90 ReStart range

Automatic reclosing devices



The 90 ReStart range is made up of a wide range automatic reclosing devices which reset the coupled circuit breaker in total safety, therefore ideal for all domestic, commercial and industrial applications.

The main features are:

- System check before the automatic reclosing.
- The Autotest versions test working condition of the residual current device without interrupting the power supply from the electrical system.
- PRO and TOP versions for professional applications.

ReSTART WITH **A**UTOTEST

SELECTION TABLES

Automatic reclosing devices with circuit safety check and automatic test.

		COUPLED VERSION	ONS WITH RCCB'S			
	2 p	oles	4 poles			
	5 m	nod.	7 m	nod.		
	IΔn =	30 mA	IΔn = 30 mA	IΔn = 300 mA		
In (A)	A[IR] type	A[IR] - PRO type	A[IR] - P	RO type		
25	GW 90 901 N	GW 90 911	GW 90 921	GW 90 927		
40	GW 90 902 N	GW 90 912	GW 90 922	GW 90 928		
63		GW 90 913	GW 90 923 GW 90 929			

NOTE: ARD must be supplied with 230 V AC phase-neutral for working.



ReStart Rd

SELECTION TABLES

Automatic reclosing devices with circuit safety check.

		COUPLED VERSIONS WITH RCCB'S SD										
	2 pc	oles			2 poles - P	RO version			4 poles - PRO version			
	4 m	nod.		4 mod.						nod.	7 m	od.
	IΔn =	30 mA	IΔn =	30 mA	IΔn = 100 mA	IΔn = 3	IΔn = 300 mA IΔn = 500 mA		IΔn = 30 mA		IΔn = 30 mA	
In (A)	A type	A[IR] type	A type	A[IR] type	A type	A type	A[S] type	A type	AC type	A type	AC type	A type
25	GW 94 817 R	GW 95 651 R	GW 94 817 P	GW 95 651 P	-	GW 94 819 P	-	-	GW 94 662 P	GW 94 867 P	-	-
40	GW 94 827 R	GW 95 656 R	GW 94 827 P	GW 95 656 P	GW 94 828 P	GW 94 829 P	GW 94 924 P	GW 94 830 P	GW 94 667 P	GW 94 897 P	-	-
63	GW 94 837 R	GW 95 661 R	GW 94 837 P	GW 95 661 P	GW 94 838 P	GW 94 839 P	GW 94 934 P	GW 94 840 P	-	-	GW 94 757 P	GW 94 937 P
80	-	-	GW 94 847 P	-	GW 94 848 P	GW 94 849 P	GW 94 944 P	-	-	-	-	-

NOTE: ARD must be supplied with 230 V AC phase-neutral for working.

			VERS	IONS TO BE CO	UPLED WITH I	RCCB'S SD 4 P	OLES - PRO VEI	RSION			
		GW 9	90 966			GW 9	90 968				
		3 r	mod.			3 r	nod.				
			+	+							
					RCCB'S SI	O 4 POLES					
		IΔn =	30 mA	IΔn =	100 mA	IΔn =	300 mA	IΔn = 5	00 mA		
In (A)	Туре	3 mod.	4 mod.	3 mod.	4 mod.	3 mod.	4 mod.	3 mod.	4 mod.		
	AC	GW 94 662	GW 94 697 GW 94 637 *	-	GW 94 698	GW 94 664	GW 94 699 GW 94 639 *	-	-		
25	A	GW 94 867	GW 94 877 GW 94 552 *	-	GW 94 878	GW 94 869	GW 94 879 GW 94 554 *	-	-		
	A[IR]	-	GW 95 676	-	-	-	GW 95 678	-	-		
	AC	GW 94 667	GW 94 707 GW 94 647 *	GW 94 668	GW 94 708	GW 94 669	GW 94 709 GW 94 649 *	GW 94 670	GW 94 710		
40	A	GW 94 897	GW 94 927 GW 94 557 *	GW 94 898	GW 94 928	GW 94 899	GW 94 929 GW 94 559 *	GW 94 900	GW 94 930		
	A[IR]	-	GW 95 681	-	-	-	GW 95 683	-	-		
	A[S]	-	-	-	-	-	GW 94 966	-	-		
	AC	-	GW 94 757 GW 94 717 *	-	GW 94 758	-	GW 94 759 GW 94 719 *	-	GW 94 760		
63	А	-	GW 94 937 GW 94 907 *	-	GW 94 938	-	GW 94 939 GW 94 909 *	-	GW 94 940		
	A[IR]	-	GW 95 686	-	-	-	GW 95 688	-	-		
	A[S]	-	-	-	-	-	GW 94 976	-	-		
80	AC	-	GW 94 761 GW 94 727 *	-	GW 94 771	-	GW 94 766 GW 94 728 *	-	-		
	A	-	GW 94 947	-	GW 94 948	-	GW 94 949	-	-		
	A[IR]	-	-	-	-	-	GW 94 986	-	-		
	AC	-	GW 94 777 GW 94 737 *	-	GW 94 778	-	GW 94 779 GW 94 739 *	-	GW 94 780		
100	Α	-	GW 94 957	-	GW 94 958	-	GW 94 959	-	GW 94 960		
	A[IR]	-	GW 95 696	-	-	-	GW 95 698	-	-		
	A[S]	-	-	-	-	-	GW 94 996	-	-		

NOTE: they are also compatible with RCCB's 2 poles (SD 2P). ARD must be supplied with 230 V AC phase-neutral for working.

