

## 68 ACS construction site board system

Range of construction site boards complying with the CEI 64-8/7 Standard for applications on construction and demolition sites. The directives of CEI 64-8/7 specify that boards for electricity distribution on construction sites must comply with EN 61439-1 and EN 61 439-4, and extend this application to the following systems:

- new build;
- renovation, extension and demolition of existing buildings;
- public works;
- earth moving works;
- similar works.

The very name of an ACS (Assemblies for Construction Sites) board indicates that the product complies with the EN 61439-1 and EN 61 439-4 Standard. These boards are available in the Q-BOX, Q-DIN, COMBIBLOC, QMC and QP versions, fully factory-wired, and are supplied with the relative certification and wiring diagram. Alternatively, it is possible to wire empty boards and obtain certification based on the configurations of the Pre-established Construction System.

## Technical data and compliance with standards

Board type	Reference Standard	Degree of protection (IP)	Insulation provided by the shell	Shell			Devices on main circuits	Accessories supplied
				Impact resistance at ambient temperature (IK code)	Thermo-pressure with ball (°C)	Glow Wire Test (°C)		
CDK	EN61439-4	IP65	☐	IK 09	70	650	Residual current circuit breaker with overcurrent protection	Emergency push-button with green indicator lamp
QP		IP66		IK 10	200	960	Residual current circuit breaker with overcurrent protection	Emergency push-button with green indicator lamp, handle for transportation, metal surface-mounting brackets
Q-BOX 4-6		IP55		IK10	70	650	Residual current circuit breaker with overcurrent protection	Emergency push-button with green indicator lamp, metal surface-mounting brackets
Q-DIN		IP44 IP65		IK 09	70	650	Residual current circuit breaker with overcurrent protection	Supply cable length 4 meters with mobile plug
COMBIBLOC		IP55		IK 08	80	650	Residual current circuit breaker with overcurrent protection	Supply cable length 5 meters with mobile plug
QMC		IP56		IK 09	70	650	Residual current circuit breaker with overcurrent protection	Supply cable length 4 meters with mobile plug, and emergency push-button

**BEHAVIOUR WITH CHEMICAL AND ATMOSPHERIC AGENTS**



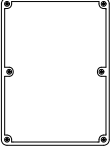
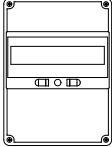
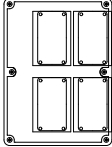
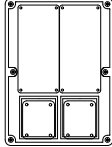
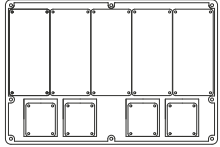
	Saline solution	Acids		Bases		Solvents				Mineral oil	UV rays
		Concentrated	Diluted	Concentrated	Diluted	Hexane	Benzol	Acetone	Alcohol		
Q-BOX	Resistant	Limited resistance	Resistant	Limited resistance	Resistant	Limited resistance	Limited resistance	Limited resistance	Resistant	Limited resistance	Resistant
Q-DIN	Resistant	Limited resistance	Resistant	Resistant	Resistant	Limited resistance	Not resistant	Not resistant	Limited resistance	Limited resistance	Limited resistance
Q-DIN 5 shockproof casing	Limited resistance	Not resistant	Limited resistance	Limited resistance	Resistant	Resistant	Resistant	Resistant	Resistant	Resistant	Resistant
COMBIBLOC	Limited resistance	Not resistant	Limited resistance	Limited resistance	Resistant	Resistant	Resistant	Resistant	Resistant	Resistant	Resistant
QMC	Resistant	Limited resistance	Resistant	Limited resistance	Resistant	Limited resistance	Limited resistance	Limited resistance	Resistant	Limited resistance	Resistant

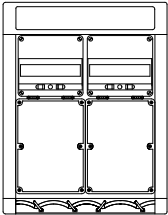
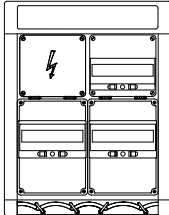
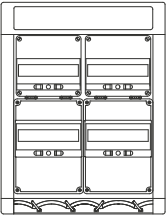
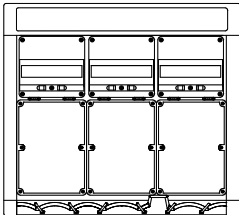
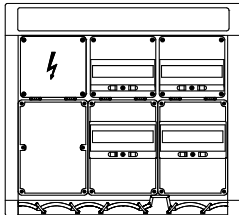
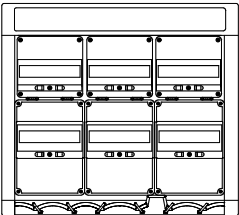
NOTES: for behaviour of QP and CDK type boards when exposed to chemical and atmospheric agents, please refer to the relevant sections of the catalogue: "46 QP range" and "40 CDK range".

