# Chorus - domestic range



The Chorus modular range allows you to create a wide variety of functions, thanks to the modular structure of the numerous products offered. In addition to the traditional electromechanical devices (commands, socket-outlets, protection etc.), there are also electronic devices for the command and control of services, such as regulators, timers and dimmers. Furthermore, a wide selection of products has been developed for special services and wireless systems.

The Chorus range for domestic use has a modular structure on flush-mounting frames up to 12 modules. Surface-mounting and free-standing boxes and plates are included, along with watertight plates (IP55) and outdoor containers (IP40 and IP55).

		TECHNICAL D	ATA AND REFER	ENCE STANDARD	5					
	Essential electrical data*				Prolonged	Resistance to abnormal heat and fire				
Component	Reference standards	Resistance at test voltage (V)	Insulation resistance (MΩ)	Breaking capacity or category of use	operation (no. of position changes)	Thermo-pressure with ball (°C)	Glow Wire Test (°C)			
Commands	EN 60669-1			1.25 In (200 position changes)	<b>40,000</b> at In 250V~ cosφ = 0.6					
Italian Std. socket-outlets	IEC 60884-1	2000 at 50 Hz for 1 minute	at 50 Hz		1.25 In (100 position changes)	10,000 at In 250V~ cosφ = 0.8				
International Std. socket- outlets	IEC 60884-1			at 50 Hz	> 5	1.25 In (100 position changes)	10,000 at In 250V~ cosφ = 0.8			
Latching relays	EN 60669-1 / EN 60669-2-2				at 50 Hz			40,000	125	850
Momentary relays	EN 60669-1 / EN 60669-2-2					1.25 In (200 position changes)	at In 250V~ cosφ = 0.6			
Miniature circuit breakers	EN 60898-1		2** ÷ 5	ЗКА	8,000					
Residual current circuit breakers	EN 61009-1 / EN 61008-1		2°° ÷ 5	ЗКА	4,000	1				
Supports and plates	EN 60669-1	-	-	-	-	70	650			

\* For rated voltages and currents, see the specifications for the individual codes. \*\* The value of 2 MΩ refers to a special condition established by the Standards given alongside.

# Characteristics of screw terminals



# **Characteristics of spring terminals**



The spring terminals allow you to carry out the wiring in a shorter time, and without using screwdrivers or other tools. To insert the cable, it is necessary to press the orange lever (opening of terminal). Releasing the lever, the terminal closes automatically, firmly blocking the cable.

	TECHNIC	AL DATA	
Term	ninal grip on cable trac	tion	>50N
	TERMINAL TIGHT	ENING CAPACITY	
Strande	d wires	Solid	wires
Minimum	Maximum	Minimum	Maximum
0.75mm <sup>2</sup>	2 x 4mm <sup>2</sup>	0.5mm <sup>2</sup>	2 x 2.5mm <sup>2</sup>



# Characteristics of signalling and night-time localisation devices

Type of o	coupling	Illuminat	ed devices	Substitution of the button key	signa	ution of the lling lens onal signalling	-	ty of the 22x22mm on keys
	The front coupling of the Chorus devices makes the support assembly and release operations quick and easy, without the necessity to remove the support.		Seat for insertion of miniature lamps with wired lead				Replacing a button key 2	2 1 Substitution of diffuser and personalised label

# Backlighting of command devices

Туре	Use	Applications	Туре	Use	Applications
Lighting for localisation purposes	Permits the identification of the command button in the dark, or the indication of the ON/OFF status of a lighting circuit	General services of a building complex (stair lights, entrances, etc.) Public entertainment premises Bedrooms Corridors	Diffuser 22x22mm	Permits the identification of the ON/ OFF status of a service or lighting circuit from a distance. The signalling is clearly visible from the front	Signalling of lights coming on outside the place where the command device is installed
Lighting for signalling	Permits the identification of the command button, and its specific function, in the dark	General services Indoor systems for offices, shops, warehouses. Hotel facilities Hospitals and nursing homes	Push-buttons with illuminated name plate	Permits the identification of the command button in the dark, and the reading of the name on the label, even in poorly lit areas	Push-button for call circuits in homes and offices

#### Examples of function and location lighting

To indicate the operating status of services not visible from the command position	To locate the command key in the dark
The indicator lamp is located parallel to the service, and is switched on when the one-way switch is 0N. The indicator lamp follows the 0N/OFF status of the service.	The indicator lamp is switched on when the one-way switch is OFF. With the one-way switch is off. In the ON position, the service is powered and go off when indicator lamp is switched off.

# Degree of protection of the set of CHORUS domestic range devices installed

Component	Installation	Reference standard	IP rating
Devices with closed front (commands, bells, indicators, etc.) installed in flush-mounting boxes, surface-mounting boxes, free-standing panels (completed with support and plate) and in self-supporting boxes	Flush-mounting for domestic or similar finish, in vertical position, installed to a high standard		41
Devices with open front (socket-outlets, etc.) installed in flush-mounting boxes, surface-mounting boxes, free-standing panels (completed with support and plate) and in self- supporting boxes	Flush-mounting for domestic or similar finish, in vertical position, installed to a high standard. Suitable for use for zone 3 of rooms containing baths or showers.	EN60529 (CEI 70-1)	X 1 (in case of socket-outlets it is 21)
Devices with open front (socket-outlets, etc.) installed in flush-mounting boxes, surface-mounting boxes, free-standing panels (completed with support and plate) and in self- supporting boxes	Flush-mounting for domestic or similar finish, in vertical position, installed to a high standard <b>with plug inserted</b>		4 X



#### COMMAND

#### Infrared movement detectors

The passive infrared movement detector senses temperature variations within its range of action and, depending on the environmental light, closes a relay contact. When movement stops, the contact automatically opens again after an adjustable set time. The device incorporates a light-sensitive sensor with an adjustable trip threshold to avoid controlling the circuit (e.g. lighting equipment) when not necessary.

#### **Fixed lens**



GW 10 591 - GW 12 591 - GW 14 591

NOTE: Not suitable for compensated fluorescent lamps, for discharge lamps and for those loads not indicated; please use an auxiliary relay to control such lamps.

The exclusion of the light-sensitive threshold is obtained by positioning the luminosity selector at the maximum.

TECHNICAL DATA		
Power supply voltage	230V AC - 50/60 Hz	
Light-sensitive threshold setting	10 lux - max. inhibited	
Activation duration setting	15 sec / 10 min	
Output contact	1 NO 3A (AC1) 250V ac, potential-free	
Type of load:		
Resistive loads	700W	
Incandescent lamps	450W	
Low voltage halogen lamps (12V)	450W	
Uncompensated fluorescent lamps	2x58W	
Motors and motor reduction units	400VA	
Operating temperature	-5 to +40°C	
Relative humidity	max. 93% non condensative	



#### **Directional lens**

Reference standards: EN 60669-1, EN 60669-2-1



TECHNICAL DATA		
Power supply voltage	230V AC - 50/60 Hz	
Light-sensitive threshold setting	10 lux - max. inhibited	
Activation duration setting	15 sec / 10 min	
Output contact	1 NO 16A (AC1) / 10A (AC15) 250V AC potential-free	
Uncompensated fluorescent lamp command	max. 4A	
Operating temperature	-5 to +40°C	
Relative humidity	max. 93% non condensative	

Not suitable for compensated fluorescent lamps; please use an auxiliary relay to control such lamps.

It is possible to connect the input of the device with several NO push-buttons, connected side by side. This solution is suitable, for example, for the installation of the device in an environment where the light-sensitive module is positioned in the entrance, for the automatic switching-on of the lights in dark conditions, while in the other points push-buttons are used to switch the lights on manually. The activation is always subject to the light-sensitive module and the adjusted timer, via the potentiometer. The exclusion of the light-sensitive threshold is obtained by positioning the luminosity selector at the maximum.



Power supply: 2 - Phase 3 - Neutral Potential-free output: 4 / 5 - NO contact

Wiring terminals

Input: 1 - Remote command





Coverage diagram

# Chorus - domestic range



# Infrared receiver and remote control

The infrared system is made up of a portable remote control with 6 channels/3 bands, and a single-channel receiver with relay output for the ON-OFF command of a specific service (light point, fan, etc.).

The remote control is able to manage up to 18 receivers.



TECHNICAL DATA		
No. of channels	6	
No. of push-buttons	6	
Band selector	3 positions - housed in the battery compartment The setting of the internal microswitch on 3 bands prevents interference with other remote controls.	
Max capacity	10m	
Power supply	2 alkaline-type batteries (1.5V AAA)	

#### 1-channel receiver

Suitable for use in open spaces, where there are no obstacles between the receiver and the remote control, and the maximum distance between the two devices is 10m. Equipped with an 18-position rear selector for determining the appropriate remote control channel. For different and more specialised applications, it is possible to use the corresponding articles of the wireless range.

Reference standards: EN 60669-1; 60669-2-1; EN 60669-2-2



TECHNICAL DATA		
Rated voltage	230V AC 50/60 Hz	
Output contact	1 NO 5A (AC1) 250V AC	

Wiring terminals

**Power supply:** L - Phase N - Neutral

Potential-free output: 1 / 2 NO contact (monostable)

#### Installation characteristics

Fields of use: • Buildings in the domestic or advanced commercial sector, where you want to obtain a high level of comfort • Renovations where it would be harsh or ugly to install terminal control circuits • Places for the disabled.





