

68 Q-MC energy and service distribution terminals

The 68 Q-MC range is the innovative energy and service distribution system for environments such as tourist harbours, campsites and public spaces (trade fairs, markets etc.), combining maximum reliability technical performance and an attractive design for shape and geometries. The 68 Q-MC range offers maximum mechanical resistance and total reliability over time with respect to atmospheric and chemical agents, thanks to the unpainted technopolymer coating with a self-extinguishing level of 650° according to the Glow wire test (CEI EN 50298), and the use of stainless steel for all metal parts. All terminal versions are equipped with cable rails in order to avoid accidental tugging of the cable. The various versions of the Q-MC distribution terminals conform to the EN 60439-1 Standard, so each terminal (whether already wired or to be assembled following the Pre-established Construction System rules) is certified as AS (Standard Equipment). The system's extreme modular structure is a very important feature, as it allows the execution of possible modifications or variations of the various implementations while keeping design, safety and functionality features unaltered.

Range of temperature of empty version: -25 to +65°C

Technical data and compliance with Standards

Board type	Reference Standards	Degree of protection (IP)	Protection	Impact resistance at ambient temperature (IK code)	Resistenza al calore	Resistance to abnormal heat and fire
			Indirect contacts		Thermo-pressure with ball (°C)	Glow Wire Test (°C)
Empty terminals	EN 62208	IP 56		IK 10	70	650
Assembled and wired terminals (AS)	EN 60439-1	IP44 / IP55/56 (depending on socket-outlets)		IK 10 (shell) IK 09 (installed components)		850 (active parts) 650 (passive parts)

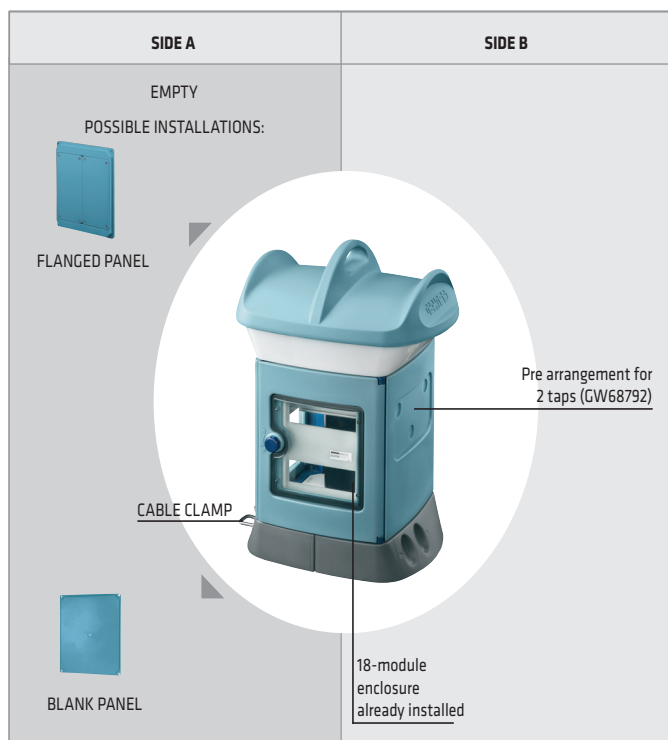
BEHAVIOUR WITH CHEMICAL AND ATMOSPHERIC AGENTS

Saline solution	Acids		Bases		Solvents				Mineral oil	UV rays
	Concentrated	Diluted	Concentrated	Diluted	Hexane	Benzol	Acetone	Alcohol		
Resistant	Limited resistance	Resistant	Limited resistance	Resistant	Limited resistance	Limited resistance	Limited resistance	Resistant	Limited resistance	Resistant

