COMMAND

SWITCH DISCONNECTORS (EN 60947-3)



GW 96 134

AC SWITCH DISCONNECTORS



Code	Rated current	No. of modules EN 50022	Rated voltage AC	Pack Carton
No. of poles	s: 1P			
GW 96 104	32 A	1	240 V	6/12
GW 96 105	40 A	1	240 V	6/12
GW 96 146	63 A	1	240 V	6/24
GW 96 147	80 A	1	240 V	6/24
GW 96 148	100 A	1	240 V	6/24
GW 96 149	125 A	1	240 V	6/24
No. of poles	s: 2P			
GW 96 114	32 A	2	415 V	3/12
GW 96 115	40 A	2	415 V	3/12
GW 96 156	63 A	2	415 V	3/12
GW 96 157	80 A	2	415 V	3/12
GW 96 158	100 A	2	415 V	3/12
GW 96 159	125 A	2	415 V	3/12
No. of poles	s: 3P			
GW 96 124	32 A	3	415 V	2/8
GW 96 125	40 A	3	415 V	2/8
GW 96 166	63 A	3	415 V	2/8
GW 96 167	80 A	3	415 V	2/8
GW 96 168	100 A	3	415 V	2/8
GW 96 169	125 A	3	415 V	2/8
No. of poles	s: 4P			
GW 96 134	32 A	4	415 V	1/3
GW 96 135	40 A	4	415 V	1/3
GW 96 176	63 A	4	415 V	1/2
GW 96 177	80 A	4	415 V	1/2
GW 96 178	100 A	4	415 V	1/2
GW 96 179	125 A	4	415 V	1/2

NOTES: they can be combined ONLY with an auxiliary position contact (GW96001 or GW96009, configured for open/closed position).

They can be padlocked with the accessory GW96041, to lock the operating lever in either the "ON" or "OFF" position. For padlock of max Ø 8 mm.



GW 96 187

DC ROTARY SWITCH DISCONNECTORS

Code	No.	Rated	Rated	No. of modules	Pack
	of poles	current	voltage DC	EN 50022	Carton
GW 96 186	2P	25 A	600 V	3.5	1
GW 96 187	4P	32 A	1000 V	3.5	1

NOTE: utilisation category DC21B. These switch disconnectors cannot be combined.

ISOLATING SWITCHES (EN 60669-2-4)



GW 96 538

COMPACT ISOLATING SWITCHES

Code No. of modules Rated Rated Pack EN 50022 voltage Carton current No. of poles: 1P GW 96 531 250 V 3/12 GW 96 532 32 A 250 V 3/12 No. of poles: 2P 250-415 V GW 96 533 3/12 16 A GW 96 534 32 A 250-415 V 3/12 No. of poles: 3P GW 96 535 250-415 V 1/12 16 A GW 96 536 32 A 250-415 V 1/12 No. of poles: 4P GW 96 537 16 A 250-415 V 1/12 GW 96 538 32 A 250-415 V 1/12

NOTES: switch disconnectors cannot be combined.

They can be padlocked with the accessory GW96041, to lock the operating lever in either the "ON" or "OFF" position. For padlocks max Ø 8 mm.

ON-OFF SWITCHES



GW 96 542

ON-OFF SWITCHES WITH INDICATOR LAMP



Rated	Characteristics	No. of modules	Rated	Pack
current		EN 50022	voltage	Carton
s: 1P			-	
16 A	With red indicator lamp	1	230 V	3/12
32 A	With red indicator lamp	1	230 V	1/12
s: 2P				
16 A	With red indicator lamp	1	230 V	1/12
32 A	With red indicator lamp	1	230 V	1/12
	current 5: 1P 16 A 32 A 5: 2P 16 A	current 5: 1P 16 A With red indicator lamp 32 A With red indicator lamp 5: 2P 16 A With red indicator lamp	current EN 50022 5: 1P 16 A With red indicator lamp 1 32 A With red indicator lamp 1 5: 2P 16 A With red indicator lamp 1	current EN 50022 voltage S: 1P 16 A With red indicator lamp 1 230 V 32 A With red indicator lamp 1 230 V S: 2P 16 A With red indicator lamp 1 230 V

ACCESSORIES SUPPLIED: indicator light with LED.

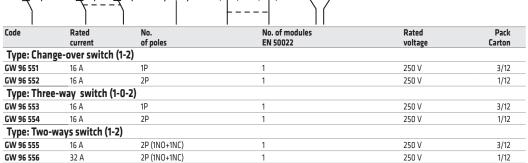
NOTE: they can be padlocked with the accessory GW96041, to lock the operating lever in either the "ON" or "OFF" position. For padlocks with max Ø 8 mm.