#### Latching relay

Electromechanical relay (of the latching type) for commanding lamps from more than one point.

Reference standards: EN 60669-1;EN 60669-2-2



GW 10 721 - GW 12 721 - GW 14 721

Wiring terminals
Power supply:
L - Phase

N - Neutral

230V AC output: 1 - Load power supply contact

TECHNICAL DATA		
Power supply voltage (coil)	230V AC 50/60 Hz	
Output contact	10AX 250V AC	
Number of poles	1	



#### 4 sequence latching relay

Electromechanical relay with 4 sequences for commanding two independent circuits, in the sequence: open-open, open-closed, closed-open, closed-closed.

Reference standards: EN 60669-1;EN 60669-2-2



Power supply: L - Phase N - Neutral 230V AC output: 1 - Contact 1

Wiring terminals

2 - Contact 2

GW 10 723 - GW 12 723 - GW 14 723

TECHNICAL DATA		
Power supply voltage (coil)	230V AC 50/60 Hz	
Output contact	10AX 250V AC	
Number of poles	2	

NUMBER	SEQUENCES					
OF IMPULSES	1	2	3	4		
4	\ <sup> </sup> \	Ϋ́́	γ	77		

# **Momentary relay**

Electromechanical momentary relay suitable for creating automatisms or separations between the command circuit and the energy circuit. Can be used as an auxiliary element for controlling special loads.

**TECHNICAL DATA** Power supply voltage (coil) 230V AC 50/60 Hz Reference standards: EN 60669-1;EN 60669-2-2 **Output contact** 1 NO/NC 10A (AC1) /2A (AC15) 250V AC 50/60Hz Number of poles 1 Wiring terminals Connection diagram Power supply: L - Phase N - Neutral Ódoo Potential-free output: 1 - NC contact 2 - NO contact 3 - Common GW 10 724 - GW 12 724 - GW 14 724 N

# Chorus - domestic range



# Call relay

#### "Bathroom Alarm" call system

Since each Country establishes its own technical regulations in order to avoid architectural barriers, here below is represented only an example for the creation of hygene services for people with a disability.

From the electrical point of view, in particular there must be an emergency bell located near the toilet and the bath.

The alarm circuit must be activated by means of a pull-cord push-button (emergency bell) which, if pressed again, does not silence the alarm.

The return to a condition of normality can only be obtained by pressing a remote push-button connected to the "reset" input of the relay.

In order to avoid the unintentional resetting of the alarm, the use of the key push-buttons (e.g. code GW 10 145, GW 12 145 and GW 14 145) is recommended.

Apart from the inputs for the "AL" alarm push-button and the "R" reset push-button, the Gewiss call relay, powered at 12V AC/DC, also includes an NO + NC output contact with 12V potential for managing acoustic/light signalling.

Reference standards: EN 60669-1;EN 60669-2-2



GW 10 726 - GW 12 726 - GW 14 726

Wiring terminals

12V power supply: 0 / 12

**Inputs:** AL - alarm push-button R - reset push-button

**12V output contacts:** NO - normally open contact NC - normally closed contact

TECHNICAL DATA				
Power supply voltage (coil) 12V AC/DC				
Output contact	1 NO/NC 1A 12V DC			







#### SOCKET-OUTLETS

#### **Multistandard socket-outlets**

The multistandard socket-outlets accept different types of plugs, guaranteeing always the right connection. They are provided with safety shields and are suitable for use in environments such as hotels, airports, meeting rooms, etc.

Reference standards: IEC 60884-1



GW 10 310 - GW 12 310 - GW 14 310

	TECHNICAL DATA
Type of socket-outlet	2P+E - 13A/250Vac - 15A/127Vac with safety shields
Terminal block	with screws (for rigid and stranded cables) up to 14mm <sup>2</sup> )
Protection degree IP20	
Plugs compatibility	Europlug 2P 2.5A - 250V British 2P+E 13A - 250V Italian 2P 10A - 250V Danish 2P 10A - 250V Chinese 2P+E 10A - 250V Argentinean/Australian 2P+E 10A - 250V Indian 2P+E 6A - 250V USA 2P+E 15A - 127V
	Not suitable for 2P+E German and French sockets because they don't offer earth continuity
Dimensions	2 Chorus modules

NOTES: the multistandard energy sockets GW10310, GW12310, GW14310 are in compliance with the safety requirements defined by the International Standard IEC 60884-1. These sockets may not be in compliance with the standard sheets used in the country where they are sold, hence their usage could be prohibited or however, restricted only for specific applications. The plugs allowed are listed in the technical datasheet. Please contact directly Gewiss technical service for further information.



# SOCKET-OUTLETS

#### Italian and international standards

ш	Power supply for household appliances, lighting devices, portable appliances, etc. Multiple sockets to reduce wiring times.
Italian	Power supply of equipments through dedicated lines.
ierman	Power supply for household appliances, lighting devices, portable appliances, etc.
Italian/German	Power supply of equipments through dedicated lines.
н	Power supply for household appliances, lighting devices, portable appliances, etc. Sockets provided with a IP40 transparent lid.
German	Power supply of equipments through dedicated lines.

# Chorus - domestic range







# German and french standard sockets with front tightening of terminals

The German and French Standard sockets with front tightening of terminals allow you to check the correct fixing of the cables once the installation is completed and, thanks to the side output, they also allow a reduced bulk of the wiring in the box (flush-mounting or surfacemounting).



# French standard socket for allocated lines, with front tightening terminals



GW 10 258



GW 10 260

This French Standard socket allows you to identify and privilege an energy take-off point, in order to prevent the powering of devices excluded from the allocated line. The sockets are equipped with a supplementary honeycomb for the mechanical release of the safety shields. The plugs of the services connected to these circuits require the accessory (GW 10 260) which, when fixed on the front of the plug, allows you to unblock the protection system.



#### Plugs and sockets for dedicated lines

#### **Functional characteristics**

The plugs and sockets for dedicated lines allow the clear differentiation of a power outlet intended for special applications, avoiding the connection of services not envisaged for this circuit.



\* There are no relevant regulatory provisions, therefore the examples of colour use are only a guide.

#### Euro-american standard shaver socket with insulation transformer

The shaver socket includes a powered insulation transformer 20VA, automatically fed upon the insertion of the plug. There is also a selector that allows you to change the voltage of the secondary circuit of the transformer. Especially suitable for use in hotel facilities.

Reference standards: EN 61558-2-5			TECHNICAL DATA	
/ Voltage switch			Primary: 230V ac	
		Insulation transformer	Secondary: 120 and 230V ac	
2300~	Transformer	in compliance with CEI 96-1	Frequency: 50/60Hz	
	<ul> <li>Transformer</li> <li>primary circuit</li> </ul>	y circuit standards: supply	Power: 20 VA	
	power supply push-button		Overload protection via PTC with automatic reset	
120V~	pusi-button		American standard plugs 6.3 x 1.5	
		Euro-American 2P socket	Centre distance 12.7mm	
GW 10 331 - GW 12 331 - GW 14 331			British 2.5A Standard plugs (plug pins Ø 5mm)	
		suitable for:	European plugs 2.5A	
			Italian Standard plugs 2 x 10A - type S10	



# Interlocked switched socket-outlets

Many danger situations in the domestic environment are caused by faults or insulation leaks in the service devices (especially the portable ones), occurring when the appliance is fed.

Gewiss has created interlocked switched socket-outlets with a bipolar switch (both miniature circuit breaker and residual current circuit breaker with overcurrent protection), suitable for installation in the system terminations for load protection. These socket-outlets guarantee that the holes are only connected to the voltage when the plug is inserted, to prevent the formation of electrical arcs when the plug is inserted and removed.

The automatic circuit breaker is immediately disconnected when the plug is pulled out.

Reference standards: CEI 23-50 (IEC 60884-1), EN 60898, EN 61009-1







1- the absence of voltage on the holes is ensured.



2- only with the plug completely inserted is it possible to close the circuit breaker.



3- the circuit breaker opens automatically when you begin to remove the plug.



4- protection is guaranteed in the event of short-circuiting/overloading and (where a residual current circuit breaker is envisaged) also in the event of direct or indirect contact.

#### **Tripping characteristics**





Short-circuit current (A)



#### SIGNAL

#### **TV-SAT socket-outlets**

The development of television transmission systems and of services intended for the user has raised the performance and quality level required for signal distribution systems.

The EN 60728 standards (systems for distribution of television and sound signals via cable) define the present and future European standard and establish the requisites that the various parts of the system (including the terminal socket-outlets) must meet.

Thanks to their high performance level, these socket-outlets offer optimal distribution of the signals, both digital and analogue, as required by the various drivers for access to present and future services.

