A	230 V	2	1/6
GW 94 320	300 mA	32 A	230 V	2	1/6
No. of poles: 2P					
GW 94 322	① 30 mA	2 A	230 V	2	1/6
GW 94 324	① 30 mA	4 A	230 V	2	1/6
GW 94 325	30 mA	6 A	230 V	2	1/6
GW 94 326	30 mA	10 A	230 V	2	1/6
GW 94 331	30 mA	13 A	230 V	2	1/6
GW 94 327	30 mA	16 A	230 V	2	1/6
GW 94 328	30 mA	20 A	230 V	2	1/6
GW 94 329	30 mA	25 A	230 V	2	1/6
GW 94 330	30 mA	32 A	230 V	2	1/6
GW 94 335	300 mA	6 A	230 V	2	1/6
GW 94 336	300 mA	10 A	230 V	2	1/6
GW 94 337	300 mA	16 A	230 V	2	1/6
GW 94 338	300 mA	20 A	230 V	2	1/6
GW 94 339	300 mA	25 A	230 V	2	1/6
GW 94 340	300 mA	32 A	230 V	2	1/6
No. of poles: 3P					
GW 94 345	30 mA	6 A	400 V	3	1/4
GW 94 346	30 mA	10 A	400 V	3	1/4
GW 94 351	30 mA	13 A	400 V	3	1/4
GW 94 347	30 mA	16 A	400 V	3	1/4
GW 94 348	30 mA	20 A	400 V	3	1/4
GW 94 349	30 mA	25 A	400 V	3	1/4
GW 94 350	30 mA	32 A	400 V	3	1/4
GW 94 355	300 mA	6 A	400 V	3	1/4
GW 94 356	300 mA	10 A	400 V	3	1/4
GW 94 357	300 mA	16 A	400 V	3	1/4
GW 94 358	300 mA	20 A	400 V	3	1/4
GW 94 359	300 mA	25 A	400 V	3	1/4
GW 94 360	300 mA	32 A	400 V	3	1/4
No. of poles: 4P					
GW 94 365	30 mA	6 A	400 V	4	1/3
GW 94 366	30 mA	10 A	400 V	4	1/3
GW 94 371	30 mA	13 A	400 V	4	1/3
GW 94 367	30 mA	16 A	400 V	4	1/3
GW 94 368	30 mA	20 A	400 V	4	1/3
GW 94 369	30 mA	25 A	400 V	4	1/3
GW 94 370	30 mA	32 A	400 V	4	1/3
GW 94 375	300 mA	6 A	400 V	4	1/3
GW 94 376	300 mA	10 A	400 V	4	1/3
GW 94 377	300 mA	16 A	400 V	4	1/3
GW 94 378	300 mA	20 A	400 V	4	1/3
GW 94 379	300 mA	25 A	400 V	4	1/3
GW 94 380	300 mA	32 A	400 V	4	1/3

MDC 60 - A[IR] TYPE IMPULSE RESISTANT - C CURVE - 6000 A (EN 61009-1) - 6 KA (EN 60947-2)

BREAKING CAPACITY 2P					
230V	EN61009-1	EN60947-2	Icn	Icu	
In=6+32 A	6000 A	10 kA			

BREAKING CAPACITY 4P					
400V	EN61009-1	EN60947-2	Icn	Icu	
In=6+32 A	6000 A	6 kA			



GW 95 817

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



Code	Idn	Rated current	Rated voltage	No. of modules EN 50022	Conf. Imb.
No. of poles: 2P					
GW 95 805	30 mA	6 A	230 V	2	1/6
GW 95 806	30 mA	10 A	230 V	2	1/6
GW 95 811	30 mA	13 A	230 V	2	1/6
GW 95 807	30 mA	16 A	230 V	2	1/6
GW 95 808	30 mA	20 A	230 V	2	1/6
GW 95 809	30 mA	25 A	230 V	2	1/6
GW 95 810	30 mA	32 A	230 V	2	1/6
No. of poles: 4P					
GW 95 815	30 mA	6 A	400 V	4	1/3
GW 95 816	30 mA	10 A	400 V	4	1/3
GW 95 821	30 mA	13 A	400 V	4	1/3
GW 95 817	30 mA	16 A	400 V	4	1/3
GW 95 818	30 mA	20 A	400 V	4	1/3
GW 95 819	30 mA	25 A	400 V	4	1/3
GW 95 820	30 mA	32 A	400 V	4	1/3

CHARACTERISTICS: type A[IR] presents greater resistance to mains disturbances and atmospheric discharges in comparison to standard residual current circuit breakers with overcurrent protection. Immunity level 8/20 µs is 3000 A.

MDC 60 - A[S] TYPE SELECTIVE - C CURVE - 6000 A (EN 61009-1) - 6 KA (EN 60947-2)

BREAKING CAPACITY 2P			
230V	EN61009-1	EN60947-2	
I _{cs}	I _{cs}	I _{cs}	
I _{cs} =16÷32 A	6000 A	10 kA	

BREAKING CAPACITY 4P			
400V	EN61009-1	EN60947-2	
I _{cs}	I _{cs}	I _{cs}	
I _{cs} =16÷32 A	6000 A	6 kA	



GW 95 850

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



Code	I _{dn}	Rated current	Rated voltage	No. of modules EN 50022	Conf. lmb.
No. of poles: 2P					
GW 95 847	300 mA	16 A	230 V	2	1/6
GW 95 848	300 mA	20 A	230 V	2	1/6
GW 95 849	300 mA	25 A	230 V	2	1/6
GW 95 850	300 mA	32 A	230 V	2	1/6
No. of poles: 4P					
GW 95 857	300 mA	16 A	400 V	4	1/3
GW 95 858	300 mA	20 A	400 V	4	1/3
GW 95 859	300 mA	25 A	400 V	4	1/3
GW 95 860	300 mA	32 A	400 V	4	1/3

MDC 60 - F TYPE - C CURVE - 6000 A (EN 61009-1) - 10 KA (EN 60947-2)

BREAKING CAPACITY 2P			
230V	EN61009-1	EN60947-2	
I _{cs}	I _{cs}	I _{cs}	
I _{cs} =16÷32 A	6000 A	10 kA	



GW 95 937

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



Code	I _{dn}	Rated current	Rated voltage	No. of modules EN 50022	Conf. lmb.
No. of poles: 2P					
GW 95 935	30 mA	6 A	230 V	2	1/6
GW 95 936	30 mA	10 A	230 V	2	1/6
GW 95 941	30 mA	13 A	230 V	2	1/6
GW 95 937	30 mA	16 A	230 V	2	1/6
GW 95 938	30 mA	20 A	230 V	2	1/6
GW 95 939	30 mA	25 A	230 V	2	1/6
GW 95 940	30 mA	32 A	230 V	2	1/6

CHARACTERISTICS: F type presents greater resistance to mains disturbances and atmospheric discharges in comparison to standard residual current circuit breakers with overcurrent protection. Immunity level 8/20 µs is 3000 A.