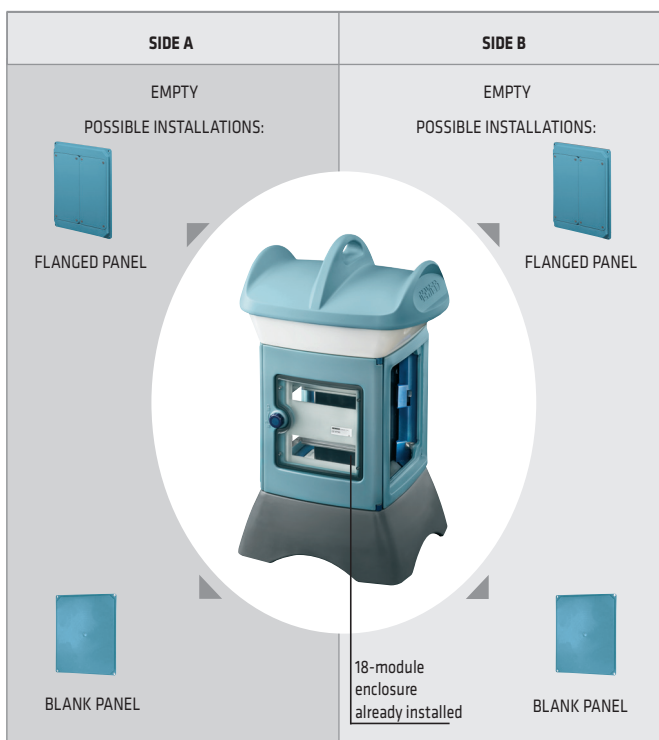
Compact distribution terminals

Panel modular structure

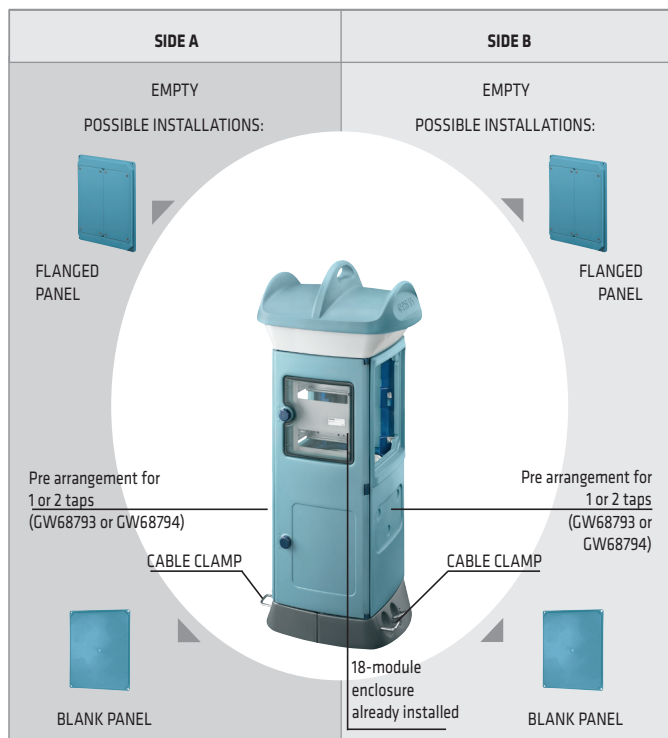
Q-MC 16 B COMPACT TERMINAL WITH SINGLE-FACE TAKE-OFF
GW 68 701 A - GW 68 701 W



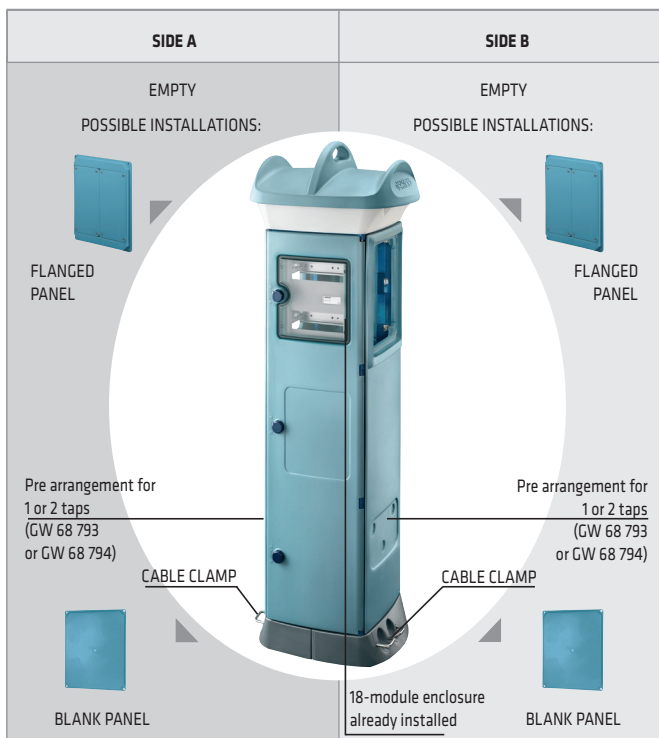
Q-MC 16 B AND Q-MC 16 T COMPACT TERMINALS WITH DOUBLE-FACE TAKE-OFF
GW 68 711 A - GW 68 712 A AND GW 68 711 W - GW 68 712 W



