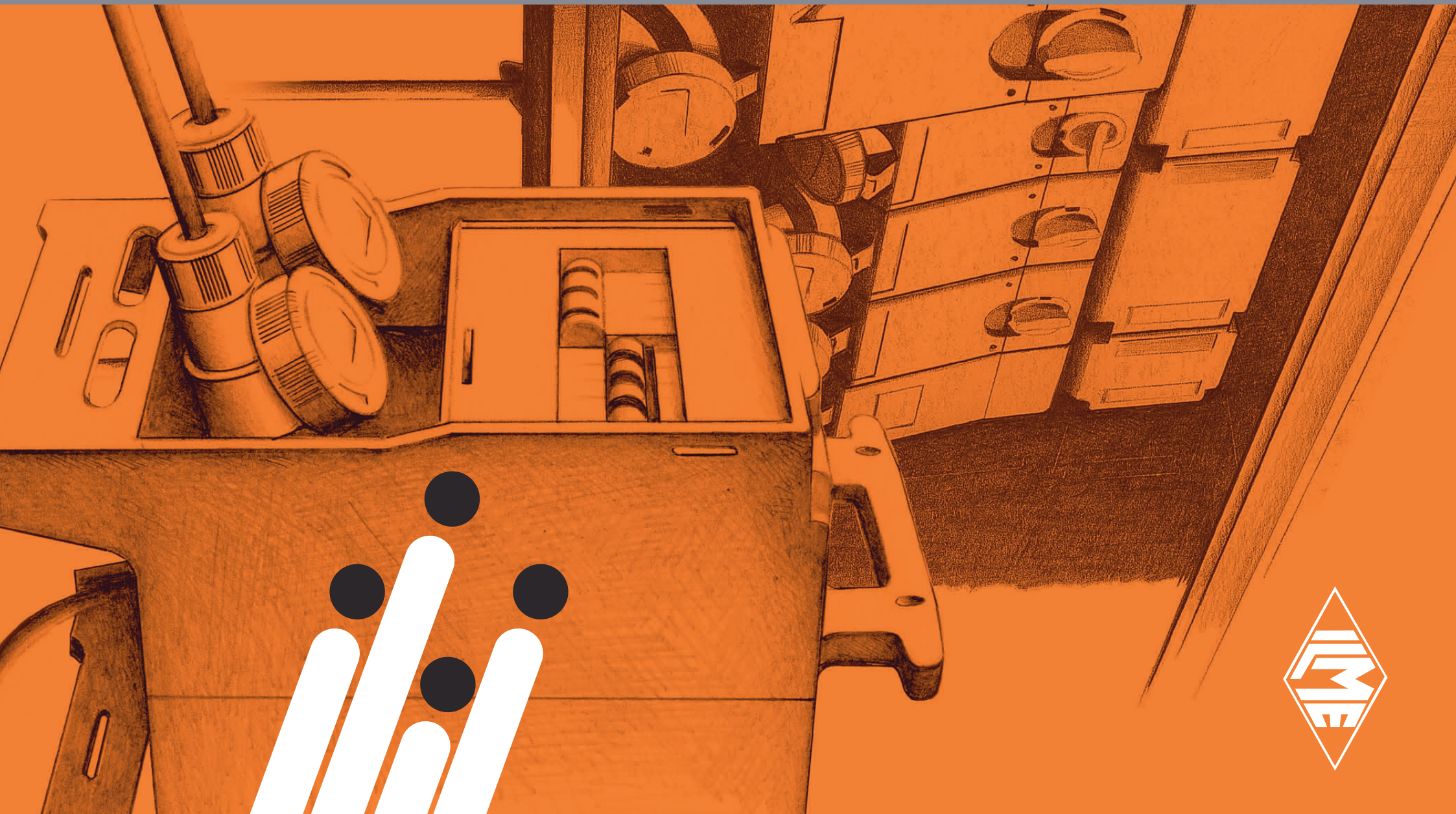
ENGLISH

QC empty or assembled construction site boards (ACS)



The Company and the Product

INDUSTRIA LOMBARDA MATERIALE ELETTRICO SpA has been operating **in Milan since 1938,** in particular in the electrotechnical sector for the manufacturing of equipment for industrial installations.
ILME reflects the traditional **entrepreneurial spirit of Lombardy,** and has enjoyed continuous expansion for over half a century.
The company has carved an important role for itself in the main world markets, also operating directly in the countries that have assumed world leadership in the field of automation, including Germany and Japan.
In the **electrical connection** sector with applications in industrial automation, characterised by **top performance** and utmost **reliability needs,** ILME is today the acknowledged partner of many leading companies worldwide.

