POWER

PRODUCT CATALOGUE

GEWISS

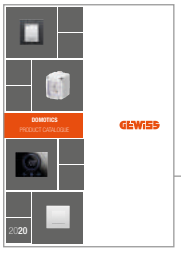
2020

GEWISS Group

GEWISS is an international leader in the production of systems and components for low voltage electrical installations. The fact that development is seen as a constant management feature has permitted GEWISS to assert itself as a reference interlocutor for the electrotechnical market in the creation of solutions for domotics, energy and the lighting industry. It is now present in Italy, France, Germany, the United Kingdom, Spain, Portugal, China, Russia, Turkey, Romania, Chile, the United Arab Emirates, and in a further 80 countries around the world.

POWER

The technologically advanced range of modular and moulded-case devices joins the vast range of distribution boards and cabinets, enclosures and combined boards to create the Gewiss Protection System.

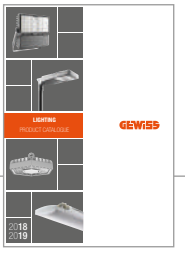


DOMOTICS

The domotic systems offer cutting-edge solutions for smart home and building management and control, guaranteeing safety, comfort and energy savings along with Italian design.

BUILDING

Junction boxes and special containers, a complete and coordinated line of distribution boards, cutting-edge industrial connections and an integrated system of boards for special systems create the GEWISS distribution systems.



LIGHTING

Lighting systems designed for every room, area and location. Solutions that embrace LED technology to meet the requirements of industrial and commercial sector contexts, sport facilities and emergency lighting.

Discover the complete offer

www.gewiss.com

GEWISS Protection System

The GEWISS protection system is made up of products that work together perfectly, such as the innovative 90 ReStart range (automatic reclosing devices), the 90 MCB and 90 RCD ranges (modular circuit breakers for circuit and residual current protection), the MTX range (MCCBs for power distribution) and the 47 CVX range (metal distribution boards). An integrated selection of products to meet every possible need for the specific application - from residential to industrial - and to guarantee quality and safety in line with the market requisites. The GEWISS system offers a wealth of advantages: practical compatibility of homogeneous products, simple and quick system planning, installation and maintenance, modern and stylish design.

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RESTART AUTOTEST

RESTART RD FOR RCCB

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Automatic Reclosing Devices ReStart

If the residual current device trips, **ReStart** restores the electricity supply quickly, but only after carrying out a system check (**RD** versions) and also a short-circuit check (**RM** version).

Thanks to the innovative control logic, **Autotest** can regularly and automatically test the working of the residual current device **without ever disconnecting the system from the power supply**.

PRO versions are available for continuous system monitoring: the system check is carried out at regular intervals until the fault clears and the device can be automatically and safely reclosed.

The **ReStart** RM TOP version is also available. This allows you to:

- establish the reclosing mode (with a system check, using attempts, or remote)
- select the insulation threshold
- set the reclosing time delay

ReStart Autotest 2P

ReStart Autotest 4P

ReStart 2P range

ReStart RD

ReStart RD PRO

ReStart RM

ReStart RM PRO

ReStart 4P range

ReStart RD PRO

ReStart RM PRO

ReStart RM TOP

ReStart CM

NOTE: ReStart CM is a motor operating device without system check

CHARACTERISTICS AND ADVANTAGES		ReStart Autotest	ReStart RD		ReStart RM		
		PRO	Standard	PRO	Standard	PRO	TOP
	Reclose, but in total safety The ReStart devices restore the power supply only after checking there are no faults in the system. This means a guarantee of safety for people and property, avoiding any risk of electric shock.	✓	✓	✓	✓	✓	✓(*)
	Practical installation, everywhere All ReStart devices work without an earth wire (domestic switchboards don't always include them) so they can be installed in existing domestic switchboards.	✓	✓	✓	✓	✓	✓
	Continuous control, immediate reclosing Once the circuit breaker has tripped because of a fault, ReStart PRO continues to monitor the system every 2 minutes until safety conditions are restored, and then it enables the automatic reclosing of the circuit breaker.	✓		✓		✓	✓(**)
	Self-diagnosis on a continuous cycle ReStart Autotest regularly tests the residual current device automatically. This ensures the residual current device is highly efficient, even in the long term.	✓					
	No loss of power ReStart Autotest regularly tests the residual current device without disconnecting voltage to the system, thanks to a special bypass circuit patented by GEWISS. This avoids the inconvenience caused by power failure or voltage drops.	✓					
	Safety under control, from one single point The ReStart devices can be integrated in a MODBUS RS485 data network thanks to the connection with the GEWISS BUS interface, allowing all the ReStart functions to be centrally managed via the network.	✓		✓		✓	
	A contact that always warns you in the event of a fault An auxiliary contact associated with ReStart allows any system fault to be recognised by means of a sound or light signal. A failed reclosing operation can also be signalled by a text message.	✓		✓		✓	✓
	The system close to hand, everywhere. Thanks to a WiFi interface, ReStart can be connected to the Internet so you can see the condition of the system at any time. All it takes is a smartphone or a tablet to check the ReStart status from a distance.	✓		✓		✓	
	More compact, meaning reduced overall dimensions in the enclosure. The overall dimensions of the ReStart devices have been reduced. The solution for single-phase systems takes up just one module, guaranteeing a wide range of installation possibilities within the enclosure.		✓	✓	✓	✓	

(*) It's possible to choose the automatic reclosing mode: • with a system check • by attempts • remote
(**) It's possible to set the automatic reclosing time delay.
(***) For 4P versions only

RESTART RANGE MAIN TECHNICAL DATA	RESTART Autotest	RESTART RD		RESTART RM		
	PRO version	STANDARD version	PRO version	STANDARD version	PRO version	TOP version
Circuit breaker type:	IDP	IDP		MDC		MT - MTC MDC - MT+BD
Number of poles:	2P-4P	2P	2P - 4P	1P+N, 2P	1P+N - 2P - 4P	1P - 1P+N - 2P - 3P - 4P
RCD type:	A[IR]	AC, A, A[IR], A[S]		AC, A, A[IR], A[S]		AC, A, A[IR], A[S]
No. of modules (circuit breaker included)	5 (2 poles) 7 (4 poles)	1 *	1 (2 poles) * 3 (4 poles) *	1 *	1 (2 poles) * 3 (4 poles) *	3 *
Residual operating current IΔn: (mA)	30-300	30 - 100 - 300 - 500		30 - 100 - 300		30-100-300-500
Breaking capacity Icn: (kA)	-	-	-	4.5 - 6 - 10		4.5 ÷ 25
Rated current In: (A)	25 ÷ 63	25 ÷ 100		6 ÷ 32		1 ÷ 63
Coupled versions with circuit breaker:	✓					
Auxiliary contact:	✓ (Integrated inside device)		✓ (2 poles: with GWD0951) (4 poles: integrated inside device)		✓ (2 poles: with GWD0951) (4 poles: integrated inside device)	✓ (Integrated inside device)
Adjustable reclosing time:						✓
Adjustable reclosing mode:						✓

MT: MCB **MTC**: compact MCB **MDC**: compact RCBO **IDP**: RCCB **BD**: add-on RCD
* Without circuit breaker

NOTE: type A[IR] offers greater resistance to mains disturbance and atmospheric discharge compared with standard RCDs.
Immunity level 8/20μs: 3000A for A[IR] version, 250A for standard version.

RESTART AUTOTEST

SELECTION TABLES

Automatic reclosing devices with preventive check of the insulation and automatic test of the residual current circuit breaker.

	COUPLED VERSIONS WITH RCCB'S		
	ATR2 - 2 poles	ATR4 - 4 poles	
	5 mod.	7 mod.	
	IΔn = 30 mA	IΔn = 30 mA	IΔn = 300 mA
In (A)	A[IR] - PRO type	A[IR] - PRO type	A[IR] - PRO type
25	GW 90 901 N	GW 90 921	GW 90 927
40	GW 90 902 N	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 divices with preventive check of the insulation

	COUPLED VERSIONS WITH RCCB'S IDP	
	RD2 - 2 poles	RD2 - 2 poles, PRO version
	3 mod.	
	IΔn = 30 mA	
In (A)	A type	
25	GW D4 817 R	GW D4 817 P
40	GW D4 827 R	GW D4 827 P

	VERSIONS TO BE COUPLED WITH RCCB'S IDP				
	RD2 - 2 poles	RD2 - 2 poles, PRO version		RD4 - 4 poles, PRO version	
	GW D0 971	GW D0 976	GW D0 978	GW 90 967	GW 90 969
	1 mod.	1 mod.		3 mod.	
	+	+	+	+	+
	RCCB'S IDP 2P			RCCB'S IDP 4P	
	2 mod.			4 mod.	

In (A)	Type	IΔn = 30 mA	IΔn = 100 mA	IΔn = 300 mA	IΔn = 500 mA	IΔn = 30 mA	IΔn = 100 mA	IΔn = 300 mA	IΔn = 500 mA
25	AC	GW D4 002 GW D4 617*	GW D4 003	GW D4 004	-	GW D4 102 GW D4 302**	GW D4 103	GW D4 104 GW D4 304**	-
	A	GW D4 012 GW D4 817*	GW D4 013	GW D4 014	-	GW D4 112 GW D4 312**	GW D4 113	GW D4 114 GW D4 314**	-
	A[IR]	GW D4 202	-	GW D4 203	-	GW D4 217 GW D4 317**	-	GW D4 218	-
40	AC	GW D4 022 GW D4 627*	GW D4 023	GW D4 024	GW D4 025	GW D4 122 GW D4 322**	GW D4 123	GW D4 124 GW D4 324**	GW D4 125
	A	GW D4 032 GW D4 827*	GW D4 033	GW D4 034	GW D4 035	GW D4 132 GW D4 332**	GW D4 133	GW D4 134 GW D4 334**	GW D4 135
	A[IR]	GW D4 205	-	GW D4 206	-	GW D4 220 GW D4 337**	-	GW D4 221	-
	A[S]	-	-	GW D4 234	GW D4 235	-	-	GW D4 249	GW D4 250
63	AC	GW D4 042	GW D4 043	GW D4 044	GW D4 045	GW D4 142 GW D4 342**	GW D4 143	GW D4 144 GW D4 344**	GW D4 145
	A	GW D4 052	GW D4 053	GW D4 054	GW D4 055	GW D4 152 GW D4 352**	GW D4 153	GW D4 154 GW D4 354**	GW D4 155
	A[IR]	GW D4 208	-	GW D4 209	-	GW D4 223 GW D4 357**	-	GW D4 224	-
	A[S]	-	-	GW D4 237	GW D4 238	-	-	GW D4 252	GW D4 253
80	AC	GW D4 062	GW D4 063	GW D4 064	-	GW D4 162 GW D4 362**	GW D4 163	GW D4 164 GW D4 364**	-
	A	GW D4 072	GW D4 073	GW D4 074	-	GW D4 172	GW D4 173	GW D4 174	-
100	AC	GW D4 082		GW D4 084	-	GW D4 182 GW D4 382**	GW D4 183	GW D4 184 GW D4 384**	GW D4 185
	A	GW D4 092	GW D4 093	GW D4 094	-	GW D4 192	GW D4 193	GW D4 194	GW D4 195
	A[IR]	GW D4 211	-	-	-	GW D4 226	-	GW 94 227	-
	A[S]	-	-	GW D4 243	GW D4 244	-	-	GW D4 258	GW D4 259

NOTE: ARD must be supplied with 230 V AC phase-neutral for working.
GW90967 and GW90969 ARDs can be coupled with RCCB's IDP 2 poles.
*Accessories not available.
**RCCB with Neutral on the left.

RESTART RM

Selection tables

Automatic reclosing divices with preventive check of the insulation and of the short circuit

			COUPLED VERSIONS WITH RCBO'S MDC	
			RM2 - 2 poles	RM2 - 2 poles, PRO version
			3 mod.	
			IΔn = 30 mA	
Icn (A)	Curve	In (A)	A type	
4500	C	16	GW D4 227 R	GW D4 227 P
		25	GW D4 229 R	GW D4 229 P

			VERSIONS TO BE COUPLED WITH RCBO'S MDC 2 POLES		
			RM2 - 2 poles	RM2 - 2 poles, PRO version	
			GW D0 991	GW D0 996	GW D0 998
			1 mod.	1 mod.	
			+	+	+
			RCBO'S MDC 1P+N, 2P		
			2 mod.		
			IΔn = 30 mA	IΔn = 300 mA	
			AC type	A type	A[IR] type	AC type	A type	A[S] type
Icn (A)	Curve	In (A)	1P+N	2P	1P+N	2P	2P	1P+N	2P	1P+N	2P	2P
4500	C	6	GW 94 005	GW 94 025	GW 94 205	GW 94 225	-	GW 94 015	GW 94 035	GW 94 215	GW 94 235	-
		10	GW 94 006	GW 94 026	GW 94 206	GW 94 226	-	GW 94 016	GW 94 036	GW 94 216	GW 94 236	-
		13	GW 94 011	GW 94 031	GW 94 211	GW 94 231	-	-	-	-	-	-
		16	GW 94 007	GW 94 027	GW 94 207	GW 94 227	-	GW 94 017	GW 94 037	GW 94 217	GW 94 237	-
		20	GW 94 008	GW 94 028	GW 94 208	GW 94 228	-	GW 94 018	GW 94 038	GW 94 218	GW 94 238	-
		25	GW 94 009	GW 94 029	GW 94 209	GW 94 229	-	GW 94 019	GW 94 039	GW 94 219	GW 94 239	-
		32	GW 94 010	GW 94 030	GW 94 210	GW 94 230	-	GW 94 020	GW 94 040	GW 94 220	GW 94 240	-
6000	C	2	-	-	-	GW 94 322	-	-	-	-	-	-
		4	-	-	-	GW 94 324	-	-	-	-	-	-
		6	GW 94 105	GW 94 125	GW 94 305	GW 94 325	GW 95 805	GW 94 115	GW 94 135	GW 94 315	GW 94 335	-
		10	GW 94 106	GW 94 126	GW 94 306	GW 94 326	GW 95 806	GW 94 116	GW 94 136	GW 94 316	GW 94 336	-
		13	GW 94 111	GW 94 131	GW 94 311	GW 94 331	GW 95 811	-	-	-	-	-
		16	GW 94 107	GW 94 127	GW 94 307	GW 94 327	GW 95 807	GW 94 117	GW 94 137	GW 94 317	GW 94 337	GW 95 847
		20	GW 94 108	GW 94 128	GW 94 308	GW 94 328	GW 95 808	GW 94 118	GW 94 138	GW 94 318	GW 94 338	GW 95 848
		25	GW 94 109	GW 94 129	GW 94 309	GW 94 329	GW 95 809	GW 94 119	GW 94 139	GW 94 319	GW 94 339	GW 95 849
		32	GW 94 110	GW 94 130	GW 94 310	GW 94 330	GW 95 810	GW 94 120	GW 94 140	GW 94 320	GW 94 340	GW 95 850
	B	6	-	-	GW 95 105	GW 95 125	-	-	-	GW 95 115	GW 95 135	-
		10	-	-	GW 95 106	GW 95 126	-	-	-	GW 95 116	GW 95 136	-
		13	-	-	GW 95 111	GW 95 131	-	-	-	-	-	-
		16	-	-	GW 95 107	GW 95 127	-	-	-	GW 95 117	GW 95 137	-
		20	-	-	GW 95 108	GW 95 128	-	-	-	GW 95 118	GW 95 138	-
		25	-	-	GW 95 109	GW 95 129	-	-	-	GW 95 119	GW 95 139	-
		32	-	-	GW 95 110	GW 95 130	-	-	-	GW 95 120	GW 95 140	-

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

Selection tables

Automatic reclosing divices with preventive check of the insulation and of the short circuit

			VERSIONS TO BE COUPLED WITH RCBO'S MDC 4 POLES					
			RM4 - 4 POLES, PRO VERSION					
			GW 90 986			GW 90 988		
			3 mod.			3 mod.		
			+			+		
			RCBO'S 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
4500	C	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	-	-	-	-
		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	-
6000	C	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	-	-	-
		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
		32	GW 94 170	GW 94 370	GW 95 820	GW 94 180	GW 94 380	GW 95 860
	B	6	-	GW 95 165	-	-	GW 95 175	-
		10	-	GW 95 166	-	-	GW 95 176	-
		13	-	GW 95 171	-	-	-	-
		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

Adjustable reclosing device with/without preventive check of the insulation and/or short-circuits.