Q-MC 63 B COMPACT TERMINAL WITH DOUBLE-FACE TAKE-OFF
GW 68 713 A - GW 68 713 W



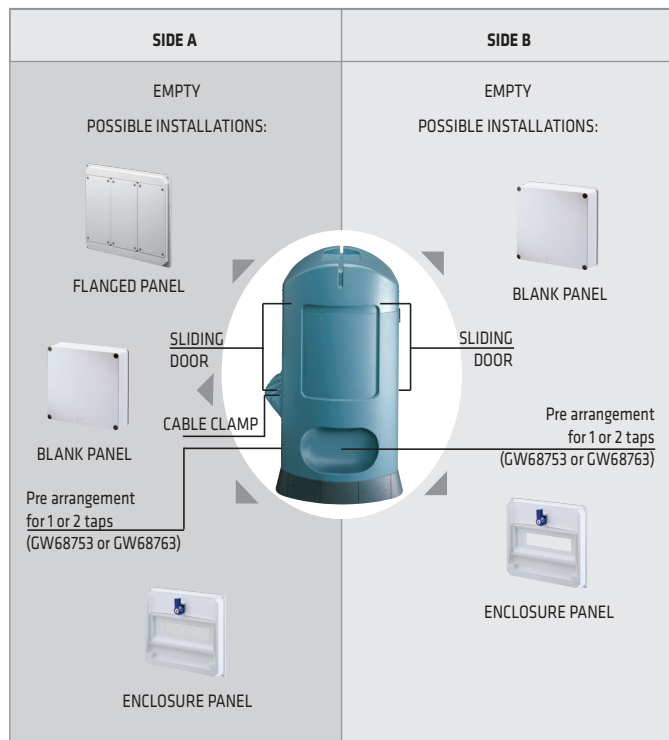
QM-C 63 C COMPACT TERMINAL WITH DOUBLE-FACE TAKE-OFF
GW 68 714 A - GW 68 714 W



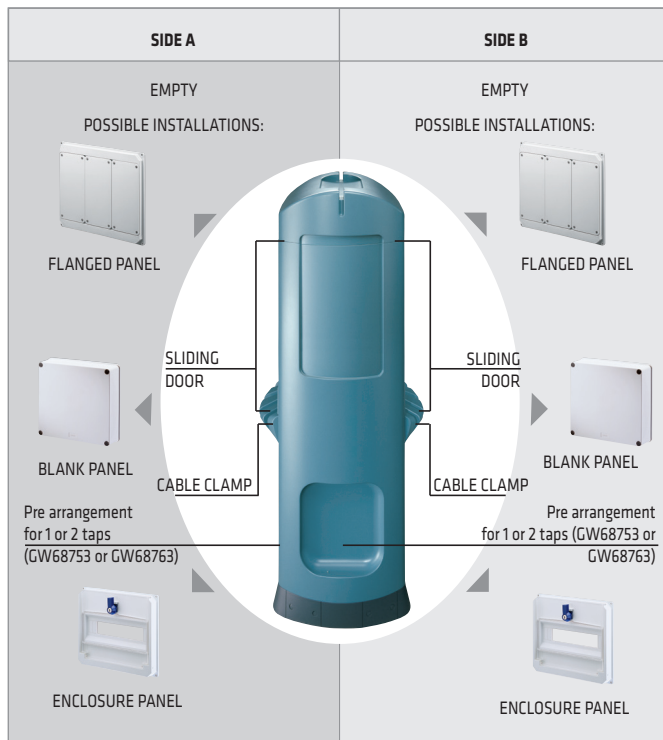
Standard and high capacity distribution terminals

Panel modular structure

Q-MC 125 B STANDARD TERMINAL WITH SINGLE-FACE TAKE-OFF
GW 68 715 A - GW 68 715 W



Q-MC 200 B HIGH CAPACITY TERMINAL WITH DOUBLE-FACE TAKE-OFF
GW 68 717 A - GW 68 717 W



Characteristics of prepaid and centralised systems

The prepaid system is made up of the following components:

- 68 Q-MC terminals;
- console for programming transponder keys;
- PC with dedicated software to program transponder keys.