LEVER SWITCHES



GW 96 554

LEVER SWITCHES



NOTE: they can be padlocked with the accessory GW96041, to lock the operating lever in either the "ON" or "OFF" position. For padlocks with max Ø 8 mm.

ROTARY SWITCHES



VOLTMETER SWITCHES

Code	Description	Characteristics	Rated current	Rated voltage	No. of modules EN 50022	Pack Carton
GW 96 851	4 positions	Phase - Neutral	16 A	690 V	3	1/4
GW 96 852	4 positions	Phase - Phase	16 A	690 V	3	1/4
GW 96 853	7 positions	Phase - Phase and Phase - Neutral	16 A	690 V	3	1/4

GW 96 851



AMMETER SWITCH

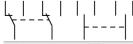
Code	Description	Rated current	Rated voltage	No. of modules EN 50022	Pack Carton
GW 96 856	4 positions	16 A	690 V	3	1/4

NOTES: the GW96856 can also be used as a single-pole command three-way switch with 4 positions.

GW 96 856



LINE SWITCHES



Code	Description	Characteristics	Rated current	Rated voltage	No. of modules EN 50022	Pack Carton
No. of pole	s: 2P					
GW 96 951	2 positions		16 A	690 V	3	1/4
GW 96 952	3 positions	0 central	16 A	690 V	3	1/4
GW 96 953	3 positions	With 0 return position	16 A	690 V	3	1/4

 $\textbf{APPLICATIONS:} \ \textbf{DIN rail three-way switches usable for motor, pump and fan command.}$

GW 96 951



CONTACTORS CTR



GW D6 703

CONTACTORS



Code	Contacts	Control	No. of modules	Pack
Dated curr	ent (AC-1/AC-7a): 2	coil voltage (V)	EN 50022	Carton
				C/24
GW D6 701	1NO	230 ac	1	6/24
GW D6 702	2NO	24 ac	1	6/24
GW D6 703	2NO	230 ac	1	6/24
GW D6 705	2NC	230 ac	1	6/24
GW D6 706	1NO+1NC	24 ac	1	6/24
GW D6 707	1NO+1NC	230 ac	1	6/24
GW D6 708	3NO	230 ac	2	3/12
GW D6 709	4N0	230 ac	2	3/12
Rated curr	ent (AC-1/AC-7a): 2	25 A - CTR25		
GW D6 711	2N0	24 ac/dc	2	3/12
GW D6 712	2N0	230 ac - 220 dc	2	3/12
GW D6 713	3NO	230 ac - 220 dc	2	3/12
GW D6 714	4N0	24 ac/dc	2	3/12
GW D6 715	4N0	230 ac - 220 dc	2	3/12
GW D6 716	4NC	24 ac/dc	2	3/12
GW D6 717	4NC	230 ac - 220 dc	2	3/12
GW D6 718	3NO+1NC	230 ac - 220 dc	2	3/12
Rated curr	ent (AC-1/AC-7a): 4	10 A - CTR40		
GW D6 721	2N0	230 ac - 220 dc	3	2/8
GW D6 722	3NO	230 ac - 220 dc	3	2/8
GW D6 723	4N0	24 ac/dc	3	2/8
GW D6 724	4N0	230 ac - 220 dc	3	2/8
GW D6 725	2NO+2NC	230 ac - 220 dc	3	2/8
Rated curr	ent (AC-1/AC-7a): 6	53 A - CTR63		
GW D6 731	2NO	230 ac - 220 dc	3	2/8
GW D6 732	3NO	230 ac - 220 dc	3	2/8
GW D6 733	4N0	24 ac/dc	3	2/8
GW D6 734	4N0	230 ac - 220 dc	3	2/8
GW D6 735	3NO+1NC	230 ac - 220 dc	3	2/8

APPLICATIONS: they are used for automatic control of electrical devices with high number of operations. The switching of contacts happens when the coil is both energized and de-energized. For other applications than AC-1/AC-7a utilization category, please consult the technical pages.

CHARACTERISTICS: they can be combined with auxiliary contacts and sealing terminal covers.

NOTE: it's suggested the use of a spacer insert between adjacent contactors to ensure optimum operation.