		VERSION TO BE COUPLED WITH MCB'S AND ADD-ON RCD'S 4 POLES		
		GW 90 893		
		4 mod.		
		+		
		MCB'S MT 4 POLES		
		4 mod.		
Curve	**In (A)**	**Icn = 6000 A**	**Icn = 10000 A**	**Icn = 25000 A**
C	1	GW 92 081	-	-
	2	GW 92 082	-	-
	3	GW 92 083	-	-
	4	GW 92 084	-	-
	6	GW 92 085	GW 92 685	GW 92 885
	10	GW 92 086	GW 92 686	GW 92 886
	13	GW 92 094	GW 92 694	-
	16	GW 92 087	GW 92 687	GW 92 887
	20	GW 92 088	GW 92 688	GW 92 888
	25	GW 92 089	GW 92 689	GW 92 889
	32	GW 92 090	GW 92 690	GW 92 890
	40	GW 92 091	GW 92 691	GW 92 891
	50	GW 92 092	GW 92 692	GW 92 892
	63	GW 92 093	GW 92 693	GW 92 893
B	6	GW 92 285	GW 92 585	-
	10	GW 92 286	GW 92 586	-
	13	GW 92 294	GW 92 587	-
	16	GW 92 287	GW 92 588	-
	20	GW 92 288	GW 92 589	-
	25	GW 92 289	GW 92 590	-
	32	GW 92 290	GW 92 591	-
	40	GW 92 291	GW 92 592	-
	50	GW 92 292	GW 92 593	-
	63	GW 92 293	GW 92 594	-
D	1	-	GW 92 781	-
	2	-	GW 92 782	-
	3	-	GW 92 783	-
	4	-	GW 92 784	-
	6	GW 92 485	GW 92 785	-
	10	GW 92 486	GW 92 786	-
	13	GW 92 494	GW 92 794	-
	16	GW 92 487	GW 92 787	-
	20	GW 92 488	GW 92 788	-
	25	GW 92 489	GW 92 789	-
	32	GW 92 490	GW 92 790	-
	40	GW 92 491	GW 92 791	-

+

		ADD-ON RESIDUAL CURRENT DEVICES BD 4 POLES			
		3,5 mod.			
In (A)	**IΔn (mA)**	**AC type**	**A type**	**A[IR] type**	**A[S] type**
≤25	30	GW 94 422	GW 94 522	-	-
	300	GW 94 423	GW 94 523	-	-
	500	GW 94 424	GW 94 524	-	-
≤63	30	GW 94 432	GW 94 532	GW 94 586	-
	300	GW 94 433	GW 94 533	-	GW 94 583
	500	GW 94 434	GW 94 534	-	-
	1000	-	-	-	GW 94 585

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 AUTOTEST

Technical data

TYPE		ReStart Autotest PRO 2P	ReStart Autotest PRO 4P
Electrical characteristics			
Standards:		**EN 50557, EN 61008-1**	
Distribution system:		TT - TN-S	
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	
Rated impulse withstand voltage (Uimp):	**(kV)**	4	
Overvoltage category:		III	
Rated frequency:	**(Hz)**	50	
Residual making and breaking capacity (IΔm):	**(A)**	630	
Rated conditional residual short-circuit current with fuse (IΔc):	**(A)**	10000 (gL 63A) for In=25-40A 10000 (gL 80A) for In=63A	
Number of poles:		2	4
Type of associated residual current circuit breaker:		A[IR]	
Rated current (In):	**(A)**	25 - 40 - 63	
Rated residual operating current (IΔn):	**(mA)**	30	30 - 300
Rated non-operating resistance between live parts and earth (Rdo):	**(kΩ)**	8	8 (30mA) - 2.5 (300mA)
Rated operating resistance between live parts and earth (Rd):	**(kΩ)**	16	16 (30mA) - 5 (300mA)
Power loss at In:	**(W)**	2.2 (25A) - 5.4 (40A) - 6.2 (63A)	3.5 (25A) - 6 (40A) - 12 (63A)
Off-load absorbed power:	**(VA)**	4 (cosφ=0.2)	
Power absorbed during automatic reclosing:	**(VA)**	41 (cosφ=0.5)	
Power supply:		from above	
Mechanical characteristics			
Width in DIN modules:		5	7
Reclosing time:	**(s)**	10	
Autotest cycle time:	**(s)**	7	
Maximum operational frequency:	**(oper./h)**	30	
Max mechanical endurance (total no. operations):		4000	
Maximum no. of consecutive automatic reclosure operations [2]:		3	
Counter reset time no. of consecutive automatic reclosure operations:	**(s)**	60	
Section of circuit breaker terminals:	**(mm²)**	flexible cable: ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10 rigid cable: ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10	
Rated tightening torque:	**(Nm)**	2	
Mounting position:		any	
Degree of protection:		IP20 (terminals) - IP40 (front)	
Pollution degree:		2	
Operating temperature:	**(°C)**	-25 +60 [3]	
Stocking temperature:	**(°C)**	-40 +70	
Tropicalization:		55°C - RH 95%	
Auxiliary contact characteristics			
Type of contact:		Photomos (potential free contact)	
Operating voltage:	**(V)**	5-230 AC/DC	
Operating current:	**(mA)**	0,6 (min) - 100 cosφ=1 (max)	
Operating frequency:	**(Hz)**	50	
Category of use:		AC12	
Operating mode:		NO / NC / NC + impulse[4]	
Terminal section:	**(mm²)**	≤ 2.5	
Rated tightening torque:	**(Nm)**	0.4	
Autotest function			
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:		•	
Auxiliary contact for remote operating status access:		•	
Compatible with WiFi/ModBus interface module		•	
Internal electrical protection:		PTC	

[1] Power supply 230V phase-neutral [2] In the absence of a system fault [3] Average daily temperature ≤ +35°C
[4] Choosing NC + impulse option, auxiliary contact switches for 100ms at the end of each cycle of Autotest carried out successfully.

RESTART RD

Technical data

TYPE		ReStart Rd 2P	ReStart Rd PRO 2P	ReStart Rd PRO 4P
Electrical characteristics				
Standards:		**EN 50557**		
Distribution system:		TT - TN-S		
Rated operational voltage (Ue):	**(V)**	230 AC (1)		
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		
Rated impulse withstand voltage (Uimp):	**(kV)**	4		
Overvoltage category:		III		
Rated frequency:	**(Hz)**	50/60		50
Residual making and breaking capacity (IΔm):	**(A)**	IΔm of the associated circuit breaker		
Rated conditional residual short-circuit current with fuse (IΔc):	**(A)**	IΔc of the associated circuit breaker		
Number of poles:		2		4
Type of IDP RCCB:		AC - A - A[IR] - A[S]		
Rated current (In):	**(A)**	25 - 40 - 63 - 80 - 100		
Rated residual operating current (IΔn):	**(mA)**	30 - 100 - 300 - 500		
Rated non-operating resistance between live parts and earth (Rdo):	**(kΩ)**	8 (30mA) - 2,5 (100/300/500mA)		
Rated operating resistance between live parts and earth (Rd):	**(kΩ)**	16 (30mA) - 5 (100/300/500mA)		
Power loss at In:	**(W)**	Power loss of the associated circuit breaker		
Off-load absorbed power:	**(VA)**	3 (cosφ=0.4)		4 (cosφ=0.2)
Power absorbed during automatic reclosing:	**(VA)**	18 (cosφ=0.5)		45 (cosφ=0.5)
Mechanical characteristics				
Width in DIN modules:		1		3
Reclosing time:	**(s)**	10		
Maximum operational frequency:	**(oper./h)**	30		
Max mechanical endurance (total no. operations):		4000		
Maximum no. of consecutive automatic reclosure operations (2):		3		
Counter reset time no. of consecutive automatic reclosure operations:	**(s)**	60		
Section of circuit breaker terminals:	**(mm²)**	flexible cable: ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10 rigid cable: ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10		
Circuit breaker rated tightening torque:	**(Nm)**	3 (IDP) - 2 (IDP NA)		
Mounting position:		any		
Circuit breaker degree of protection:		IP20 (terminals) - IP40 (front)		
Pollution degree:		2		
Operating temperature:	**(°C)**	-5 +40	-5 +60 (3)	-25 +60 (3)
Stocking temperature:	**(°C)**	-40 +70		
Tropicalization:		55°C - RH 95%		
Auxiliary contact characteristics				
Can be fitted with auxiliary:		no	yes (with GWD0951)	already integrated in the ReStart
Type of contact:		-	Photomos (potential free contact)	
Operating voltage:	**(V)**	-	5-230 AC/DC	
Operating current:	**(mA)**	-	0,6 (min) - 100 cosφ=1 (max)	
Operating frequency:	**(Hz)**	-	50	
Category of use:		-	AC12	
Operating mode:		-	NO\NC\NO as signal of handle position	
Terminal section:	**(mm²)**	-	≤ 2.5	
Rated tightening torque:	**(Nm)**	-	0.4	
ReStart function				
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:			•	•
Compatible with WiFi/ModBus interface module			•	•
Internal electrical protection:		PTC	PTC	PTC

(1) Power supply 230V phase-neutral (2) In the absence of a system fault (3) Average daily temperature ≤ +35°C

RESTART RM

Technical data

TYPE		ReStart Rm 2P	ReStart Rm PRO 2P	ReStart Rm PRO 4P	Rm TOP		CM
Electrical characteristics							
Standards:			**EN 50557**		-		-
Distribution system:			TT - TN-S		TT - TN - IT (1)		TT-TN-IT
Rated operational voltage (Ue):	(V)		230 AC (2)				
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				
Rated impulse withstand voltage (Uimp):	(kV)		4				
Overvoltage category:			III				
Rated frequency:	(Hz)	50/60		50			
Residual making and breaking capacity (IΔm):	(A)		IΔm of the associated circuit breaker				
Number of poles:		2		4			
Type of MDC RCBO:			AC - A - A[IR] - A[S]				
Type of MT+BD RCBO:			-		AC - A - A[IR] - A[S]		
Rated current (In):	(A)		from 6 to 32		from 1 to 63		
Rated residual operating current (IΔn):	(mA)		30 - 300		30 - 300 - 500 - 1000		
Rated non-operating resistance between live parts and earth (Rdo):	(kΩ)		8 (30mA) - 2.5 (300mA)		8 (30mA) - 2.5 (300/500/1000mA)		-
Rated operating resistance between live parts and earth (Rd):	(kΩ)		16 (30mA) - 5 (300mA)		16 (30mA) - 5 (300/500/1000mA)		-
Rated non-operating resistance between live parts (Rcco):	(Ω)	0.4		0.3			-
Rated operating resistance between live parts (Rcc):	(Ω)	2.3		1.8			-
Power loss at In:	(W)		Power loss of the associated circuit breaker				
Off-load absorbed power:	(VA)	3 (cosφ=0.4)		16 (cosφ=0.2)	15 (cosφ=0.1)		0 (cosφ=0.2)
Power absorbed during automatic reclosing:	(VA)	18 (cosφ=0.5)		34 (cosφ=0.7)	30 (cosφ=0.6)		30 (cosφ=0.6)
Reclosing control:			automatic		automatic / remote (3)		remote (3)
Mechanical characteristics							
Width in DIN modules:		1		3	4		2
Reclosing time:	(s)		10		3 (without system test) 10 (with system test)		3
Remote control opening time:	(s)		-		2		
Maximum operational frequency:	(oper./h)		30				
Max mechanical endurance (total no. operations):			4000		10000		
Maximum no. of consecutive automatic reclosure operations (4):			3				-
Counter reset time no. of consecutive automatic reclosure operations:	(s)		60				-
Section of circuit breaker terminals:	(mm²)		flexible cable: ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10 rigid cable: ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10				
Rated tightening torque:	(Nm)		2				
Mounting position:			any				
Degree of protection:			IP20 (terminals) - IP40 (front)				
Pollution degree:			2				
Operating temperature:	(°C)	-5 +40	-5 +60 (5)	-25 +60 (5)			
Stocking temperature:	(°C)		-40 +70				
Tropicalization:			55°C - RH 95%				
Auxiliary contact characteristics							
Can be fitted with auxiliary:		no	yes (with GWD0951)	already integrated in the ReStart	already integrated in the ReStart	already integrated in the ReStart	already integrated in the ReStart
Type of contact:		-	Photomos (potential free contact)		Changeover	Photomos (potential free contact)	Changeover
Operating voltage:	(V)	-	5-230 AC/DC		230 AC/ 30 DC	5-230 AC/DC	230 AC/ 30 DC
Operating current:	(mA)	-	0,6 (min) - 100 cosφ=1 (max)		1,5 a.c. / 0,8 d.c.	0,6 (min) - 100 cosφ=1 (max)	1,5 a.c. / 0,8 d.c.
Operating frequency:	(Hz)	-	50				
Category of use:		-	AC12				
Operating mode:		-	NO/NC/NO as signal of handle position		CO	NO/NC/ INTERMITTENT	CO
Terminal section:	(mm²)	-	≤ 2.5				
Rated tightening torque:	(Nm)	-	0.4				
ReStart function							
Automatic reclosure for untimely tripping:		•	•	•	•		
Earth leakage check:		•	•	•	•		
Short-circuit check:		•	•	•	•		
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 progress:		•	•	•	•		
Light signalling of failure:		•	•	•	•		
Activation / exclusion of ReStart function:		•	•	•	•		•
Auxiliary contact for remote operating status access:			•	•	•		•
Compatible with WiFi/ModBus interface module			•	•			
Internal electrical protection:		PTC	PTC	PTC	PTC		PTC

(1) For IT system reclosing without fault check
(2) Power supply 230V phase-neutral
(3) Impulse duration ≥ 200ms
(4) In the absence of a system fault
(5) Average daily temperature ≤ +35°C
(6) Automatic reclosure delay time: 0-1h

90 MCB

MTC - COMPACT MINIATURE CIRCUIT BREAKERS

MT - MINIATURE CIRCUIT BREAKERS

MTHP - HIGH PERFORMANCE MINIATURE CIRCUIT BREAKERS

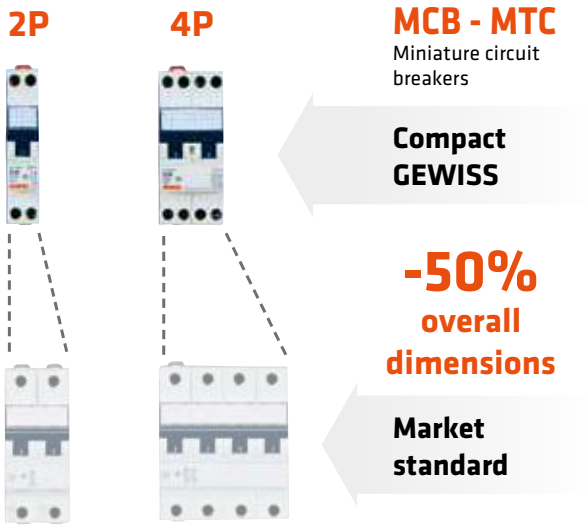
page 19

MCBs for circuit protection

With the compact MCBs **MTC** you can protect 2 poles for each module.