**APPLICATION FIELD**

BOARD TYPE	CONSTRUCTION SITES SIZE			TYPE OF USE			GENERAL FUNCTION
	Small In ≤ 32A	Medium In ≤ 63A	Big In > 63A	Main board	Primary and secondary distribution	Final	
QP			X	X			- Measurement board - Main supply board
CDK	X			X			
		X		X			
Q-BOX	X				X	X	- Primary distribution board to supply other boards or fixed/mobile machinery
		X			X		
			X	X	X		
Q-DIN COMBIBLOC QMC 16T	X					X	- Secondary distribution board - final board for fixed/mobile machinery
		X				X	

Q-BOX boards enable a large number of socket-outlets to be housed simply by fastening them to the back plate of the board itself. In order to obtain even more complex configurations with a larger number of socket-outlets and more modular space, Q-BOX panels can be added; these are specifically designed to expand the solutions that can be achieved with these boards.

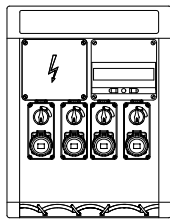
DISTRIBUTION BOARDS TYPE Q-BOX	ADDITIONAL PANEL FOR Q-BOX				
<p>Q-BOX 4 GW68465</p>   <p>Q-BOX 6 GW68466</p> 	<p>Blank panel GW68551</p> 	<p>12M enclosure panel GW68552</p> 	<p>Panel 4 x COMBIBLOC GW68554</p> 	<p>Panel 2 x 67IB + 2 x IEC GW68556</p> 	<p>Panel 5 x 67IB + 4 IEC GW68559</p> 
<b>No. max pf panels housable into Q-BOX board</b>					
	GW68551	GW68552	GW68554	GW68556	GW68559
GW68465	max. 2	max. 2	max. 2	max. 2	max. 1
GW68466	max. 3	max. 3	max. 3	max. 3	max. 1

POSSIBLE SOLUTION FOR MOUNTING MODULAR AND NOT MODULAR DEVICES				
<b>Q-BOX 4</b>	 <p>24 modules + space for not modular devices</p>	 <p>36 modules</p>	 <p>48 modules</p>	
	<b>Q-BOX 6</b>	 <p>36 modules + space for not modular devices</p>	 <p>48 modules + space for not modular devices</p>	 <p>72 modules</p>

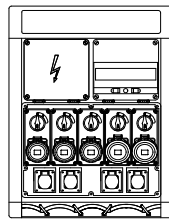
For technical information contact the Technical Assistance Service or visit [www.gewiss.com](http://www.gewiss.com)

**POSSIBLE SOLUTION FOR Q-BOX WITH 16/32A SOCKET-OUTLETS**

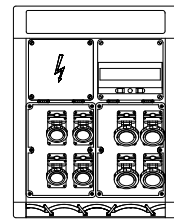
**Q-BOX 4**



12 modules +  
4 interlocked sockets 16/32A

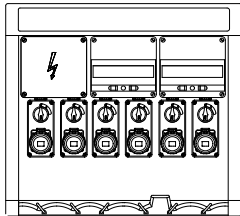


12 modules +  
5 interlocked sockets 16/32A +  
4 IEC sockets 16A or GW62392

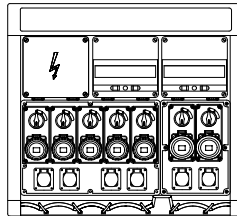


12 modules +  
8 interlocked sockets COMBIBLOC 16/32A

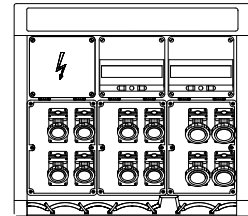
**Q-BOX 6**



24 modules +  
6 interlocked sockets 16/32A



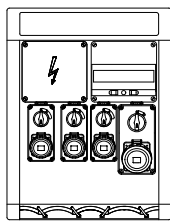
24 modules +  
7 interlocked sockets 16/32A +  
6 IEC sockets 16A or GW62392



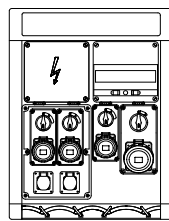
24 modules +  
12 interlocked sockets COMBIBLOC 16/32A