GW D6 742

MANUAL CONTROL CONTACTORS

MANUAL CO	MIROL COMIACI	UKJ		
Code	Contacts	Control	No. of modules	Pack
		coil voltage (V)	EN 50022	Carton
Rated curre	ent (AC-1/AC-7a): 2	20 A - CTRM20		
GW D6 741	2NO	24 ac	1	6/24
GW D6 742	2NO	230 ac	1	6/24
GW D6 743	2NC	230 ac	1	6/24
GW D6 744	1NO+1NC	230 ac	1	6/24
Rated curre	ent (AC-1/AC-7a): 2	25 A - CTRM25		
GW D6 751	2NO	230 ac - 220 dc	2	3/12
GW D6 752	3N0	230 ac - 220 dc	2	3/12
GW D6 753	4N0	24 ac/dc	2	3/12
GW D6 754	4N0	230 ac - 220 dc	2	3/12

APPLICATIONS: they have a three positions built-in toggle handle switch (A - 0 - I) to enable permanent opening or closing manually leaving out normal contactor function Position A: working as normal contactor

 $Position \ 0: working \ as \ manual \ control \ contactor \ (contacts \ locked \ mechanically)$

Position I: working as manual control contactor (contacts are switched without control coil voltage). When coil is energized the toggle handle switch is automatically set to position A maintaining the previous contacts status.

CHARACTERISTICS: they can be combined with auxiliary contacts and sealing terminal covers

NOTE: it's suggested the use of a spacer insert between adjacent contactors to ensure optimum operation.

INSTALLATION RELAYS RLM



GW D6 601

INSTALLATION RELAY 16 A



Code	Contacts	Control coil voltage (V)	No. of modules EN 50022	Pack Carton
GW D6 601	1NO	8 ac	1	6/24
GW D6 602	1NO	12 ac	1	6/24
GW D6 603	1NO	24 ac	1	6/24
GW D6 604	1NO	230 ac	1	6/24
GW D6 606	1 Changeover	8 ac	1	6/24
GW D6 608	1 Changeover	12 ac/dc	1	6/24
GW D6 610	1 Changeover	24 ac/dc	1	6/24
GW D6 611	1 Changeover	230 ac	1	6/24
GW D6 617	1NO+1NC	12 ac	1	6/24
GW D6 618	1NO+1NC	24 ac	1	6/24
GW D6 619	1NO+1NC	230 ac	1	6/24
GW D6 624	2NO	230 ac	1	6/24
GW D6 626	2 Changeover	8 ac	2	3/12
GW D6 627	2 Changeover	12 ac	2	3/12
GW D6 629	2 Changeover	24 ac/dc	2	3/12
GW D6 630	2 Changeover	230 ac	2	3/12
GW D6 632	4N0	12 ac	2	3/12
GW D6 633	4N0	24 ac	2	3/12
GW D6 634	4N0	230 ac	2	3/12

CHARACTERISTICS: relay with single stable state; the contacts are maintained in switched position only while the control coil is supplied.

APPLICATIONS: command of low voltage circuits with high number of switchovers (lighting, heating and ventilation systems). they have a three positions built-in toggle handle switch (A - 0 - I) to enable permanent opening or closing manually independently of the external commands:

Position A: automatic operation as a momentary relay.

Position 0: operation as a manually commanded momentary relay (contacts locked mechanically in the rest state).

Position I: operation as a manually commanded momentary relay (contacts switched without the need for a remote control with return to automatic on A as soon as the lever is released).

ACCESSORIES FOR CTR CONTACTORS AND RLM INSTALLATION RELAYS



GW D6 761

AUXILIARY CONTACTS

Code	Contacts	Contact rating in AC-15	No. of modules EN 50022	Pack Carton
GW D6 761	2NO	6 A (230 V) 4 A (400 V)	0.5	1/12
GW D6 762	1NO+1NC	6 A (230 V) 4 A (400 V)	0.5	1/12

APPLICATIONS: used in order to signal the contacts position (open or closed).

NOTE: each device can be associated with 1 auxiliary contact. The devices with a AC/DC powered coil cannot be provided with accessories.

APPLICATIONS: used in order to have a better heat dissipation when more contactors/relay are installed in adjacent position.



0.5

SUGGESTIONS FOR AN OPTIMAL HEAT DISSIPATION:
- Room temperature up to 40°C: 1 spacer every 3 side-by-side devices.



GW D6 766

- Room temperature between 40°C and $55^{\circ}\text{C}{:}\,1\,\text{spacer}$ every 2 side-by-side devices.