MDC 60 - A TYPE - B CURVE - 6000 A (EN 61009-1) - 6 KA (EN 60947-2)

BREAKING CAPACITY 2P			
230V	EN61009-1	EN60947-2	
I _{nb}	I _{cn}	I _{cu}	
In=6÷32 A	6000 A	7.5 kA	

BREAKING CAPACITY 1P+N-2P			
230V	EN61009-1	EN60947-2	
I _{nb}	I _{cn}	I _{cu}	
In=6÷32 A	6000 A	10 kA	

BREAKING CAPACITY 3-4P			
400V	EN61009-1	EN60947-2	
I _{nb}	I _{cn}	I _{cu}	
In=6÷32 A	6000 A	6 kA	



GW 95 168

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



Code	I _{dn}	Rated current	Rated voltage	No. of modules EN 50022	Conf. Imb.
No. of poles: 1P+N					
GW 95 105	30 mA	6 A	230 V	2	1/6
GW 95 106	30 mA	10 A	230 V	2	1/6
GW 95 111	30 mA	13 A	230 V	2	1/6
GW 95 107	30 mA	16 A	230 V	2	1/6
GW 95 108	30 mA	20 A	230 V	2	1/6
GW 95 109	30 mA	25 A	230 V	2	1/6
GW 95 110	30 mA	32 A	230 V	2	1/6
GW 95 115	300 mA	6 A	230 V	2	1/6
GW 95 116	300 mA	10 A	230 V	2	1/6
GW 95 117	300 mA	16 A	230 V	2	1/6
GW 95 118	300 mA	20 A	230 V	2	1/6
GW 95 119	300 mA	25 A	230 V	2	1/6
GW 95 120	300 mA	32 A	230 V	2	1/6
No. of poles: 2P					
GW 95 125	30 mA	6 A	230 V	2	1/6
GW 95 126	30 mA	10 A	230 V	2	1/6
GW 95 131	30 mA	13 A	230 V	2	1/6
GW 95 127	30 mA	16 A	230 V	2	1/6
GW 95 128	30 mA	20 A	230 V	2	1/6
GW 95 129	30 mA	25 A	230 V	2	1/6
GW 95 130	30 mA	32 A	230 V	2	1/6
GW 95 135	300 mA	6 A	230 V	2	1/6
GW 95 136	300 mA	10 A	230 V	2	1/6
GW 95 137	300 mA	16 A	230 V	2	1/6
GW 95 138	300 mA	20 A	230 V	2	1/6
GW 95 139	300 mA	25 A	230 V	2	1/6
GW 95 140	300 mA	32 A	230 V	2	1/6
No. of poles: 3P					
GW 95 145	30 mA	6 A	400 V	3	1/4
GW 95 146	30 mA	10 A	400 V	3	1/4
GW 95 151	30 mA	13 A	400 V	3	1/4
GW 95 147	30 mA	16 A	400 V	3	1/4
GW 95 148	30 mA	20 A	400 V	3	1/4
GW 95 149	30 mA	25 A	400 V	3	1/4
GW 95 150	30 mA	32 A	400 V	3	1/4
GW 95 155	300 mA	6 A	400 V	3	1/4
GW 95 156	300 mA	10 A	400 V	3	1/4
GW 95 157	300 mA	16 A	400 V	3	1/4
GW 95 158	300 mA	20 A	400 V	3	1/4
GW 95 159	300 mA	25 A	400 V	3	1/4
GW 95 160	300 mA	32 A	400 V	3	1/4
No. of poles: 4P					
GW 95 165	30 mA	6 A	400 V	4	1/3
GW 95 166	30 mA	10 A	400 V	4	1/3
GW 95 171	30 mA	13 A	400 V	4	1/3
GW 95 167	30 mA	16 A	400 V	4	1/3
GW 95 168	30 mA	20 A	400 V	4	1/3
GW 95 169	30 mA	25 A	400 V	4	1/3
GW 95 170	30 mA	32 A	400 V	4	1/3
GW 95 175	300 mA	6 A	400 V	4	1/3
GW 95 176	300 mA	10 A	400 V	4	1/3
GW 95 177	300 mA	16 A	400 V	4	1/3
GW 95 178	300 mA	20 A	400 V	4	1/3
GW 95 179	300 mA	25 A	400 V	4	1/3
GW 95 180	300 mA	32 A	400 V	4	1/3

90 RCD

MDC 60 - F TYPE - B CURVE - 6000 A (EN 61009-1) - 10 KA (EN 60947-2)

BREAKING CAPACITY 2P			
230V	EN61009-1	EN60947-2	
I_{nB}	I_{cn}	I_{cs}	
$I_{nB}=16-32$ A	6000 A	10 kA	



GW 95 977

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



Code	I_{dn}	Rated current	Rated voltage	No. of modules EN 50022	Conf. lmb.
No. of poles: 2P					
GW 95 975	30 mA	6 A	230 V	2	1/6
GW 95 976	30 mA	10 A	230 V	2	1/6
GW 95 981	30 mA	13 A	230 V	2	1/6
GW 95 977	30 mA	16 A	230 V	2	1/6
GW 95 978	30 mA	20 A	230 V	2	1/6
GW 95 979	30 mA	25 A	230 V	2	1/6
GW 95 980	30 mA	32 A	230 V	2	1/6

CHARACTERISTICS: F type presents greater resistance to mains disturbances and atmospheric discharges in comparison to standard residual current circuit breakers with overcurrent protection. Immunity level 8/20 μ s is 3000 A.

MDC 100 - AC TYPE - C CURVE - 10000 A (EN 61009-1) - 15 KA (EN 60947-2)

BREAKING CAPACITY 1P+N-2P			
230V	EN61009-1	EN60947-2	
I_{nB}	I_{cn}	I_{cs}	
$I_{nB}=6-32$ A	10000 A	15 kA	

BREAKING CAPACITY 2P			
230V	EN61009-1	EN60947-2	
I_{nB}	I_{cn}	I_{cs}	
$I_{nB}=6-32$ A	10000 A	10 kA	



GW 95 027

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



Code	I_{dn}	Rated current	Rated voltage	No. of modules EN 50022	Conf. lmb.
No. of poles: 2P					
GW 95 025	30 mA	6 A	230 V	2	1/6
GW 95 026	30 mA	10 A	230 V	2	1/6
GW 95 031	30 mA	13 A	230 V	2	1/6
GW 95 027	30 mA	16 A	230 V	2	1/6
GW 95 028	30 mA	20 A	230 V	2	1/6
GW 95 029	30 mA	25 A	230 V	2	1/6
GW 95 030	30 mA	32 A	230 V	2	1/6
GW 95 035	300 mA	6 A	230 V	2	1/6
GW 95 036	300 mA	10 A	230 V	2	1/6
GW 95 037	300 mA	16 A	230 V	2	1/6
GW 95 038	300 mA	20 A	230 V	2	1/6
GW 95 039	300 mA	25 A	230 V	2	1/6
GW 95 040	300 mA	32 A	230 V	2	1/6