In order to achieve the centralised management system, it is necessary to connect the terminals to the PC with a serial data cable. The PC must be equipped with the special USB/RS485 converter and the specific centralised management software (both available from the catalogue - code GW 68 995 for systems up to 75 terminals, and code GW 68 993 for systems with more than 75 terminals). From a PC, installed for example in the facility reception area (port or campsite), it is possible to monitor and control the terminals.

More specifically, the main functions of a centralised system are:

- Status of power socket-outlets: open/closed, protection device triggered, instantaneous consumption (kW) and total consumption (kWh).
- Status of water outlets: open/closed, instantaneous consumption (m³/s) and total consumption (m³).
- Consent from central PC to use the services (energy and/or water); service action/deactivation for water and energy supply must always be carried out with the transponder key.
- Sending of brief messages to the users; they can be read when accessing with transponder keys.
- Management of a client database, integrable with other application software packages for managing doors and systems.

For services greater than 125A, it is necessary to operate the one-way switch after enabling the service with the transponder key.

PREPAID AND CENTRALISED SYSTEM - TERMINAL COMPONENTS

Electronic devices on the terminals are made up of the following components:

- monitoring and control unit (electronic card on board distribution pillar);
- graphic LCD display of 128x64 pixels;
- reading area for transponder key;
- contactors for activating the energy supply (versions up to 125A);
- solenoid valves for enabling the water supply, and volumetric contactors for calculating consumption

PREPAID AND CENTRALISED SYSTEM - TERMINAL TECHNICAL DATA

Power supply voltage:	230V AC 50Hz
Absorbed power without load:	10V A
Ambient operating temperature: ⁽¹⁾	-20°C ÷ +65°C
Ambient storage temperature:	-30°C ÷ +70°C
Humidity:	max. 98% (non-condensing)
Degree of protection:	IP 55/56

⁽¹⁾ the control unit can operate at higher working temperatures because the internal temperature is always higher than the external one

EXAMPLE OF OPERATION

The operations that user must carry out in order to activate a service are:

- 1 - bring the transponder key near the reading area;
- 2 - select the circuit and type of service required (only energy/ only water / both):
each selection is made by leaving the transponder key positioned near the reading area; the selectable items are displayed in a sequence;
to select, remove the key from the reading area when the required item is displayed; a "beep" will confirm selection.

The display shows:

- the circuit activated and the services supplied;
- the available credit (only with prepaid system).

To deactivate the circuit, return the key to the reading area, select the type of service to be deactivated, and confirm; a "beep" will confirm the operation.

CENTRALISED SYSTEM TECHNICAL DATA

- Maximum number of terminals: max. 250 for each line. The system can be managed on several lines by using several USB ports or adding a USB HUB.
- Communication between PC and terminals: Modbus/RS485 standard
- Connection cable between PC and terminals: shielded with a pair of 0.22mm² twisted cables with an impedance of 120 Ω (consult SAT for the detailed electrical characteristics)
- Maximum length of each line: 1200m in ideal conditions. For greater lengths, it is possible to use signal repeaters (consult SAT)

ENERGY AND SERVICES DISTRIBUTION PEDESTALS IN INSULATING MATERIAL

Prepaid electronic management - "Stand-alone" operating system

Terminals are independent from the central PC (located in the reception area).



Reception desk

+



Transponder key programming console

+



Transponder key

▶ The system allows:

- local enabling/disabling of energy and water supply;
- calculation of energy and water consumption for each service, with the relative credit decrease.



Centralised electronic management - remote monitoring operations

The terminals are connected to the central PC by data BUS.