^{*} RCCB with Neutral on the left.

RESTART RM

SELECTION TABLES

Automatic reclosing devices with circuit safety and short-circuit check.

Automatic ic	closing acvi	CC3 WILLI CITCO	ill safety and short-circ	uit cricck.				
				COUPLE	VERSIONS WITH RC	BO'S MDC		
			2 p	oles		2 poles - PRO version		
			4 m	nod.	4 mod.			
			IΔn =	30 mA	IΔn = 30 mA	IΔn = 3	300 mA	
Icn (A)	Curve	In (A)	A type	A[IR] type	A type	A type	A[S] type	
		6	GW 94 225 R	-	-	-	-	
		10	GW 94 226 R	-		-	-	
		13	GW 94 231 R	-	-	-	-	
4500	c	16	GW 94 227 R	-	-	-	-	
		20	GW 94 228 R	-		-	-	
		25	GW 94 229 R	-		-	-	
		32	GW 94 230 R	-		-	-	
		6	GW 94 325 R	GW 95 805 R	GW 94 325 P	GW 94 335 P	-	
		10	GW 94 326 R	GW 95 806 R	GW 94 326 P	GW 94 336 P	-	
		13	GW 94 331 R	GW 95 811 R	GW 94 331 P	-	-	
6000	C	16	GW 94 327 R	GW 95 807 R	GW 94 327 P	GW 94 337 P	GW 95 847 P	
		20	GW 94 328 R	GW 95 808 R	GW 94 328 P	GW 94 338 P	GW 95 848 P	
		25	GW 94 329 R	GW 95 809 R	GW 94 329 P	GW 94 339 P	GW 95 849 P	
		32	GW 94 330 R	GW 95 810 R	GW 94 330 P	GW 94 340 P	GW 95 850 P	

NOTE: ARD must be supplied with 230 V AC phase-neutral for working.

				VERSIONS TO BE	COUPLED WITH R	CBO'S MDC 4 POL	ES - PRO VERSION			
				GW 90 986						
				GW 90 986			GW 90 988			
				3 mod.			3 mod.			
				+			+			
				<u> </u>	DCDOIG	MDCAD	<u> </u>			
					KCBO.2	MDC 4P				
				4 mod.			4 mod.			
			IΔn = 30 mA			IΔn = 300 mA				
Icn (A)	Curve	In (A)	AC type	A type	A[IR] type	AC type	A type	A[S] type		
		6	GW 94 065	GW 94 265	-	GW 94 075	GW 94 275	-		
		10	GW 94 066	GW 94 266	-	GW 94 076	GW 94 276	-		
		13	GW 94 071	GW 94 271	-	-	-	-		
4500	C	16	GW 94 067	GW 94 267	-	GW 94 077	GW 94 277	-		
		20	GW 94 068	GW 94 268	-	GW 94 078	GW 94 278	-		
		25	GW 94 069	GW 94 269	-	GW 94 079	GW 94 279	-		
		32	GW 94 070	GW 94 270	-	GW 94 080	GW 94 280	-		
		6	GW 94 165	GW 94 365	GW 95 815	GW 94 175	GW 94 375	-		
		10	GW 94 166	GW 94 366	GW 95 816	GW 94 176	GW 94 376	-		
		13	GW 94 171	GW 94 371	GW 95 821	-	-	-		
	С	16	GW 94 167	GW 94 367	GW 95 817	GW 94 177	GW 94 377	GW 95 857		
		20	GW 94 168	GW 94 368	GW 95 818	GW 94 178	GW 94 378	GW 95 858		
		25	GW 94 169	GW 94 369	GW 95 819	GW 94 179	GW 94 379	GW 95 859		
6000		32	GW 94 170	GW 94 370	GW 95 820	GW 94 180	GW 94 380	GW 95 860		
		6	•	GW 95 165	-	-	GW 95 175	-		
		10	-	GW 95 166	-	-	GW 95 176	-		
		13	-	GW 95 171	-	-	-	-		
	В	16	-	GW 95 167	-	-	GW 95 177	-		
		20	-	GW 95 168	-	-	GW 95 178	-		
		25	-	GW 95 169	-	-	GW 95 179	-		
		32	-	GW 95 170	-	-	GW 95 180	-		

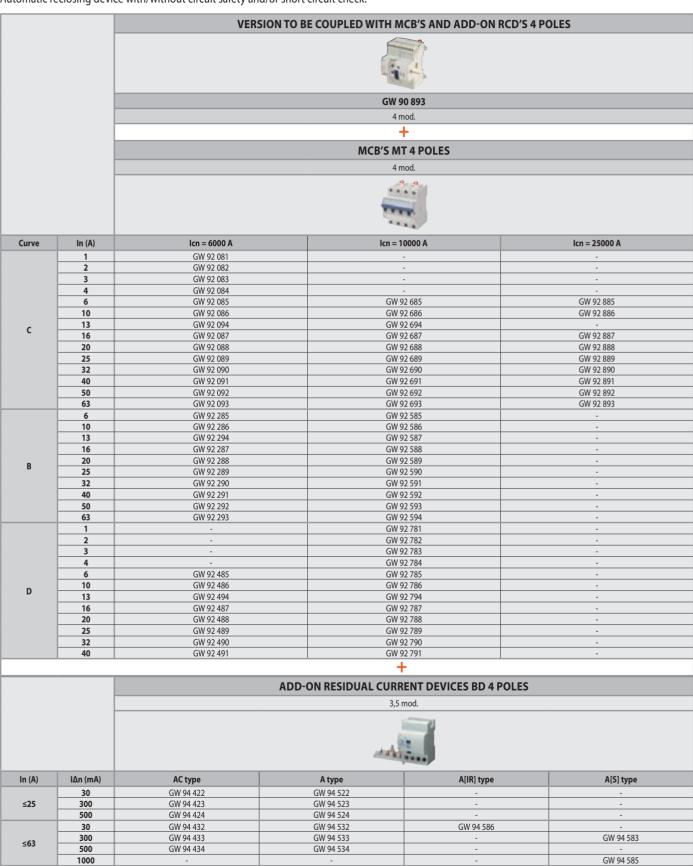
NOTE: they are also compatible with RCBO's 1P+N and 2 poles (MDC 1P+N e 2P). ARD must be supplied with 230 V AC phase-neutral for working.