MDC 100 MA - AC TYPE - C CURVE - 10000 A (EN 61009-1) - 15 KA (EN 60947-2)

BREAKING CAPACITY 2P			
110V	EN61009-1	EN60947-2	
I _{cn}	I _{cn}	I _{cu}	
In=6÷32 A	10000 A	15 kA	



GW 95 025 MA

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



Code	I _{dn}	Rated current	Rated voltage	No. of modules EN 50022	Conf. Imb.
No. of poles: 2P					
GW 95 025 MA	30 mA	6 A	110 V	2	1/6
GW 95 026 MA	30 mA	10 A	110 V	2	1/6
GW 95 031 MA	30 mA	13 A	110 V	2	1/6
GW 95 027 MA	30 mA	16 A	110 V	2	1/6
GW 95 028 MA	30 mA	20 A	110 V	2	1/6
GW 95 029 MA	30 mA	25 A	110 V	2	1/6
GW 95 030 MA	30 mA	32 A	110 V	2	1/6
GW 95 035 MA	300 mA	6 A	110 V	2	1/6
GW 95 036 MA	300 mA	10 A	110 V	2	1/6
GW 95 037 MA	300 mA	16 A	110 V	2	1/6
GW 95 038 MA	300 mA	20 A	110 V	2	1/6
GW 95 039 MA	300 mA	25 A	110 V	2	1/6
GW 95 040 MA	300 mA	32 A	110 V	2	1/6

MDC 100 - A TYPE - C CURVE - 10000 A (EN 61009-1) - 15 KA (EN 60947-2)

BREAKING CAPACITY 1P+N-2P-3P			
230V	EN61009-1	EN60947-2	
I _{cn}	I _{cn}	I _{cu}	
In=6÷32 A	10000 A	15 kA	

BREAKING CAPACITY 2P			
230V	EN61009-1	EN60947-2	
I _{cn}	I _{cn}	I _{cu}	
In=6÷32 A	10000 A	10 kA	



GW 95 227

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



Code	I _{dn}	Rated current	Rated voltage	No. of modules EN 50022	Conf. Imb.
No. of poles: 2P					
GW 95 225	30 mA	6 A	230 V	2	1/6
GW 95 226	30 mA	10 A	230 V	2	1/6
GW 95 231	30 mA	13 A	230 V	2	1/6
GW 95 227	30 mA	16 A	230 V	2	1/6
GW 95 228	30 mA	20 A	230 V	2	1/6
GW 95 229	30 mA	25 A	230 V	2	1/6
GW 95 230	30 mA	32 A	230 V	2	1/6
GW 95 785	100 mA	6 A	230 V	2	1/6
GW 95 786	100 mA	10 A	230 V	2	1/6
GW 95 791	100 mA	13 A	230 V	2	1/6
GW 95 787	100 mA	16 A	230 V	2	1/6
GW 95 788	100 mA	20 A	230 V	2	1/6
GW 95 789	100 mA	25 A	230 V	2	1/6
GW 95 790	100 mA	32 A	230 V	2	1/6
GW 95 235	300 mA	6 A	230 V	2	1/6
GW 95 236	300 mA	10 A	230 V	2	1/6
GW 95 237	300 mA	16 A	230 V	2	1/6
GW 95 238	300 mA	20 A	230 V	2	1/6
GW 95 239	300 mA	25 A	230 V	2	1/6
GW 95 240	300 mA	32 A	230 V	2	1/6
No. of poles: 3P					
GW 95 245	30 mA	6 A	230 V	3	1/4
GW 95 246	30 mA	10 A	230 V	3	1/4
GW 95 247	30 mA	16 A	230 V	3	1/4
GW 95 248	30 mA	20 A	230 V	3	1/4
GW 95 249	30 mA	25 A	230 V	3	1/4
GW 95 250	30 mA	32 A	230 V	3	1/4

MDC 100 MA - A TYPE - C CURVE - 10000 A (EN 61009-1) - 15 KA (EN 60947-2)

BREAKING CAPACITY 2P			
110V	EN61009-1	EN60947-2	
	I _{cn}	I _{cn}	
I _n =6-32 A	10000 A	15 kA	



GW 95 225 MA

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



Code	I _{dn}	Rated current	Rated voltage	No. of modules EN 50022	Conf. lmb.
No. of poles: 2P					
GW 95 225 MA	30 mA	6 A	110 V	2	1/6
GW 95 226 MA	30 mA	10 A	110 V	2	1/6
GW 95 231 MA	30 mA	13 A	110 V	2	1/6
GW 95 227 MA	30 mA	16 A	110 V	2	1/6
GW 95 228 MA	30 mA	20 A	110 V	2	1/6
GW 95 229 MA	30 mA	25 A	110 V	2	1/6
GW 95 230 MA	30 mA	32 A	110 V	2	1/6
GW 95 235 MA	300 mA	6 A	110 V	2	1/6
GW 95 236 MA	300 mA	10 A	110 V	2	1/6
GW 95 237 MA	300 mA	16 A	110 V	2	1/6
GW 95 238 MA	300 mA	20 A	110 V	2	1/6
GW 95 239 MA	300 mA	25 A	110 V	2	1/6
GW 95 240 MA	300 mA	32 A	110 V	2	1/6

MDC 100 - A[IR] TYPE IMPULSE RESISTANT - C CURVE - 10000 A (EN 61009-1) - 15 KA (EN 60947-2)

BREAKING CAPACITY 2P			
230V	EN61009-1	EN60947-2	
	I _{cn}	I _{cn}	
I _n =6-32 A	10000 A	15 kA	



GW 95 827

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



Code	I _{dn}	Rated current	Rated voltage	No. of modules EN 50022	Conf. lmb.
No. of poles: 2P					
GW 95 825	30 mA	6 A	230 V	2	1/6
GW 95 826	30 mA	10 A	230 V	2	1/6
GW 95 831	30 mA	13 A	230 V	2	1/6
GW 95 827	30 mA	16 A	230 V	2	1/6
GW 95 828	30 mA	20 A	230 V	2	1/6
GW 95 829	30 mA	25 A	230 V	2	1/6
GW 95 830	30 mA	32 A	230 V	2	1/6

CHARACTERISTICS: type A[IR] presents greater resistance to mains disturbances and atmospheric discharges in comparison to standard residual current circuit breakers with overcurrent protection. Immunity level 8/20 μs is 3000 A.