Reception desk

+



Transponder key programming console

+



Transponder key

+

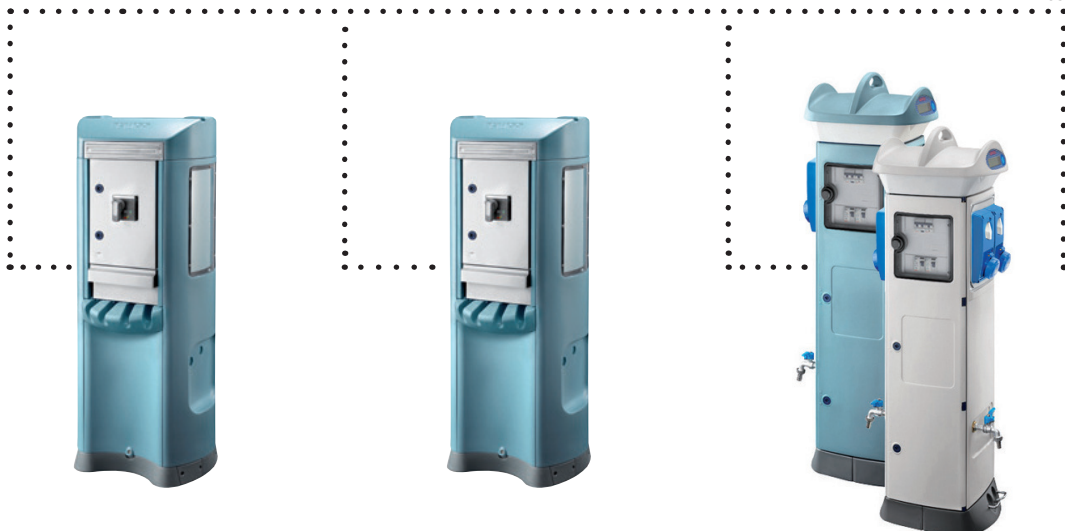


Kit for centralised management

▶ The system allows:

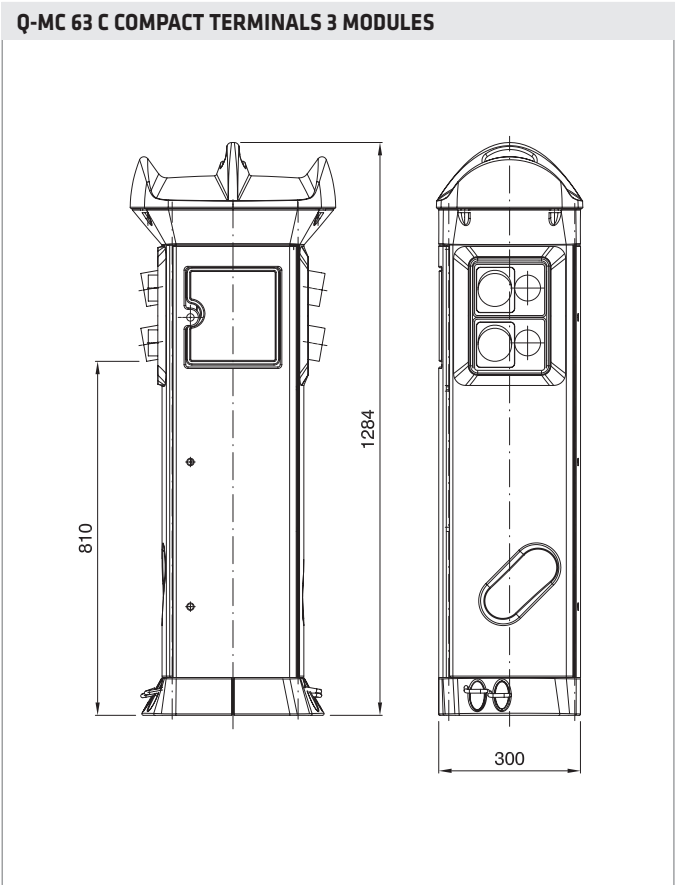
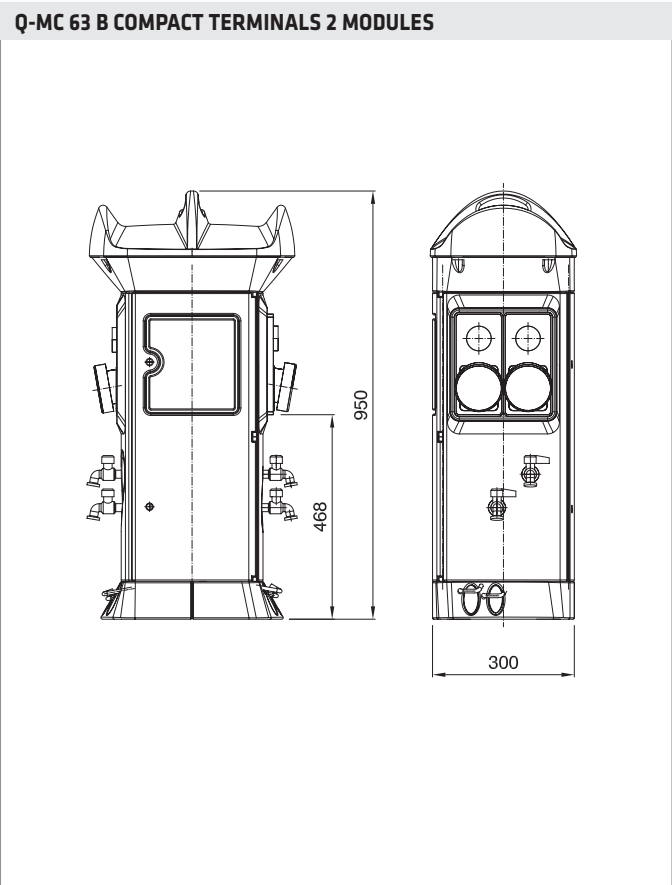
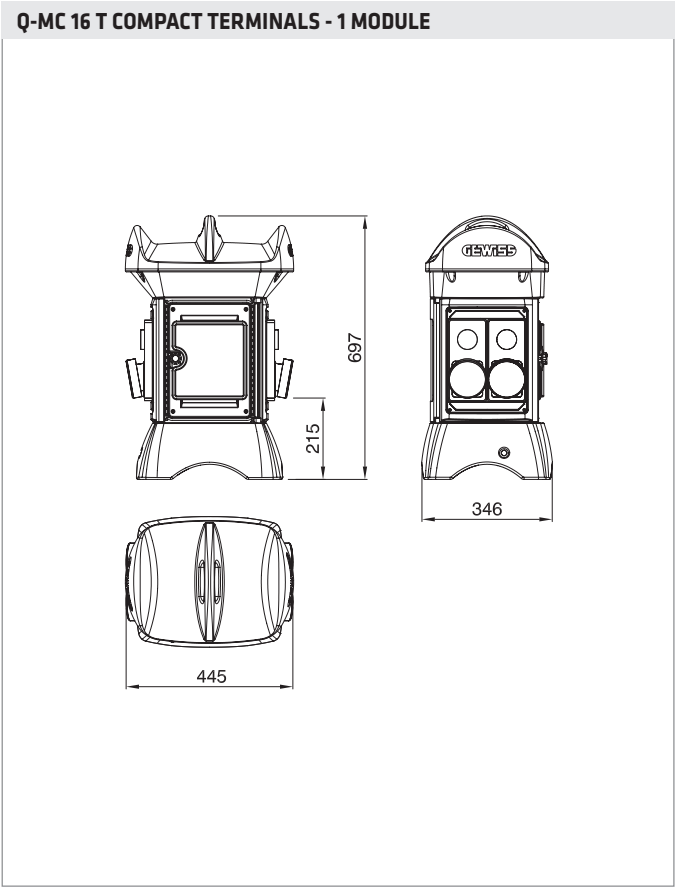
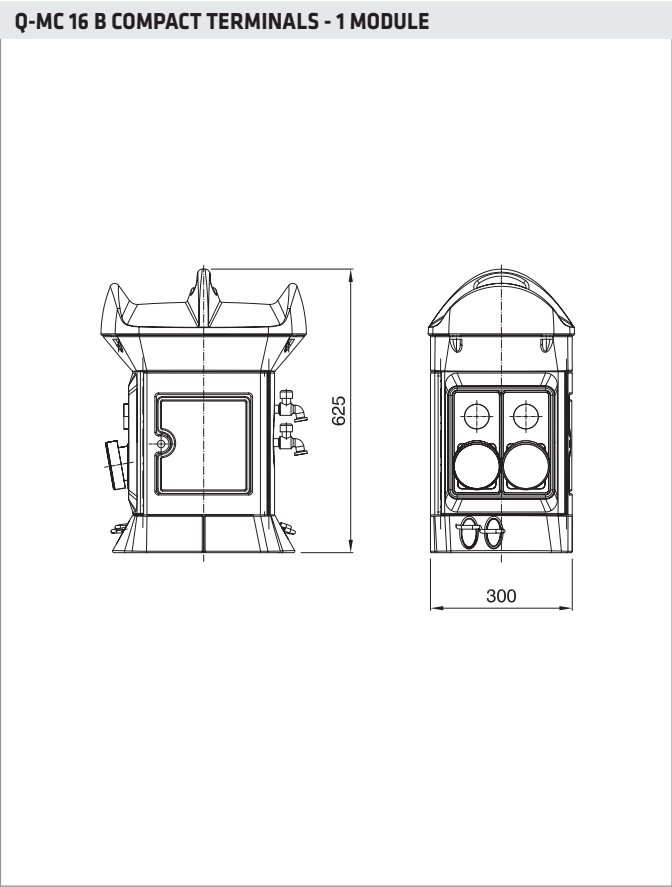
- remote consent for energy and water supply;
- remote calculation of energy and water consumption;
- supervision of operation status for each terminal;
- management of client database and sending of brief messages.