ReStart Rm TOP

SELECTION TABLES

Automatic reclosing device with/without circuit safety and/or short circuit check.



NOTE: they are also compatible with MCB's MTC, RCBO's MDC, MCB's MT and with Add-on RCD's BD 1P+N, 2 e 3 poles. ARD must be supplied with 230 V AC phase-neutral for working.

ReSTART WITH **A**UTOTEST

TECHNICAL DATA

ТҮРЕ	ReStart with Autotest 2P	ReStart with Autotest PRO 2P	RESTART WITH AUTOTEST PRO 4P				
Electrical characteristics							
Standards:		EN 50557, EN 61008-1					
Distribution system:		TT - TN					
Rated operational voltage (Ue):	(V) 230	AC (1)	400 AC				
Minimum operating voltage (min Ue)	(V)	85% Ue					
Maximum operating voltage (max Ue):	(V)	110% Ue					
Rated insulation voltage (Ui):	(V)	500					
Dielectric strength test voltage between pole and earth:	(V)	2500 AC for 1 minute					
	(V)	4					
• •	Hz)	50					
	(A)	630					
Rated conditional residual short-circuit current with fuse (I Δ c):	(A)	10000 (gL 80A)					
Number of poles:		2	4				
Type of associated residual current circuit breaker:		A[IR]					
	(A) 25 - 40	·	10 - 63				
		30	30 - 300				
	Ω) 20	8	8 (30mA) - 2.5 (300mA)				
	Ω) 70	16	16 (30mA) - 5 (300mA)				
		(40A) - 6.2 (63A)	3.5 (25A) - 6 (40A) - 12 (63A)				
	/A)	4 (cosφ=0)					
	/A)	49 (cosφ=0,55)					
Reclosing control:		automatic					
Power supply:		from above					
Mechanical characteristics		-	7				
Width in DIN modules: Reclosing time:	(s)	10	7				
Autotest cycle time:	(s)	7					
Maximum operational frequency: (oper		30					
Max mechanical endurance (total no. operations):	,,,,,	4000					
Maximum no. of consecutive automatic reclosure operations (2):		3					
·	(s)	60					
Section of circuit breaker terminals: (mi	≤ 35 flexible cable - ≤ 35 rigid cable						
Rated tightening torque: (N	m)	2					
Degree of protection:		IP20 (terminals) - IP40 (front)					
Operating temperature:	°C)	-25 +60 ⁽³⁾					
Tropicalization:		55°C - RH 95%					
Auxiliary contact characteristics							
Type of contact:		Photomos					
· · · · ·	(V)	5-230 AC/DC					
	nA)	100 (cosφ=1)					
	nA)	0.6					
	Hz)	50					
Category of use:		AC12					
Operating mode:	m21	NO / NC / NC + impulse					
Terminal section: (mr		≤ 2.5 0.4					
Rated tightening torque: (N Autotest function	m)	0.4					
Regular and automatic RCCB test:		•					
Light signalling for autotest cycle in progress:	•	•	•				
Light signalling for any device anomaly:	•	•					
RESTART function							
Automatic reclosure for untimely tripping:	•	•	•				
Earth leakage check:	•	•	•				
Continuous system check:		•	•				
Interruption of reclosure operation in the event of a fault:	•	•	•				
Signalling of reclosure operation in progress:	•	•	•				
Light signalling of failure:	•	•	•				
Activation / exclusion of ReStart function:	•	•	•				
Activation / exclusion of Restart function.	· ·						
Auxiliary contact for remote operating status access:	•	•	•				