The company's fundamental values are: **product innovation,** original solutions, excellent **price-quality ratio,** a customer-oriented **sense of service,** ethical behaviour and an environmentally-friendly approach.

To promote the continuing improvement of its **qualitative results,** ILME has always encouraged its collaborators to work with utmost **responsibility and participation.**
The company focuses on a series of benefits to the user, including research into the most suitable materials, high quality and safe cabling, a rapid turnaround and readily available services.

CE marking

As from 1 January 1997, in order to launch electrical products on the European market the manufacturer must ensure these bear the relevant CE marking, in line with the Low Voltage Directive 73/23/EEC * (implemented in Italy as law 18-10-1977 no. 791) and its modification 93/68/EEC * (implemented in Italy as L. D. 25-11-1996 no. 626/96, published in the supplement to the Gazzetta Ufficiale of 14-12-1996).

Said marking must be placed on the product - or, if this is not possible, on the packaging, the instructions for use or the warranty certificate - and acts as a declaration by the manufacturer that the product complies with all relevant EU directives.

ILME products bear the CE marking on the product or packaging.

Almost all ILME products fall under the Low Voltage Directive. A declaration of compliance is required before applying the CE marking. This document, to which the market is not directly entitled, must be made available to the control authorities (in Italy the Ministry for Industry, Commerce and Handicraft) at all times. In it, the manufacturer declares the technical safety standard(s) followed to manufacture the product. These standards must be, in decreasing order of preference:

- a European standard (EN prefix)
- a European harmonisation document (HD prefix)
- an international IEC standard
- a national standard
- in the absence of reference standards, the manufacturer's internal specifications, guaranteeing compliance with the directive's basic safety requirements.

Compliance with harmonised technical standards (i.e. ratified by the CENELEC) constitutes presumtion of conformity to the directive's basic safety requirements.
The CE marking of ILME products results from said products' declaration of conformity to harmonised standards or international IEC standards.
Through the CE marking, ILME declares full compliance, not merely with the directive's basic safety requirements, but also with those international or national EU standards on which voluntary safety certification markings are based (e.g. IMQ and VDE).
In this way, ILME intends to award the CE marking the value of self-certification in terms of safety, given the loss in legal value of voluntary certifications issued by third parties, ratified by directive 93/68/EEC *.
Notwithstanding the above, practically all ILME products still bear voluntary conformity markings.

This EC declaration of conformity becomes null and void when the assembly of products includes one or more components not manufactured by us and without EC approval.

* **Note:** New legal reference for the Low Voltage Directive is 2006/95/EC which is the consolidated edition of Directive 73/23/EEC + Directive 93/68/EEC.

On March 29, 2014, the new Low Voltage directive 2014/35/EU has been published on the Official Journal of the European Union, as a recast of the previous directive 2006/95/EC. It will enter into force on April 20, 2016.

Certification ISO 9001: 2008
Design, manufacture and distribution of industrial electrical equipment (IAF 19, 29a)
Certificate No. 50 100 11133

General Information and Standards for ACS Construction Site Boards

A new **QM series** of **portable boards** has been added to the ACS ILME site boards, to be used on **construction sites**.

The **self-supporting** frame, specifically designed for construction site environments, allows it to be **used with ease without the need for other frames** or additional supports.

The new series is suitable for many working environments (such as fair stands and temporary structures, industrial environments, areas used in the zootechnical and food industries etc.), i.e. in all circumstances where temporary power distribution is required, in order to multiply the number of power outlets available. **All this is provided with safety in mind, ensured by current differential and short-circuit protection.**

The **QM series** was introduced in order to provide small distribution boards with multiple outlets which, according to the models, vary from a minimum of two to a maximum of six.

The power socket-outlets can be basic (Pluso series PQ/PQF type wall mounted fixed socket-outlets) or with cut-out switch (SQE series, or – on request – fused, SQV series).

The board consists of an enclosure/frame, made up of two almost symmetrical half shells, which house the following: **on one side, an opening for modular equipment** (for a magnetothermal switch with differential protection with $I_{\Delta n} \leq 30$ mA which also acts as the main switch for the distribution board) **and up to 6 socket-outlets located on the two front sides.**

The board is constructed from **shock proof** and **self-extinguishing** MIL.BOX® thermoplastic material, injection moulded by using the BC-MUL® technology, painted in RAL 7012 dark grey. This technique makes the distribution board **extremely sturdy, highly shock resistant and very resistant to the elements** (high temperature and humidity) **as well as to several chemicals.**

The top section is fitted with a **large lifting and carrying handle**, which also acts as a cable winder for the power cable during transport and storage.