CHARACTERISTICS	ADVANTAGES
• Shielding efficiency (in compliance with standard EN 60728-4).	• The socket-outlets are in a metal shell and are unaffected by the electromagnetic emissions (EMC) present in the environment.
<ul> <li>Impedance adaptation.</li> <li>System for the quick and safe connection of the coaxial cable.</li> </ul>	<ul> <li>Undesired signal reflections are avoided.</li> <li>Maintains the co-axiality of the cable in the connection point.</li> </ul>
• A range featuring two types: user ports with F connector (type EN 60169-24) and with male IEC connector Ø 9.5mm (in compliance with HD134.2 S2).	<ul> <li>Maximum application flexibility with single or centralised systems (new / restored / arrangements for future extensions).</li> <li>In satellite reception, due to the frequency range, it is very important to maintain the co-axiality of the connection, which is a requirement fully met by the innovative connection and the use of the F connector.</li> </ul>





"F" female connector

"IEC" male connector

TECHNICAL DATA				
Frequency field From 5 to 2400 MHz				
Diameter of the coaxial cable	From Ø 5 to Ø 7mm			
Return channel	From 5 to 40 MHz			
Shielding	Class A			
Chrominance/luminance delay difference	< 1 ns. for all models			
User port - TV socket-outlet	Male IEC coaxial connector Ø 9.5mm			
User port - TV-SAT socket-outlet	F coaxial connector (female)			

# Chorus - domestic range



# TV-FM-SAT socket-outlets

The TV-FM-SAT socket-outlets of 2 modules allow the contemporary connecting of more than one device. The socket-outlets consist of:

- male IEC coaxial TV socket-outlet connector
- female F coaxial TV-SAT socket-outlet connector
- female IEC radio socket-outlet connector



GW 10 381 - GW 12 381 - GW 14 381



Reference standards: ISO 11801

**RJ11 IN-OUT CONNECTOR** 

GW 10 382 - GW 12 382 - GW 14 382



GW 10 383 - GW 12 383 - GW 14 383

	Type of socket-	Cut-out attenuation	Insulation	R	eturn loss (input po	rt)	Cu	rrent pass	age
Code	outlet	(base loss)	(average value between the ports)	Return channel 5-40 MHz.	TV 47-862 MHz.	SAT 950-2400 MHz.	TV	FM	SAT
GW 10-12-14 381	TV - FM	<1.5 dB	>22 dB	>18 dB	>10 dB	-	-	-	-
GW 10-12-14 382	TV-FM-SAT	<2.5 dB	>20 dB	>10 dB	>10 dB	>12 dB	-	-	500mA
GW 10-12-14 383	TV-SAT	<1.5 dB	>25 dB	>10 dB	>10 dB	>10 dB	-	-	500mA

#### International Standard telephone connectors

RJ11 telephone connector with 4 contacts, suitable for connecting the telephone, telefax, modem.



RI11:

RI11 IN-OUT:

GW 10 401 - GW 12 401 - GW 14 401 GW 10 402 - GW 12 402 - GW 14 402



RJ11 DOUBLE:

GW 10 403 - GW 12 403 - GW 14 403

#### **RJ11 CONNECTOR**



The RJ11 connector is provided with a dust cover and terminal blocks with screws.



The RJ11 IN-OUT connector offers the possibility to connect an input line and an output line, quickly and easily. The divided terminal block avoids the use of additional terminals, and facilitates the wiring operations. Fixing of cable on insulation perforating terminals.



#### **RJ11 DOUBLE CONNECTOR**



The RJ11 double connector offers 2 RJ11 connectors in a single module. The double rear terminal block facilitates the wiring operations. Fixing of cable on insulation perforating terminals.

#### Series connection



• The clamps 3 and 4 are connected by means of the contact inside the telephone, which is closed when the telephone receiver is put down. When the telephone receiver is picked up, the line breaks downstream (L1 pole), ensuring that the conversation is not overheard.

Note: with the connection in series, when one of the plugs is extracted, the socket-outlets positioned downline are disconnected. To prevent this problem, just insert a plug with a jumper between terminals 3-4, in the socket-outlets from which the telephone appliance was removed.



 Each socket-outlet takes the signal from the line There is no privacy of conversation.

For technical information contact the Technical Assistance Service or visit gewiss.com

Technical Information

# Chorus - domestic range



To obtain the EIA/TIA 568A

or 568B configuration shown alongside, follow the colour

code given on the terminal block (of the products).

#### **Connectors for structured wiring**

RJ45 connectors of category 5e and 6, shielded (FTP) and unshielded (UTP), for data transmission. Allow computerised devices (computers, printers, modems, etc.) to be connected to the network, as well as the connection of multimedia devices (e.g. videoconference facilities). They can also be used for traditional, centralised telephone systems.

#### **Toolless connection**

With the Toolless connection, it is possible to make the connection without using additional tools. This connection simplifies the wiring operations.





GW 10 421 - GW 12 421 - GW 14 421 GW 10 422 - GW 12 422 - GW 14 422

The wires without fitted terminal are inserted in the appropriate blade seats. The cover closure ensures the complete incision of the insulation and the electrical continuity with the contact.

TECHNICAL DATA	GW 10 421 GW 12 421 GW 14 421	GW 10 423 GW 12 423 GW 14 423	
Connector type	RJ45		
Type of cables used	UTP		
No. of contacts	8		
Terminals	toolless		
Category	5e 6		
Transmission protocols used	EIA/TIA 568A - EIA/TIA 568B		

# CAT 6

Diagrams

EIA/TIA - 568A

PR3 PR1

PR2

EIA/TIA - 568B

GW 10 423 - GW 12 423 - GW 14 423 GW 10 424 - GW 12 424 - GW 14 424 ADAPTERS



GW 10 431 - GW 12 431 - GW 14 431

Suitable for Keystone Jack-type connectors (manufactured in according to standard EN 60603-7)

TECHNICAL DATA	GW 10 422 GW 12 422 GW 14 422	GW 10 424 GW 12 424 GW 14 424	
Connector type	RJ45		
Type of cables used	FTP		
No. of contacts	8		
Terminals	toolless		
Category	5e	6	
Transmission protocols used	EIA/TIA 568A - EIA/TIA 568B		







# **USB and HDMI couplers**

Female-female couplers with Keystone Jack coupling, for A-type USB and HDMI cables. To complete with GW1x431 adapters.





GW 38 056



# **USB** charger

2.1A double USB charger, suitable for powering mobile phones, smartphones and mobile electronic devices.





TECHNICAL DATA				
Power supply	100-240V ac - 50/60Hz - 300mA max			
Output	5V dc - 2,1A			
USB connector	Туре А 2.0			
Power supply connector	Screws terminals, maximum cable section 1,5mm <sup>2</sup>			
Degree of protection	IP20			
Operating temperature	0÷ +40°C			

Suitable to recharge a single 2.1A electronic device or a couple of simultaneous devices. The total current provided (max. 2.1A) is split in the two USB outputs, depending on the state of charge of the connected devices.

# Connector for speakers/music

Front terminals (red and black) for inserting solid or stranded cables with section max 1.5mm<sup>2</sup>. Rear dual puncture insulation terminals for AWG24 cables or for cables with section max 0.25mm<sup>2</sup> (an "impact tool" like GW38051 is recommended).



GW 10 458 GW 12 458 GW 14 458





#### PROTECTION

#### Automatic circuit breakers

The automatic circuit breakers protect the electrical load connected downline (either directly or via a socket-outlet) against overloading and short-circuiting and, via the residual current circuit breaker part, against contact voltages. They can be installed together with the miniature circuit breakers and the RCCBs with overcurrent protection used - in the enclosure of the home - to diversity the different lines while respecting the selectivity.

They are particularly suitable in locations where there is a high risk of electrocution, such as the bathroom, to protect terminal devices, as well as a safety for portable service devices in the home and so on.

Miniature circuit breaker tripping with C characteristic and A-type residual current circuit breaker for alternated fault currents and single-direction push-buttons.

Reference standards: EN 60898-1; EN 61009-1; EN 61543



Miniature circuit breaker



RCCB with overcurrent protection

	TECHNICAL DATA					
	Power supply voltage	Number of poles	Rated current	Breaking capacity		Code
			6A			GW 10 461 - GW 12 461 - GW 14 461
ti i		1P	10A			GW 10 462 - GW 12 462 - GW 14 462
Miniature circuit breaker		230V AC 16A 10A 1P+N 10A 16A	- 3 kA		GW 10 463 - GW 12 463 - GW 14 463	
brea	230V AL		6A	3 KA		GW 10 466 - GW 12 466 - GW 14 466
Mir			10A			GW 10 467 - GW 12 467 - GW 14 467
			16A			GW 10 468 - GW 12 468 - GW 14 468
			6A		10mA	GW 10 482 - GW 12 482 - GW 14 482
			10A			GW 10 485 - GW 12 485 - GW 14 485
RCCB with overcurrent protection	230V AC 1P+N	1D N	16A	21.4		GW 10 488 - GW 12 488 - GW 14 488
RCCB vercu prote		6/	6A	- 3 kA		GW 10 483 - GW 12 483 - GW 14 483
			10A		30mA	GW 10 486 - GW 12 486 - GW 14 486
			16A			GW 10 489 - GW 12 489 - GW 14 489

#### **Tripping characteristics**









# **Overvoltage limiter**

The overvoltage limiter is a discharger of the varistor type, suitable for protecting the power supply socket-outlets of all types of electrical appliances (especially those containing electronic components, e.g. TV, DVD player, hi-fi, etc.) from damage that can arise from the presence of overvoltages induced in the mains by manoeuvres or atmospheric discharges. The overvoltage peak will not reach the service, or will at least be greatly attenuated. If the varistor should break, the presence of a fuse prevents short-circuiting. The failure is signalled by the switching off of the LED, and the lack of power supply.