**POSSIBLE SOLUTION FOR Q-BOX WITH 16/32/63A SOCKET-OUTLETS**

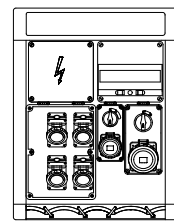
**Q-BOX 4**



12 modules +  
3 interlocked sockets 16/32A +  
1 interlocked socket 63A

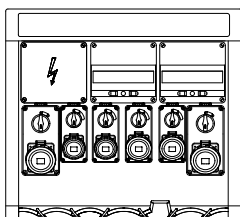


12 modules +  
3 interlocked sockets 16/32A +  
1 interlocked socket 63A +  
2 IEC sockets 16A or GW62392

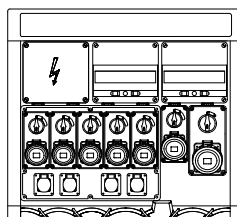


12 modules +  
4 interlocked sockets COMBIBLOC 16/32A +  
1 interlocked socket 16/32A +  
1 interlocked socket 63A

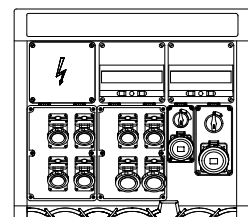
**Q-BOX 6**



24 modules +  
4 interlocked sockets 16/32A +  
2 interlocked sockets 63A



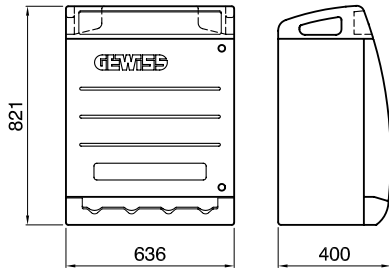
24 modules +  
6 interlocked sockets 16/32A +  
1 interlocked socket 63A +  
4 IEC sockets 16A or GW62392



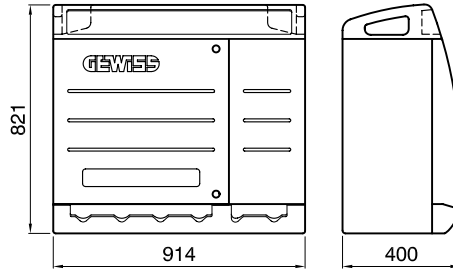
24 modules +  
8 interlocked sockets COMBIBLOC 16/32A +  
1 interlocked socket 16/32A +  
1 interlocked socket 63A

**Dimension tables**

**Q-BOX 4/6 BOARDS**

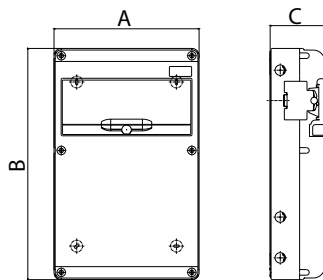


**GW 68 465**



**GW 68 466**

**Q-DIN BOARDS**

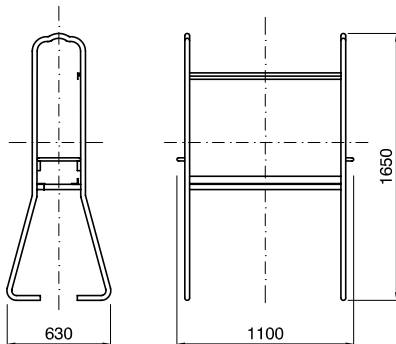


TIPO Q-DIN	A	B	C
Q-DIN 5	105	430	76
Q-DIN 5 WITH BOX	140	560	105
Q-DIN 10	220	435	76
Q-DIN 14	320	510	120
Q-DIN 20	450	560	120

(\*) NB: The values provided in the table refer to the dimensions of empty boards.

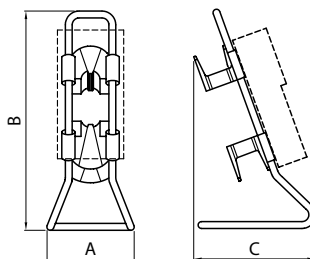
**FLOOR-MOUNTING SUPPORT**

Q-BOX 4/6 construction sites metal support



**GW 68 463**

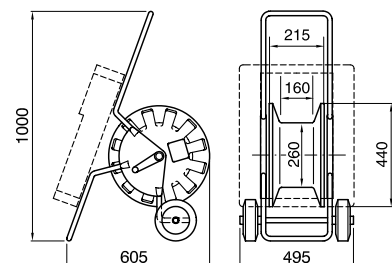
Q-DIN/COMBIBLOC construction sites metal support



CODE	FOR Q-DIN	A	B	C
<b>GW 68 431</b>	10	350	715	435
<b>GW 68 433</b>	14-20	350	964	520

NOTE: GW68433 suitable also for COMBIBLOC boards.