The **MT** MCBs, based on unique and innovative design solutions and the use of high quality materials, stand out for their optimum performance, robustness and long-term reliability.

The high-performance **MTHP** MCBs - up to 125A and with a breaking capacity of 16kA (EN 60947-2) - can be used both as a main switch and as circuit breaker protection in electrical boards with a high short-circuit current.



MTC

MT

MTHP

Maximum safety

In addition to the characteristic of the double DIN clip, which allows a more steady mounting and facilitates maintenance operations, the terminals are supplied with protective and sliding insulation insert for the maximum safety of tightening and against any possible contacts with live parts.

Accessories to simplify use

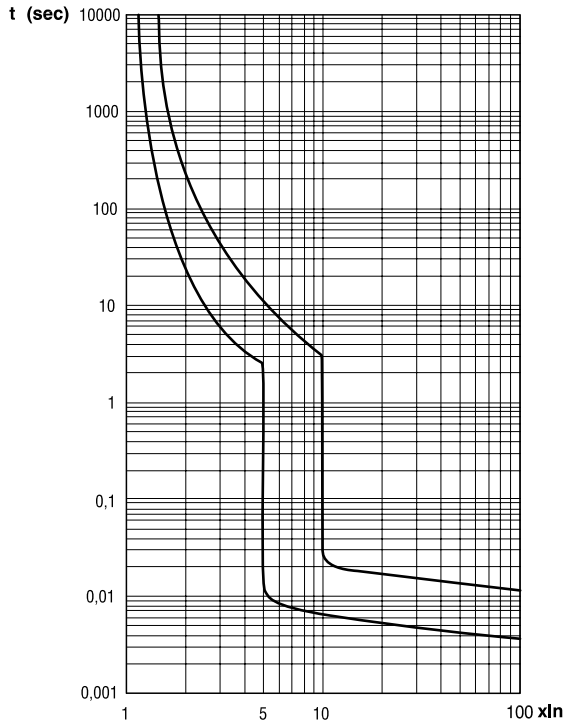
The complete integration among the circuit breakers and all electrical auxiliaries the 90 range allow to simply the accessory management.

Quick identification

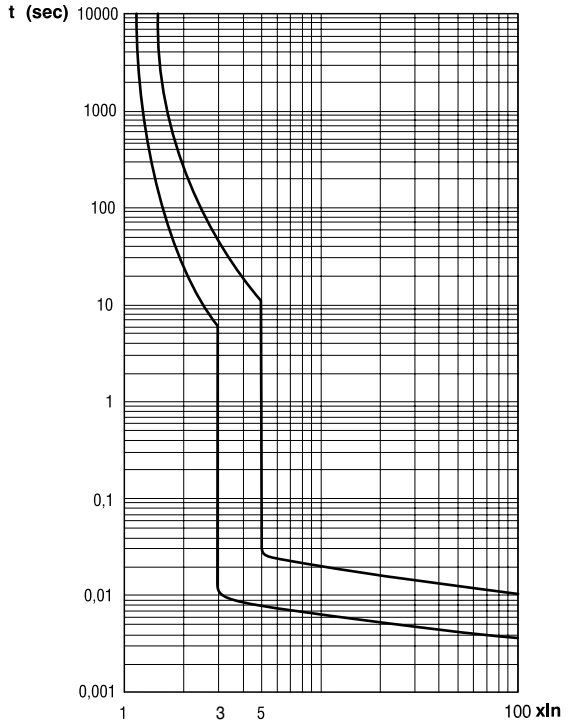
The label holder is suitable for identification of the function of every circuit and it is available across the range.

TRIPPING CHARACTERISTICS IN ALTERNATING CURRENT (EN 60898)

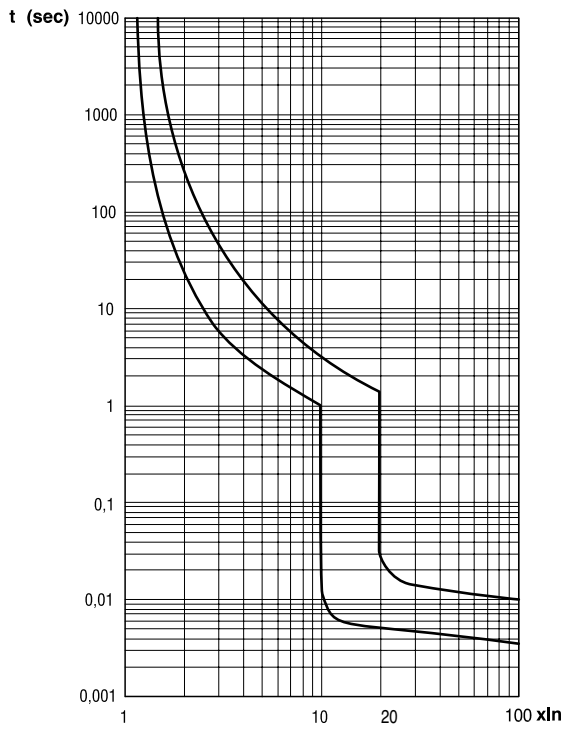
MTC 45 - 60 - 100 Characteristic C
MT 45 - MT 60 - 100 - 250 Characteristic C
MTHP 160 - 250 Characteristic C



MT 45 - MT 60 - 100 Characteristic B
MTC 60 Characteristic B



MT 60 - 100 Characteristic D
MTHP 160 Characteristic D



Tripping characteristic	B	C	D
In	from 6 to 63 A	from 1 to 125 A	from 6 to 100 A
Thermal release			
Inf	1,13 In	1,13 In	1,13 In
If	1,45 In	1,45 In	1,45 In
t	< 1 h	< 1 h	< 1 h
Magnetic release			
Inf	3 In	5 In	10 In
If	5 In	10 In	20 In
t	istantaneous	istantaneous	istantaneous

In =rated current
Inf = conventional non-trpping current
If = conventional tripping current
t = tripping time

B tripping curve: tripping characteristic for the protection of electrical resistive loads (for example: heating) and very long electrical ditribution lines.

C tripping curve: tripping characteristic for the protection of general electrical resistive or slight inductive loads (for example: fluorescent lamps).

D tripping curve: tripping characteristic for the protection of electrical heavy inductive loads or high starting curents (for example: electrical engines).

Selection tables

			MINIATURE CIRCUIT BREAKERS										
			MTC						MT				
Icn [A] (EN60898)	Curve	In [A]	1P 1 mod.	1P+N 1 mod.	1P+N* 1 mod.	2P 1 mod.	3P 2 mod.	4P 2 mod.	1P 1 mod.	1P+N 2 mod.	2P 2 mod.	3P 3 mod.	4P 4 mod.
			MTC 45						MT 45				
4500	C	2	-	GW 90 022	GW 90 602	-	-	-	-	-	-	-	-
		6	GW 90 005	GW 90 025	GW 90 605	GW 90 045	GW 90 065	GW 90 085	GW 92 105	GW 92 125	GW 92 145	GW 92 165	GW 92 185
		10	GW 90 006	GW 90 026	GW 90 606	GW 90 046	GW 90 066	GW 90 086	GW 92 106	GW 92 126	GW 92 146	GW 92 166	GW 92 186
		13	GW 90 011	GW 90 031	-	GW 90 051	GW 90 071	GW 90 091	GW 92 107	GW 92 127	GW 92 147	GW 92 167	GW 92 187
		16	GW 90 007	GW 90 027	GW 90 607	GW 90 047	GW 90 067	GW 90 087	GW 92 108	GW 92 128	GW 92 148	GW 92 168	GW 92 188
		20	GW 90 008	GW 90 028	GW 90 608	GW 90 048	GW 90 068	GW 90 088	GW 92 109	GW 92 129	GW 92 149	GW 92 169	GW 92 189
		25	GW 90 009	GW 90 029	GW 90 609	GW 90 049	GW 90 069	GW 90 089	GW 92 110	GW 92 130	GW 92 150	GW 92 170	GW 92 190
		32	GW 90 010	GW 90 030	GW 90 610	GW 90 050	GW 90 070	GW 90 090	GW 92 111	GW 92 131	GW 92 151	GW 92 171	GW 92 191
		40	-	-	-	-	-	-	GW 92 112	GW 92 132	GW 92 152	GW 92 172	GW 92 192
	B	6	-	-	-	-	-	-	GW 92 305	GW 92 325	GW 92 345	GW 92 365	GW 92 385
		10	-	-	-	-	-	-	GW 92 306	GW 92 326	GW 92 346	GW 92 366	GW 92 386
		13	-	-	-	-	-	-	GW 92 307	GW 92 327	GW 92 347	GW 92 367	GW 92 387
		16	-	-	-	-	-	-	GW 92 308	GW 92 328	GW 92 348	GW 92 368	GW 92 388
		20	-	-	-	-	-	-	GW 92 309	GW 92 329	GW 92 349	GW 92 369	GW 92 389
		25	-	-	-	-	-	-	GW 92 310	GW 92 330	GW 92 350	GW 92 370	GW 92 390
		32	-	-	-	-	-	-	GW 92 311	GW 92 331	GW 92 351	GW 92 371	GW 92 391
		40	-	-	-	-	-	-	GW 92 312	GW 92 332	GW 92 352	GW 92 372	GW 92 392
			MTC 60						MT 60				
6000	C	1	-	-	-	-	-	-	GW 92 001	GW 92 021	GW 92 041	GW 92 061	GW 92 081
		2	-	-	-	-	-	-	GW 92 002	GW 92 022	GW 92 042	GW 92 062	GW 92 082
		3	-	-	-	-	-	-	GW 92 003	GW 92 023	GW 92 043	GW 92 063	GW 92 083
		4	-	-	-	-	-	-	GW 92 004	GW 92 024	GW 92 044	GW 92 064	GW 92 084
		6	-	GW 90 225	-	GW 90 245	GW 90 265	GW 90 285	GW 92 005	GW 92 025	GW 92 045	GW 92 065	GW 92 085
		10	-	GW 90 226	-	GW 90 246	GW 90 266	GW 90 286	GW 92 006	GW 92 026	GW 92 046	GW 92 066	GW 92 086
		13	-	GW 90 231	-	GW 90 251	GW 90 271	GW 90 291	GW 92 014	GW 92 034	GW 92 054	GW 92 074	GW 92 094
		16	-	GW 90 227	-	GW 90 247	GW 90 267	GW 90 287	GW 92 007	GW 92 027	GW 92 047	GW 92 067	GW 92 087
		20	-	GW 90 228	-	GW 90 248	GW 90 268	GW 90 288	GW 92 008	GW 92 028	GW 92 048	GW 92 068	GW 92 088
		25	-	GW 90 229	-	GW 90 249	GW 90 269	GW 90 289	GW 92 009	GW 92 029	GW 92 049	GW 92 069	GW 92 089
		32	-	GW 90 230	-	GW 90 250	GW 90 270	GW 90 290	GW 92 010	GW 92 030	GW 92 050	GW 92 070	GW 92 090
		40	-	-	-	-	-	-	GW 92 011	GW 92 031	GW 92 051	GW 92 071	GW 92 091
		50	-	-	-	-	-	-	GW 92 012	GW 92 032	GW 92 052	GW 92 072	GW 92 092
		63	-	-	-	-	-	-	GW 92 013	GW 92 033	GW 92 053	GW 92 073	GW 92 093
	B	6	-	GW 90 325	-	GW 90 345	-	-	GW 92 205	-	GW 92 245	GW 92 265	GW 92 285
		10	-	GW 90 326	-	GW 90 346	-	-	GW 92 206	-	GW 92 246	GW 92 266	GW 92 286
		13	-	GW 90 327	-	GW 90 347	-	-	GW 92 214	-	GW 92 254	GW 92 274	GW 92 294
		16	-	GW 90 328	-	GW 90 348	-	-	GW 92 207	-	GW 92 247	GW 92 267	GW 92 287
		20	-	GW 90 329	-	GW 90 349	-	-	GW 92 208	-	GW 92 248	GW 92 268	GW 92 288
		25	-	GW 90 330	-	GW 90 350	-	-	GW 92 209	-	GW 92 249	GW 92 269	GW 92 289
		32	-	GW 90 331	-	GW 90 351	-	-	GW 92 210	-	GW 92 250	GW 92 270	GW 92 290
		40	-	-	-	-	-	-	GW 92 211	-	GW 92 251	GW 92 271	GW 92 291
		50	-	-	-	-	-	-	GW 92 212	-	GW 92 252	GW 92 272	GW 92 292
		63	-	-	-	-	-	-	GW 92 213	-	GW 92 253	GW 92 273	GW 92 293
	D	6	-	-	-	-	-	-	GW 92 405	-	GW 92 445	GW 92 465	GW 92 485
		10	-	-	-	-	-	-	GW 92 406	-	GW 92 446	GW 92 466	GW 92 486
		13	-	-	-	-	-	-	GW 92 414	-	GW 92 454	GW 92 474	GW 92 494
		16	-	-	-	-	-	-	GW 92 407	-	GW 92 447	GW 92 467	GW 92 487
		20	-	-	-	-	-	-	GW 92 408	-	GW 92 448	GW 92 468	GW 92 488
		25	-	-	-	-	-	-	GW 92 409	-	GW 92 449	GW 92 469	GW 92 489
		32	-	-	-	-	-	-	GW 92 410	-	GW 92 450	GW 92 470	GW 92 490
		40	-	-	-	-	-	-	GW 92 411	-	GW 92 451	GW 92 471	GW 92 491