The distribution boards can be **joined and stacked**.

The H07 RN-F neoprene rubber, anti-abrasion power cable has the following measurements: 5x4 mm² and 4m in length and is **terminated by** an industrial plug conforming to EN 60309-2 standard.
The cable outlet positioned on the board base reduces its overall dimensions and makes it **more stable** in case of accidental “pulls”.

The board conforms to EN 60439-4 standard.

Main features

Protection rating:	**IP65**	with PEW.....PQ/PQF (IP67) socket-outlets without blocking device on request, IP44 versions with PE...PQ/PQF (IP44) socket-outlets
	IP55	with Schuko ® [1] complementary socket-outlets and/or socket-outlets with SQE type blocking device (on request, fused SQV type)
Mechanical strength index:	**IK08**	conforms to EN 50102 standard.

[1] Schuko ® is a registered mark of
SCHUKO-Warenzeichenverband e.V.

ILME distribution boards for construction sites

The ILME range of Q series of construction site boards comprises:
- Two empty board assembly kits (QP V and QG V) for housing an array of interlocked industrial socket-outlets with relative automatic switchgear devices for protection against direct and indirect contacts and against overcurrents and short circuits.
- four series of site boards (QP TI, QP SQ, QG TI and QG SQ) factory-assembled (ACS) and including sockets and protection and control devices. Upon customer request, boards with combinations of custom-built socket-outlets may be supplied. Following are the main technical characteristics.

Supporting structure

Made in **anti-impact, self-extinguishing thermoplastic material** (750 °C classification at glow wire test), colour RAL 7012 grey, **stabilized to ultraviolet rays**. Despite the spacious passage at the base of the board (for the output line cables) and the convenient panel flaps for internal access it has a **high torsional rigidity** thanks to the structural elements used for the connections (socket-outlet head screws and stainless steel nuts) and to the **thickness** of the panelling. The supporting structure is made in **totally recyclable material**. The insulating structure ensures total isolation b of the boards in accordance with the standards EN 60439-1 and IEC 60364-4-... The panelling resist to energy impacts of 6 J (representative of impacts inside the construction sites) as required by the applicable standards.

ILME construction site factory-assembled boards - ACS.

The ILME construction site boards of the **Q series** are classified as ***ACS assemblies for* construction sites** and conform to all the requirements of the general standard **EN 60439-1** and to the specific standard **EN 60439-4**.
Because of their rated current and the various possibilities available of connecting the power supply cable, they are called ***final distribution ACS*** or ***plug socket ACS*** and may be connected downstream to a larger ACS.

Almost assembled construction site boards of the Q series have the IMQ mark. Additional versions of the board assembled in the factory with different ILME socket-outlets within the framework of the rated current that corresponds to the maximum active power withdrawable of the verified types*), maintain the IMQ mark.

All the boards are designed for use on both internal and external construction sites defined as: *temporary work locations to which the general public does not generally have access and where construction works, installations, repairs, changes or demolition of property (buildings) or civil engineering (public works) or excavation or other similar works are performed*".
The boards are **transportable** (semi-fixed) and for use in locations where they are not permanently fixed. Their position may vary during the works within the same construction site and the board must be disconnected from the power source before each move. Portable electric tools and other construction site apparatus may be connected to the boards.
These boards are not for use in the administrative areas of the construction sites (offices, cloakrooms, meeting rooms, canteens, restaurants, dormitories, bathrooms, etc.)

The assembled boards are supplied complete with socket-outlets (excluding fuses), electric connections, magnetothermal switches and differential device and are ready for operation once good quality fuses have been inserted in the socket-outlets.

Accompanying documents to the ILME Q series boards (ACS)

- Instructions for the handling, assembly, installation and maintenance thereof.
- single-wire wiring diagram.

*) *For power supply rated voltage of less than 230/400V - at equivalent rated current the maximum active power withdrawable reduces in proportion to the voltage.*
For example: 63A board [35kW - 230/400V~] > [20kW - 130/230V~]

General information and standards.

Construction and demolition sites are subject to a high number of electric accidents, and even fatal accidents (source: ISPESL National Institute for Occupational Health and Safety).
Construction sites are high risk environments, and especially subject to electric hazards due to the conditions of use of the electric system which is often external and subject to atmospheric conditions or those connected to the nature of the construction materials present in the site (sun, rain, dust, frost, high temperatures, humidity, salt air, chemical pollution) and accidental heavy mechanical stress.