MDC 100 - F TYPE - C CURVE - 10000 A (EN 61009-1) - 15 KA (EN 60947-2)

BREAKING CAPACITY 2P			
230V	EN61009-1	EN60947-2	
I_{cn}	I_{cn}	I_{cu}	
$I_{n=6} \geq 32 \text{ A}$	10000 A	15 kA	



GW 95 957

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



Code	I_{dn}	Rated current	Rated voltage	No. of modules EN 50022	Conf. Imb.
No. of poles: 2P					
GW 95 955	30 mA	6 A	230 V	2	1/6
GW 95 956	30 mA	10 A	230 V	2	1/6
GW 95 961	30 mA	13 A	230 V	2	1/6
GW 95 957	30 mA	16 A	230 V	2	1/6
GW 95 958	30 mA	20 A	230 V	2	1/6
GW 95 959	30 mA	25 A	230 V	2	1/6
GW 95 960	30 mA	32 A	230 V	2	1/6

CARATTERISTICHE: F type presents greater resistance to mains disturbances and atmospheric discharges in comparison to standard residual current circuit breakers with overcurrent protection. Immunity level 8/20 μ s is 3000 A.

MDC 100 - A TYPE - B CURVE - 10000 A (EN 61009-1) - 15 KA (EN 60947-2)

BREAKING CAPACITY 2P			
230V	EN61009-1	EN60947-2	
I_{cn}	I_{cn}	I_{cu}	
$I_{n=6} \geq 32 \text{ A}$	10000 A	15 kA	



GW 95 327

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



Code	I_{dn}	Rated current	Rated voltage	No. of modules EN 50022	Conf. Imb.
No. of poles: 2P					
GW 95 325	30 mA	6 A	230 V	2	1/6
GW 95 326	30 mA	10 A	230 V	2	1/6
GW 95 331	30 mA	13 A	230 V	2	1/6
GW 95 327	30 mA	16 A	230 V	2	1/6
GW 95 328	30 mA	20 A	230 V	2	1/6
GW 95 329	30 mA	25 A	230 V	2	1/6
GW 95 330	30 mA	32 A	230 V	2	1/6
GW 95 795	100 mA	6 A	230 V	2	1/6
GW 95 796	100 mA	10 A	230 V	2	1/6
GW 95 801	100 mA	13 A	230 V	2	1/6
GW 95 797	100 mA	16 A	230 V	2	1/6
GW 95 798	100 mA	20 A	230 V	2	1/6
GW 95 799	100 mA	25 A	230 V	2	1/6
GW 95 800	100 mA	32 A	230 V	2	1/6
GW 95 335	300 mA	6 A	230 V	2	1/6
GW 95 336	300 mA	10 A	230 V	2	1/6
GW 95 337	300 mA	16 A	230 V	2	1/6
GW 95 338	300 mA	20 A	230 V	2	1/6
GW 95 339	300 mA	25 A	230 V	2	1/6
GW 95 340	300 mA	32 A	230 V	2	1/6

MDC 100 - A[IR] TYPE IMPULSE RESISTANT - B CURVE - 10000 A (EN 61009-1) - 15 KA (EN 60947-2)

BREAKING CAPACITY 2P			
230V	EN61009-1	EN60947-2	
	Icn	Icn	
In=6-32 A	10000 A	15 kA	



GW 95 837

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



Code	Idn	Rated current	Rated voltage	No. of modules EN 50022	Conf. lmb.
No. of poles: 2P					
GW 95 835	30 mA	6 A	230 V	2	1/6
GW 95 836	30 mA	10 A	230 V	2	1/6
GW 95 841	30 mA	13 A	230 V	2	1/6
GW 95 837	30 mA	16 A	230 V	2	1/6
GW 95 838	30 mA	20 A	230 V	2	1/6
GW 95 839	30 mA	25 A	230 V	2	1/6
GW 95 840	30 mA	32 A	230 V	2	1/6

CHARACTERISTICS: type A[IR] presents greater resistance to mains disturbances and atmospheric discharges in comparison to standard residual current circuit breakers with overcurrent protection. Immunity level 8/20 µs is 3000 A.

MDC 100 - F TYPE - B CURVE - 10000 A (EN 61009-1) - 15 KA (EN 60947-2)

BREAKING CAPACITY 2P			
230V	EN61009-1	EN60947-2	
	Icn	Icn	
In=6-32 A	10000 A	15 kA	



GW 95 967

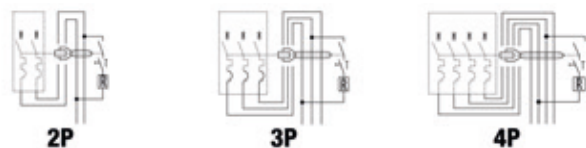
COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



Code	Idn	Rated current	Rated voltage	No. of modules EN 50022	Conf. lmb.
No. of poles: 2P					
GW 95 965	30 mA	6 A	230 V	2	1/6
GW 95 966	30 mA	10 A	230 V	2	1/6
GW 95 971	30 mA	13 A	230 V	2	1/6
GW 95 967	30 mA	16 A	230 V	2	1/6
GW 95 968	30 mA	20 A	230 V	2	1/6
GW 95 969	30 mA	25 A	230 V	2	1/6
GW 95 970	30 mA	32 A	230 V	2	1/6

CARATTERISTIC: F type presents greater resistance to mains disturbances and atmospheric discharges in comparison to standard residual current circuit breakers with overcurrent protection. Immunity level 8/20 µs is 3000 A.

BD - ADD-ON RESIDUAL CURRENT DEVICES FOR MT CIRCUIT BREAKERS



BD - AC TYPE (INSTANTANEOUS)



GW 94 402

ADD-ON RESIDUAL CURRENT DEVICES



Code	Idn	Rated current	Rated voltage	No. of modules EN 50022	Conf. lmb.
No. of poles: 2P					
GW 94 401	10 mA	25 A	230 V	2	1/2
GW 94 402	30 mA	25 A	230 V	2	1/2
GW 94 403	300 mA	25 A	230 V	2	1/2
GW 94 404	500 mA	25 A	230 V	2	1/2
GW 94 412	30 mA	63 A	230 V	2	1/2
GW 94 413	300 mA	63 A	230 V	2	1/2
GW 94 414	500 mA	63 A	230 V	2	1/2
No. of poles: 3P					
GW 94 442	30 mA	25 A	400 V	3.5	1/2
GW 94 443	300 mA	25 A	400 V	3.5	1/2
GW 94 444	500 mA	25 A	400 V	3.5	1/2
GW 94 448	30 mA	63 A	400 V	3.5	1/2
GW 94 449	300 mA	63 A	400 V	3.5	1/2
GW 94 450	500 mA	63 A	400 V	3.5	1/2
No. of poles: 4P					
GW 94 422	30 mA	25 A	400 V	3.5	1/2
GW 94 423	300 mA	25 A	400 V	3.5	1/2
GW 94 424	500 mA	25 A	400 V	3.5	1/2
GW 94 432	30 mA	63 A	400 V	3.5	1/2
GW 94 433	300 mA	63 A	400 V	3.5	1/2
GW 94 434	500 mA	63 A	400 V	3.5	1/2