News

Pack Carton





SEALING TERMINAL COVERS

Code	Suitable for contactor	No. of pieces	Pack Carton
GW D6 763	1 mod. width	2	1/10
GW D6 764	2 mod. width	2	1/10
GW D6 765	3 mod. width	2	1/10

APPLICATIONS: they enable to seal terminal screws, preventing access to cable connections.

GW D6 764

LATCHING RELAY RLB



GW D6 652

LATCHING RELAY 16 A



Code	Contacts	Control coil voltage (V)	No. of modules EN 50022	Pack Carton
GW D6 641	1NO	8 ac	1	6/24
GW D6 642	1NO	12 ac	1	6/24
GW D6 643	1NO	24 ac	1	6/24
GW D6 644	1NO	230 ac	1	6/24
GW D6 646	1 Changeover	8 ac	1	6/24
GW D6 647	1 Changeover	12 ac	1	6/24
GW D6 648	1 Changeover	24 ac	1	6/24
GW D6 649	1 Changeover	24 dc	1	6/24
GW D6 650	1 Changeover	230 ac	1	6/24
GW D6 652	1NO+1NC	12 ac	1	6/24
GW D6 653	1NO+1NC	24 ac	1	6/24
GW D6 654	1NO+1NC	230 ac	1	6/24
GW D6 657	2N0	12 ac	1	6/24
GW D6 658	2N0	24 ac	1	6/24
GW D6 659	2NO	230 ac	1	6/24
GW D6 663	2 Changeover	24 ac	2	3/12
GW D6 664	2 Changeover	230 ac	2	3/12
GW D6 667	4N0	12 ac	2	3/12
GW D6 668	4N0	24 ac	2	3/12
GW D6 669	4N0	230 ac	2	3/12

CHARACTERISTIC: relay with 2 stable states; every impulse to the coil switches over the contacts position that is maintained until the next signal.

APPLICATIONS: control of lighting circuits in residential and commercial installations. It is possible to inhibit the remote command thanks to the ON/OFF frontal selector.

The lever idicates the contacts status and it could be used in order to manual command the relay.

News

ACCESSORIES FOR LATCHING RELAY RLB



AUXILIARY CONTACTS

Code	Contacts	Contact rating in AC-15	No. of modules EN 50022	Pack Carton
GW D6 676	1 Changeover	4A (230V)	0.5	1/20
GW D6 677	1NO+1NC	4A (230V)	0.5	1/20
GW D6 678	2NO	4A (230V)	0.5	1/20

APPLICATIONS: used in order to signal the contacts position (open or closed).

NOTE: it is possible to use 1 auxiliary contact for each contactor/relay with AC coil. It is not possible to use accessories with DC coil relays.





CENTRALIZED COMMAND

Code	Functions	No. of modules	Pack
		EN 50022	Carton
GW D6 671	Central command	0.5	1/20
GW D6 672	Group command	0.5	1/20

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

APPLICATIONS:

- 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.
- CWD6672: 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.

EXAMPLE: It is possible to centralize the command of a group of relay installed on a building floor (every relay has a GWD6671 coupled). With the GWD6672 it is possible to command from one point 2 or more groups of centralized relays installed on the different buildings floors.



GW D6 766

SPACER INSERT

		
Code	No. of modules	Pack
	EN 50022	Carton
GW D6 766	0.5	12

APPLICATIONS: used in order to have a better heat dissipation when more contactors/relay are installed in adjiacent position.

SUGGESTIONS FOR AN OPTIMAL HEAT DISSIPATION:

- Operating temperature up to $40^{\circ}\text{C}\text{:}$ no limitations.
- Operating temperature between 40°C and 55°C: No limitation for AC coils, 1 spacer every 3 adjacent relays with DC coils:
- Operating temperature between 55°C and 70°C: 1 spacer every 3 adjacent relays with AC coils. It is not possible the adjacent installation of relay with DC coil.

News

MONITORING RELAYS



GW 96 906

CURRENT MONITORING RELAY - 1 PHASE AC ELECTRICAL SYSTEM

Code	Rated	Controlled	Output	Contact	No. of modules	Pack
	voltage (V)	current (A)	contacts	capacity (A)	EN 50022	Carton
GW 96 906	230 ac	10	1 Changeover	5	1	1/8

APPLICATIONS: overcurrent control: the output contact changes status when the measured current exceeds the "MAX" set value.

 $Under current \ control: the \ output \ contact \ changes \ status \ when \ the \ measured \ current \ falls \ below \ the \ "MIN" \ set \ value.$

Window function: the output contact changes status when the measured current is not within the "MIN"-"MAX" set range.