Reference standards: EN 61643-11



GW 10 492 - GW 12 492 - GW 14 492

**Connection terminals** L in - Phase Input line: N in - Neutral L out - Phase **Output line:** N out - Neutral

TECHNICAL DATA		
Rated voltage	250V AC	
Uc	275V AC 50/60 Hz	
Up	1 kV	
Uoc	<= 2.5 kV	



The Gewiss range to protect circuits against overvoltage in the domestic or similar environments includes the dischargers in the POWER catalogue, designed for installation in home enclosures.

# **Fuse holder**

Modular element for the installation of fuses (Ø 6.3x32mm) with a maximum rated current of 16A.

Socket-outlets should be included upline, to power devices for which additional protection against overcurrents and short-circuiting is recommended. Especially suitable for the protection of dimmers too. The fuse is not included.



GW 10 491 GW 12 491 - GW 14 491

Connection diagram	
1 —	Fuse
•	
N	

TECHNICAL DATA	
Rated voltage	230V AC
Maximum rated current	16A
Number of poles	1
Fuses that can be inserted	Ø 6.3 x 32mm



#### SIGNALLING

#### Extractable anti-blackout lamp

Lamp with high efficiency LED, to be inserted in any Italian, German or French Standard socket-outlet, suitable for auxiliary lighting in the event of a mains failure; can be easily extracted and used as a normal, portable, rechargeable lamp. Selecting the "night" function, it can be used as a courtesy night-light; when in this mode, the lamp switches off automatically after about 30 minutes. The time necessary for recharging is about 36 hours. Signalling LED:

- green: indicates the presence of the mains

- red: indicates the inhibition of the anti-blackout function

Reference standards: EN 60065; EN 61000-6-3; EN 61000-6-1

By means of a front selector, the lamp can work in different modes:



GW 10 661 - GW 12 661 - GW 14 661

- emergency: switches on automatically when there is no mains voltage
- inhibition: lamp always switched off
- night: the lamp remains switched on for about 30 minutes, powered by batteries, then switches off and recharges automatically



TECHNICAL DATA	
Power supply voltage 230V AC	
Battery	Ni-Mh 3.6V 80mAh
Minimum autonomy	2 hours
Recharging time	36 hours
Lamp	High efficiency LED
Power absorbed in standby mode	2W

Socket-outlet type	Socket-outlet code (example)	GW 1x 661 lamp ledge (measured from the socket-outlet surface)
Italian standard	GW 1x 203	42 mm
Italian/german standard	GW 1x 204	30 mm
German standard	GW 1x 241	24 mm

#### Flush-mounting anti-blackout lamp

Flush-mounting anti-blackout lamp, 1 Chorus module, suitable for auxiliary lighting in the event of a mains failure. Front LED indicating presence of mains and standby (steady green light).



GW 10 662 - GW 12 662 - GW 14 662

TECHNICAL DATA	
Power supply voltage	230V AC
Battery	Ni-Mh
Minimum autonomy	1 hour
Recharging time	12 hours
Lamp	White high efficiency LED
Dimensions	1 Chorus module



#### Autonomous emergency lamps

Autonomous emergency lamps for flush-mounting boxes of 2 and 4 modules, suitable for emergency lighting in residential or public service environments when there is no mains voltage. A green frontal LED indicates the presence of mains voltage. Can be used to light exits, dangerous passages, etc. The lighting uses a high efficiency white LED.

Reference standards: EN 60598-2-22



GW 10 663 - GW 12 663 GW 14 663



GW 10 666 - GW 12 666 GW 14 666

<b>TECHNICAL DATA</b>	GW 1x 666	GW 1x 663
Power supply voltage	230V AC	230V ac
Battery	Ni-Mh 3.6V 1100mAh	Ni-Mh 3,6V 160mAh
Minimum autonomy	1 hour	1 hour
Recharging time	24 hours	12 hours
Lamp	1 white high efficiency LED	2 white high efficiency LED
Power absorbed in standby mode	1W	1W
Dimensions	4 Chorus modules	2 Chorus modules
Light flux	30 lumens	12 lumens

#### **Indicator lamps**

Permit the visualisation from a considerable distance of the ON/OFF status of a service or lighting circuit. The Chorus half-module indicator lamps allow notable space-saving.

The indicator lamps must be completed with miniature lamps with wired lead, to be inserted in the back of the product



Reference standards: EN 62094-1



1/2 Module GW 10 641 - GW 12 641 - GW 14 641 Opal GW 10 642 - GW 12 642 - GW 14 642 Green GW 10 643 - GW 12 643 - GW 14 643 Red GW 10 644 - GW 12 644 - GW 14 644 Amber



GW 10 621 - GW 12 621 - GW 14 621 Opal GW 10 622 - GW 12 622 - GW 14 622 Green GW 10 623 - GW 12 623 - GW 14 623 Red GW 10 624 - GW 12 624 - GW 14 624 Amber



1 Module GW 10 628 - GW 12 628 - GW 14 628 Opal/opal GW 10 629 - GW 12 629 - GW 14 629 Red/green

#### **Protruding indicator lamps**

Permit the visualisation from a considerable distance of the ON/OFF status of a service or lighting circuit. The light generated by the indicator lamp is visible not only from the front, but also from the side. Suitable for special applications such as the signalling of calls from hospital wards. The protruding indicator lamps are supplied with LED sources.

Reference standards: EN 62094-1





GW 10 631 - GW 12 631 - GW 14 631 Opal



GW 10 632 - GW 12 632 - GW 14 632 Green

TECHNICAL DATA		
Power supply voltage	12V AC/DC or 230V AC	
Dimensions	2 Chorus modules	
Type of lamp	LED	
Power absorbed	12V: 0.4W - 230V: 6W	



GW 10 633 - GW 12 633 - GW 14 633

Red

GW 10 634 - GW 12 634 - GW 14 634 Amber

# Chorus - domestic range



#### Stair riser lamp

Lamp with white LEDs, suitable for use as a stair riser lamp, courtesy lamp, night-time lamp, etc. The product has a double 12V AC/DC - 230V AC power supply input. The lamp with white LEDs is integrated in the product.

#### Reference standards: EN 62094-1



2 Chorus modules GW 10 651 - GW 12 651 - GW 14 651



4 Chorus modules GW 10 656 - GW 12 656 - GW 14 656

<u>–</u> 12V-–	
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	2

Wiring terminals

Power supply: terminals 1-2: 12V terminals 1-3: 230V

	TECHNICAL DATA	
Power supply voltage	12V AC/DC or 230V AC 50/60Hz	
Dimensions	2-4 CHORUS modules	
Type of lamp	White high efficiency LEDs	
Power absorbed	12V 2 modules: 0.12W	
	230V 2 modules: 0.6W	
	12V 4 modules: 0.1W	
	230V 4 modules: 0.5W	

#### **Ringer with three independent inputs**

The ringer with three independent inputs has three different acoustic signals:

- emergency-type sound (e.g. bathroom alarm)
- two-tone sound (e.g. main entrance ringer)
- trill-type sound (e.g. secondary entrance ringer)

The volume of the ringer can be adjusted using the push-button on the back.

Reference standards: IEC 62080



GW 10 611 - GW 10 612 GW 12 611 - GW 12 612 GW 14 611 - GW 14 612

 
 TECHNICAL DATA

 Power supply voltage
 GW 10 611 - GW 12 611 - GW 14 611 12V AC/DC GW 10 612 - GW 12 612 - GW 14 612 230V AC - 50Hz

 Dimensions
 2 CHORUS modules

 Power absorbed
 GW 10 611 - GW 12 611 - GW 14 611 3 VA GW 10 612 - GW 12 612 - GW 14 612 6 VA

 Sound intensity
 80dB at 1m







#### ENERGY AND COMFORT MANAGEMENT

#### 1-channel daily and weekly electronic timer

- Electronic device for the timed command of a load
- Positive LCD display with white backlight
- Permanent indication of: time, day of the week, load lighting status, functioning/working mode status,
- 144 daily cycles that can be set (transitions every 5 minutes)
- Manual activation/deactivation of the load (MAN mode)
- Programmed activation/deactivation of the load (AUTO mode), with daily/weekly cycles
- Permanent deactivation of the load (OFF mode)
- Immediate visualisation of the daily planning, via permanently visualised histogram
- Rechargeable buffer battery

Reference standards: EN 60730-1; EN 60730-2-7



Chorus: GW 10 581 - GW 12 581 - GW 14 581

Command push-buttons:

- Selection of functional mode
- Selection of operational mode
- Modify (increase)
- Modify (decrease)

#### **Clock - Alarm - Thermometer**

- LCD display with white backlight
- Visualisation of time (12/24h), day of the week and date
- Visualisation of the temperature
- Alarm function with two independent daily alarms
- Visualisation of the time programmed and the ringers activated
- "Snooze" function for the temporary silencing of the alarm
- Unit of temperature measurement can be selected (°C, °F)
- Rechargeable buffer battery

Reference standards: EN 60065; EN 55014-1; EN 55014-2



GW 10 708 - GW 12 708 - GW 14 708

For technical information contact the Technical Assistance Service or visit gewiss.com

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Power supply voltage	230V AC 50/60Hz
Output contacts	1NO/NC 8A(AC1) / 4A(AC15) 250V AC
Reserve charge	48 hours
Dimensions	2 modules
No. activations/deactivations	144

TECHNICAL DATA



#### Wiring terminals

Power supply: L - Phase N - Neutral Output relay: 1 - NO contact 2 - NC contact

- 2 NC contact 3 - Common
- 3 Commo
- Serial line:
- 4 TX (output data) 5 - GND (common) 6 - RX (input data)

TECHNICAL DATA	
Power supply voltage	230V AC
Dimensions	2 Chorus modules
Operating temperature	-5 to +45°C
Reserve charge	48 hours
Sound intensity	72 dB at 1m
Duration of temporary silencing	5 minutes
Temperature display field	0 to +45°C



#### Wiring terminals Power supply:

L - Phase N - Neutral



#### **Electronic timer**

The electronic timer allows you to command groups of light points or services, programming the automatic switching off after a pre-set period of time. On the device, there is a push-button for the command, and a LED that indicates the presence of mains voltage.