* Miniature circuit breakers with neutral on the left

			MINIATURE CIRCUIT BREAKERS									
			MTC		MT				MTHP			
Icn [A] (EN60898)	Curve	In [A]	1P+N 1 mod.	2P 1 mod.	1P 1 mod.	2P 2 mod.	3P 3 mod.	4P 4 mod.	1P 1.5 mod.	2P 3 mod.	3P 4.5 mod.	4P 6 mod.
			MTC 100		MT 100							
10000	C	6	GW 90 425	GW 90 445	GW 92 605	GW 92 645	GW 92 665	GW 92 685	-	-	-	-
		10	GW 90 426	GW 90 446	GW 92 606	GW 92 646	GW 92 666	GW 92 686	-	-	-	-
		13	GW 90 431	GW 90 451	GW 92 614	GW 92 654	GW 92 674	GW 92 694	-	-	-	-
		16	GW 90 427	GW 90 447	GW 92 607	GW 92 647	GW 92 667	GW 92 687	-	-	-	-
		20	GW 90 428	GW 90 448	GW 92 608	GW 92 648	GW 92 668	GW 92 688	-	-	-	-
		25	GW 90 429	GW 90 449	GW 92 609	GW 92 649	GW 92 669	GW 92 689	-	-	-	-
		32	GW 90 430	GW 90 450	GW 92 610	GW 92 650	GW 92 670	GW 92 690	-	-	-	-
		40	-	-	GW 92 611	GW 92 651	GW 92 671	GW 92 691	-	-	-	-
		50	-	-	GW 92 612	GW 92 652	GW 92 672	GW 92 692	-	-	-	-
		63	-	-	GW 92 613	GW 92 653	GW 92 673	GW 92 693	-	-	-	-
	B	6	-	-	GW 92 505	GW 92 545	GW 92 565	GW 92 585	-	-	-	-
		10	-	-	GW 92 506	GW 92 546	GW 92 566	GW 92 586	-	-	-	-
		13	-	-	GW 92 507	GW 92 547	GW 92 567	GW 92 587	-	-	-	-
		16	-	-	GW 92 508	GW 92 548	GW 92 568	GW 92 588	-	-	-	-
		20	-	-	GW 92 509	GW 92 549	GW 92 569	GW 92 589	-	-	-	-
		25	-	-	GW 92 510	GW 92 550	GW 92 570	GW 92 590	-	-	-	-
		32	-	-	GW 92 511	GW 92 551	GW 92 571	GW 92 591	-	-	-	-
		40	-	-	GW 92 512	GW 92 552	GW 92 572	GW 92 592	-	-	-	-
		50	-	-	GW 92 513	GW 92 553	GW 92 573	GW 92 593	-	-	-	-
		63	-	-	GW 92 514	GW 92 554	GW 92 574	GW 92 594	-	-	-	-
	D	1	-	-	GW 92 701	GW 92 741	GW 92 761	GW 92 781	-	-	-	-
		2	-	-	GW 92 702	GW 92 742	GW 92 762	GW 92 782	-	-	-	-
		3	-	-	GW 92 703	GW 92 743	GW 92 763	GW 92 783	-	-	-	-
		4	-	-	GW 92 704	GW 92 744	GW 92 764	GW 92 784	-	-	-	-
		6	-	-	GW 92 705	GW 92 745	GW 92 765	GW 92 785	-	-	-	-
		10	-	-	GW 92 706	GW 92 746	GW 92 766	GW 92 786	-	-	-	-
		13	-	-	GW 92 714	GW 92 754	GW 92 774	GW 92 794	-	-	-	-
		16	-	-	GW 92 707	GW 92 747	GW 92 767	GW 92 787	-	-	-	-
		20	-	-	GW 92 708	GW 92 748	GW 92 768	GW 92 788	-	-	-	-
		25	-	-	GW 92 709	GW 92 749	GW 92 769	GW 92 789	-	-	-	-
		32	-	-	GW 92 710	GW 92 750	GW 92 770	GW 92 790	-	-	-	-
		40	-	-	GW 92 711	GW 92 751	GW 92 771	GW 92 791	-	-	-	-
									MTHP 160			
10000 (16kA EN60947-2)	C	80	-	-	-	-	-	-	GW 93 307	GW 93 327	GW 93 337	GW 93 347
		100	-	-	-	-	-	-	GW 93 308	GW 93 328	GW 93 338	GW 93 348
		125	-	-	-	-	-	-	GW 93 309	GW 93 329	GW 93 339	GW 93 349
	D	50	-	-	-	-	-	-	GW 93 355	GW 94 375	GW 93 385	GW 93 395
		63	-	-	-	-	-	-	GW 93 356	GW 93 376	GW 93 386	GW 93 396
		80	-	-	-	-	-	-	GW 93 357	GW 93 377	GW 93 387	GW 93 397
		100	-	-	-	-	-	-	GW 93 358	GW 93 378	GW 93 388	GW 93 398
					MT 250				MTHP 250			
12500	C	50	-	-	GW 92 812	GW 92 852	GW 92 872	GW 92 892	-	-	-	-
		63	-	-	GW 92 813	GW 92 853	GW 92 873	GW 92 893	-	-	-	-
15000	C	32	-	-	GW 92 810	GW 92 850	GW 92 870	GW 92 890	-	-	-	-
		40	-	-	GW 92 811	GW 92 851	GW 92 871	GW 92 891	-	-	-	-
20000	C	25	-	-	GW 92 809	GW 92 849	GW 92 869	GW 92 889	-	-	-	-
25000	C	6	-	-	GW 92 805	GW 92 845	GW 92 865	GW 92 885	-	-	-	-
		10	-	-	GW 92 806	GW 92 846	GW 92 866	GW 92 886	-	-	-	-
		16	-	-	GW 92 807	GW 92 847	GW 92 867	GW 92 887	-	-	-	-
		20	-	-	GW 92 808	GW 92 848	GW 92 868	GW 92 888	GW 93 201	GW 93 221	GW 93 231	GW 93 241
		25	-	-	-	-	-	-	GW 93 202	GW 93 222	GW 93 232	GW 93 242
		32	-	-	-	-	-	-	GW 93 203	GW 93 223	GW 93 233	GW 93 243
		40	-	-	-	-	-	-	GW 93 204	GW 93 224	GW 93 234	GW 93 244
		50	-	-	-	-	-	-	GW 93 205	GW 93 225	GW 93 235	GW 93 245
		63	-	-	-	-	-	-	GW 93 206	GW 93 226	GW 93 236	GW 93 246

90 RCD

MDC - MONOBLOC COMPACT RCBO'S

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

IDP - RESIDUAL CURRENT CIRCUIT BREAKERS

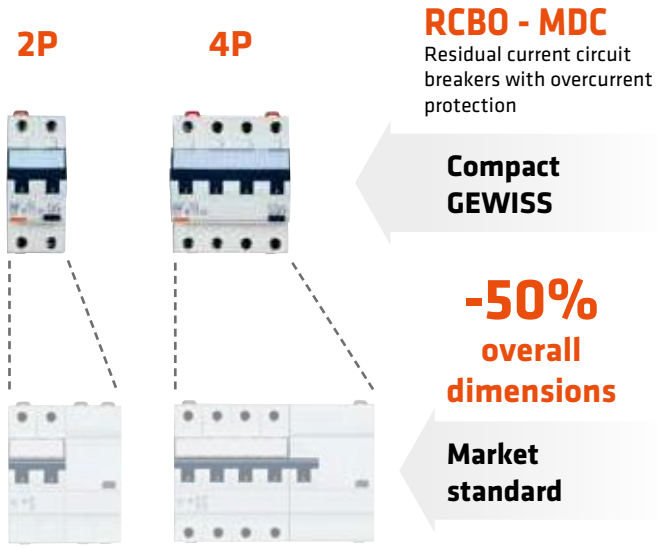
page 24

RCBOs, RCCBs and ADD-ONs for residual current protection

With the compact **MDC** RCBOs, you can protect one pole for each module.
A range of modular devices for residual current protection at the forefront of performance. The **IDP** RCCBs and add-on **BD** and **BDHP** RCDs for **MT** and **MTHP** circuit breakers offer quick assembly and unique innovation solutions.

Wide range of versions:

- instantaneous: type AC - A
- impulse resistant: type A - B
- selective: type A - B
- with adjustable tripping threshold and time delay: type A



MDC

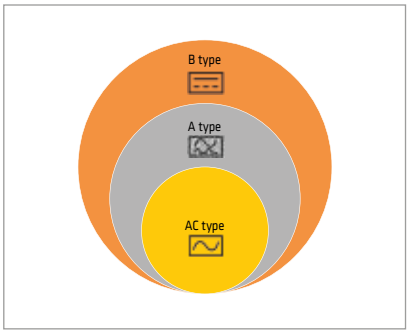
BD and BDHP

IDP

IDP B type

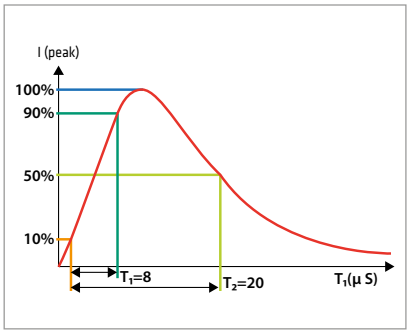
Quick test

The Add-on RCD's are provided with a test button which tests the correct mechanical coupling with circuit breaker before suppling. This is an important test that ensures the correct operation of trip mechanism. Moreover, the only one lever allows to identify the type of fault that has caused the device to trip. A yellow flag indicates earth fault.



A circuit breaker for every need

Thanks to the wide possibility of choice, the 90 RCD range allows to meet all the needs of protection in electrical circuit with different types of earth fault currents, from sinusoidal alternating shape (AC type) and pulsanting (A type), due to the presence of electronic devices, up to smooth DC shape (B type) used, for example, for the protection of inverters, UPS and medical equipment.



Without interruption

In addition to AC, A and B types, the 90 RCD range offers also the Impulse Resistant IR version with high resistance to untimely tripping due to overvoltage impulses. This version is particularly suitable for installations where the continuity of service is extremely important. The IR version, available for MDC, BD and IDP, stands out for its ability to provide safety and, at the same time, to not trip during atmospheric discharges, during driving with critical inrush current and in presence of harmonics that usually open the standard RCD's without real fault.

Selection tables

Icn [A] (EN 61009-1)	Curve	Type	In [A]	COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION							
				IΔn = 30mA				IΔn = 300mA			
				1P+N	2P	3P	4P	1P+N	2P	3P	4P
				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
			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
		A	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
			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
		A	2	-	GW 94 322	-	GW 94 365	-	-	-	-
			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[IR]	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	-	-	-	-
			32	-	GW 95 810	-	GW 95 820	-	-	-	-
		A[S]	16	-	-	-	-	-	GW 95 847	-	GW 95 857
			20	-	-	-	-	-	GW 95 848	-	GW 95 858
			25	-	-	-	-	-	GW 95 849	-	GW 95 859
			32	-	-	-	-	-	GW 95 850	-	GW 95 860
	B	A	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
			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

COMPACT RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION

Icn [A] (EN 61009-1)	Curve	Type	In [A]	IΔn = 30mA				IΔn = 100mA	IΔn = 300mA		
				1P+N	2P		3P	2P	1P+N	2P	
				2 mod.	2 mod.		3 mod.	2 mod.	2 mod.	2 mod.	
				MDC 100							
10000	C	AC	6	GW 95 005	GW 95 025	GW 95 025 MA*	-	-	GW 95 015	GW 95 035	GW 95 035 MA*
			10	GW 95 006	GW 95 026	GW 95 026 MA*	-	-	GW 95 016	GW 95 036	GW 95 036 MA*
			13	GW 95 011	GW 95 031	GW 95 031 MA*	-	-	-	-	-
			16	GW 95 007	GW 95 027	GW 95 027 MA*	-	-	GW 95 017	GW 95 037	GW 95 037 MA*
			20	GW 95 008	GW 95 028	GW 95 028 MA*	-	-	GW 95 018	GW 95 038	GW 95 038 MA*
			25	GW 95 009	GW 95 029	GW 95 029 MA*	-	-	GW 95 019	GW 95 039	GW 95 039 MA*
			32	GW 95 010	GW 95 030	GW 95 030 MA*	-	-	GW 95 020	GW 95 040	GW 95 040 MA*
		A	6	GW 95 205	GW 95 225	GW 95 225 MA*	GW 95 245**	GW 95 785	GW 95 215	GW 95 235	GW 95 235 MA*
			10	GW 95 206	GW 95 226	GW 95 226 MA*	GW 95 246**	GW 95 786	GW 95 216	GW 95 236	GW 95 236 MA*
			13	GW 95 211	GW 95 231	GW 95 231 MA*	-	GW 95 791	-	-	-
			16	GW 95 207	GW 95 227	GW 95 227 MA*	GW 95 247**	GW 95 787	GW 95 217	GW 95 237	GW 95 237 MA*
			20	GW 95 208	GW 95 228	GW 95 228 MA*	GW 95 248**	GW 95 788	GW 95 218	GW 95 238	GW 95 238 MA*
			25	GW 95 209	GW 95 229	GW 95 229 MA*	GW 95 249**	GW 95 789	GW 95 219	GW 95 239	GW 95 239 MA*
			32	GW 95 210	GW 95 230	GW 95 230 MA*	GW 95 250**	GW 95 790	GW 95 220	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		-	-	-	-	
	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		-	-	-	-	

* Rated operating voltage equal to 110V ac

** Rated operating voltage equal to 230V ac

ADD-ON RESIDUAL CURRENT DEVICES (EN 61009-1 APP. G)

Type	IΔn [mA]	BD						BDHP		
		2P		3P		4P		2P	3P	4P
		2 mod.		3,5 mod.		3,5 mod.		4 mod.	6 mod.	6 mod.
		In≤25 A	In≤63 A	In≤25 A	In≤63 A	In≤25 A	In≤63 A	In≤125 A	In≤125 A	In≤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[IR]	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 reg.	300-3000	-		-		-		-	-	GW 95 512

In [A]	Ue [V]	Type	IΔn [mA]	RCD SAFETY SOCKET		FLUSH-MOUNTING RCD WATERTIGHT COVER	HOUSING FOR SURFACE-MOUNTING
				IP21	IP44	IP41	IP44
16	230	A	10	GW 95 921	GW 95 923	GW 95 925	GW 95 928
			30	GW 95 922	GW 95 924	GW 95 926	

RCCBS IDP

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	-
	B[IR]	30	-	GW 95 701 **	-	-	GW 95 716	-
		300	-	-	-	-	GW 95 718	-
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	-
	B[IR]	30	-	GW 95 706 **	-	-	GW 95 721	-
		300	-	-	-	-	GW 95 723	-
63	AC	30	-	GW D4 042	-	-	GW D4 142	GW D4 342
		100	-	GW D4 043	-	-	GW D4 143	-
		300	-	GW D4 044	-	-	GW D4 144	GW D4 344
		500	-	GW D4 045	-	-	GW D4 145	-
	A	30	-	GW D4 052	-	-	GW D4 152	GW D4 352
		100	-	GW D4 053	-	-	GW D4 153	-
		300	-	GW D4 054	-	-	GW D4 154	GW D4 354
		500	-	GW D4 055	-	-	GW D4 155	-
	A[IR]	30	-	GW D4 208	-	-	GW D4 223	-
		300	-	GW D4 209	-	-	GW D4 224	-
	A[S]	300	-	GW D4 237	-	-	GW D4 252	-
		500	-	GW D4 238	-	-	GW D4 253	-
	B[IR]	30	-	-	-	-	GW 95 726	-
		300	-	-	-	-	GW 95 728	-
		500	-	-	-	-	GW 95 729	-
	B[S]	300	-	-	-	-	GW 95 737	-
80	AC	30	-	GW D4 062	-	-	GW D4 162	GW D4 362
		100	-	GW D4 063	-	-	GW D4 163	-
		300	-	GW D4 064	-	-	GW D4 164	GW D4 364
	A	30	-	GW D4 072	-	-	GW D4 172	-
		100	-	GW D4 073	-	-	GW D4 173	-
		300	-	GW D4 074	-	-	GW D4 174	-
	B[IR]	30	-	-	-	-	GW 95 731	-
		300	-	-	-	-	GW 95 733	-
	B[S]	300	-	-	-	-	GW 95 743	-
100	AC	30	-	GW D4 082	-	-	GW D4 182	GW D4 382
		100	-	-	-	-	GW D4 183	-
		300	-	GW D4 084	-	-	GW D4 184	GW D4 384
		500	-	-	-	-	GW D4 185	-
	A	30	-	GW D4 092	-	-	GW D4 192	-
		100	-	GW D4 093	-	-	GW D4 193	-
		300	-	GW D4 094	-	-	GW D4 194	-
		500	-	-	-	-	GW D4 195	-
	A[IR]	30	-	GW D4 211	-	-	GW D4 226	-
		300	-	-	-	-	GW D4 227	-
	A[S]	300	-	GW D4 243	-	-	GW D4 258	-
		500	-	GW D4 244	-	-	GW D4 259	-
125	AC	30	-	-	-	-	GW 95 601	-
		300	-	-	-	-	GW 95 603	-
		500	-	-	-	-	GW 95 604	-
	A	30	-	-	-	-	GW 95 606	-
		300	-	-	-	-	GW 95 608	-
		500	-	-	-	-	GW 95 609	-

* Accessories not available ** 4 Modules *** RCCBs with left neutral

90 AM

MODULAR ACCESSORIES

page 30

90 PV

PRODUCTS FOR PHOTOVOLTAIC SYSTEMS

page 36

Electrical auxiliaries and busbars

The **auxiliary contacts** and **shunt trip releases**, common to all MCBs and RCBOs, allow simplicity, interchangeability, multiple uses and rationalisation of the items. The range is completed by modular auxiliaries specifically for the RCCB range.