BD - A TYPE (INSTANTANEOUS)



GW 94 502

ADD-ON RESIDUAL CURRENT DEVICES



Code	Idn	Rated current	Rated voltage	No. of modules EN 50022	Conf. lmb.
No. of poles: 2P					
GW 94 502	30 mA	25 A	230 V	2	1/2
GW 94 503	300 mA	25 A	230 V	2	1/2
GW 94 504	500 mA	25 A	230 V	2	1/2
GW 94 512	30 mA	63 A	230 V	2	1/2
GW 94 513	300 mA	63 A	230 V	2	1/2
GW 94 514	500 mA	63 A	230 V	2	1/2
No. of poles: 3P					
GW 94 542	30 mA	25 A	400 V	3.5	1/2
GW 94 543	300 mA	25 A	400 V	3.5	1/2
GW 94 544	500 mA	25 A	400 V	3.5	1/2
GW 94 547	30 mA	63 A	400 V	3.5	1/2
GW 94 548	300 mA	63 A	400 V	3.5	1/2
GW 94 549	500 mA	63 A	400 V	3.5	1/2
No. of poles: 4P					
GW 94 522	30 mA	25 A	400 V	3.5	1/2
GW 94 523	300 mA	25 A	400 V	3.5	1/2
GW 94 524	500 mA	25 A	400 V	3.5	1/2
GW 94 532	30 mA	63 A	400 V	3.5	1/2
GW 94 533	300 mA	63 A	400 V	3.5	1/2
GW 94 534	500 mA	63 A	400 V	3.5	1/2

BD - A[IR] TYPE (IMPULSE RESISTANT)



GW 94 566

ADD-ON RESIDUAL CURRENT DEVICES



Code	Idn	Rated current	Rated voltage	No. of modules EN 50022	Conf. lmb.
No. of poles: 2P					
GW 94 566	30 mA	63 A	230 V	2	1/2
No. of poles: 3P					
GW 94 595	30 mA	63 A	400 V	3.5	1/2
No. of poles: 4P					
GW 94 586	30 mA	63 A	400 V	3.5	1/2

CHARACTERISTICS: type A[IR] presents greater resistance to mains disturbances and atmospheric discharges in comparison to add-on residual current devices.
Immunity level 8/20 µs is 3000 A.

BD - A[S] TYPE (SELECTIVE)



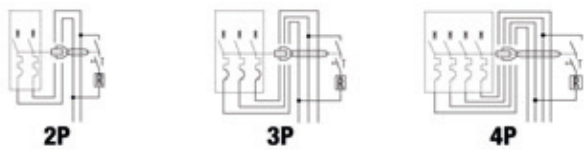
GW 94 563

ADD-ON RESIDUAL CURRENT DEVICES



Code	Idn	Rated current	Rated voltage	No. of modules EN 50022	Conf. lmb.
No. of poles: 2P					
GW 94 563	300 mA	63 A	230 V	2	1/2
GW 94 565	1000 mA	63 A	230 V	2	1/2
No. of poles: 3P					
GW 94 598	300 mA	63 A	400 V	3.5	1/2
GW 94 600	1000 mA	63 A	400 V	3.5	1/2
No. of poles: 4P					
GW 94 583	300 mA	63 A	400 V	3.5	1/2
GW 94 585	1000 mA	63 A	400 V	3.5	1/2

BDHP - ADD-ON RESIDUAL CURRENT DEVICES FOR MTHP CIRCUIT BREAKERS



BDHP - AC TYPE (INSTANTANEOUS)



GW 95 416

ADD-ON RESIDUAL CURRENT DEVICES

					
Code	I _{dn}	Rated current	Rated voltage	No. of modules EN 50022	Conf. Imb.
No. of poles: 2P					
GW 95 406	30 mA	125 A	230 V	4	1/2
GW 95 408	300 mA	125 A	230 V	4	1/2
No. of poles: 3P					
GW 95 416	30 mA	125 A	400 V	6	1/2
GW 95 418	300 mA	125 A	400 V	6	1/2
No. of poles: 4P					
GW 95 426	30 mA	125 A	400 V	6	1/2
GW 95 428	300 mA	125 A	400 V	6	1/2

BDHP - A TYPE (INSTANTANEOUS)



GW 95 446

ADD-ON RESIDUAL CURRENT DEVICES

					
Code	I _{dn}	Rated current	Rated voltage	No. of modules EN 50022	Conf. Imb.
No. of poles: 2P					
GW 95 436	30 mA	125 A	230 V	4	1/2
GW 95 438	300 mA	125 A	230 V	4	1/2
No. of poles: 3P					
GW 95 446	30 mA	125 A	400 V	6	1/2
GW 95 448	300 mA	125 A	400 V	6	1/2
No. of poles: 4P					
GW 95 456	30 mA	125 A	400 V	6	1/2
GW 95 458	300 mA	125 A	400 V	6	1/2

BDHP - A[S] TYPE (SELECTIVE)



GW 95 478

ADD-ON RESIDUAL CURRENT DEVICES



Code	I _{dn}	Rated current	Rated voltage	No. of modules EN 50022	Conf. Imb.
No. of poles: 2P					
GW 95 468	300 mA	125 A	230 V	4	1/2
GW 95 470	1000 mA	125 A	230 V	4	1/2
No. of poles: 3P					
GW 95 478	300 mA	125 A	400 V	6	1/2
GW 95 480	1000 mA	125 A	400 V	6	1/2
No. of poles: 4P					
GW 95 488	300 mA	125 A	400 V	6	1/2
GW 95 490	1000 mA	125 A	400 V	6	1/2

BDHP - TYPE A[IR] ADJUSTABLE BOOSTED IMMUNITY



GW 95 512

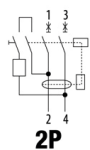
ADD-ON RESIDUAL CURRENT DEVICE



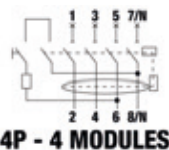
Code	I _{dn}	Adjustable tripping time	Rated current	Rated voltage	No. of modules EN 50022	Conf. Imb.
No. of poles: 4P						
GW 95 512	300 - 3000 mA	0 - 60 - 150 ms	125 A	400 V	6	1/2

CHARACTERISTICS: I_{da}: adjustable 300-500-1000-3000 mA; adjustable tripping time 0-60-150 ms.
Type A[IR] presents greater resistance to mains disturbances and atmospheric discharges in comparison to standard add-on residual current devices. Immunity level 8/20 µs is 3000 A.