By means of a rotary selector on the side of the product, it is possible to vary the timing (15"-30"-45"-1'-1'30"-2'-3'-5'-10'-15').

Via the command circuit of the remote push-buttons connected, the device allows you to power up to 15 LED signalling units for localisation. 5 seconds before the end of the time period set, the device signals the imminent switching off by means of a brief deactivation of the load. Keeping the local push-button pressed for 5 seconds, you activate/deactivate the "stair cleaning" function: in this way, the load remains active for 30 minutes.

Reference standards: EN 60669-1, EN 60669-2-1



GW 10 583 - GW 12 583 - GW 14 583



Wiring terminals	
Power supply:	L - Phase N - Neutral
Command:	1 - Load
Input:	2 - Remote command

TECHNICAL DATA	
Power supply voltage	230V AC
Type of contact	Electronic TRIAC
Output contact	1 NO 2A (AC1) 250V AC
Fluorescent lamp command	not suitable
Dimensions	1 CHORUS module
Timer adjustment	15 seconds - 15 minutes
No. of push-buttons with remote access	15



# **Relay timer**

The relay timer is equipped with a front push-button for local activation, and is able to manage a series of light points or services, limiting their functioning time; it can also be used to command the extractor fan used in bathrooms, thereby avoiding a useless waste of electrical energy. The timer also has a LED that indicates the presence of mains voltage, and a rotary selector (beneath the easily removable front cover) to determine the duration of the load activation (15"-30"-45"-1'-1'30"-2'-3'-5'-10'-15').

Via the command circuit of the remote push-buttons connected, the device allows you to power up to 15 LED signalling units for localisation. Keeping the local push-button pressed for 5 seconds, the "stair cleaning" function (for modes 1 and 2) or the "forced fan" function (for 3 and 4) is activated/deactivated. In these modes, the load remains active for 30 minutes.

Reference standards: EN 60669-1, EN 60669-2-1



GW 10 582 - GW 12 582 - GW 14 582



Wiring terminals	
Power supply:	3 - Phase 2 - Neutral
Potential-free output:	4 / 5 NO contact

output: 4 / 5 NO contact
Input: 1 - Remote command

TECHNICAL DATA	
Power supply voltage	230V AC
Type of contact	relay
Output contact	1NO - 16A(AC1) / 4A(AC15) 250V AC
Fluorescent lamp command	max. 4A
Dimensions	2 CHORUS modules
Timer adjustment	15 seconds - 15 minutes
No. of push-buttons with remote access	15

Depending on the contact connection, it is possible to select one of the following operational modes:

- 1- Timing with delay reset
- 2 Timing without delay reset
- 3 Delay in the stopping of the extractor fan after the switching off of the lamp (the extractor fan comes on when the lamp is switched on)
- 4 The timed switching on/off of the extractor fan
  - occurs after the light switches off.



#### DIMMER

#### Rotating electronic regulators, for resistive/inductive loads

Dimmer with conventional potentiometer adjustment and static switching off by turning the knob on position zero.

Reference standards: EN 60669-1;EN 60669-2-1



TECHNICAL DATA		
Product code	GW 10 561 - GW 12 561 - GW 14 561	GW 10 564 - GW 12 564 - GW 14 564 (*)
Technology	with TRIAC	with TRIAC
Power supply voltage	230V ac	230V ac
Max. power of resistive load	100 - 500W	100 - 900W
Max. power of inductive load		40 - 300VA
Adjustable load		
- Incandescent and halogen lamps	•	•
- Toroidal and lamellar transformers		•
Dimensions	1 Chorus module	1 Chorus module

(\*) GW 10 564 - GW 12 564 - GW 14 564 - item designed solely to a limited number of countries outside the European Union or proposed as candidate and to the European Free Trade Association.



#### Typical use:

 Domestic sector for light source adjustment.

The conformity to EMC Directive is guaranteed only connecting the GW1x564 regulator to a LC filter as showed in the following wiring diagram.



#### WARNINGS

- The connection should be made together with a fuse carrier (eg. GW1x491) with a quick-acting fuse with high breaking capacity type F2.5AH 250Vac (for GW1x561) or type F5AH 250Vac (for GW1x564) as shown in the diagrams.
- The regulator does not have a mechanical circuit breaker in the main circuit and so is not galvanically separated. The circuit load should be considered always under voltage.

• The conductors should be pushed down to the bottom of the box. Do not let the conductors in the box contact the walls of the regulator.

• Do not install the regulator near thermostats or chronothermostats.

• Max n.1 regulator in the same round/square box. Max n.2 regulators in the same rectangular box; for installations with 2 regulators in the same box, the maximum loads controllable by each regulator should be reduced by 50%. The side-by-side installation of several products in a single box is not permitted: insert a blanking module between two electronic devices.

• It should be used in dry, dust-free places at a temperature between 0 °C and +35 °C.



#### Rotating electronic regulators with two-way switch, for resistive/inductive loads

Dimmer with incorporated two-way switch that makes it possible to command the switching on and off of a second point (using the two-way switch), or a number of points (using intermediate switches). Switched on and off by pressing the knob; adjustment by turning it.

#### Reference standards: EN 60669-1; EN 60669-2-1

Control knob:

mains voltage

ON/OFF with touch

• adjustment via rotation

Indicator light for localisation and presence of

TECHNICAL DATA	
Product code	GW 10 567 - GW 12 567 - GW 14 567
Technology	with TRIAC
Power supply voltage	230V ac
Max. power of resistive load	100 - 500W
Max. power of inductive load	100 - 500VA
Adjustable load	
- Incandescent and halogen lamps	•
- Toroidal and lamellar transformers	•
Dimensions	1 Chorus module



- Domestic sector for light source adjustment.
- In existing systems, the dimmer with two-way switch can be easily installed in place of a two-way switch, without modifying the original circuit.



WARNINGS

• The connection should be made together with a fuse carrier (eg. GW1x491) with a quick-acting fuse with high breaking capacity type F2.5AH 250Vac as shown in the diagrams.

• The conductors should be pushed down to the bottom of the box. Do not let the conductors in the box contact the walls of the regulator.

• Do not install the regulator near thermostats or chronothermostats.

• Max n.1 regulator in the same round/square box. Max n.2 regulators in the same rectangular box; for installations with 2 regulators in the same box, the maximum loads controllable by each regulator should be reduced by 50%. The side-by-side installation of several products in a single box is not permitted: insert a blanking module between two electronic devices.

• It should be used in dry, dust-free places at a temperature between 0 °C and +35 °C.



#### Rotating electronic regulators with two-way switch, for universal loads

Dimmer with incorporated two-way switch that makes it possible to command the switching on and off of a second point (using the two-way switch), or a number of points (using intermediate switches). Switched on and off by pressing the knob; adjustment by turning it.

#### Reference standards: EN 60669-1; EN 60669-2-1



. Indicator light for localisation and presence of mains voltage

adjustment via rotation

Control knob:

ON/OFF with touch

TECHNICAL DATA		
<b>Product code</b> GW 10 566 - GW 12 566 - GW 14 56		
Power supply voltage	230V ac - 50Hz	
Adjustable load		
- Incandescent and halogen lamps	20-160W	
- Halogen lamps (12Vac) with electronic transformers	40-160W	
- LED lamps (12Vac) with electronic transformers	4-110W (Max 2 transf max 3 lamps for each transf.)	
- Dimmable 230V LED lamps	4-160W (Max 10 lamps)	
Dimensions	1 Chorus module	

#### Typical use:

- Domestic sector for light source adjustment.
- In existing systems, the dimmer with two-way switch can be easily installed in place of a two-way switch, without modifying the original circuit.



#### WARNINGS

• The connection should be made together with a fuse carrier (eg. GW1x491) with a quick-acting fuse with high breaking capacity type F1.6AH 250Vac as shown in the diagrams.

• The conductors should be pushed down to the bottom of the box. Do not let the conductors in the box contact the walls of the regulator.

• Do not install the regulator near thermostats or chronothermostats.

• Max n.1 regulator in the same round/square box. Max n.2 regulators in the same rectangular box; for installations with 2 regulators in the same box, the maximum loads controllable by each regulator should be reduced by 50%. The side-by-side installation of several products in a single box is not permitted: insert a blanking module between two electronic devices.