⁽¹⁾ Power supply 230V phase-neutral

⁽²⁾ In the absence of a system fault

 $^{^{(3)}}$ Average daily temperature $\leq +35^{\circ}$ C



ReStart Rd

TYPE		ReStart Rd 2P	ReStart Rd PRO 2P	ReStart Rd PRO 4P		
		APS>_				
electrical characteristics						
itandards:		EN 5055	7, EN 61008-1	EN 50557		
Distribution system:			TT - TN			
Rated operational voltage (Ue):	(V)		230 AC (1)			
Minimum operating voltage (min Ue)	(V)		85% Ue			
Maximum operating voltage (max Ue):	(V)					
Rated insulation voltage (Ui):	(V)					
Dielectric strength test voltage between pole and earth:	(V)		2500 AC for 1 minute			
Rated impulse withstand voltage (Uimp):	(kV)		4			
Rated frequency:	(Hz)		50			
Residual making and breaking capacity (IΔm):	(A)					
Rated conditional residual short-circuit current		(A) IΔc of the associated circuit breaker				
with fuse (I∆c):	(A)			T		
Number of poles:			2	4		
Type of SD RCCB:		A - A[IR]	A - A[IR] - A[S]	AC - A - A[IR] - A[S]		
Rated current (In):	(A)	25 - 40 - 63	25 - 40 - 63 - 80	25 - 40 - 63 - 80 - 100		
Rated residual operating current (I∆n):	(mA)	30	30 - 300 - 500	30 - 100 - 300 - 500		
Rated non-operating resistance between live parts and earth (Rdo):	(kΩ)	20	8 (30mA) - 2.5 (300/500mA)	8 (30mA) - 2.5 (100/300/500mA		
Rated operating resistance between live parts and earth (Rd):	(kΩ)	70	16 (30mA) - 5 (300/500mA)	16 (30mA) - 5 (100/300/500mA)		
Power loss at In:	(W)		Power loss of the associated circuit break	er		
Off-load absorbed power:	(VA)	0	17 (cosφ=0)	4 (cosφ=0)		
outomatic reclosing:	(VA)	18 (c	:0sφ=0.46)	45 (cosφ=0.55)		
Reclosing control:			automatic			
Mechanical characteristics						
Nidth in DIN modules:		2 (ARD	D) + 2 (RCCB)	3 (ARD)		
Reclosing time:	(s)		90	10		
Maximum operational frequency: (o)	per./h)		15	30		
Max mechanical endurance (total no. operations):			1000	4000		
Maximum no. of consecutive automatic reclosure operations (2):			3			
Counter reset time no. of consecutive automatic reclosure operations:	(s)		180	60		
Section of circuit breaker terminals:	(mm²)		\leq 35 flexible cable $^{(3)}$ - \leq 35 rigid cable			
Rated tightening torque:	(Nm)		2			
Degree of protection:			IP20 (terminals) - IP40 (front)			
Operating temperature:	(°C)		-5 +40	-25 +60 ⁽⁴⁾		
Tropicalization:			55°C - RH 95%			
Auxiliary contact characteristics						
Type of contact:		-	Phot	omos		
Operating voltage:	(V)	-	5-230	AC/DC		
Maximum operating current:	(mA)	-	100 (c	osφ=1)		
Minimum operating current:	(mA)	-	(1.6		
Operating frequency:	(Hz)	-		50		
Category of use:		-	A	C12		
Operating mode:		-	NO/NC/INT	ERMITTENT		
Ferminal section:	(mm²)	-	≤	2.5		
Rated tightening torque:	(Nm)	-	(1,4		
RESTART function						
		•	•	•		
Automatic reclosure for untimely tripping:		•	•	•		
· · · · · ·			•	•		
Earth failure test:						
Earth failure test: Earth leakage check:		•	•	•		
Earth failure test: Earth leakage check: Interruption of reclosure operation in the event of a fault:		•	•	•		
Earth failure test: Earth leakage check: Interruption of reclosure operation in the event of a fault: Signalling of reclosure operation in progress:						
Earth failure test: Earth leakage check: Interruption of reclosure operation in the event of a fault: Signalling of reclosure operation in progress: Light signalling of failure:		•	•	•		
Automatic reclosure for untimely tripping: Earth failure test: Earth leakage check: Interruption of reclosure operation in the event of a fault: Signalling of reclosure operation in progress: Light signalling of failure: Activation / exclusion of RESTART function: Auxiliary contact for remote operating status access:		•	•	•		