The **busbars** reduce the wiring and labour times, without the need to use cables and crimps. They are available in pin and fork versions with 12 modules, up to one metre long.

AUXILIARY CONTACT FOR OPEN/CLOSED POSITION

GW 96 001

FAULT INDICATOR SWITCH

GW 96 006

ADJUSTABLE AUXILIARY CONTACT (POSITION/TRIPPED)

GW 96 009

SHUNT TRIP RELEASES

GW 96 011
(12-48V AC/DC)

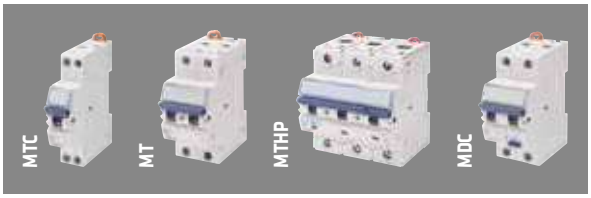
GW 96 012
(110-125V DC)
(110-415V AC)

UNDER VOLTAGE RELEASES

GW 96 016
(230V AC)

GW 96 017
(24V AC/DC)

GW 96 018
(48V AC/DC)



AUXILIARY CONTACT FOR OPEN/CLOSED POSITION

GW D6 002
(IDP 25-100A)

FAULT INDICATOR SWITCH

GW D6 007
(IDP 25-100A)

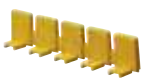
ADJUSTABLE AUXILIARY CONTACT (POSITION/ TRIPPED)

GW D6 010
(IDP 25-100A)

SHUNT TRIP RELEASES

GW D6 013
(IDP 25-100A)
(12-48V AC/DC)

GW D6 015
(IDP 25-100A)
(110-125V DC)
(110-415V AC)

		PIN BUSBARS		FORK BUSBARS		ISOLATED TERMINAL FOR PIN BUSBARS	BUSBAR END CAPS	PROTECTION CAPS
								
		12 mod.	**1 metre**	**12 mod.**	**1 metre**			**5 pieces**
MT - MDC - IDP	1P	GW 96 984	GW 96 988	GW 96 992	GW 96 996	GW 96 961	GW 96 963	GW 96 967
	2P	GW 96 985	GW 96 989	GW 96 993	GW 96 997		GW 96 964	
	3P	GW 96 986	GW 96 990	GW 96 994	GW 96 998		GW 96 965	
	4P	GW 96 987	GW 96 991	GW 96 995	GW 96 999	GW 96 962	GW 96 966	
				12 mod.				**5 pieces**
For MDC	Up to 6 MDC 1P+N / 2P	-		GW 96 491		-	-	GW 96 967
		13 mod.	**1 metre**					**5 pieces**
For MTC	1P (grey)	GW 96 500	-	-		GW 96 503	-	GW 96 967
	1P (blue)	GW 96 501	-	-			-	
	1P (white)	-	GW 96 988	-			-	
		13 mod.		**6 mod.**	**12 mod.**			**5 pieces**
For IDP 2P	Up to 11 MTC 1P+N / 2P	GW 96 507F		-	-	-	-	GW 96 967

Protection

This range of accessories guarantees excellent protection of loads and power distribution systems. The range includes:

- LST surge protective devices
- disconnectable fuse-holders
- residual current relay with separate toroid
- motor protection switches

Compact fuse-holder

LST surge protective devices

LST - SURGE PROTECTIVE DEVICES

	TYPE 1+2		TYPE 2			
	1P+N	3P+N	1P		1P+N	3P+N
Imax (kA)	**230V**	**400V**	**230V**	**400V**	**230V**	**400V**
20	-	-	-	-	GW D6 407	GW D6 409
					2 mod.	4 mod.
40	-	-	GW D6 411	GW D6 413	GW D6 417	GW D6 419
			1 mod.		2 mod.	4 mod.
			GW D6 412*	1 mod.	GW D6 418*	GW D6 420*
			1 mod.		2 mod.	4 mod.
65 (Iimp=12.5kA)	GW D6 401	GW D6 402	-	-	-	-
	2 mod.	4 mod.				
100 (Iimp=25kA)	GW D6 404*	GW D6 405*	-	-	-	-
	4 mod.	8 mod.				

* With auxiliary contact

MOTOR PROTECTION SWITCHES

In (A)	3 mod.
0.1 - 0.16	GW 96 751
0.16 - 0.25	GW 96 752
0.25 - 0.4	GW 96 753
0.4 - 0.63	GW 96 754
0.63 - 1	GW 96 755
1 - 1.6	GW 96 756
1.6 - 2.5	GW 96 757
2.5 - 4	GW 96 758
4 - 6.3	GW 96 759
6.3 - 10	GW 96 760
10 - 16	GW 96 761
16 - 25	GW 96 762
25 - 40	GW 96 763

AC DISCONNECTABLE FUSE-HOLDERS

In (A)	Fuse dim. (mm)	1P	1P+N	2P	3P	3P+N
20	**8.3x31.5**	GW 96 206	GW 96 216	GW 96 301	GW 96 306	GW 96 311
		1 mod.	2 mod.	2 mod.	3 mod.	4 mod.
32	**10.3x38**	GW 96 205	GW 96 215	GW 96 302	GW 96 307	GW 96 312
		1 mod.	2 mod.	2 mod.	3 mod.	4 mod.
		-	GW 96 220	-	-	-
			1 mod.			
50	**14x51**	GW 96 207	GW 96 217	GW 96 303	GW 96 308	GW 96 313
		1.5 mod.	3 mod.	3 mod.	4.5 mod.	6 mod.
100	**22x58**	-	GW 96 218	-	-	GW 96 314
			4 mod.			8 mod.

RCD RELAY

GW 96 331	3 mod.

+

SEPARATE TOROID

Diameter (mm)	In max (A)	Code
35*	**125**	GW 96 332
80*	**400**	GW 96 333
110*	**630**	GW 96 334
210*	**1600**	GW 96 335

* Solid-core current transformer

Command

The command accessories allow the connection and disconnection of loads and the isolation of the electrical system. The range is made up of:

- **switch disconnectors**
- **latching relays**
- **control relays**
- **CTR contactors**
- **installation relays**

CTR contactors

AC switch disconnectors

AC SWITCH DISCONNECTORS

	1P	2P	3P	4P
In (A)	1 mod.	2 mod.	3 mod.	4 mod.
32	GW 96 104	GW 96 114	GW 96 124	GW 96 134
40	GW 96 105	GW 96 115	GW 96 125	GW 96 135
63	GW 96 146	GW 96 156	GW 96 166	GW 96 176
80	GW 96 147	GW 96 157	GW 96 167	GW 96 177
100	GW 96 148	GW 96 158	GW 96 168	GW 96 178
125	GW 96 149	GW 96 159	GW 96 169	GW 96 179

INSTALLATION RELAYS

	In (A)		16			
	Coil voltage (V)		8 AC	12 AC	24 AC	230 AC
TYPE OF CONTACTS	1 NA	1 mod.	GW D6 601	GW D6 602	GW D6 603	GW D6 604
	2 NA	1 mod.	-	-	-	GW D6 624
	4 NA	2 mod.	-	GW D6 632	GW D6 633	GW D6 634
	1 CO	1 mod.	GW D6 606	GW D6 608*	GW D6 610*	GW D6 611
	2 CO	2 mod.	GW D6 626	GW D6 627	GW D6 629*	GW D6 630
	1 NA + 1 NC	1 mod.	-	GW D6 617	GW D6 618	GW D6 619

* Also DC voltage

CONTROL RELAYS

Current monitoring	Phase monitoring	Undervoltage monitoring 1-phase AC/DC	Undervoltage monitoring 3-phase AC
GW 96 906	GW 96 907	GW 96 908	GW 96 909

CTR CONTACTORS

	In (A)		20		25		40		63	
	Coil voltage (V)		24 AC	230 AC	24 AC-DC	230 AC-DC	24 AC-DC	230 AC-DC	24 AC-DC	230 AC-DC
TYPE OF CONTACTS	1 NO		-	GW D6 701 1 mod.	-	-	-	-	-	-
	2 NO		GW D6 702 GW D6 741* 1 mod.	GW D6 703 GW D6 742* 1 mod.	GW D6 711 2 mod.	GW D6 712 GW D6 751* 2 mod.	-	GW D6 721 3 mod.	-	GW D6 731 3 mod.
	3 NO		-	GW D6 708 2 mod.	-	GW D6 713 GW D6 752* 2 mod.	-	GW D6 722 3 mod.	-	GW D6 732 3 mod.
	3 NO + 1 NC		-	-	-	GW D6 718 2 mod.	-	-	-	GW D6 735 3 mod.
	4 NO		-	GW D6 709 2 mod.	GW D6 714 GW D6 753* 2 mod.	GW D6 715 GW D6 754* 2 mod.	GW D6 723 3 mod.	GW D6 724 3 mod.	GW D6 733 3 mod.	GW D6 734 3 mod.
	2 NC		-	GW D6 705 GW D6 743* 1 mod.	-	-	-	-	-	-
	4 NC		-	-	GW D6 716 2 mod.	GW D6 717 2 mod.	-	-	-	-
	1 NO + 1 NC		GW D6 706 1 mod.	GW D6 707 GW D6 744* 1 mod.	-	-	-	-	-	-
	2 NO + 2 NC		-	-	-	-	-	GW D6 725 3 mod.	-	-

* Manual control version

LATCHING RELAYS

	In (A)		16			
	Coil voltage (V)		8 AC	12 AC	24 AC	230 AC
TYPE OF CONTACTS	1 NA	1 mod.	GW D6 641	GW D6 642	GW D6 643	GW D6 644
	2 NA	1 mod.	-	GW D6 657	GW D6 658	GW D6 659
	4 NA	2 mod.	-	GW D6 667	GW D6 668	GW D6 669
	1 CO	1 mod.	GW D6 646	GW D6 647	GW D6 648 GW D6 649*	GW D6 650
	2 CO	2 mod.	-	-	GW D6 663	GW D6 664
	1 NA + 1 NC	1 mod.	-	GW D6 652	GW D6 653	GW D6 654

* DC voltage

- GWD6671: used to centralize the command in only one point allowing to simultaneously turning ON and OFF 2 or more relays independently by their position. In order to use this function every relay has to mount this accessory.
- GWD6672: used to realize the simultaneously command of 2 or more groups of centralized relays from one point. In order to obtain this function it is necessary to install this accessory for each group of centralized relay.

It is not possible to use accessories with DC coil relays.

Programming

Thanks to their versatility, the programming accessories allow electric loads to be controlled and managed in the widest possible variety of system configurations, offering even simpler and more intuitive flexible use for the most common installation situations.

App TimerOn

Available on the App Store

GET IT ON Google Play

Astronomical/time switches

Astronomical switches

ANALOGUE TIME SWITCHES

GWD6771	Daily time switch (1 NO)	No reserve charge	1 mod.
GWD6772	Daily time switch (1 NO)	150h reserve charge	1 mod.
GWD6773	Daily time switch (1 CO)	150h reserve charge	2 mod.
GWD6776	Weekly time switch (1 CO)	150h reserve charge	2,5 mod.

TWILIGHT SWITCH

GWD6779	with outdoor probe	1 NO	1 mod.

DIGITAL TIME/ASTRONOMICAL SWITCHES

GW D6 781	Weekly time switch (1 NO)	-	1 mod.
GW D6 782	Weekly time switch (1 CO)	APP NFC	2 mod.
GW D6 783	Weekly time switch (2 CO)	APP NFC	2 mod.
GW D6 785	Astronomical switch (1 CO)	-	2 mod.
GW D6 786	Astronomical switch (2 CO)	APP NFC	2 mod.
GW D6 788	Weekly time/astronomical switch (1CO)	APP BLUETOOTH	2 mod.
GW D6 789	Weekly time/astronomical switch (2CO)	APP BLUETOOTH	2 mod.

TIMERS

Multifunction timer		Asymmetrical timer	
GW 96 814	1 mod.	GW 96 815	1 mod.

STAIRCASE LIGHTING TIMER

Without switch-off warning	
GW 96 809	1 mod.

Measurement

The range of analogue and digital measurement instruments monitor the main parameters of the electrical system, making it possible to receive immediate information about the electrical values such as voltage, current, energy, etc.

Multimeter

Network analyser

VOLTMETERS

Analogue			Digital	
GW 96 861	0-300V	3 mod.	GW 96 867	2 mod.
GW 96 862	0-500V			

AMMETERS

Analogue			Digital	
GW 96 871	Direct (max 10A)	3 mod.	GW 96 879	2 mod.
GW 96 872	Direct (max 20A)			
GW 96 873	Direct (max 30A)			
GW 96 878	Using CT / 5A			

DIGITAL ENERGY METERS

Three-phase			Single-phase	
GW D6 806 GW D6 807 (MID type)	Direct (max 80A)	4 mod.	GW D6 801 GW D6 802 (MID type)	1 mod.
GW D6 808 GW D6 809 (MID type)	Using CT / 5A			

DIGITAL MEASUREMENT DEVICES

Network analyser		Multimeter	
GW 96 899	4 mod.	GW 96 897	2 mod.

Signalling

The signalling accessories allow the luminous (with LED technology) and acoustic signalling of alarms, voltage presence, circuit control with an indicator lamp, low voltage circuit power supply.

Bells and buzzers

Indicator lamps and push-buttons

INDICATOR LAMPS

1 mod.	Un (V)	
LED colour	**12-24-48 AC/DC**	**230 AC**
Red	GW 96 586	GW 96 581
Green	GW 96 587	GW 96 582
Yellow	GW 96 588	GW 96 583
Blue	GW 96 589	GW 96 584
White	GW 96 590	GW 96 585
Green and red	-	GW 96 591
Triple red	-	GW 96 592
Triple (red/yellow/green)	-	GW 96 598

BELLS AND BUZZERS

Un (V)		12	230
Bells	1 mod.	GW 96 401	-
		-	GW 96 402
	2 mod.	-	GW 96 403
Buzzers	1 mod.	GW 96 406	-
		-	GW 96 407
	2 mod.	-	GW 96 408
Bell + Buzzer + Transformer	2 mod.	-	GW 96 411

PUSH-BUTTONS WITH LED

1 mod.		Un (V)	
Type of contact	**LED colour**	**12-24-48 AC/DC**	**230 AC**
1 NO	**Green**	GW 96 570	GW 96 566
1 NC	**Red**	GW 96 571	GW 96 567
1 NO + 1 NC	**Green**	-	GW 96 568
1 NO + 1 NC	**Red**	-	GW 96 569

BELL TRANSFORMERS

A (VA)	Secondary voltage (V)		No. of modules
	12	24	
5	GW 96 421	GW 96 422	2 mod.
10	GW 96 423	GW 96 424	
15	GW 96 425	GW 96 426	
30	GW 96 431	GW 96 432	3 mod.
40	GW 96 433	GW 96 434	

SAFETY TRANSFORMERS

A (VA)	Secondary voltage (V)	No. of modules
	24	
15	GW 96 321	3 mod.
25	GW 96 322	
40	GW 96 323	4 mod.
63	GW 96 324	6 mod.