For the three operating modes, there is a memory function for exceeding the set threshold.

Adjustment of contact switchover delay, from minimum 0.1s to maximum 10s.

NOTE: if you need to monitor currents greater than 10A, use a current transformer (CT).

If necessary, connect the output contact with a device (usually a contactor) suitable for the needs of the line to be commanded.

PHASE MONITORING RELAY - 3 PHASE ELECTRICAL SYSTEM



Code Rated Controlled Adiustable Contact No. of modules Pack voltage (V) voltage (V) EN 50022 asymmetry contacts capacity (A) Carton GW 96 907 230/400 ac 230/400 ac 5% ... 25% 1 Changeover 1/8

APPLICATIONS: phase sequence check: if the check shows that the phases are not in the correct sequence, the output contact will change its status

Phase and neutral failure: if one of the three phases or the neutral fails, the output contact will change its status.

Asymmetry check: if the measured asymmetry value exceeds the set threshold, the output contact will change its status.

NOTE: if necessary, connect the output contact with a device (usually a contactor) suitable for the needs of the line to be commanded.

GW 96 907

GW 96 908

UNDERVOLTAGE MONITORING RELAY - 1 PHASE AC/DC ELECTRICAL SYSTEM

Code	Rated	Controlled	Output	Contact	No. of modules	Pack
	voltage (V)	voltage (V)	contacts	capacity (A)	EN 50022	Carton
GW 96 908	24 ac/dc - 230 ac	24 ac/dc - 230 ac	1 Changeover	5	1	1/8

APPLICATIONS: undervoltage check; when the measured voltage falls below the set value, the output contact will change its status.

The contact switches back again when the measured voltage exceeds the set value plus the hysteresis.

NOTE: if necessary, connect the output contact with a device (usually a contactor) suitable for the needs of the line to be commanded.

UNDERVOLTAGE MONITORING RELAY - 3 PHASE AC ELECTRICAL SYSTEM Controlled voltage (V)

230/400 ac



Code

GW 96 909

Rated

voltage (V)

230/400 ac

NOTE: if necessary, connect the output contact with a device (usually a contactor) suitable for the needs of the line to be commanded

1 Changeover APPLICATIONS: undervoltage check with variable threshold: when the measured voltage of one of the phases falls below the set value, the output contact will change its status. The undervoltage threshold can be adjusted from 160 V to 240 V (Phase - Neutral).

Output

contacts

Contact

5

capacity (A)

No. of modules

EN 50022

GW 96 909

Pack

Carton

1/8

LOAD MANAGEMENT RELAY P-COMFORT



LOAD MANAGEMENT RELAY

Code	Rated	Rated	Relay	Contact	No. of modules	Pack
	voltage (V)	current	contact	capacity (A)	EN 50022	Carton
GW 96 916	230 ac	32 A	1 NC	16 A AC1	2	1/6

APPLICATION: the P-Comfort relay manages the power of the electrical system up to 6 kW.

In the event of overloading, P-Comfort prevents any electricity supply interruption, disconnecting only the not-preferential loads.

 $After a predefined time\ lapse, P-Comfort\ automatically\ reactivates\ them,\ avoiding\ any\ inconvenience\ for\ the\ user.$

UVV 30 310

BIOCOMFORT MAIN DISCONNECTION SWITCH



MAIN DISCONNECTION SWITCH WITH SELF LEARNING FUNCTION

Code	Rated voltage (V)	Rated current	Monitoring voltage (V)	No. of modules EN 50022	Pack Carton
GW 96 339	230 ac	16 A	5 - 230 dc	1	1/2

APPLICATIONS: the BIOCOMFORT disconnection switch reduces the voltage of the electrical system when the loads connected to it in the sleeping area are switched off. It is not necessary to manually adjust the relay tripping threshold because the main disconnection switch, thanks to the self-learning function, automatically learns the value of the current absorbed by the loads and applies it as the tripping threshold. During operation of the disconnection switch, the line downstream of BIOCOMFORT is powered by a continuous monitoring voltage (5-230 V dc). This voltage prevents the formation of electromagnetic fields in the sleeping area and is necessary for restoring the mains voltage (230 V ac) at any moment when a load is switched on.

GW 96 339



GW 96 340

BASE LOAD

Code	Rated voltage (V)	Pack Carton
GW 96 340	230 ac	1/5

NOTE: base load necessary for fluorescent lamps, low consumption lamps, halogen lamps with transformer, dimmers, electronic transformers or loads with absorption lower than 30 mA (e.g. loads with stand-by).