⁽¹⁾ Power supply 230V phase-neutral

 $[\]ensuremath{^{(2)}}$ In the absence of a system fault

 $^{^{(3)} \}le 35 \text{mm}^2$ for 4-pole versions in 3 modules

 $^{^{(4)}}$ Average daily temperature $\leq +35^{\circ}$ C

ReStart RM

TECHNICAL DATA

ТҮРЕ	ReStart Rm 2P	RESTART RM PRO 2P	ReStart Rm PRO 4P	RM	ТОР	CM
				-		
Electrical characteristics						
Standards:	EN 50557	, EN 61009-1	EN 50557		-	-
Distribution system:		TT - TN		TT-T	N - IT ⁽¹⁾	TT-TN-IT
Rated operational voltage (Ue): (V			230 AC (
Minimum operating voltage (min Ue) (V			85% Ue			
Maximum operating voltage (max Ue): (V Rated insulation voltage (Ui): (V			110% U	e		
Dielectric strength test voltage between pole and earth: (V			2500 AC for 1	minute		
Rated impulse withstand voltage (Uimp): (kV			4			
Rated frequency: (Hz)		50			
Residual making and breaking capacity (IΔm): (A)		I∆m of the associated			
Number of poles:	A A ((D)	2	A.C. A. AFIDI. AFGI	4		
Type of MT L RD RCRO.	A - A[IR]	A - A[S]	AC - A - A[IR] - A[S]		AC - A - A[IR] - A[S] AC - A - A[IR] - A[S]	
Type of MT+BD RCBO: Rated current (In): (A		from 6 to 32	-		from 1 to 63	
Rated residual operating current (IΔn): (mA			- 300		30 - 300 - 500 - 1000	
Rated non-operating resistance between live parts and earth (Rdo): $(k\Omega)$			- 2.5 (300mA)	8 (30mA) - 2.5 (3	300/500/1000mA)	-
Rated operating resistance between live parts and earth (Rd): $(k\Omega)$	70	16 (30mA) - 5 (300mA)	16 (30mA) - 5 (3	300/500/1000mA)	-
Rated non-operating resistance between live parts (Rcco): (Ω)		0.8		0.3		-
Rated operating resistance between live parts (Rcc): (Ω		1.3	D	1.8		-
Power loss at In: (W Off-load absorbed power: (VA		17 (cosφ=0)	Power loss of the associa 16 (cosφ=0)		sφ=0.06)	0 (cosφ=0)
automatic reclosing: (VA		sφ=0.46)	34 (cosφ=0.67)		sφ=0.06) sφ=0.64)	30 (cosφ=0.64)
Reclosing control:	10 (60	automatic	31 (cosq=0.07)	automatic / remote (3)		remote (3)
Mechanical characteristics					.,	10111111
Width in DIN modules:	2 (ARD)	+ 2 (RCBO)	3 (ARD)	4 (ARD)	2 (ARD)
Reclosing time: (s	90		10		system test) system test)	3
Remote control opening time: (s	-	-	-		2	
Maximum operational frequency: (oper./h		15		30		
Max mechanical endurance (total no. operations): Maximum no. of consecutive automatic reclosure operations (4):	1	000	4000		10000	I
Counter reset time						-
no. of consecutive automatic reclosure operations:)	180		60		-
Section of circuit breaker terminals: (mm ²			≤ 35 flexible cable - ≤	35 rigid cable		
Rated tightening torque: (Nm)		2	D40 (funct)		
Degree of protection: Operating temperature: (°C	5	+40	IP20 (terminals) - I	-25 +6	50 (5)	
Tropicalization:	, -3	1740	55°C - RH 9		50 (-7	
Auxiliary contact characteristics						
Type of contact:	-	Pho	tomos	Changeover	Photomos	Changeover
Operating voltage: (V			AC/DC	230 AC/ 30 DC	5-230 AC/DC	230 AC/ 30 DC
Maximum operating current: (mA			cosφ=1)	1.5 AC / 0.8 DC	100 (cosφ=1)	1.5 AC / 0.8 DC
Minimum operating current: (mA Operating frequency: (Hz			0.6	50	0.6	-
Category of use:	-			AC12		
Operating mode:	-	NO/NC/IN	TERMITTENT	CO	NO/NC/INTERMITTENT	CO
Terminal section: (mm²	-			≤ 2.5		
Rated tightening torque: (Nm) -			0,4		
RESTART function		1				1
Automatic reclosure for untimely tripping: Earth leakage check:	•	•	•		•	
Short-circuit check:	<u> </u>	•	•		•	
Adjustable insulation threshold:					•	
Continuous system check:		•	•		•	
Adjustable reset standby time (6):					•	
Adjustable reclosing mode: Interruption of reclosure operation in the event of a fault:					•	
Signalling of reclosure operation in the event or a fault:	•	•	•		•	
Light signalling of failure:		•	•		•	
Activation / exclusion of ReStart function:	•	•	•		•	•
Auxiliary contact for remote operating status access:		•	•		•	•
Internal electrical protection:	PTC	PTC	PTC	F	PTC	PTC

⁽³⁾ Impulse duration \geq 200ms

 $^{^{\}rm (4)}$ In the absence of a system fault

ReSTART WITH **A**UTOTEST

ReSTART WITH AUTOTEST 2 POLE - VERSIONS COUPLED WITH RCCB'S

GW90901N



AUTOMATIC RECLOSING DEVICES WITH PREVENTIVE CHECK OF THE INSULATION AND AUTOMATIC TEST OF THE RESIDUAL CURRENT CIRCUIT BREAKER



Code	Rated	ldn	Type of	Rated	No. of modules	Pack
	current		RCCB	voltage	EN 50022	Carton
GW 90 901 N	25 A	30 mA	A[IR]	230 V	5	1/4
GW 90 902 N	40 A	30 mA	A[IR]	230 V	5	1/4

CHARACTERISTICS: after RCCB has tripped, ReStart checks the insulation prior to the automatic reclosure.

In the event of a fault (earth leakage), ReStart will not reset the circuit breaker. The integrated configurable auxiliary contact will change state to indicate the automatic reset did not take place.

NOTE: the AUTOTEST function automatically and periodically (every 30 days) tests the RCCB, without interrupting the electric power supply, thus maintaining the performance of the residual current protection over time.

230 V ac power supply, phase-neutral.

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AUTOMATIC RECLOSING DEVICES WITH PREVENTIVE CHECK OF THE INSULATION AND AUTOMATIC TEST OF THE RESIDUAL CURRENT CIRCUIT BREAKER - PRO VERSION



Code	Rated	ldn	Type of	Rated	No. of modules	Pack
	current		RCCB	voltage	EN 50022	Carton
GW 90 911	① 25 A	30 mA	A[IR]	230 V	5	1/4
GW 90 912	① 40 A	30 mA	A[IR]	230 V	5	1/4
GW 90 913	① 63 A	30 mA	A[IR]	230 V	5	1/4

CHARACTERISTICS: after RCCB has tripped, ReStart checks the insulation prior to the automatic reclosure. In the event of a fault (earth leakage), ReStart will not reset the circuit breaker but will continue to monitor the circuit every 2 minutes reclosing the circuit breaker when safe to do so. In the meantime the integrated configurable auxiliary contact will change state to indicate the automatic reset did not take place.

230 V ac power supply, phase-neutral.

NOTE: the AUTOTEST function automatically and periodically (every 30 days) tests the RCCB, without interrupting the electric power supply, thus for maintaining the performance of the residual current protection over time.

APPLICATIONS: due to the prolonged control over time and the lower control threshold for the insulation, the PRO version is recommended for extensive electrical systems, that are dated or subject to critical ambient conditions (e.g., humidity) that can even temporarily lower the system's insulation level.