• It should be used in dry, dust-free places at a temperature between 0  $^\circ C$  and +35  $^\circ C.$ 



#### Push-button electronic regulators, for universal loads

Double push-button type dimmer, with possibility of control and adjustment from any number of points using single-pole NO push-buttons; gradual switching on and off by briefly touching at the pre-set adjustment level (intensity memory); adjustment with prolonged pressure.

A dip-switch located on the side of the devices allows to set the type of driving of the dimmable lamps (Leading Edge or Trailing Edge mode) and the type of switching on (Flash-start or Soft-start).



TECHNICAL DATA		
Product code	GW 10 572 A - GW 12 572 A - GW 14 572 A	GW 10 573 A - GW 12 573 A - GW 14 573 A
Power supply voltage	230V ac - 50/60Hz	230V ac - 50/60Hz
Adjustable load		
- Incandescent and halogen lamps	40-300W	40-300W
- Toroidal and lamellar transformers	40-300W	40-300W
- Electronic transformers	40-300W	40-300W
- Dimmable 230V LED lamps	5-150W (max. 10 lamps)	5-150W (max. 10 lamps)
Dimensions	1 Chorus module	2 Chorus modules



Reference standards: EN 60669-1: EN 60669-2-1



1-point light control

Multi-point light control with NO buttons

#### Notes:

(\*) Illuminated push-buttons cannot be used with a built-in lamp for remote control

#### WARNINGS

- The connection should be made together with a fuse carrier (eg. GW1x491) with a quick-acting fuse with high breaking capacity type F2AH 250Vac as shown in the diagrams.
- The conductors should be pushed down to the bottom of the box. Do not let the conductors in the box contact the walls of the regulator.
- Do not install the regulator near thermostats or chronothermostats.
- Max n.1 regulator in the same round/square box. Max n.2 regulators in the same rectangular box; for installations with 2 regulators in the same box, the maximum loads controllable by each regulator should be reduced by 50%. The side-by-side installation of several products in a single box is not permitted: insert a blanking module between two electronic devices.
- . The regulator does not have a mechanical circuit breaker in the main circuit and so is not galvanically separated. The circuit load should be considered always under voltage.
- It should be used in dry, dust-free places at a temperature between 0 °C and +35 °C.



#### Push-button electronic regulator, for resistive/inductive loads

Push-button type dimmer, with possibility of control and adjustment from any number of points using single-pole NO push-buttons; gradual switching on and off by briefly touching at the pre-set adjustment level (intensity memory); adjustment with prolonged pressure on the same button.

Reference standards: EN 60669-1;EN 60669-2-1

# Control push-button: - ON/OFF with touch; - adjustment by prolonged pressure



Indicator light for localisation and presence of mains voltage

TECHNICAL DATA		
Product code	GW 10 568 - GW 12 568 - GW 14 568	
Technology	with TRIAC	
Power supply voltage	230V ac	
Max. power of resistive load	60 - 500W	
Max. power of inductive load	60 - 500VA	
Adjustable load		
- Incandescent and halogen lamps	•	
- Ferromagnetic transformers	•	
Dimensions	1 Chorus module	

	CHARACTERISTICS	ADVANTAGES
GW 10 568 GW 12 568	Memorisation of adjustment level	Easy to position at a standard adjustment level
	Gradual switching on	Increased lamp lifespan, reducing filament stress during cold switch-on; also prevents disturbing glare effect
	Gradual switching off	Guarantees the gradual passage from the maximum light condition to the switched-off status

#### Typical use:

- Domestic sector for light source adjustment.

- Commercial sector, hotel rooms, places for communities, conference halls, for adjustment of light sources.

- In existing systems, the dimmers can be easily installed by replacing the two-way switches, without modifying the original circuit.



#### WARNINGS

• The connection should be made together with a fuse carrier (eg. GW1x491) with a quick-acting fuse with high breaking capacity type F2.5AH 250Vac as shown in the diagrams.

• The conductors should be pushed down to the bottom of the box. Do not let the conductors in the box contact the walls of the regulator.

• Do not install the regulator near thermostats or chronothermostats.

• It should be used in dry, dust-free places at a temperature between 0 °C and +35 °C.

<sup>•</sup> Max n.1 regulator in the same round/square box. Max n.2 regulators in the same rectangular box; for installations with 2 regulators in the same box, the maximum loads controllable by each regulator should be reduced by 50%. The side-by-side installation of several products in a single box is not permitted: insert a blanking module between two electronic devices.

<sup>•</sup> The regulator does not have a mechanical circuit breaker in the main circuit and so is not galvanically separated. The circuit load should be considered always under voltage.



# Push-button electronic regulators, for air agitators

Push-button type dimmer with pre-set intensity levels (0-25-50-100%). By briefly pressing the push-button, the minimum intensity level will be obtained. With any further touch, the speed will change from the minimum to the medium, then the maximum. A subsequent touch will turn the dimmer off.

Reference standards: EN 60669-1;EN 60669-2-1



TECHNICAL DATA		
<b>Product code</b> GW 10 574 - GW 12 574 - GW 14 574		
Power supply voltage 230V ac		
Power	55-80 VA	
Dimensions	1 Chorus module	

#### Typical use:

- suitable for adjusting air agitators, fans and extractors with induction engines. It can be controlled by external NO push-button.

WARNINGS

Article only suitable for adjusting air stirrers, fans and aspirators with induction motors with auxiliary phase. Not suitable for adjusting fan-coil motors or light sources.

- The connection should be made together with a fuse carrier (eg. GW1x491) with a quick-acting fuse with high breaking capacity type F0.8AH 250Vac as shown in the diagrams.
- The regulator does not have a mechanical circuit breaker in the main circuit and so is not galvanically separated. The circuit load should be considered always under voltage.

• Do not install the regulator near thermostats or chronothermostats.

• It should be used in dry, dust-free places at a temperature between 0 °C and +35 °C.

# **TOUCH COMMANDS**

#### Introduction

The Touch command devices are an innovative range of modular devices for the electrical system: a line of high technological and design content that gives the electrical system a touch of furnishing and style.

The most highly distinctive design-based aspect of the Touch products is the "wall-level" feature.

The main characteristic of the technology lies in the "cap-sensitive" system for command acquisition: a light touch (or slight brushing) of the device produces a change of status of the output command (switch-on, switch-off or adjustment).

The range consists of a one-way switch (GW 1X 904) and a dimmer (GW 1X 905), that can be commanded both locally and from a distance, using the command duplicator (GW 1X 906) or generic NO push-buttons.

#### Touch one-way switch

The quick and/or prolonged touch (or brushing) activates or switches off the load: this action can also be carried out from NO remote push-buttons and Touch command duplicators. A simple programmation allows you to configure acoustic signals (buzzer), luminous signals (double intensity blue led) and the output contact (latching or momentary).



TECHNICAL DATA	
<b>Product code</b> GW 10 904 - 12 904 - 14 904	
Power supply voltage	230V ac - 50 Hz
Load	halogen and incandescent lamps: 500W
	energy savings lamps: 100W (max 4 lamps)
	uncompensated fluorescent lamps: 100W
Dimensions	1 Chorus module



WARNINGS

• The connection should be made together with a fuse carrier (eg. GW1x491) with a quick-acting fuse with high breaking capacity type F2.5AH 250Vac as shown in the diagrams.

Connection terminals:

Power supply:	N - Neutral L - Phase
Command:	🔌 - Load
Input:	P - Remote command



#### Touch dimmer

The quick touch (or brushing) produces switch-off or load command at the pre-set (memory) value.

The prolonged touch (or brushing) produces load adjustment; this action can also be carried out from remote NO push-buttons and the Touch command duplicator. A simple programmation allows you to configure acoustic signals (buzzer) and luminous signals (double intensity blue led).



TECHNICAL DATA		
<b>Product code</b> GW 10 905 - 12 905 - 14 905		
Power supply voltage 230V ac		
Power load 40 - 300VA		
Adjustable load Incandescent and halogen lamps		
	toroidal and lamellar transformers	
Dimensions	1 Chorus module	



**Connection terminals** 

Power supply:	2 - Phase
Command:	ᢞ - Load
Input:	1 - Remote command

WARNINGS

- The connection should be made together with a fuse carrier (eg. GW1x491) with a quick-acting fuse with high breaking capacity type F2AH 250Vac as shown in the diagrams.
- The conductors should be pushed down to the bottom of the box. Do not let the conductors in the box contact the walls of the regulator.
  Do not install the regulator near thermostats or chronothermostats.
- Max n.1 regulator in the same round/square box. Max n.2 regulators in the same rectangular box; for installations with 2 regulators in the same box, the maximum loads controllable by each regulator should be reduced by 50%. The side-by-side installation of several products in a single box is not permitted: insert a blanking module between two electronic devices.
- The regulator does not have a mechanical circuit breaker in the main circuit and so is not galvanically separated. The circuit load should be considered always under voltage.
- It should be used in dry, dust-free places at a temperature between 0 °C and +35 °C.

# Touch command duplicator

The Touch command duplicator can only work with the Touch one-way switches and dimmers.

The command duplicators connected to the Touch products behave as NO push-buttons, with the distinctive feature of maintaining the technical and design characteristics of the system unaltered. The quick and/or prolonged touch (or brushing) produces the cyclical activation of the load (by means of a Touch dimmer or one-way switch). In standby conditions, the front LED is fixed amber. A simple programmation allows you to configure acoustic signals (buzzer) and luminous signals (double intensity blue led). It is not possible to understand the load status from the command duplicator.