It is obvious therefore, that the electric system of a construction site must be made using specific design, construction and control criteria which are much stricter than those set for normal environments.
The first IEC technical regulations regarding construction site where not issued until 1989 (**standard IEC 60364-7-704**)

The aim was to obtain a single electric installation code for the EU to facilitate the free circulation of system components within the single European Market and develop a homogeneous safety level throughout the states of the European Union.

Main requirements for assemblies for construction sites (standard IEC 60364-7).

As mentioned above, the most recent electric safety requirements for construction and demolition sites are provided in standard IEC 60364-7-704 and in the European Harmonization Document HD 384-7-704.

The requirements integrate with the general requirements of standard IEC 60364-1 and are applicable to temporary systems for use in:
- construction works in new buildings.
- repair, alteration, expansion or demolition works of existing buildings;
- public works;
- earthworks.
- Similar works (for example: roadside maintenance, bank maintenance, cableway construction, etc.).

They are not applicable to electric systems located externally and under severe conditions, such as open-cut mines and quarries (see safety requirements in the IEC 60621 series of standards).

Those parts of buildings that are subject to structural alterations (expansion, significant repair works or demolition) are considered **sites** for the duration of such works and when a temporary system of this kind is required.
The general requirements of Italian standard IEC 60364-1 are applied to the service areas of the such sites (offices, locker rooms, meeting rooms, stores, restaurants, dormitories, bathrooms, etc.), and stricter requirements are applied to special situations (as, for example, enclosed conductor rooms - Section 706 of Italian standard IEC 60364-7).

The European Directive 92/57/EEC relative to the minimum safety and health requirements applies to temporary and mobile sites.
The sites are defined as **"all locations where construction or civil engineering works are carried out in conformance to the list provided in Attachment 1"** of the directive.
In the sites, fixed systems are limited to equipment including the main control, protection and insulation apparatuses (704.537). The downstream systems are considered mobile or portable and section 704 of the Italian IEC 60364-7 standard, in waiver to the general principal that considers the system limited to fixed installations, is applied both to the fixed building site systems as well as to mobile or portable ones, excluding user apparatuses.

Installation regulations for assemblies for construction and demolition sites.

All assemblies for electric distribution in construction sites must conform to the requirements of the European Standard **EN 60439-4**, with minimum degree of protection IP43.
Building sites boards are classified on the basis of the function and rated current strength as described here below.
Each system must be equipped with a board containing the main insulating, control and switchgear devices.
Each **power supply board** and each **distribution board** must be equipped with one or more devices on the ingoing cable for their control (control switch) and insulation.
Emergency power supply disconnection devices for all user apparatus must be provided in case the active conductors need to be cut off in case of hazard.
The distribution circuit isolating and switchgear devices may be contained in the main board or in separate boards which are power supplied by the main board.
The power isolating devices must be able to be blocked in their open position (e.g. by padlock or by placing them in packaging under lock and key).
Power supply to the user apparatus must be provided by the distribution boards, each of which comprises:
- switchgear devices against overcurrents.
- switchgear devices against indirect contacts.
- socket-outlets.

Safety and back-up power supply equipment must be connected in such a way as to prevent connections between different power supplies.
The power outlets must be placed on the inside or outside (on the walls) of the above boards, or incorporated in the cable winder, or may be of industrial type, mobile, and must conform to the European Standard EN 60309-1.
The flexible cable used must be the H07 RN-F type or equivalent (must be resistant to water and abrasion, and be flexible in low temperatures). Flexible cables type FG70-K and H07-BQ-F are considered examples of cables equivalent to the H07 RN-F type.

Main requirements for construction site boards (Standard EN 60439-4).

The IEC SC 17D *"Switchgear and Controlgear Assemblies"* developed a second part to the general boards standard (IEC 60439-1) entitled **IEC 60439-4**.
The first edition is dated 1990, and was converted into European Standard **EN 60439-4** in 1991. Amendment 1 was issued in 1995 in IEC, and published as Variant 1 to the European Standard EN 60439-4.
In 2004, the 2nd edition of EN 60439-4, equivalent to the IEC, was ratified.

Because of the temporary nature of the construction sites, no part of the electric system may be considered permanent, and therefore fixed.
The use of boards with mobile type construction is therefore required which can be easily moved according to the progress of the works and do not need to be disconnected from the power supply when being moved, or portable (semi-fixed), whose position may vary according to the planning of the works.
The latter must be disconnected from the power supply before being transported. In all cases, the construction site boards may be used again elsewhere.
In consideration of the specific conditions of use, such boards must have particular mechanical strength, be resistant to corrosion and reliable in time against the penetration of solid bodies and water.
The compulsory EC marking has put an end to the negligence of many operators of this sector. These boards must be constructed in accordance with the said European Standard (assumption of conformity to the safety requirements of the directive BT 73/23/CEE and successive changes). The requirement to use construction site boards that conform to said standard is ratified by the Italian standard **IEC 60364-7-704**.