RESTART WITH AUTOTEST 4 POLE - VERSIONS COUPLED WITH RCCB'S





AUTOMATIC RECLOSING DEVICES WITH PREVENTIVE CHECK OF THE INSULATION AND AUTOMATIC TEST OF THE RESIDUAL CURRENT CIRCUIT BREAKER - PRO VERSION



Code	Rated	ldn	Type of	Rated	No. of modules	Pack
	current		RCCB	voltage	EN 50022	Carton
GW 90 921	25 A	30 mA	A[IR]	400 V	7	1/2
GW 90 922	40 A	30 mA	A[IR]	400 V	7	1/2
GW 90 923	63 A	30 mA	A[IR]	400 V	7	1/2
GW 90 927	25 A	300 mA	A[IR]	400 V	7	1/2
GW 90 928	40 A	300 mA	A[IR]	400 V	7	1/2
GW 90 929	63 A	300 mA	A[IR]	400 V	7	1/2

CHARACTERISTICS: after RCCB has tripped, ReStart checks the insulation prior to the automatic reclosure. In the event of a fault (earth leakage), ReStart will not reset the circuit breaker but will continue to monitor the circuit every 2 minutes reclosing the circuit breaker when safe to do so. In the meantime the integrated configurable auxiliary contact will change state to indicate that the automatic reset did not take place.

NOTE: the AUTOTEST function automatically and periodically (every 30 days) tests the RCCB, without interrupting the electric power supply thus maintaining the performance of the residual current protection over time.

ReStart Rd

RESTART RD 2 POLE - VERSIONS COUPLED WITH RCCB'S SD

GW94817R



AUTOMATIC RECLOSING DEVICES WITH PREVENTIVE CHECK OF THE INSULATION



Code	Rated	ldn	Type of	Rated	No. of modules	Pack
	current		RCCB	voltage	EN 50022	Carton
GW 94 817 R	25 A	30 mA	Α	230 V	4	1/4
GW 94 827 R	40 A	30 mA	Α	230 V	4	1/4
GW 94 837 R	63 A	30 mA	Α	230 V	4	1/4
GW 95 651 R	25 A	30 mA	A[IR]	230 V	4	1/4
GW 95 656 R	40 A	30 mA	A[IR]	230 V	4	1/4
GW 95 661 R	63 A	30 mA	A[IR]	230 V	4	1/4

CHARACTERISTICS: after RCCB has tripped, ReStart checks the insulation prior to the automatic reclosure. In the event of a fault (earth leakage), ReStart will not reset the circuit breaker.

NOTE: the ARD must be supplied at 230 V ac phase-neutral.

GW94817P



AUTOMATIC RECLOSING DEVICES WITH PREVENTIVE CHECK OF THE INSULATION - PRO VERSION

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RESTART H	D
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Code	Rated	ldn	Type of	Rated	No. of modules	Pack
	current		RCCB	voltage	EN 50022	Carton
GW 94 817 P	25 A	30 mA	Α	230 V	4	1/4
GW 94 827 P	40 A	30 mA	Α	230 V	4	1/4
GW 94 837 P	63 A	30 mA	Α	230 V	4	1/4
GW 94 847 P	80 A	30 mA	Α	230 V	4	1/4
GW 95 651 P	25 A	30 mA	A[IR]	230 V	4	1/4
GW 95 656 P	40 A	30 mA	A[IR]	230 V	4	1/4
GW 95 661 P	63 A	30 mA	A[IR]	230 V	4	1/4
GW 94 828 P	40 A	100 mA	Α	230 V	4	1/4
GW 94 838 P	63 A	100 mA	Α	230 V	4	1/4
GW 94 848 P	80 A	100 mA	Α	230 V	4	1/4
GW 94 819 P	25 A	300 mA	Α	230 V	4	1/4
GW 94 829 P	40 A	300 mA	А	230 V	4	1/4
GW 94 839 P	63 A	300 mA	Α	230 V	4	1/4
GW 94 849 P	80 A	300 mA	Α	230 V	4	1/4
GW 94 924 P	40 A	300 mA	A[S]	230 V	4	1/4
GW 94 934 P	63 A	300 mA	A[S]	230 V	4	1/4
GW 94 944 P	80 A	300 mA	A[S]	230 V	4	1/4
GW 94 830 P	40 A	500 mA	Α	230 V	4	1/4
GW 94 840 P	63 A	500 mA	Α	230 V	4	1/4

CHARACTERISTICS: after RCCB has tripped, ReStart checks the insulation prior to the automatic reclosure. In the event of a fault (earth leakage), ReStart will not reset the circuit breaker but will continue to monitor the circuit every 2 minutes reclosing the circuit breaker when safe to do so. In the meantime the integrated configurable auxiliary contact will change state to indicate the automatic reset did not take place.

 $\textbf{NOTE:} \ \text{The ARD must be supplied at 230 V ac phase-neutral.}$

APPLICATIONS: due to the prolonged control over time and the lower control threshold for the insulation, the PRO version is recommended for extensive electrical systems, that are dated or subject to critical ambient conditions (e.g. humidity) that can even temporarily lower the system's insulation level.