Products for photovoltaic systems

The 90 PV range includes 6 string board versions that meet the various installation requirements in the photovoltaic sector - whether residential, commercial or industrial. Each string board version has a different number of strings or string voltage level.

In addition to string boards, the range also includes modular products specifically for the DC side of the photovoltaic system, such as:

- **switch disconnectors**
- **surge protective devices**
- **fuse-holders and fuses**

String boards

DC switch disconnectors

DC LST surge protective device

DC fuse-holders

Ready to be connected

The string boards are already complete with cable glands and terminal blocks enabling quick and easy safe connection to the system. The cable glands are supplied as spare parts, so the connection cable can be made according to individual needs (from the top, bottom or sides). They are supplied with insulated and earth terminals.

Already tested certified

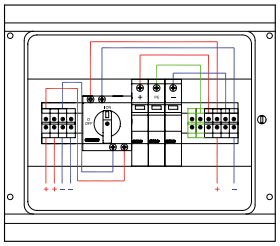
The string boards have been tested in the GEWISS laboratories, passing all the tests envisaged by standards EN 61439-1 and EN 61439-2 for product certification.

The ideal range for every application

The 90 PV range contains 6 versions to meet the most varying photovoltaic plant engineering requirements, from residential applications to commercial/industrial sectors. The different versions are distinguished by the number of strings that can be managed and by the voltage level of the photovoltaic plants.

90 PV RANGE - PRE-WIRED STRING BOARDS

2 STRINGS - 600V DC - 25A
GW D9901

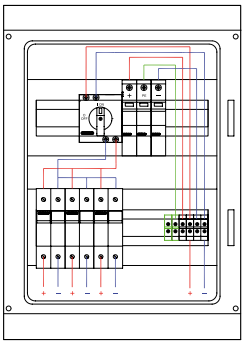


Pre-wired board for connecting 1 or 2 strings of photovoltaic panels to the inverter. Includes:
- **watertight enclosure**
- **1 rotary switch disconnector 2-pole**
- **1 surge protective device with extractable cartridges**

TECHNICAL DATA	
Reference Standards:	EN 61439-1 and EN 61439-2
No. of modules of 40CDK enclosure:	1x12
Degree of protection:	IP65
Insulation class:	Class II
Rated voltage of the switch disconnector (Ue):	600V DC
Rated current of the switch disconnector (In):	25A
Rated voltage of the SPD (Un):	600V DC
Connection cable section:	6mm²

STRING BOARD EQUIPMENT: cable glands (supplied loose) and equipotential terminal blocks.

3 STRINGS - 600V DC - 25A
GW D9902

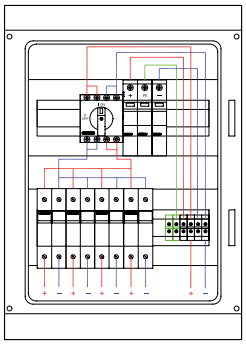


Pre-wired board for connecting 3 strings of photovoltaic panels to the inverter. Includes:
- **watertight enclosure**
- **1 rotary switch disconnector 2-pole**
- **1 surge protective device with extractable cartridges**
- **3 disconnectable fuse-holders**

TECHNICAL DATA	
Reference Standards:	EN 61439-1 and EN 61439-2
No. of modules of 40CDK enclosure:	2x12
Degree of protection:	IP65
Insulation class:	Class II
Rated voltage of the switch disconnector (Ue):	600V DC
Rated current of the switch disconnector (In):	25A
Rated voltage of the SPD (Un):	600V DC
Connection cable section:	6mm²

STRING BOARD EQUIPMENT: cable glands (supplied loose) and equipotential terminal blocks.
NB: DC fuses not supplied.

4 STRINGS - 600V DC - 50A
GW D9903

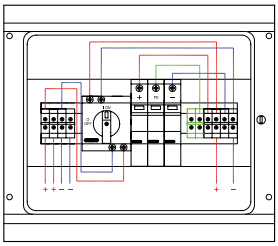


Pre-wired board for connecting 4 strings of photovoltaic panels to the inverter. Includes:
- **watertight enclosure**
- **1 rotary switch disconnector 4-pole**
- **1 surge protective device with extractable cartridges**
- **4 disconnectable fuse-holders**

TECHNICAL DATA	
Reference Standards:	EN 61439-1 and EN 61439-2
No. of modules of 40CDK enclosure:	2x12
Degree of protection:	IP65
Insulation class:	Class II
Rated voltage of the switch disconnector (Ue):	600V DC
Rated current of the switch disconnector (In):	50A (2 poles in parallel)
Rated voltage of the SPD (Un):	600V DC
Connection cable section:	6mm²

STRING BOARD EQUIPMENT: cable glands (supplied loose) and equipotential terminal blocks.
NB: DC fuses not supplied.

2 STRINGS - 800V DC - 20A
GW D9906

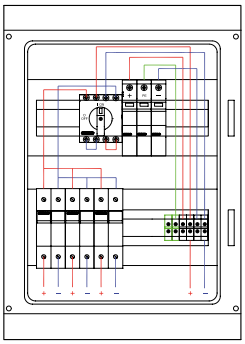


Pre-wired board for connecting 1 or 2 strings of photovoltaic panels to the inverter. Includes:
- **watertight enclosure**
- **1 rotary switch disconnector 2-pole**
- **1 surge protective device with extractable cartridges**

TECHNICAL DATA	
Reference Standards:	EN 61439-1 and EN 61439-2
No. of modules of 40CDK enclosure:	1x12
Degree of protection:	IP65
Insulation class:	Class II
Rated voltage of the switch disconnector (Ue):	800V DC
Rated current of the switch disconnector (In):	20A
Rated voltage of the SPD (Un):	1000V DC
Connection cable section:	6mm²

STRING BOARD EQUIPMENT: cable glands (supplied loose) and equipotential terminal blocks.

3 STRINGS - 1000V DC - 32A
GW D9907

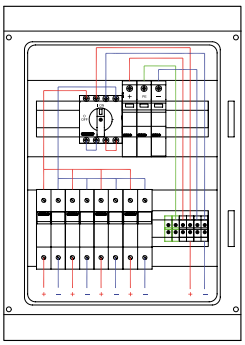


Pre-wired board for connecting 3 strings of photovoltaic panels to the inverter. Includes:
- **watertight enclosure**
- **1 rotary switch disconnector 4-pole**
- **1 surge protective device with extractable cartridges**
- **3 disconnectable fuse-holders**

TECHNICAL DATA	
Reference Standards:	EN 61439-1 and EN 61439-2
No. of modules of 40CDK enclosure:	2x12
Degree of protection:	IP65
Insulation class:	Class II
Rated voltage of the switch disconnector (Ue):	1000V DC
Rated current of the switch disconnector (In):	32A (4 poles in series)
Rated voltage of the SPD (Un):	1000V DC
Connection cable section:	6mm²

STRING BOARD EQUIPMENT: cable glands (supplied loose) and equipotential terminal blocks.
NB: DC fuses not supplied.

4 STRINGS - 1000V DC - 32A
GW D9908



Pre-wired board for connecting 4 strings of photovoltaic panels to the inverter. Includes:
- **watertight enclosure**
- **1 rotary switch disconnector 4-pole**
- **1 surge protective device with extractable cartridges**
- **4 disconnectable fuse-holders**

TECHNICAL DATA	
Reference Standards:	EN 61439-1 and EN 61439-2
No. of modules of 40CDK enclosure:	2x12
Degree of protection:	IP65
Insulation class:	Class II
Rated voltage of the switch disconnector (Ue):	1000V DC
Rated current of the switch disconnector (In):	32A (4 poles in series)
Rated voltage of the SPD (Un):	1000V DC
Connection cable section:	6mm²

STRING BOARD EQUIPMENT: cable glands (supplied loose) and equipotential terminal blocks.
NB: DC fuses not supplied.

90 PV RANGE - MODULAR DEVICES IN DIRECT CURRENT

SWITCH DISCONNECTORS

Compact DC switch disconnector suitable for photovoltaic installations up to 32A 1000V DC

TECHNICAL DATA	
Reference Standards:	EN 60947-3
Utilisation category:	DC21B / DC22B
Rated insulation voltage (Ui):	1000V
Rated impulse withstand voltage (Uimp):	8kV
Operating temperature:	-40 to +65°C
Max. cable section:	16mm² (solid or stranded) 10mm² (flexible, also with terminals)

Code	Modules	Poles	Utilisation category	Rated operating voltage (Ue)		
				600V DC	800V DC	1000V DC
				Rated operating current (In)		
GW 96 186	3.5	2	DC21B	25A	20A	11A
			DC22B	6A	2.5A	1.5A
GW 96 187	3.5	4	DC21B	32A	32A	32A
			DC22B	27.5A	12.5A	10A

SURGE PROTECTIVE DEVICES LST

Surge protective devices with extractable cartridge, suitable for photovoltaic applications up to 1000V DC

TECHNICAL DATA	
Reference Standards:	EN 61643-11
Type:	Type 2 (8/20 µs)
Rated discharge current (In):	20kA
Maximum discharge current (Imax):	40kA
Back-up protection:	if Icc > 100A DC, fuse type gPV ≤ 20A if Icc < 100A DC, protection not necessary

Code	Rated voltage of the SPD (Un)	Maximum continuous operating voltage (Uc)	Voltage protection level at In (Up)	Modules
GW D6 426	600V DC	700V DC	≤ 2.6kV	3
GW D6 428	1000V DC	1170V DC	≤ 4kV	3

SPARE CARTRIDGES
- GW D6 446 suitable for SPD GW D6 426.
- GW D6 448 suitable for SPD GW D6 428.

DISCONNECTABLE FUSE-HOLDERS

Fuse-holder bases for protection and isolation of the photovoltaic strings

TECHNICAL DATA	
Reference Standards:	EN 60947-3
Utilisation category:	DC20B
Rated operating voltage (Ue):	1000V DC
Rated current (In):	20A
Max power loss:	3W

Code	Poles	Modules
GW 96 226	1	1
GW 96 227	2	2

FUSES

The fuses are type gPV, as required for photovoltaic applications

TECHNICAL DATA	
Reference Standards:	IEC EN 60269-6
Dimensions:	10.3 x 38mm
Type:	gPV
Rated operating voltage (Ue):	1000V DC
Breaking capacity:	30kA DC

Code	Rated current (In)
GW 72 131	6
GW 72 132	8
GW 72 133	10
GW 72 134	12
GW 72 135	16
GW 72 136	20

MTX

MOULDED CASE CIRCUIT BREAKERS FOR POWER DISTRIBUTION

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97 MSS

ROTARY SWITCH DISCONNECTORS

page 48

Moulded-case circuit breakers for power distribution

The **MTX** range is the best solution for industrial installations and advanced commercial applications where there is a need for high rated current and breaking capacity, perfectly integrated with the CVX 47 boards. The range offers a wide selection of accessories to meet all installation requirements.

MTX 160C / MTXM 160C

MTX 160

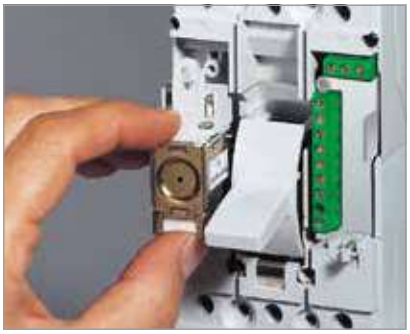
MTX 250 / MTXM 250

MTX 320 / MTXE 320 / MTXM 320
MTX 630 / MTXE 630 / MTXM 630

MTX 1000 / MTXE 1000
MTXM 1000

Ideal range for every need

The moulded case circuit breakers MTX range is made up of circuit breakers with thermo-magnetic release, circuit breakers with magnetic release only, circuit breakers with electronic release, switch disconnectors, add-on residual current circuit breaker.



Complete and specific accessories

The MTX range is full of common accessories that streamline the installation and allow to reach additional functions such as remote opening, operating status by remote, engine control etc.

Positive operation

The operating lever always indicates the precise position of the moving contacts of the circuit-breaker, thereby guaranteeing safe and reliable signals, in compliance with the prescriptions of the IEC 60073 and IEC 60417-2 Standard. The circuit-breaker operating mechanism has free release regardless of the pressure on the lever and the speed of the operation.

Selection tables

Release			In [A]	MTX 160c			
				B (16kA)		C (25kA)	
				3P	4P	3P	4P
THERMAL MAGNETIC	TM1	Magnetic threshold 10 In	16	GW D7 001	GW D7 021	-	-
			20	GW D7 002	GW D7 022	-	-
			25	GW D7 003	GW D7 023	GW D7 041	GW D7 051
			32	GW D7 004	GW D7 024	GW D7 042	GW D7 052
			40	GW D7 005	GW D7 025	GW D7 043	GW D7 053
			50	GW D7 006	GW D7 026	GW D7 044	GW D7 054
			63	GW D7 007	GW D7 027	GW D7 045	GW D7 055
			80	GW D7 008	GW D7 028	GW D7 046	GW D7 056
			100	GW D7 009	GW D7 029	GW D7 047	GW D7 057
			125	GW D7 010	GW D7 030	GW D7 048	GW D7 058
			160	GW D7 011	GW D7 031	GW D7 049	GW D7 059

NOTE: for fixing on DIN EN 50022 profile order following bracket :GW D8 261.