IDP NA - RESIDUAL CURRENT CIRCUIT BREAKERS (ACCESSORIES NOT AVAILABLE)



2P



4P - 4 MODULES

IDP NA - AC TYPE INSTANTANEOUS



GW D4 617

RESIDUAL CURRENT CIRCUIT BREAKERS



Code	Rated current	Idn	Rated voltage	Auxiliaries compa- tibility	ReStart compa- tibility	No. of modules EN 50022	Conf. Imb.
No. of poles: 2P							
GW D4 617	25 A	30 mA	230 V	No	Yes	2	1/6
GW D4 627	40 A	30 mA	230 V	No	Yes	2	1/6
No. of poles: 4P							
GW D4 427	25 A	30 mA	400 V	No	No	4	1/3
GW D4 429	25 A	300 mA	400 V	No	No	4	1/3
GW D4 431	40 A	30 mA	400 V	No	No	4	1/3
GW D4 433	40 A	300 mA	400 V	No	No	4	1/3
GW D4 435	63 A	30 mA	400 V	No	No	4	1/3
GW D4 437	63 A	300 mA	400 V	No	No	4	1/3

IDP NA - A TYPE INSTANTANEOUS



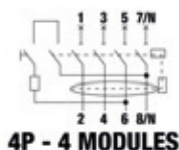
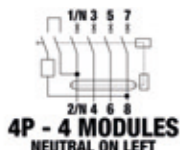
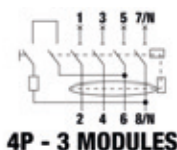
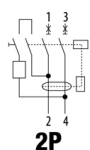
GW D4 817

RESIDUAL CURRENT CIRCUIT BREAKERS



Code	Rated current	Idn	Rated voltage	Auxiliaries compa- tibility	ReStart compa- tibility	No. of modules EN 50022	Conf. Imb.
No. of poles: 2P							
GW D4 817	25 A	30 mA	230 V	No	Yes	2	1/6
GW D4 827	40 A	30 mA	230 V	No	Yes	2	1/6
No. of poles: 4P							
GW D4 439	25 A	30 mA	400 V	No	No	4	1/3
GW D4 441	25 A	300 mA	400 V	No	No	4	1/3
GW D4 443	40 A	30 mA	400 V	No	No	4	1/3
GW D4 445	40 A	300 mA	400 V	No	No	4	1/3
GW D4 447	63 A	30 mA	400 V	No	No	4	1/3
GW D4 449	63 A	300 mA	400 V	No	No	4	1/3

IDP - RESIDUAL CURRENT CIRCUIT BREAKERS



IDP - AC TYPE INSTANTANEOUS



GW D4 001

RESIDUAL CURRENT CIRCUIT BREAKERS



AC

Code	Rated current	I _{dn}	Rated voltage	Auxiliaries compatibility	ReStart compatibility	No. of modules EN 50022	Conf. lmb.
No. of poles: 2P							
GW D4 001	25 A	10 mA	230 V	Yes	Yes	2	1/6
GW D4 002	25 A	30 mA	230 V	Yes	Yes	2	1/6
GW D4 003	25 A	100 mA	230 V	Yes	Yes	2	1/6
GW D4 004	25 A	300 mA	230 V	Yes	Yes	2	1/6
GW D4 022	40 A	30 mA	230 V	Yes	Yes	2	1/6
GW D4 023	40 A	100 mA	230 V	Yes	Yes	2	1/6
GW D4 024	40 A	300 mA	230 V	Yes	Yes	2	1/6
GW D4 025	40 A	500 mA	230 V	Yes	Yes	2	1/6
GW D4 042	63 A	30 mA	230 V	Yes	Yes	2	1/6
GW D4 043	63 A	100 mA	230 V	Yes	Yes	2	1/6
GW D4 044	63 A	300 mA	230 V	Yes	Yes	2	1/6
GW D4 045	63 A	500 mA	230 V	Yes	Yes	2	1/6
GW D4 062	80 A	30 mA	230 V	Yes	Yes	2	1/6
GW D4 063	① 80 A	100 mA	230 V	Yes	Yes	2	1/6
GW D4 064	① 80 A	300 mA	230 V	Yes	Yes	2	1/6
GW D4 082	① 100 A	30 mA	230 V	Yes	Yes	2	1/6
GW D4 084	① 100 A	300 mA	230 V	Yes	Yes	2	1/6
No. of poles: 4P							
GW 94 662	25 A	30 mA	400 V	Yes	No	3	1/4
GW 94 664	25 A	300 mA	400 V	Yes	No	3	1/4
GW 94 667	40 A	30 mA	400 V	Yes	No	3	1/4
GW 94 668	40 A	100 mA	400 V	Yes	No	3	1/4
GW 94 669	40 A	300 mA	400 V	Yes	No	3	1/4
GW 94 670	40 A	500 mA	400 V	Yes	No	3	1/4
GW D4 102	25 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 103	25 A	100 mA	400 V	Yes	Yes	4	1/3
GW D4 104	25 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 122	40 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 123	40 A	100 mA	400 V	Yes	Yes	4	1/3
GW D4 124	40 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 125	40 A	500 mA	400 V	Yes	Yes	4	1/3
GW D4 142	63 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 143	63 A	100 mA	400 V	Yes	Yes	4	1/3
GW D4 144	63 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 145	63 A	500 mA	400 V	Yes	Yes	4	1/3
GW D4 162	① 80 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 163	① 80 A	100 mA	400 V	Yes	Yes	4	1/3
GW D4 164	① 80 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 182	① 100 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 183	① 100 A	100 mA	400 V	Yes	Yes	4	1/3
GW D4 184	① 100 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 185	① 100 A	500 mA	400 V	Yes	Yes	4	1/3
GW 95 601	125 A	30 mA	400 V	Yes	No	4	1
GW 95 603	125 A	300 mA	400 V	Yes	No	4	1
GW 95 604	125 A	500 mA	400 V	Yes	No	4	1
No. of poles: 4P (N-conductor left)							
GW D4 302	25 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 304	25 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 322	40 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 324	40 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 342	63 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 344	63 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 362	80 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 364	80 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 382	100 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 384	100 A	300 mA	400 V	Yes	Yes	4	1/3