News ⊕=Available while stocks last ⊕=April 2013 ©=June 2013

③=September 2013

RESTART RD 4 POLE - VERSIONS COUPLED WITH SD RCCB'S



AUTOMATIC RECLOSING DEVICES WITH PREVENTIVE CHECK OF THE INSULATION - PRO VERSION



Code	Rated current	ldn	Type of RCCB	Rated voltage	No. of modules EN 50022	Pack Carton
GW 94 662 P	25 A	30 mA	AC	400 V	6	1/2
GW 94 667 P	40 A	30 mA	AC	400 V	6	1/2
GW 94 757 P	63 A	30 mA	AC	400 V	7	1/2
GW 94 867 P	25 A	30 mA	A	400 V	6	1/2
GW 94 897 P	40 A	30 mA	A	400 V	6	1/2
GW 94 937 P	63 A	30 mA	Α	400 V	7	1/2

CHARACTERISTICS: after RCCB has tripped, ReStart checks the insulation prior to the automatic reclosure. In the event of a fault (earth leakage), ReStart will not reset the circuit breaker but will continue to monitor the circuit every 2 minutes reclosing the circuit breaker when safe to do so. In the meantime the integrated configurable auxiliary contact will change state to indicate that the automatic reset did not take place.

NOTE: the ARD must be supplied at 230 V ac phase-neutral.

ReStart Rd 4 POLE - Versions to be coupled with RCCB's SD

GW90966



Code	Suitable for	Rated voltage	No. of modules EN 50022	Pack Carton
GW 90 966	SD RCCB's - 2P/4P up to 100 A - 30 mA	230 V	3	1/4
GW 90 968	SD RCCB's - 2P/4P up to 100 A - 100/300/500 mA	230 V	3	1/4

CHARACTERISTICS: after RCCB has tripped, ReStart checks the insulation prior to the automatic reclosure. In the event of a fault (earth leakage), ReStart will not reset the circuit breaker but will continue to monitor the circuit every 2 minutes reclosing the circuit breaker when safe to do so. In the meantime the integrated configurable auxiliary contact will change state to indicate the automatic reset did not take place.

 $\textbf{NOTE:} \ \text{The ARD must be supplied at 230 V ac phase-neutral.}$

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ReStart RM

RESTART RM 2 POLE - VERSIONS COUPLED WITH COMPACT RCBO'S MDC





AUTOMATIC RECLOSING DEVICES WITH PREVENTIVE CHECK OF THE INSULATION AND OF THE SHORT CIRCUIT



Code	Rated current	ldn	Type of RCBO	Curve	Rated voltage	No. of modules EN 50022	Pack Carton
BREAKING CAPA		09-1): 4500 A			voitage	EN 50022	Carton
GW 94 225 R	6 A	30 mA	Α	С	230 V	4	1/4
GW 94 226 R	10 A	30 mA	A	C	230 V	4	1/4
GW 94 231 R	13 A	30 mA	A	C	230 V	4	1/4
GW 94 227 R	16 A	30 mA	A	C	230 V	4	1/4
GW 94 228 R	20 A	30 mA	A	C	230 V	4	1/4
GW 94 229 R	25 A	30 mA	Α	C	230 V	4	1/4
GW 94 230 R	32 A	30 mA	A	C	230 V	4	1/4
		09-1): 6000 A				<u> </u>	
GW 94 325 R	6 A	30 mA	A	С	230 V	4	1/4
GW 94 326 R	10 A	30 mA	A	С	230 V	4	1/4
GW 94 331 R	13 A	30 mA	A	С	230 V	4	1/4
GW 94 327 R	16 A	30 mA	A	С	230 V	4	1/4
GW 94 328 R	20 A	30 mA	A	С	230 V	4	1/4
GW 94 329 R	25 A	30 mA	A	С	230 V	4	1/4
GW 94 330 R	32 A	30 mA	A	С	230 V	4	1/4
GW 95 805 R	6 A	30 mA	A[IR]	С	230 V	4	1/4
GW 95 806 R	10 A	30 mA	A[IR]	С	230 V	4	1/4
GW 95 811 R	13 A	30 mA	A[IR]	С	230 V	4	1/4
GW 95 807 R	16 A	30 mA	A[IR]	С	230 V	4	1/4
GW 95 808 R	20 A	30 mA	A[IR]	С	230 V	4	1/4
GW 95 809 R	25 A	30 mA	A[IR]	С	230 V	4	1/4
GW 95 810 R	32 A	30 mA	A[IR]	С	230 V	4	1/4

CHARACTERISTICS: after RCCB has tripped, ReStart checks the insulation and the short circuit prior to the automatic reclosure. In the event of a fault (earth leakage or short circuit), ReStart will not reset the circuit breaker.

NOTE: The ARD must be supplied at 230 V ac phase-neutral.