Release			In [A]	MTX/E 160					
				N (36kA)		S (50kA)		H (70kA)	
				3P	4P	3P	4P	3P	4P
THERMAL MAGNETIC	TM1	Magnetic threshold 10 Ith	10	GW D7 931	GW D7 936	-	-	-	-
			16	GW D7 932	GW D7 937	-	-	-	-
			20	GW D7 933	GW D7 938	-	-	-	-
			25	GW D7 934	GW D7 939	-	-	-	-
	GENERATOR PROTECTION - TMG	Magnetic threshold 3 Ith	25	GW D7 081	GW D7 091	-	-	-	-
			40	GW D7 082	GW D7 092	-	-	-	-
			63	GW D7 083	GW D7 093	-	-	-	-
			80	GW D7 084	GW D7 094	-	-	-	-
			100	GW D7 085	GW D7 095	-	-	-	-
			125	GW D7 086	GW D7 096	-	-	-	-
			160	GW D7 087	GW D7 097	-	-	-	-
ELECTRONIC	SEP/1	I	10	GW D7 146	GW D7 156	GW D7 166	GW D7 176	GW D7 186	GW D7 196
			25	GW D7 147	GW D7 157	GW D7 167	GW D7 177	GW D7 187	GW D7 197
			63	GW D7 148	GW D7 158	GW D7 168	GW D7 178	GW D7 188	GW D7 198
			100	GW D7 149	GW D7 159	GW D7 169	GW D7 179	GW D7 189	GW D7 199
			160	GW D7 150	GW D7 160	GW D7 170	GW D7 180	GW D7 190	GW D7 200
		LS/I	10	GW D7 141	GW D7 151	GW D7 161	GW D7 171	GW D7 181	GW D7 191
			25	GW D7 142	GW D7 152	GW D7 162	GW D7 172	GW D7 182	GW D7 192
			63	GW D7 143	GW D7 153	GW D7 163	GW D7 173	GW D7 183	GW D7 193
			100	GW D7 144	GW D7 154	GW D7 164	GW D7 174	GW D7 184	GW D7 194
			160	GW D7 145	GW D7 155	GW D7 165	GW D7 175	GW D7 185	GW D7 195
MAGNETIC ONLY	MOTOR PROTECTION - M	Magnetic threshold 13 Ith	1	GW D7 101	-	GW D7 121	-	-	-
			1.6	GW D7 102	-	GW D7 122	-	-	-
			2	GW D7 103	-	GW D7 123	-	-	-
			2.5	GW D7 104	-	GW D7 124	-	-	-
			3.2	GW D7 105	-	GW D7 125	-	-	-
			4	GW D7 106	-	GW D7 126	-	-	-
			5	GW D7 107	-	GW D7 127	-	-	-
			6.5	GW D7 108	-	GW D7 128	-	-	-
			8.5	GW D7 109	-	GW D7 129	-	-	-
			11	GW D7 110	-	GW D7 130	-	-	-
			12.5	GW D7 111	-	GW D7 131	-	-	-
		Magnetic threshold 6÷12 Ith	20	GW D7 112	-	GW D7 132	-	-	-
			32	GW D7 113	-	GW D7 133	-	-	-
			52	GW D7 114	-	GW D7 134	-	-	-
			80	GW D7 115	-	GW D7 135	-	-	-
			100	GW D7 116	-	GW D7 136	-	-	-

NOTE: can be fixed on the DIN EN 50022 profile using the GW D8 261 fixing bracket.

Release			In [A]	MTX 250			
				N (36kA)		S (50kA)	
				3P	4P	3P	4P
THERMAL MAGNETIC	TM1	Magnetic threshold 10 Ith	63	GW D7 201	GW D7 211	GW D7 221	GW D7 231
			80	GW D7 202	GW D7 212	GW D7 222	GW D7 232
			100	GW D7 203	GW D7 213	GW D7 223	GW D7 233
			125	GW D7 204	GW D7 214	GW D7 224	GW D7 234
			160	GW D7 205	GW D7 215	GW D7 225	GW D7 235
			200	GW D7 206	GW D7 216	GW D7 226	GW D7 236
			250	GW D7 207	GW D7 217	GW D7 227	GW D7 237
THERMAL MAGNETIC	GENERATOR PROTECTION - TMG	Magnetic threshold 3 Ith	63	GW D7 241	GW D7 251	GW D7 261	GW D7 271
			80	GW D7 242	GW D7 252	GW D7 262	GW D7 272
			100	GW D7 243	GW D7 253	GW D7 263	GW D7 273
			125	GW D7 244	GW D7 254	GW D7 264	GW D7 274
			160	GW D7 245	GW D7 255	GW D7 265	GW D7 275
			200	GW D7 246	GW D7 256	GW D7 266	GW D7 276
			250	GW D7 247	GW D7 257	GW D7 267	GW D7 277
MAGNETIC ONLY	MOTOR PROTECTION - M	Magnetic threshold 6÷12 Ith	100	GW D7 281	-	GW D7 291	-
			125	GW D7 282	-	GW D7 292	-
			160	GW D7 283	-	GW D7 293	-
			200	GW D7 284	-	GW D7 294	-

NOTE: can be fixed on the DIN EN 50022 profile using the GW D8 262 fixing bracket.

Release			In [A]	MTX/E 320							
				N (36kA)		S (50kA)		H (70kA)		L (120kA)	
				3P	4P	3P	4P	3P	4P	3P	4P
THERMAL MAGNETIC	TM2	Magnetic threshold 5÷10 Ith	100	GW D7 301	GW D7 311	GW D7 321	GW D7 331	-	-	-	-
			125	GW D7 302	GW D7 312	GW D7 322	GW D7 332	-	-	-	-
			160	GW D7 303	GW D7 313	GW D7 323	GW D7 333	-	-	-	-
			200	GW D7 304	GW D7 314	GW D7 324	GW D7 334	-	-	-	-
			250	GW D7 305	GW D7 315	GW D7 325	GW D7 335	-	-	-	-
ELECTRONIC	SEP/1	I	100	GW D7 344	GW D7 364	GW D7 384	GW D7 404	GW D7 424	GW D7 444	GW D7 464	GW D7 484
			160	GW D7 345	GW D7 365	GW D7 385	GW D7 405	GW D7 425	GW D7 445	GW D7 465	GW D7 485
			250	GW D7 346	GW D7 366	GW D7 386	GW D7 406	GW D7 426	GW D7 446	GW D7 466	GW D7 486
			320	GW D7 354	GW D7 374	GW D7 394	GW D7 414	GW D7 434	GW D7 454	GW D7 474	GW D7 494
		LS/I	100	GW D7 341	GW D7 361	GW D7 381	GW D7 401	GW D7 421	GW D7 441	GW D7 461	GW D7 481
			160	GW D7 342	GW D7 362	GW D7 382	GW D7 402	GW D7 422	GW D7 442	GW D7 462	GW D7 482
			250	GW D7 343	GW D7 363	GW D7 383	GW D7 403	GW D7 423	GW D7 443	GW D7 463	GW D7 483
			320	GW D7 353	GW D7 373	GW D7 393	GW D7 413	GW D7 433	GW D7 453	GW D7 473	GW D7 493
	SEP/2	LSI	100	GW D7 347	GW D7 367	GW D7 387	GW D7 407	GW D7 427	GW D7 447	GW D7 467	GW D7 487
			160	GW D7 348	GW D7 368	GW D7 388	GW D7 408	GW D7 428	GW D7 448	GW D7 468	GW D7 488
			250	GW D7 349	GW D7 369	GW D7 389	GW D7 409	GW D7 429	GW D7 449	GW D7 469	GW D7 489
			320	GW D7 355	GW D7 375	GW D7 395	GW D7 415	GW D7 435	GW D7 455	GW D7 475	GW D7 495
		LSIG	100	GW D7 350	GW D7 370	GW D7 390	GW D7 410	GW D7 430	GW D7 450	GW D7 470	GW D7 490
			160	GW D7 351	GW D7 371	GW D7 391	GW D7 411	GW D7 431	GW D7 451	GW D7 471	GW D7 491
			250	GW D7 352	GW D7 372	GW D7 392	GW D7 412	GW D7 432	GW D7 452	GW D7 472	GW D7 492
			320	GW D7 356	GW D7 376	GW D7 396	GW D7 416	GW D7 436	GW D7 456	GW D7 476	GW D7 496

MTX/E 630

Release			In [A]	N (36kA)		S (50kA)		H (70kA)		L (120kA)	
				3P	4P	3P	4P	3P	4P	3P	4P
THERMAL MAGNETIC	TM2	Magnetic threshold 5÷10 Ith	320	GW D7 501	GW D7 506	GW D7 511	GW D7 516	GW D7 521	GW D7 526	-	-
			400	GW D7 502	GW D7 507	GW D7 512	GW D7 517	GW D7 522	GW D7 527	-	-
			500	GW D7 503	GW D7 508	GW D7 513	GW D7 518	GW D7 523	GW D7 528	-	-
ELECTRONIC	SEP/1	I	400	GW D7 534	GW D7 554	GW D7 574	GW D7 594	GW D7 614	GW D7 634	GW D7 654	GW D7 674
			630	GW D7 540	GW D7 560	GW D7 580	GW D7 600	GW D7 620	GW D7 640	GW D7 660	GW D7 680
		LS/I	400	GW D7 532	GW D7 552	GW D7 572	GW D7 592	GW D7 612	GW D7 632	GW D7 652	GW D7 672
			630	GW D7 539	GW D7 559	GW D7 579	GW D7 599	GW D7 619	GW D7 639	GW D7 659	GW D7 679
	SEP/2	LSI	400	GW D7 536	GW D7 556	GW D7 576	GW D7 596	GW D7 616	GW D7 636	GW D7 656	GW D7 676
			630	GW D7 541	GW D7 561	GW D7 581	GW D7 601	GW D7 621	GW D7 641	GW D7 661	GW D7 681
		LSIG	400	GW D7 538	GW D7 558	GW D7 578	GW D7 598	GW D7 618	GW D7 638	GW D7 658	GW D7 678
			630	GW D7 542	GW D7 562	GW D7 582	GW D7 602	GW D7 622	GW D7 642	GW D7 662	GW D7 682

MTX/E 1000

Release			In [A]	N (36kA)		S (50kA)		H (70kA)		L (100kA)	
				3P	4P	3P	4P	3P	4P	3P	4P
THERMAL MAGNETIC	TM2	Magnetic threshold 5÷10 Ith	630	GW D7 701	GW D7 706	GW D7 710	GW D7 716	GW D7 721	GW D7 726	-	-
			800	GW D7 702	GW D7 707	GW D7 711	GW D7 717	GW D7 722	GW D7 727	-	-
ELECTRONIC	SEP/1	I	630	GW D7 732	GW D7 752	GW D7 772	GW D7 792	GW D7 812	GW D7 832	GW D7 852	GW D7 872
			800	GW D7 736	GW D7 756	GW D7 776	GW D7 796	GW D7 816	GW D7 836	GW D7 856	GW D7 876
			1000	GW D7 740	GW D7 760	GW D7 780	GW D7 800	GW D7 820	GW D7 840	GW D7 860	GW D7 880
		LS/I	630	GW D7 731	GW D7 751	GW D7 771	GW D7 791	GW D7 811	GW D7 831	GW D7 851	GW D7 871
			800	GW D7 735	GW D7 755	GW D7 775	GW D7 795	GW D7 815	GW D7 835	GW D7 855	GW D7 875
			1000	GW D7 739	GW D7 759	GW D7 779	GW D7 799	GW D7 819	GW D7 839	GW D7 859	GW D7 879
	SEP/2	LSI	630	GW D7 733	GW D7 753	GW D7 773	GW D7 793	GW D7 813	GW D7 833	GW D7 853	GW D7 873
			800	GW D7 737	GW D7 757	GW D7 777	GW D7 797	GW D7 817	GW D7 837	GW D7 857	GW D7 877
			1000	GW D7 741	GW D7 761	GW D7 781	GW D7 801	GW D7 821	GW D7 841	GW D7 861	GW D7 881
		LSIG	630	GW D7 734	GW D7 754	GW D7 774	GW D7 794	GW D7 814	GW D7 834	GW D7 854	GW D7 874
			800	GW D7 738	GW D7 758	GW D7 778	GW D7 798	GW D7 818	GW D7 838	GW D7 858	GW D7 878
			1000	GW D7 742	GW D7 762	GW D7 782	GW D7 802	GW D7 822	GW D7 842	GW D7 862	GW D7 882

	MTXM SWITCH DISCONNECTORS									
	MTXM 160c		MTXM 250		MTXM 320		MTXM 400 - 630		MTXM 800 - 1000	
In [A]	**3P**	**4P**	**3P**	**4P**	**3P**	**4P**	**3P**	**4P**	**3P**	**4P**
160	GW D7 901	GW D7 902	-	-	-	-	-	-	-	-
250	-	-	GW D7 903	GW D7 904	-	-	-	-	-	-
320	-	-	-	-	GW D7 905	GW D7 906	-	-	-	-
400	-	-	-	-	-	-	GW D7 907	GW D7 908	-	-
630	-	-	-	-	-	-	GW D7 909	GW D7 910	-	-
800	-	-	-	-	-	-	-	-	GW D7 911	GW D7 912
1000	-	-	-	-	-	-	-	-	GW D7 913	GW D7 914
1250	-	-	-	-	-	-	-	-	-	-
1600	-	-	-	-	-	-	-	-	-	-

NOTE: MTXM 160c and MTXM 250 can be fixed on the DIN EN 50022 profile using the specific fixing brackets.

	ADD-ON RESIDUAL CURRENT DEVICES				
	"L" SHAPED			PLACED BELOW	
Suitable for	**MTX/M 160c**	**MTX/E 160**	**MTX/M 250**	**MTX/E/M 320**	**MTXM 400 - MTX/E/M 630**
Versions	For 4P circuit breakers only			For 4P circuit breakers only	
Instantaneous	GW D8 242	GW D8 244	GW D8 246	-	-
Adjustable	GW D8 241 (reduced height) GW D8 243	GW D8 245	GW D8 247	GW D8 248 (up to 500A)	GW D8 249 (up to 500A)

NOTE: the L-shaped devices can be fixed on the DIN EN 50022 profile using the specific bracket.
For the GWD8241 add-on residual current device, use the GWD8266 fixing bracket. For the GWD8242, GWD8243, GWD8244 and GWD8245 residual current devices, use the GWD8263 fixing bracket. For the GWD8246 and GWD8247 residual current devices, use the GWD8264 fixing bracket.

		OPENING RELEASES			
		SHUNT-TRIP		UNDER VOLTAGE	
Suitable for		**MTX/E/M 160c - 160 - 250**	**MTX/E/M 320 - 1000**	**MTX/E/M 160c - 160 - 250**	**MTX/E/M 320 - 1000**
Supply voltage	12V DC	GW D8 101	-	-	-
	24-30V AC/DC	GW D8 102	GW D8 107	GW D8 117	GW D8 122
	48-60V AC/DC	GW D8 103	GW D8 108	GW D8 118	GW D8 123
	127V AC - 125V DC	GW D8 104	GW D8 109	GW D8 119	GW D8 124
	240V AC - 250V DC	GW D8 105	GW D8 110	GW D8 120	GW D8 125
	380 - 400V AC	GW D8 106	GW D8 111	GW D8 121	GW D8 126

Rotary switch disconnectors

Thanks to their state-of-the-art technological solutions, the **MSS** switch disconnectors guarantee high performance both in AC and in DC, ensuring the maximum hold even in the event of short-circuiting or with a high number of operations in heavy working conditions.

MSS 125

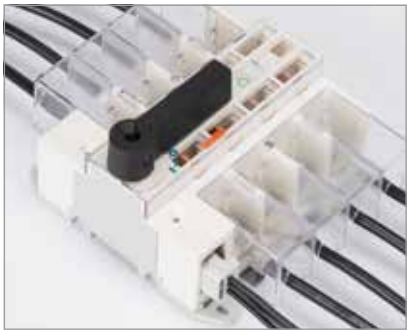
MSS 160

MSS 250

MSS 630

3-way switch
I 0 II

MSS 160 ATS



Fully accessorized

For specific applications, the switch-disconnectors can be fitted with IP65 watertight rotary handles (shaft extension included), auxiliary contacts, terminal covers, parallel connections.

Perfect integration

Thanks to the dedicated installation kit MSS switch disconnectors are perfectly integrated with the 47 CVX distribution boards. The high versatility of the MSS disconnectors allow a total synergy with the 46 range of automation and distribution boards.

Reliable change-over

The simplicity of the set-up of the MSS 160 ATS product, the different functions (with excludable automatic return to a priority line) and self-powering (L-N directly from the main line) make it a high performing product and highly competitive in automatic change-over application for 2 low voltage networks.