IDP - A TYPE INSTANTANEOUS



GW D4 011

RESIDUAL CURRENT CIRCUIT BREAKERS



Code	Rated current	I _{dn}	Rated voltage	Auxiliaries compa- tibility	ReStart compa- tibility	No. of modules EN 50022	Conf. lmb.
No. of poles: 2P							
GW D4 011	25 A	10 mA	230 V	Yes	Yes	2	1/6
GW D4 012	25 A	30 mA	230 V	Yes	Yes	2	1/6
GW D4 013	25 A	100 mA	230 V	Yes	Yes	2	1/6
GW D4 014	25 A	300 mA	230 V	Yes	Yes	2	1/6
GW D4 032	40 A	30 mA	230 V	Yes	Yes	2	1/6
GW D4 033	40 A	100 mA	230 V	Yes	Yes	2	1/6
GW D4 034	40 A	300 mA	230 V	Yes	Yes	2	1/6
GW D4 035	40 A	500 mA	230 V	Yes	Yes	2	1/6
GW D4 052	63 A	30 mA	230 V	Yes	Yes	2	1/6
GW D4 053	63 A	100 mA	230 V	Yes	Yes	2	1/6
GW D4 054	63 A	300 mA	230 V	Yes	Yes	2	1/6
GW D4 055	63 A	500 mA	230 V	Yes	Yes	2	1/6
GW D4 072	80 A	30 mA	230 V	Yes	Yes	2	1/6
GW D4 073	① 80 A	100 mA	230 V	Yes	Yes	2	1/6
GW D4 074	① 80 A	300 mA	230 V	Yes	Yes	2	1/6
GW D4 092	① 100 A	30 mA	230 V	Yes	Yes	2	1/6
GW D4 093	① 100 A	100 mA	230 V	Yes	Yes	2	1/6
GW D4 094	① 100 A	300 mA	230 V	Yes	Yes	2	1/6
No. of poles: 4P							
GW 94 866	25 A	10 mA	400 V	Yes	No	3	1/4
GW 94 867	25 A	30 mA	400 V	Yes	No	3	1/4
GW 94 869	25 A	300 mA	400 V	Yes	No	3	1/4
GW 94 885	40 A	30 mA	230 V	Yes	No	3	1/4
GW 94 897	40 A	30 mA	400 V	Yes	No	3	1/4
GW 94 898	40 A	100 mA	400 V	Yes	No	3	1/4
GW 94 899	40 A	300 mA	400 V	Yes	No	3	1/4
GW 94 900	40 A	500 mA	400 V	Yes	No	3	1/4
GW D4 111	25 A	10 mA	400 V	Yes	Yes	4	1/3
GW D4 112	25 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 113	25 A	100 mA	400 V	Yes	Yes	4	1/3
GW D4 114	25 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 132	40 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 133	40 A	100 mA	400 V	Yes	Yes	4	1/3
GW D4 134	40 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 135	40 A	500 mA	400 V	Yes	Yes	4	1/3
GW D4 152	63 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 153	63 A	100 mA	400 V	Yes	Yes	4	1/3
GW D4 154	63 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 155	63 A	500 mA	400 V	Yes	Yes	4	1/3
GW D4 172	① 80 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 173	① 80 A	100 mA	400 V	Yes	Yes	4	1/3
GW D4 174	① 80 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 192	① 100 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 193	① 100 A	100 mA	400 V	Yes	Yes	4	1/3
GW D4 194	① 100 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 195	① 100 A	500 mA	400 V	Yes	Yes	4	1/3
GW 95 606	125 A	30 mA	400 V	Yes	No	4	1
GW 95 608	125 A	300 mA	400 V	Yes	No	4	1
GW 95 609	125 A	500 mA	400 V	Yes	No	4	1
No. of poles: 4P (N-conductor left)							
GW D4 312	25 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 314	25 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 332	40 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 334	40 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 352	63 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 354	63 A	300 mA	400 V	Yes	Yes	4	1/3

IDP - A[IR] TYPE (IMPULSE RESISTANT)



GW D4 217

RESIDUAL CURRENT CIRCUIT BREAKERS



Code	Rated current	I _{dn}	Rated voltage	Auxiliaries compatibility	ReStart compatibility	No. of modules EN 50022	Conf. Imb.
No. of poles: 2P							
GW D4 202	25 A	30 mA	230 V	Yes	Yes	2	1/6
GW D4 203	25 A	300 mA	230 V	Yes	Yes	2	1/6
GW D4 205	40 A	30 mA	230 V	Yes	Yes	2	1/6
GW D4 206	40 A	300 mA	230 V	Yes	Yes	2	1/6
GW D4 208	63 A	30 mA	230 V	Yes	Yes	2	1/6
GW D4 209	63 A	300 mA	230 V	Yes	Yes	2	1/6
GW D4 211 ①	100 A	30 mA	230 V	Yes	Yes	2	1/6
No. of poles: 4P							
GW D4 217	25 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 218	25 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 220	40 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 221	40 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 223	63 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 224	63 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 226 ①	100 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 227 ①	100 A	300 mA	400 V	Yes	Yes	4	1/3
No. of poles: 4P (N-conductor left)							
GW D4 317	25 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 337	40 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 357	63 A	30 mA	400 V	Yes	Yes	4	1/3

CHARACTERISTICS: type A[IR] presents greater resistance to mains disturbances and atmospheric discharges in comparison to standard residual current circuit breakers. Immunity level 8/20 µs is 3000 A.

IDP - A[S] TYPE (SELECTIVE)



GW D4 249

RESIDUAL CURRENT CIRCUIT BREAKERS



Code	Rated current	I _{dn}	Rated voltage	Auxiliaries compatibility	ReStart compatibility	No. of modules EN 50022	Conf. Imb.
No. of poles: 2P							
GW D4 234	40 A	300 mA	230 V	Yes	Yes	2	1/6
GW D4 235	40 A	500 mA	230 V	Yes	Yes	2	1/6
GW D4 237	63 A	300 mA	230 V	Yes	Yes	2	1/6
GW D4 238	63 A	500 mA	230 V	Yes	Yes	2	1/6
GW D4 243 ①	100 A	300 mA	230 V	Yes	Yes	2	1/6
GW D4 244 ①	100 A	500 mA	230 V	Yes	Yes	2	1/6
No. of poles: 4P							
GW D4 249	40 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 250	40 A	500 mA	400 V	Yes	Yes	4	1/3
GW D4 252	63 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 253	63 A	500 mA	400 V	Yes	Yes	4	1/3
GW D4 258 ①	100 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 259 ①	100 A	500 mA	400 V	Yes	Yes	4	1/3

IDP - F TYPE



GW D4 261

RESIDUAL CURRENT CIRCUIT BREAKERS



Code	Rated current	I _{dn}	Rated voltage	Auxiliaries compa- tibility	ReStart compa- tibility	No. of modules EN 50022	Conf. Imb.
No. of poles: 2P							
GW D4 261	25 A	30 mA	230 V	Yes	Yes	2	1/6
GW D4 265	40 A	30 mA	230 V	Yes	Yes	2	1/6
GW D4 269	63 A	30 mA	230 V	Yes	Yes	2	1/6
No. of poles: 4P							
GW D4 281	25 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 285	40 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 289	63 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 307	25 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 327	40 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 347	63 A	30 mA	400 V	Yes	Yes	4	1/3