GW 10 906 GW 12 906 GW 14 906

Connection to	erminals
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Output:

Power supply: N - Neutral

L - Phase P - Remote command

Product code	GW 10 906 - 12 906 - 14 906	
Power supply voltage	230V ac	
Dimensions	1 Chorus module	

**TECHNICAL DATA** 

WARNINGS

• The connection should be made together with a fuse carrier (eg. GW1x491) with a quick-acting fuse with high breaking capacity type F.



#### TOUCH COMMAND MODULES

#### Introduction

The Touch command devices are an innovative range of modular devices for the electrical system: a line of high technological and design content that gives the electrical system a touch of furnishing and style, thanks to the ICE Touch plates made in glass.

The main characteristic of the technology lies in the "cap-sensitive" system for command acquisition: a light touch (or slight brushing) of the device produces a change of status of the output command (switch-on, switch-off or adjustment).

The range consists of a one-way switch module (GW 10 907) and a dimmer module (GW 10 908) that can be commanded both locally and from a distance, using the command duplicator module (GW 10 909) or generic NO push-buttons.



#### Touch one-way switch module

The quick and/or prolonged touch (or brushing) activates or switches off the load: this action can also be carried out from NO remote push-buttons and Touch command duplicator modules. A simple programmation allows you to configure acoustic signals (buzzer), luminous signals (double intensity blue led) and the output contact (latching or momentary).

To be completed with italian standard ICE Touch glass plate, with 1, 2 or 3 symbols, in white colour (GW 16 951 CB, GW 16 952 CB or GW 16 953 CB), black colour (GW 16 951 CN, GW 16 952 CN or GW 16 953 CN) or titanium colour (GW 16 951 CT, GW 16 952 CT or GW 16 953 CT).



TECHNICAL DATA		
Product code GW 10 907		
Power supply voltage	230V ac - 50 Hz	
Output contact	NO relay (with potential 230Vac)	
Load	halogen and incandescent lamps: 500W	
	energy savings lamps: 100W (max 4 lamps)	
	uncompensated fluorescent lamps: 100W	
Dimensions	1 Chorus module	

NOTE: for all the load types not indicated in the table, use an auxialiary relay.

WARNINGS
• The product must be protected by a F2.5AH 250Vac fuse with high breaking capacity, positioned on the power supply line.



#### Touch dimmer module

The quick touch (or brushing) produces switch-off or load command at the pre-set (memory) value. The prolonged touch (or brushing) produces load adjustment; this action can also be carried out from NO remote push-buttons and Touch command duplicator modules. A simple programmation allows you to configure acoustic signals (buzzer) and luminous signals (double intensity blue led).

To be completed with italian standard ICE Touch glass plate, with 1, 2 or 3 symbols, in white colour (GW 16 951 CB, GW 16 952 CB or GW 16 953 CB), black colour (GW 16 951 CT, GW 16 951 CT, GW 16 953 CT).



#### Touch command duplicator module

The Touch command duplicator module can only work with the Touch one-way switch and dimmer modules.

The command duplicator modules connected to the Touch products behave as NO push-buttons, with the distinctive feature of maintaining the technical and design characteristics of the system unaltered. The quick and/or prolonged touch (or brushing) produces the cyclical activation of the load (by means of a Touch dimmer or one-way switch modules). A simple programmation allows you to configure acoustic signals (buzzer) and luminous signals (double intensity blue led). It is not possible to understand the load status from the command duplicator.

To be completed with italian standard ICE Touch glass plate, with 1, 2 or 3 symbols, in white colour (GW 16 951 CB, GW 16 952 CB or GW 16 953 CB), black colour (GW 16 951 CN, GW 16 952 CN or GW 16 953 CN) or titanium colour (GW 16 951 CT, GW 16 952 CT or GW 16 953 CT).

					TECHNICAL DATA
	I MON	Connection tern	ninals:	Product code	GW 10 909
				Power supply voltage	230V ac
	<u>p ╚─₩─</u> ┛ g	Power supply:	N - Neutral	Dimensions	1 Chorus module
UP 企		Output:	L - Phase P - Remote command		

GW 10 909

WARNINGS

• The product must be protected by a F fuse with high breaking capacity, positioned on the power supply line.



#### **ELECTRONIC PUSH-BUTTONS**

#### Introduction

The electronic push-buttons are an innovative range of modular devices, characterised by their minimum stroke and light, silent activation. Suitable for both conventional and domotic electric systems. The range includes a illuminated 230V AC push-button (GW 1X 912), a illuminated push-button for BUS inputs (GW 1X 913), a double arrow push-button (GW 1X 914) and a universal push-button (GW 1X 915).

#### **Backlit electronic push-button**

The generic push-button for 230V AC applications is specifically designed to command bistable relays, electronic one-way switches for heavy loads, or dimmers with a remote control input. Equipped with amber localisation LED.



#### **Backlit push-button for BUS inputs**

The push-button for BUS inputs is designed for KNX BUS contact interface connections. Equipped with two-colour LED (for night-time localisation or load status signalling).



TECHNICAL DATA		
Product code GW 10 913 - GW 12 913 - GW 14 913		
Type of contact Potential-free		
Type of load	BUS contact interfaces	
LED	Two-colour: amber/green - the colour can be chosen using the selector. Can be programmed to act as a night-time localisation indicator light, or to show the load status	
Dimensions	1 Chorus module	



# **Double electronic push-button**

The double push-button for roller shutters is designed for the connection of KNX BUS contact interfaces, or electronic control panels for moving the roller shutters.



#### Universal electronic push-button

The push-button is suitable for KNX BUS contact interface connections or the command of bistable relays, electronic one-way switches for heavy duty loads or dimmers with a remote control input.



TECHNICAL DATA		
Product code GW 10 915 - GW 12 915 - GW 14 915		
Type of contact	4A (AC1) - 230V ac	
Type of contact	Potential-free	
Type of load	Relay	
	Dimmer (with remote control input)	
	Bus contact interfaces	
Diemnsions	1 Chorus module	

DOWN channel

GW 14 915



#### **CLIMATE CONTROL**

#### Timed thermostat - daily/weekly programming

The timed thermostat allows you to automatically control the weekly temperature and timing within the place of installation, together with the heating and air-conditioning systems.

- Powered by mains voltage
- Relay output contact for commanding the boiler, air-conditioner, zone solenoid valve, etc.
- LCD display with white backlight (the backlighting is activated every time one of the button-keys is pressed, and switches off 5 seconds after the last touch)
- Programming on a weekly basis (a programme for 7 days with hourly profiles independently configurable for each day)
- Setting of hourly profile on 24-hour basis, with 3 different temperature levels (T1, T2, T3) and profile display
- Programming of times with a resolution of 15 minutes without a limit in the number of daily changes
- Residual current circuit breaker for adjustment can be set and differentiated for HEATING and AIR-CONDITIONING
- PARTY and HOLIDAY functions for programming special functioning speeds of different duration periods
- Functioning modes that can be set: AUTOMATIC / MANUAL / OFF
- Possibility to select the system thermal gradient self-learning function. This function optimises the heating anticipation (up to 2 hours) in order to guarantee the set temperature right from program start;
- Rechargeable buffer battery.

Reference standards: EN 60730-1; EN 60730-2-7, EN 60730-2-9



**TECHNICAL DATA** 230V AC 50/60Hz Power supply voltage Dimensions 2 modules **Output contact** 1NO/NC with potential-free contact 5A(AC1) / 2A(AC15) 250V AC **Operating temperature** -5 to +45°C **Detected temperature display range** 0 to +45°C +5 to +40°C Adjustment range Tolerance ±0.5°C to 20°C **Reserve charge** 48 hours

GW 10 703 - GW 12 703 - GW 14 703



#### Wiring terminals

Power supply: L - Phase N - Neutral

Output relay: 1 - NO contact 2 - NC contact 3 - Common

Serial line: 4 - TX

5 - GND (common) 6 - RX





#### Wall-mounting timed thermostat - daily/weekly programming - battery-powered

The timed thermostat allows you to automatically control the weekly temperature and timing within the place of installation, together with the heating and air-conditioning systems.

- Powered with 3 alkaline batteries (1.5V AAA)
- Relay output contact for commanding the boiler, air-conditioner, zone solenoid valve, etc.
- Programming on a weekly basis (a programme with hourly profiles independently configurable for each day of the week)
- Setting of hourly profile on 24-hour basis, with 3 different temperature levels (T1, T2, T3) and profile display
- Programming of times with a resolution of 15 minutes without a limit in the number of daily changes
- Residual current circuit breaker for adjustment can be set and differentiated for HEATING and AIR-CONDITIONING
- PARTY and HOLIDAY functions for programming special functioning speeds of different duration periods
- Functioning modes that can be set: AUTOMATIC / MANUAL / OFF
- Possibility to select the system thermal gradient self-learning function. This function optimises the heating anticipation (up to 2 hours) in order to guarantee the set temperature right from program start;

The device can be surface-mounted (fixed with plugs) or installed on a 3-module flush-mounting box.