Matel carrier equipped with two wheels and rotating drum



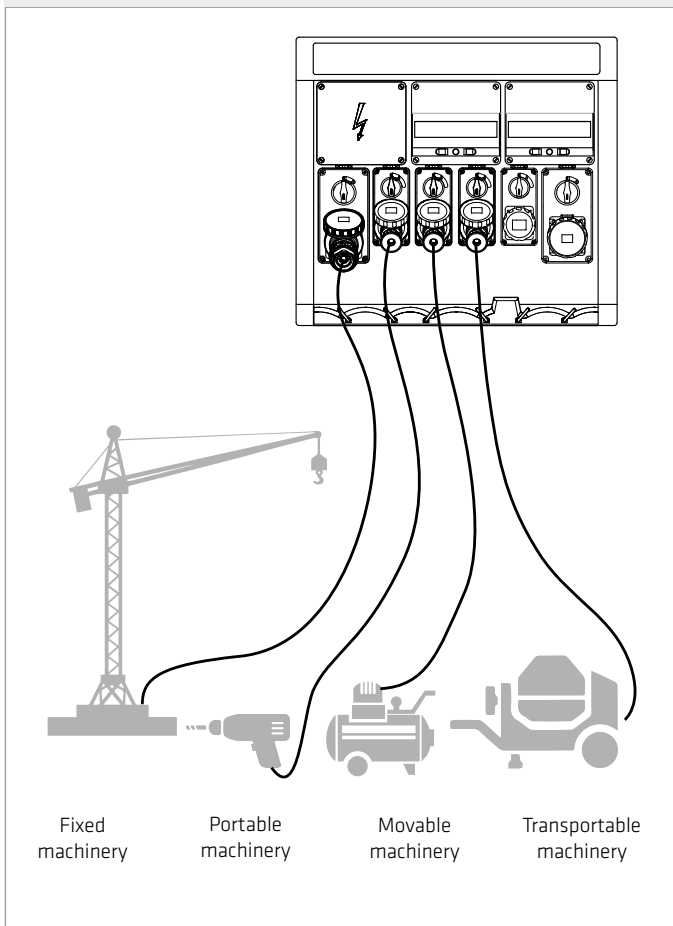
**GW 68 432**

## Reference standards:

Temporary systems at construction and demolition sites must be installed in accordance with international standard, following the instructions below:

- all boards must comply with Standard EN 61439-1 and EN 61439-4, and accordingly, must be of ACS type;
- at the site system origin point, i.e. immediately downstream of the supply point, a general sectioning and protection board must be fitted (e.g.: 68 QP ACS and 68 CDK ACS boards);
- construction site machinery must only be connected to final distribution boards (E.g.: 68 Q-BOX ACS and 68 Q-DIN ACS boards);
- the system downstream of the main board is to be considered as being of mobile type, and flexible cables with a sheath that is suitable for heavy duty applications must be used (H 07 RN - F or similar);
- in locations to which pedestrians or vehicles have access, the cables must be protected against mechanical damage, either by being buried, suspended, run under protective walkways or protective tiles, or in strong cement or iron conduits;
- the cables that supply the machinery can be directly attached to the ACS distribution boards, to mobile sockets and that are equipped with a coupling device, or to socket-outlets of any type that are incorporated into a cable winder (EN 60309-2);
- all plug socket-outlets with  $I_n \leq 32A$  used on construction sites must be protected against indirect contact by residual current circuit breakers with an  $I_{\Delta n}$  not exceeding 30mA; it is not necessary for every single socket-outlet to have its own circuit breaker;
- any final ACS distribution board socket-outlet must have its own overload protection, unless a general protection device is fitted upstream with a rated current not exceeding that of the smaller socket-outlet;
- plug socket-outlets not contained within the final distribution board (mobile sockets or sockets fitted onto a cable winder) must have a degree of protection of at least IP44;
- as an alternative to protection via residual current circuit breaker with  $I_{\Delta n} \leq 30mA$ , socket-outlets protected by an insulation transformer can also be used: where suitable (for power supply to portable lamps), extra low voltage safety socket-outlets (SELV) can be used; these must be 2P or 3P 12h industrial-type devices (40-50V) or without reference (20-25V), (see the IEC 309 range).

### DISTRIBUTION BOARD MACHINERY CONNECTIONS



### MOVABLE CONNECTIONS PERMITTED