AUTOMATIC RECLOSING DEVICES WITH PREVENTIVE CHECK OF THE INSULATION AND OF THE SHORT CIRCUIT - PRO VERSION



Code	Rated current	ldn	Type of RCBO	Curve	Rated voltage	No. of modules EN 50022	Pack Carton
BREAKING CAP	ACITY (EN 610	09-1): 6000 A					
GW 94 325 P	6 A	30 mA	Α	С	230 V	4	1/4
GW 94 326 P	10 A	30 mA	Α	C	230 V	4	1/4
GW 94 331 P	13 A	30 mA	Α	C	230 V	4	1/4
GW 94 327 P	16 A	30 mA	Α	C	230 V	4	1/4
GW 94 328 P	20 A	30 mA	Α	С	230 V	4	1/4
GW 94 329 P	25 A	30 mA	Α	С	230 V	4	1/4
GW 94 330 P	32 A	30 mA	Α	С	230 V	4	1/4
GW 94 335 P	6 A	300 mA	Α	C	230 V	4	1/4
GW 94 336 P	10 A	300 mA	Α	C	230 V	4	1/4
GW 94 337 P	16 A	300 mA	Α	C	230 V	4	1/4
GW 94 338 P	20 A	300 mA	Α	C	230 V	4	1/4
GW 94 339 P	25 A	300 mA	Α	С	230 V	4	1/4
GW 94 340 P	32 A	300 mA	Α	С	230 V	4	1/4
GW 95 847 P	16 A	300 mA	A[S]	С	230 V	4	1/4
GW 95 848 P	20 A	300 mA	A[S]	С	230 V	4	1/4
GW 95 849 P	25 A	300 mA	A[S]	С	230 V	4	1/4
GW 95 850 P	32 A	300 mA	A[S]	С	230 V	4	1/4

CHARACTERISTICS: after RCCB has tripped, ReStart checks the insulation and the short circuit prior to the automatic reclosure. In the event of a fault (earth leakage), ReStart will not reset the circuit breaker but will continue to monitor the circuit every 2 minutes reclosing the circuit breaker when safe to do so. In the meantime the integrated configurable auxiliary contact will change state to indicate the automatic reset did not take place. In the event of a short circuit, ReStart will not reset the circuit breaker.

NOTE: The ARD must be supplied at 230 V ac phase-neutral.

APPLICATIONS: due to the prolonged control over time and the lower control threshold for the insulation, the PRO version is recommended for extensive electrical systems, that are dated or subject to critical ambient conditions (e.g. humidity) that can even temporarily lower the system's insulation level.

③=September 2013

Carton

1/4

ReStart Rm 4 POLE - Versions to be coupled with compact rcbo's MDC





AUTOMATIC RECLOSING DEVICES WITH PREVENTIVE CHECK OF THE INSULATION AND OF THE SHORT CIRCUIT - PRO VERSION



Code	Suitable	Rated	No. of modules	Pack
	for	voltage	EN 50022	Carton
GW 90 986	MDC - RCBO's - 1P+N/2P/4P - 30 mA	230 V	3	1/4
GW 90 988	MDC - RCBO's - 1P+N/2P/4P - 300 mA	230 V	3	1/4

CHARACTERISTICS: after RCCB has tripped. ReStart checks the insulation and the short circuit prior to the automatic reclosure. In the event of a fault (earth leakage), ReStart will not reset the circuit breaker but will continue to monitor the circuit every 2 minutes reclosing the circuit breaker when safe to do so. In the meantime the integrated configurable auxiliary contact will change state to indicate the automatic reset did not take place. In the event of a short circuit, ReStart will not reset the circuit breaker.

NOTE: The ARD must be supplied at 230 V ac phase-neutral.

RESTART RM TOP - VERSION TO BE COUPLED WITH MDC/MT+BD RCBO'S AND MTC/MT MCB'S



ADJUSTABLE AUTOMATIC RECLOSING DEVICE WITH/WITHOUT PREVENTIVE CHECK OF THE INSULATION AND/OR OF THE SHORT CIRCUIT Suitable No. of modules Pack voltage EN 50022

230 V

for GW 90 893 CHARACTERISTICS: the Rm TOP 4P ReStart allows to:

- MDC/MT+BD RCBO's and MTC/MT MCB's - set the reset mode (reset with system check, reset by attempts, remote reset and excluded reset)
- adapt the insulation threshold on the basis of the associated circuit breaker
- regulate the reset time dealy.

The device is equipped with 2 integrated auxiliary contacts of position and/or tripped relay.

NOTE: The ARD must be supplied at 230 V ac phase-neutral.

ReStart CM - Motor operating device for modular circuit breakers





MOTOR OPERATING DEVICE WITHOUT PREVENTIVE CONTROL OF THE INSULATION								
AND OF THE SHORT CIRCUIT								
Code	Suitable Rated No. of modules Pack							
	for	voltage	EN 50022	Carton				
GW 90 896	MDC/MT+BD RCBO's and MTC/MT MCB's	230 V	2	1/4				

CHARACTERISTICS: The device is equipped with 1 integrated auxiliary position contact and/or tripped relay.

NOTE: The motor operating device must be supplied at 230 V ac phase-neutral.

ELECTRIC AUXILIARIES FOR RESTART DEVICES





SHUNT TRI	IP RELEASE WITH SIMULTANEOUS RE	SET		
Code	Suitable	Rated	No. of modules	Pack
	for	voltage	EN 50022	Carton
GW 96 014	ReStart Rm TOP/Restart CM	230V ac	1	1/6

CHARACTERISTICS: when the circuit breaker trips, it can be remotely reset with the aid of the ReStart Rm TOP 4P or the ReStart CM, even before the shunt trip release has been reset.

ReStart Rm TOP 4P and ReStart CM activate a remote reset of both the circuit breaker lever and the shunt trip release lever simultaneously.

APPLICATIONS: it is used to cause the remote opening of the circuit breaker coupled with the ReStart Rm TOP 4P or the ReStart CM.

When using a release associated with ReStart Rm TOP 4P, pay attention to the system control and reset logic set on the ReStart Rm TOP 4P.

NOTES: when using a ReStart Rm TOP 4P, the shunt trip release must be placed between the ReStart Rm TOP 4P device and the circuit breaker.

When using a ReStart CM, the shunt trip release must be placed to the left of the ReStart CM device. An position auxiliary contact or fault indication switch can also be added to the left of the release GW96014.

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