IDP - B TYPE



GW D4 512

RESIDUAL CURRENT CIRCUIT BREAKERS



Code	Rated current	I _{dn}	Rated voltage	Auxiliaries compa- tibility	ReStart compa- tibility	No. of modules EN 50022	Conf. Imb.
No. of poles: 2P							
GW D4 502	25 A	30 mA	230 V	Yes	Yes	4	1/3
GW D4 504	25 A	300 mA	230 V	Yes	Yes	4	1/3
GW D4 507	40 A	30 mA	230 V	Yes	Yes	4	1/3
GW D4 509	40 A	300 mA	230 V	Yes	Yes	4	1/3
GW D4 512	63 A	30 mA	230 V	Yes	Yes	4	1/3
GW D4 514	63 A	300 mA	230 V	Yes	Yes	4	1/3
No. of poles: 4P							
GW D4 527	25 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 529	25 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 532	40 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 534	40 A	300 mA	400 V	Yes	Yes	4	1/3
GW D4 537	63 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 539	63 A	300 mA	400 V	Yes	Yes	4	1/3

LOCAL RESIDUAL CURRENT PROTECTION DEVICES

SAFETY SOCKET-OUTLETS WITH RESIDUAL CURRENT PROTECTION



GW 95 921

FLUSH MOUNTING RCD SAFETY SOCKET-OUTLETS - TYPE A - COLOUR POLAR WHITE - IP21				
Code	Idn	Rated current	Rated voltage	Conf. Imb.
GW 95 921	10 mA	16 A	230 V	1/2
GW 95 922	30 mA	16 A	230 V	1/2



GW 95 924

FLUSH MOUNTING RCD SAFETY SOCKET-OUTLETS - TYPE A - COLOUR POLAR WHITE - WATER PROTECTED VERSION IP44				
Code	Idn	Rated current	Rated voltage	Conf. Imb.
GW 95 923	10 mA	16 A	230 V	1/2
GW 95 924	30 mA	16 A	230 V	1/2



GW 95 925

FLUSH-MOUNTING RCD SAFETY UNIT - TYPE A - COLOUR POLAR WHITE - IP41				
Code	Idn	Rated current	Rated voltage	Conf. Imb.
GW 95 925	10 mA	16 A	230 V	1/2
GW 95 926	30 mA	16 A	230 V	1/2



GW 95 928

WALL MOUNTING HOUSING FOR RCD SAFETY SOCKET-OUTLETS AND UNITS				
Code	Description	Suitable for	Colour	Conf. Imb.
GW 95 928	Housing	IP44 socket-outlets	White	5/100

90 RCD

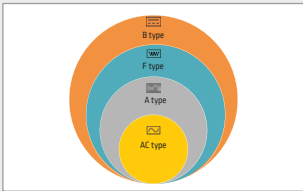


MAXIMUM PROTECTION IN MINIMUM SPACE



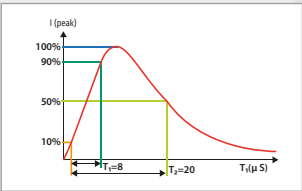
In the same application, the use of compact RCBO's guarantees a saving of the number of modules used which allows the installation of smaller distribution boards and therefore the cost is cheaper.

A CIRCUIT BREAKER FOR EVERY NEED



The 90 RCD Series meets all protection requirements in electrical systems with different types of fault currents towards the ground with sinusoidal shape (AC type) and unidirectional push button (A type), up to those with variable frequency (F type) and continuous components (B type).

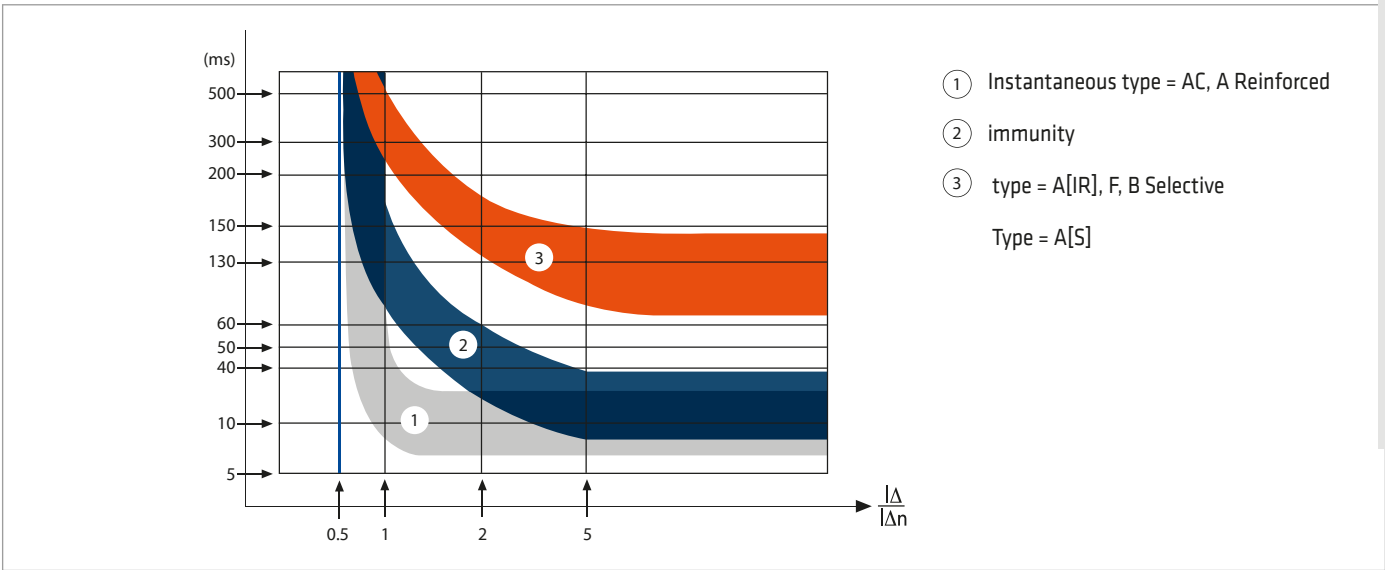
WITHOUT INTERRUPTION



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	F	B	
RESIDUAL FAULT CURRENT TYPE	• sinusoidal alternating	• Sinusoidal alternating • Pulsating	• Sinusoidal alternating • Pulsating • Variable frequency	• Alternating sinusoidal • Pulsating • Variable frequency • Smooth DC	Level of immunity (8/20μs)
1. INSTANTANEOUS First level of residual current protection against direct and indirect contacts	✓	✓			250A
2. REINFORCED IMMUNITY Prevention of untimely interventions due to: • 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