DATA BUS



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

Dimension tables - Compact pedestal



FIXING BASE WITH CENTRE DISTANCES

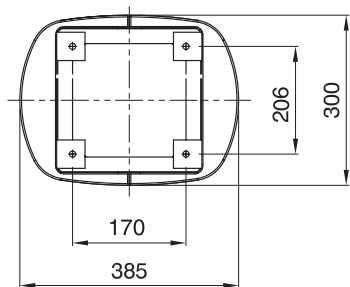


PLATE FOR PIERS

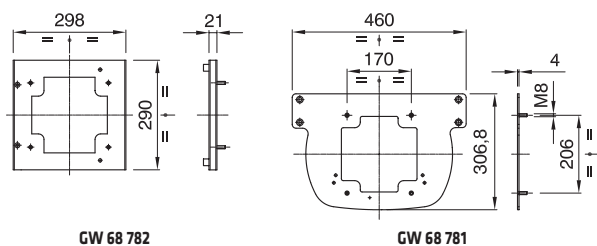
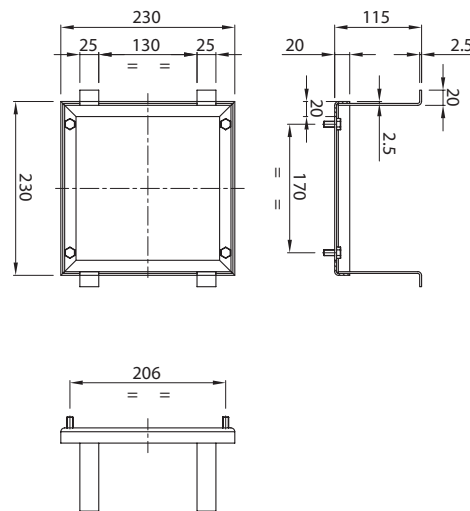
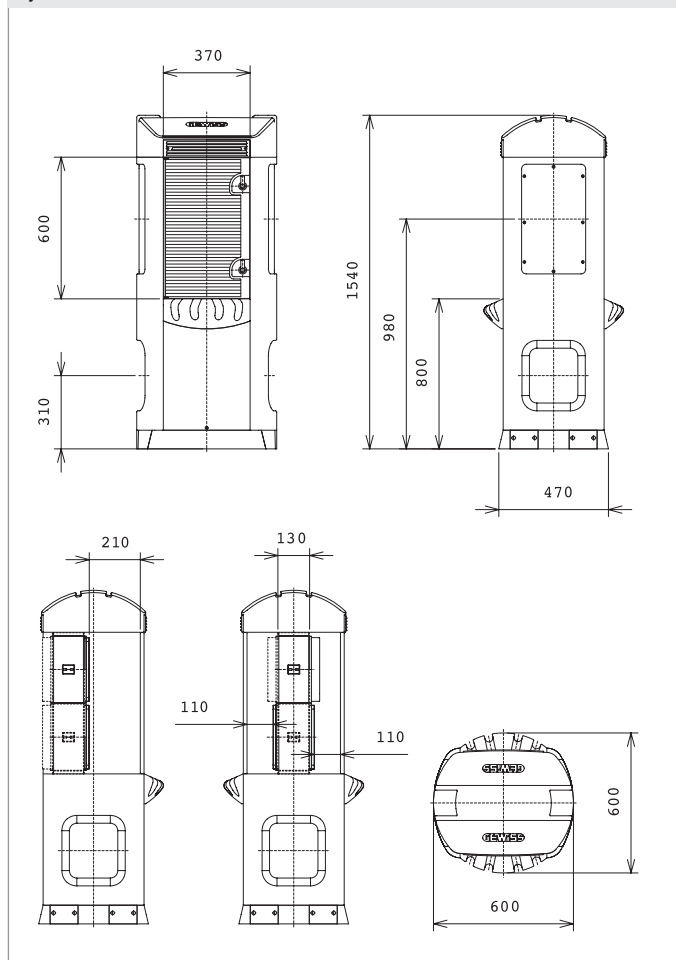