#### Reference standards: EN 60730-1; EN 60730-2-7, EN 60730-2-9

GW 10 701 - GW 14 701

TECHNICAL DATA			
Power supply 3 alkaline-type batteries (1.5V AAA)			
Average battery life:	minimum 1 year		
Dimensions	130 x 92 x 23mm		
Output contact 1NO/NC with potential-free contact			
	5A(AC1) / 2A(AC15) 250V AC		
Operating temperature	-5 to +45°C		
Detected temperature display range	0 to +45°C		
Adjustment range	+5 to +40°C		
Tolerance	± 0.5°C to 20°C		

#### Base for fixing on wall with terminal block





# Thermo ICE WiFi thermostats with plate in glass - for flush-mounting

The thermostats manage the temperature of the room where they are installed. The temperature is regulated by commanding the solenoid valve or the heating/ cooling system with a two-way logic, via the local relay.

The thermostats, realized with a glass surface, are equipped with a white LED backlit display, touch commands, circular touch slider, RGB signalling LED and include a sensor for measuring the room temperature and a proximity sensor for activating the back-lighting when the user approaches it.

- 2 types of operation: heating and cooling with independent control algorithms;
- 2 types of control: HVAC or Setpoint;
- 4 HVAC operating modes: OFF (anti-freeze / high temperature protection), Economy, Precomfort and Comfort, with a specific parameter for regulating the temperature for each mode;
- control algorithms for 2-way systems: two ON/OFF points or PI proportional with PWM control;
- 1 relay output with NO/NC contact;
- 1 input for a potential-free contact for the window contact function;
- 1 input for temperature NTC external sensor (e.g: protection sensor for underfloor heating).

The thermostats Thermo ICE WiFi have a built-in WiFi interface for the connection to domestic WLAN/internet and the management via APP. Thanks to the «THERMO ICE» APP, it is possible to control the thermostat and display its operating state, set the parameters, define the temperature profiles (timed thermostat function), enable the self-learning function for the daily profiles.

The «Thermo ICE» APP is available for smartphone and tablet running iOS and Android operating systems and requires a Cloud connection to reach the thermostat.

Reference standards: EN 60730-2-9





GW 16 972 CB - GW 16 972 CT - GW 16 972 CN

# Chorus - domestic range







- 1 NC output
- 2 NO output
- 3 Common wire for outputs
- 4 Common wire for inputs
- 5 Auxiliary input for potential-free contact
- 6 Input for temperature external sensor
- 7 Power supply 12-24Vac/dc
- 8 Power supply 12-24Vac/dc

TECHNICAL DATA		
Power supply	12-24Vac/dc Consumption max. 4.5W (@12-24Vac) - max. 3.6W (@12-24Vdc)	
Power consumption	max. 2W (Thermo ICE) - 6W (Thermo ICE WiFi)	
1 input for a potential-free contact for the window contact function (cable length max. 10m)		
Inputs	1 input for temperature external sensor (es: GW 10 800), type NTC 10K	
	1 NO/NC with potential-free contact	
Outputs	5A (cosφ=1) 250Vac	
Temperature adjustment range	+5 ÷ +40°C	
Dimension of glass plate (BxHxP)	123x95x11 mm	
Mounting	In 3-gang rectangular, square or round flush-mounting boxes	
Fixing support	In metal (included)	
WiFi connection	WiFi connection     2.4 GHz IEEE 802.11 b/g/n	

#### Thermostat

The flush-mounting thermostat commanding a boiler and/or an air-conditioner regulates the temperature in an easy, efficient way.

The choice of temperature is made by simply rotating the knob and positioning it on the value you want.

The frontal selector allows you to select 3 different functioning modes.

- SUMMER (air-conditioner) the output will be active when the temperature recorded by the thermostat is greater than the value indicated by the knob.
- WINTER (boiler) the relay output will be active when the temperature recorded by the thermostat is lower than the value indicated by the knob. In winter
  mode, the antifreeze function is active (pre-set at +5°C).
- OFF the output is never activated.

Reference standards: EN 60730-1;EN 60730-2-9



Selector: Summer — OFF Winter — Adjustment knob — Two-colour LED

TECHNICAL DATA		
Power supply voltage	230V AC	
Power absorbed	2 VA	
Adjustment range	+5 to +35°C	
Hysteresis	1°C	
Output contact	1NO/NC 8A(AC1) 250V AC	

GW 10 705 - GW 12 705 - GW 14 705



The thermostat is fitted with two LEDs; the yellow light has a localisation function, while the green one indicates the activation of the output.



#### SAFETY

# **Gas detectors**

The gas detectors reveal the presence of substances (CH<sub>4</sub>/GPL) that are dangerous for the domestic environment where they are installed

- Indicator lights and acoustic alarm signalling
- Closure of a solenoid valve, via relay
- Indicator lights for malfunctioning of sensor or device
- Device operating test function

The closure of the solenoid valve via the relay is carried out approximately 20s after the start of the alarm situation.

The push-button allows you to carry out the operational test: when pressed, the red LED lights up (alarm signalling), the buzzer sounds and, after about 20s, the relay is activated. Upon the release of the push-button, the signalling is immediately deactivated.

The detectors can be powered through the 12V power supply unit GW10720.

Owing to the particular thermal sensitivity of the LPG sensor, you are advised to position it far from the power supply unit, and apply a blanking module.

#### Reference standards: CEI 216-8





**Connection terminals** 

L-N - 12V AC/DC power supply 1 - Common 2 - NC contact 3 - NO contact 4 - NO contact

TECHNICAL DATA		
Power supply voltage	12V AC/DC	
Power absorbed	2 VA	
Alarm threshold	9% LIE (lower explosive limit)	
Alarm sound level	85 dB at 1m	
Operating temperature	+5 to +40°C	
Relative environmental humidity	+30 to +90% without condensation	
Output contact in switching:	1 NO/NC 10A (NO)/3A (NC) 250V AC	
Fixing	flush-mounting on CHORUS support	
Dimensions	2 modules	
Lifespan of device	5 years from when first powered	

#### **Connection diagram**



# Correct positioning of detectors







# 12V power supply unit

Insulation transformer suitable for the power supply of gas detectors (methane and LPG) and WiFi Thermo ICE thermostats. Internally protected against overloading, short-circuiting and excessively high temperatures.



GW 10 720

Wiring	terminals

**Power supply:** L - Phase N - Neutral

**12V output:** +12V - Positive -12V - Negative

TECHNICAL DATA		
Power supply voltage	110/240Vac - 50/60Hz - 150mA	
Output voltage	12V dc - 300mA	
Dimensions (mm)	52x33x17	



#### Anti-flood system with wireless sensor

The anti-flood system consists of one or more flood alarms (GWA1514) that reveal the presence of water and an actuator (GWA1521) for the control of the solenoid valve. The devices, that communicate via the Zigbee protocol in a wireless mode, need to be manually binded each other with a simple procedure using the programming buttons and the dip-switches.

The flood alarms can be freely positioned on the floor or can be wall mounted thanks to their specific accessories (GWA1541); the actuator can be easily located on the bottom of flush-mounted boxes, junction boxes or coupled to a specific Chorus blind module (GW1x750).

In the event of flooding, the flood alarms send luminous and acoustic signals and, through the actuator, they command the closure of the solenoid valve contact. The contact can only be reactivated locally, pressing a push-button wired to the actuator.

The flood alarms are battery operated: the necessity to replace the battery is reported by short acoustic and luminous notifications.

Reference standards: IEC 60669-2-1, EN 300 328, 2014/53/UE

# Zigbee flood alarms



GW A1 514

#### Zigbee / IEE 802.15.4 **Radio protocol** 2.4 GHz Frequency +8 dBm **Output power** Power supply CR123 replaceable Siren 85 dB @3m **Degree of protection** IP20 **Operating temperature** 0 ÷ +50 °C Ø 60 x 37mm Dimensions Certifications Zigbee

**TECHNICAL DATA** 

#### **Zigbee actuator**





#### **TECHNICAL DATA Radio protocol** Zigbee / IEE 802.15.4 Frequency 2.4 GHz **Output power** +3 dBm **Power supply** 230V ac - 50 Hz 10A NA - Potential-free **Relay contact Terminal blocks** With screws - Section max 1,5mm<sup>2</sup> **Degree of protection** IP20 -5 ÷ +45 °C **Operating temperature** Dimensions 42x40x20mm Certifications Zigbee

# Installation characteristics

**Connection diagram** 



Water sensor accessory



Accessory for the wall mounting of the GWA1514 flood alarm.



#### HOTEL COMPONENTS

# "Do not disturb" and "Make up the room" interchangeable button keys and light signalling

Interchangeable button keys with "Do not disturb" and "Make up the room" pad printings, to be used to customize the Chorus command devices (eg: switches, push-buttons, etc.) in the hotel rooms.

The indicator lamp unit, located outside the room, is used to inform the service staff about the customer's will not to be disturbed or to clean the room. The device can accept two LED signalling units, not included (eg: GW10881, GW10882, etc.).



Interchangeable button DND GW 10 731 - GW 12 731 - GW 14 731



Interchangeable button MUR GW 10 732 - GW 12 732 - GW 14 732



Interchangeable button DND + MUR GW 10 733 - GW 12 733 - GW 14 733



Indicator lamp unit DND + MUR GW 10 736 - GW 12 736 - GW 14 736