Selection tables

	MSS SWITCH DISCONNECTORS									
	MSS 125		MSS 160		MSS 250		MSS 630		MSS 125 THREE-WAY SWITCH (I 0 II)	MSS ATS 160 AUTOMATIC THREE-WAY SWITCH
In [A]	**3P**	**4P**	**3P**	**4P**	**3P**	**4P**	**3P**	**4P**	**4P**	**4P**
63	GW 97 721	GW 97 724	-	-	-	-	-	-	-	-
100	GW 97 722	GW 97 725	-	-	-	-	-	-	-	-
125	GW 97 723	GW 97 726	-	-	-	-	-	-	GW 97 761	-
160	-	-	GW 97 727	GW 97 728	-	-	-	-	-	GW 97 767
250	-	-	-	-	GW 97 729	GW 97 730	-	-	-	-
400	-	-	-	-	-	-	GW 97 731	GW 97 733	-	-
630	-	-	-	-	-	-	GW 97 732	GW 97 734	-	-

DOOR COUPLING ROTARY HANDLES - IP65

MSS 125 - MSS 160		MSS 250 - MSS 630		MSS 125 - THREE-WAY SWITCH (I 0 II)
Black handle	**Red handle**	**Black handle**	**Red handle**	**Black handle**
GW 98 521	GW 98 524	GW 98 522	GW 98 525	GW 98 523

Note: all the rotary handles include transmission rods.

AUXILIARY CONTACTS

MSS 125 - MSS 160	**MSS 250 - MSS 630**	**MSS 125 - THREE-WAY SWITCH (I 0 II)**	**MSS 160 ATS - AUTOMATIC THREE-WAY SWITCH**
GW 98 514	GW 98 515	GW 98 516	GW 97 774

TERMINAL COVERS (1 CODE = 1 PIECE)

MSS 160	MSS 250		MSS 630		MSS 160 ATS AUTOMATIC THREE-WAY SWITCH
3P - 4P	**3P**	**4P**	**3P**	**4P**	**4P**
GW 98 508	GW 98 509	GW 98 510	GW 98 511	GW 98 512	GW 97 773

47 CVX 160 I /E

FLUSH-MOUNTING DISTRIBUTION BOARDS UP TO 160 A

page 52

47 CVX 630 K /M

MODULAR DISTRIBUTION BOARDS UP TO 630 A - IP43

page 55

Metal boards up to 160A

The CVX160 I and CVX160 E ranges offer the widest choice for protection in indoor contexts, not to mention a modern, practical design.

The **CVX 160 I** range has flush-mounting boards with a degree of protection up to IP40 and up to In=160A. The choice of board is simple and quick (only one GW code) because the DIN rails, front panels and all the fixing accessories are already included.

The **CVX 160 E** range has wall-mounting boards with a degree of protection up to IP65 and up to In=160A. The range enables the creation of configurations to suit specific needs, from a minimum capacity of 72 modules to a maximum of 192, choosing the appropriate installation kit (150mm or 200mm pitch).

Easy and fast installation

The extractable frame allows wiring desk and, subsequently, the installation of the wired frame inside the casing when the system is completed.

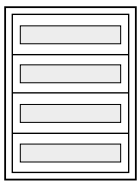
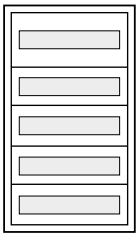
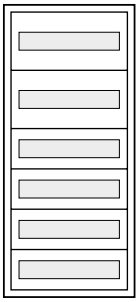
Installation without screws and tools

The fixing supports have been designed to be mounted without screws thanks to pre-holed on the function sides. Moreover the innovative support allows the fixing of the din rails on the brackets and their adjustments in depth without using any tools.

Quick fastening of the insulating panel

The front panels in plastic material allow for quick fixing by means of two inserts ¼ turn and the earthing connection is not necessary. For all range it is supplied a kit for the installation of the hinges on the front panels.

Selection tables

CVX 160 I STRUCTURES				
PRE-ASSEMBLED BOARDS COMPLETE WITH DIN RAILS AND FRONT PANELS, WITH FIXING ACCESSORIES INCLUDED				
STRUCTURES				
FUNCTIONAL DIM. (LxH)		600x600mm	600x800mm	600x1000mm
GENERAL CHARACTERISTICS In: up to 160A Capacity: 24 modules* per row Installation: indoors Colour: Grey RAL 7035		**NO. EN 50022 MODULES (17.5mm)**		
		96	**120**	**144**
No. of rows x No. of modules		4 rows x 24 modules	5 rows x 24 modules	6 rows x 24 modules
				
Height of panels with windows: (mm)		150	200 (first row) 150 (the other rows)	200 (first two rows) 150 (the other rows)
IP30	 **without door**	GW 47 072	GW 47 073	GW 47 074
IP40	 **glass door**	GW 47 082	GW 47 083	GW 47 084
	 solid door	GW 47 087	GW 47 088	GW 47 089

* EN 50022 modules (17.5mm)

Selection tables

CVX 160 E STRUCTURES					
GENERAL CHARACTERISTICS In: up to 160A Capacity: 24 modules per row Installation: indoor Colour: Grey RAL 7035		**STRUCTURES**			
FUNCTIONAL DIM. (LxH)		**600x600mm**	**600x800mm**	**600x1000mm**	**600x1200mm**
IP30	**without door**	GW 47 001 E	GW 47 002 E	GW 47 003 E	GW 47 004 E
IP40	**glass door**	GW 47 011 E	GW 47 012 E	GW 47 013 E	GW 47 014 E
	solid door	GW 47 021 E	GW 47 022 E	GW 47 023 E	GW 47 024 E
IP55	**glass door**	GW 47 031 E	GW 47 032 E	GW 47 033 E	GW 47 034 E
	solid door	GW 47 041 E	GW 47 042 E	GW 47 043 E	GW 47 044 E
IP65	**solid door**	-	GW 47 062 E	GW 47 063 E	GW 47 064 E

NOTE: the codes do not include the DIN rail and front panels.

Metal boards up to 630A

The CVX 630 K and CVX 630 M ranges offer the widest choice for protection in indoor contexts, not to mention a modern, practical design.

The **CVX 630 K** range offers both wall-mounting and floor-mounting modular boards with a degree of protection up to IP43 and up to In=630A.

The **CVX 630 M** range offers both wall-mounting and floor-mounting monobloc boards with a degree of protection up to IP55 and up to In=630A.

Synergy

CVX 630 K and CVX 630 M use the same installation kit and accessories as for modular and moulded-case devices.

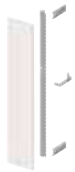
Simple and quick wiring

The CVX 630K modular distribution boards are designed to make wiring and assembly operations easier and quicker. In fact, the wiring can be carried out with the structures "fully open" and then the board assembly can be completed.

Easier assembly and maintenance

The metallic components of the board ensure a contact earth connection, hence avoiding the need for additional connections.
The front panels are fitted with hinges and unlosable screws for easier maintenance on the installed board.

Selection tables

CVX 630 K (WALL-MOUNTING) STRUCTURES STRUCTURES							
FUNCTIONAL DIM. (LxH)		600x1000mm	600x1200mm	850x1000mm		850x1200mm	
Modular capacity	Pitch 150mm	144 mod. (24x6)	192 mod. (24x8)	144 mod. (24x6)	216 mod. (36x6)	192 mod. (24x8)	288 mod. (36x8)
	Pitch 200mm	120 mod. (24x5)	144 mod. (24x6)	120 mod. (24x5)	180 mod. (36x5)	144 mod. (24x6)	216 mod. (36x6)
Structures		GW 45 004	GW 45 005	GW 45 014		GW 45 015	
Sides		GW 45 024	GW 45 025	GW 45 024		GW 45 025	
Curved glass doors		GW 45 104	GW 45 105	GW 45 114		GW 45 115	
Solid doors		GW 45 124	GW 45 125	GW 45 134		GW 45 135	
Internal cable compartment		-	-	GW 45 034		GW 45 035	
Side-by-side installation kit		GW 45 504	GW 45 505	GW 45 504		GW 45 505	

CVX 630 K (FLOOR-MOUNTING) STRUCTURES

STRUCTURES

FUNCTIONAL DIM. (LxH)		600x1600mm	600x1800mm	600x2000mm	850x1600mm		850x1800mm		850x2000mm	
Modular capacity	Pitch 150mm	240 mod. (24x10)	288 mod. (24x12)	312 mod. (24x13)	240 mod. (24x10)	360 mod. (36x10)	288 mod. (24x12)	432 mod. (36x12)	312 mod. (24x13)	468 mod. (36x13)
	Pitch 200mm	192 mod. (24x8)	216 mod. (24x9)	240 mod. (24x10)	192 mod. (24x8)	288 mod. (36x8)	216 mod. (24x9)	324 mod. (36x9)	240 mod. (24x10)	360 mod. (36x10)
Structures		GW 45 007	GW 45 008	GW 45 009	GW 45 017		GW 45 018		GW 45 019	
Sides		GW 45 027	GW 45 028	GW 45 029	GW 45 027		GW 45 028		GW 45 029	
Curved glass doors		GW 45 107	GW 45 108	GW 45 109	GW 45 117		GW 45 118		GW 45 119	
Solid doors		GW 45 127	GW 45 128	GW 45 129	GW 45 137		GW 45 138		GW 45 139	
Internal cable compartment		-	-	-	GW 45 037		GW 45 038		GW 45 039	
Side-by-side installation kit		GW 45 507	GW 45 508	GW 45 509	GW 45 507		GW 45 508		GW 45 509	

EXTERNAL CABLE COMPARTMENT

FUNCTIONAL DIM. (LxH)	400x1600mm	400x1800mm	400x2000mm
External cable compartment	GW 45 047	GW 45 048	GW 45 049
Internal solid doors	GW 45 352	GW 45 353	GW 45 354
External solid doors	GW 45 147	GW 45 148	GW 45 149

Selection tables

CVX 630 M (WALL-MOUNTING) STRUCTURES STRUCTURES							
FUNCTIONAL DIM. (LxH)		600x1000mm	600x1200mm	850x1000mm		850x1200mm	
Modular capacity	Pitch 150mm	144 mod. (24x6)	192 mod. (24x8)	144 mod. (24x6)	216 mod. (36x6)	192 mod. (24x8)	288 mod. (36x8)
	Pitch 200mm	120 mod. (24x5)	144 mod. (24x6)	120 mod. (24x5)	180 mod. (36x5)	144 mod. (24x6)	216 mod. (36x6)
Structures		GW 45 054	GW 45 055	GW 45 064		GW 45 065	
Solid side panels		GW 45 074	GW 45 075	GW 45 074		GW 45 075	
Aerated side panels		GW 45 394	GW 45 395	GW 45 394		GW 45 395	
Curved glass doors		GW 45 154	GW 45 155	GW 45 164		GW 45 165	
Solid doors		GW 45 174	GW 45 175	GW 45 184		GW 45 185	
Internal cable compartment		-	-	GW 45 084		GW 45 085	
Side-by-side installation kit	Plates	GW 45 533	GW 45 533	GW 45 533		GW 45 533	
	IP55 Gasket	GW 47 473	GW 47 473	GW 47 473		GW 47 473	

CVX 630 M (FLOOR-MOUNTING) STRUCTURES

STRUCTURES

FUNCTIONAL DIM. (LxH)		600x1600mm	600x1800mm	600x2000mm	850x1600mm		850x1800mm		850x2000mm	
Modular capacity	Pitch 150mm	240 mod. (24x10)	288 mod. (24x12)	312 mod. (24x13)	240 mod. (24x10)	360 mod. (36x10)	288 mod. (24x12)	432 mod. (36x12)	312 mod. (24x13)	468 mod. (36x13)
	Pitch 200mm	192 mod. (24x8)	216 mod. (24x9)	240 mod. (24x10)	192 mod. (24x8)	288 mod. (36x8)	216 mod. (24x9)	324 mod. (36x9)	240 mod. (24x10)	360 mod. (36x10)
Structures		GW 45 057	GW 45 058	GW 45 059	GW 45 067		GW 45 068		GW 45 069	
Solid side panels		GW 45 077	GW 45 078	GW 45 079	GW 45 077		GW 45 078		GW 45 079	
Aerated side panels		GW 45 397	GW 45 398	GW 45 399	GW 45 397		GW 45 398		GW 45 399	
Curved glass doors		GW 45 157	GW 45 158	GW 45 159	GW 45 167		GW 45 168		GW 45 169	
Solid doors		GW 45 177	GW 45 178	GW 45 179	GW 45 187		GW 45 188		GW 45 189	
Internal cable compartment		-	-	-	GW 45 087		GW 45 088		GW 45 089	
Side-by-side installation kit	Plates	GW 47 472	GW 47 472	GW 47 472	GW 47 472		GW 47 472		GW 47 472	
	IP55 Gasket	GW 47 473	GW 47 473	GW 47 473	GW 47 473		GW 47 473		GW 47 473	

EXTERNAL CABLE COMPARTMENT

FUNCTIONAL DIM. (LxH)	400x1600mm	400x1800mm	400x2000mm
External cable compartment	GW 45 097	GW 45 098	GW 45 099
Internal solid doors	GW 45 352	GW 45 353	GW 45 354
External solid doors	GW 45 197	GW 45 198	GW 45 199

CONFIGURATION FOR CVX 630 K - M BOARDS

		Panel height (mm)	L= 400mm (10 mod.)	L= 600mm (24 mod.)	L= 850mm (36 mod.)
Installation kit on DIN rail	DIN EN 50022 double - aluminium	150	GW 45 291	GW 45 201	GW 45 206
		200	GW 45 292	GW 45 202	GW 45 207
		300	GW 45 293	GW 45 203	GW 45 208
		300 (1)	-	GW 45 204	GW 45 209
Solid front panels		50	GW 45 341	GW 45 301	GW 45 321
		100	GW 45 342	GW 45 302	GW 45 322
		150	GW 45 343	GW 45 303	GW 45 323
		200	GW 45 344	GW 45 304	GW 45 324
		300	GW 45 345	GW 45 305	GW 45 325
		400	GW 45 346	GW 45 306	GW 45 326
		600	GW 45 347	GW 45 307	GW 45 327
		800	GW 45 348	-	-
Front panels for instruments		200	-	GW 45 374	GW 45 379
Front aerated panels		200	-	GW 45 362	GW 45 367
DIN rails	DIN EN 50022 double - aluminium	-	-	GW 45 401	GW 45 402
Profiles for fixing directly on frame	DIN EN 50022	-	-	GW 45 411	GW 45 416
	DIN EN 50035	-	-	GW 45 412	GW 45 417
Back-mounting plates		200	-	GW 45 421	GW 45 431
		300	GW 45 406	-	-
		400	-	GW 45 422	GW 45 432
		600	-	GW 45 423	GW 45 433
Earth terminal blocks		-	GW 45 537	GW 45 538	-
Earth busbar		-	-	GW 45 534	GW 45 535
Horizontal dividers		-	-	GW 45 453	GW 45 454

(1) Specific version for MTX/M 160c, MTX/E 160, MTX/M 250, combined with an "L" shaped add-on residual current device.

COMPLEMENTARY ITEMS		
Depth adapter		GW 49 209
Pair of hinges		GW 45 532
Pair of supports for wiring trunking		GW 45 521
Pair of supports for horizontal terminal block		GW 45 526
Pair of supports for vertical terminal block		GW 45 527 (internal cable compartment)
		GW 45 528 (external cable compartment)
DIN profiles L = 2 metres	EN 50022 (DIN35)	GW 47 691
	EN 50035 (G32)	GW 47 692
	EN 50024 (C30)	GW 47 693
IP43 gasket	for CVX 630 K	GW 47 494
Rotating handle with key		GW 47 494
4 surface-mounting brackets	for CVX 630 K wall-mounting boards	GW 45 536
2 surface-mounting brackets	for CVX 630 M floor-mounting boards	GW 47 491

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