PLATE FOR CONCRETE - GW 68 796

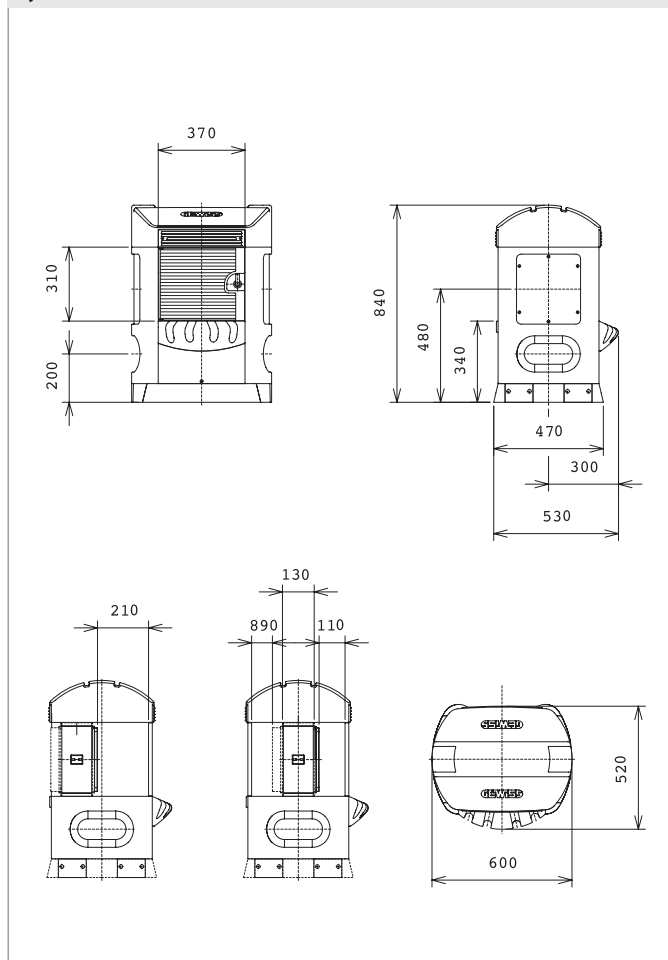


Dimension tables - Standard and high capacity pedestal

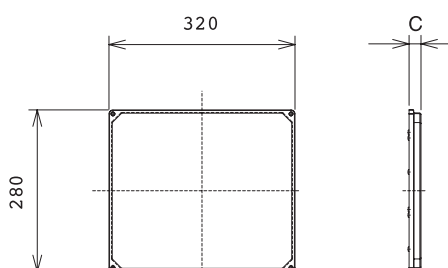
Q-MC 200 B HIGH CAPACITY TERMINALS



Q-MC 125 B STANDARD TERMINALS

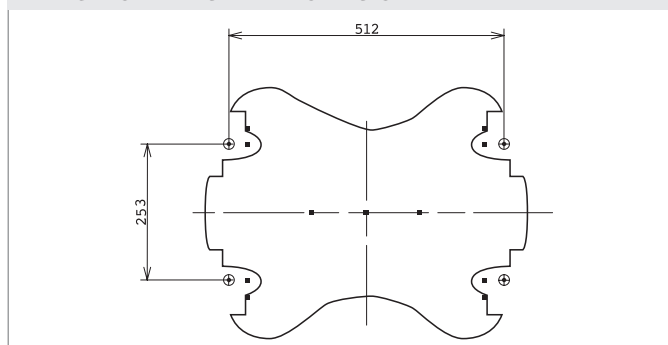


PANELS



Panel code	Dimension C (mm)
GW 68 731 W	21
GW 68 732 W	
GW 68 733 W	
GW 68 734 W	
GW 68 735 W	
GW 68 736 W	110
GW 68 737 A	43
GW 68 737 W	
GW 68 741 A	
GW 68 741 W	

FIXING BASE WITH CENTRE DISTANCES



FIXING PLATE WITH CONCRETE - GW 68 761