The construction site boards standard does not allow for so-called PTTA "non type-tested", i.e. those only partially type-tested assemblies*).

***) PTTA = partially type-tested assemblies**

Definition of construction site assemblies

Construction site boards may only be **ACS** type.

ACS: Mass-produced assemblies for construction sites (European Standard EN 60439-4)
A combination of one or more transformation or closure and cutoff devices with assemblies associated with the control, measurement, signalling, switchgear and adjustment equipment, complete with all relative electrical and mechanical connections and all relative structural parts, designed and constructed for use in all indoor and outdoor sites. The **ASC** must be mass-produced (**AS**) "in compliance with a predetermined construction type or system, without deviations such as might significantly adjust performance compared to tested apparatus, in line with the provisions of International Standards EN 60439-1 and EN 60439-2".

AS: Mass-produced assemblies (European Standard EN 60439-1)
The assemblies conform to a type or a pre-determined construction system, or in any case with no deviation that would significantly modify performance with respect to the standard equipment tested in accordance to the provisions of the Standard.

The EN 60439-1 standard states that in case of specific situations, for example for reasons of transportation or production, "some of the assembly phases may be performed outside the workshop of the manufacturer of the board tested with tests type (TTA…).
Such assemblies shall be considered as type-tested assemblies upon condition that the assembly be performed in accordance with the manufacturer's instructions in such a way as to *assure conformity of the type or system as established by the provisions of the EN 60439 standard, including performance of all the required tests".*

In addition, EN 60439-1 standard classifies the so-called **ACS** equipment (*mass-produced* construction site assemblies) into six different types on the basis of the specific functions related to electric energy distribution in construction sites, and in accordance with a descending hierarchy starting from the point of energy delivery through to the installation of the terminals.
The categories are illustrated below with reference to the clauses of the Standard.

Specific characteristics of the different ACS (§ 9)[1)]

Incoming power supply and measurement ACS (§ 9.1)[1)]
Used for the connection of the low voltage mains supply line exclusively via terminal blocks, for the measurement of the energy consumed in the construction site and for the limit of the energy via the modalities established by the manufacturer. There is an incoming section and outgoing unit that comprises the omnipolar main switch of the user installation with switching, isolating and switchgear functions against overcurrents and indirect contacts (each function may be performed by a specific unit, but in general a number of functions are assigned to one assembly). The switch is locked into the open position or placed in a compartment with lock and key to prevent undesirable voltages.
An optional push-button may be placed on the outside of the board for quick access. The push-button is red on a yellow background and functions as emergency stop of the general power supply to the construction site installation (IEC 60364 standard, clauses 464.1 and 704.537).

Main distribution ACS (In ≥ 630A) (§ 9.2)[1)]
This category comprises those construction site boards with a rated current of at least 630A. Connection to an insulating device is exclusively via terminal blocks (e.g. to a controlgear — insulating switch). The isolating device may be locked in the open position and may be without a protection device, provided that the board is supplied by an incoming and measuring power supply ACS (and switchgear is upstream, in the board).
The outgoing units may comprise one or more circuits, each independently insulated and protected against overloads and short-circuits and against indirect contacts. The possibility of locking the insulators in the open position is optional.

Distribution ACS (In = 125A ÷ 630A) (§ 9.3)[1)]
These boards are located in the intermediate phase of the distribution network (normally between the main distribution ACS and the numerous end distribution ACS) that can be directly connected to the incoming and measuring power supply ACS. (e.g. in medium-sized construction sites).
A lockable switch-disconnector in the "open" position without protection is sufficient for incoming supply and with a minimum rated current of 125A and a maximum rated current of 630A. In output, switchgear is required for each piece of equipment but without the necessity of the locking function.
The outputs may comprise terminals (to which to connect the cables for fixed equipment) or socket-outlets type:
- industrial (in conformity with the standard EN 60309-2, up to 125A)
- domestic (in Italy in conformity with standard IEC 60884-1)

for connections, for mobile equipment.

Transformer ACS (In ≤ 630 A) (§ 9.4)[1)]
These boards incorporate:
- a low / extra-low voltage transformer unit (BR/SELV* or BT/FELV**) for the connection of mobile equipment such as lamps or portable tools.
- one or more low / extra-low voltage transformer units for supplying continuous working fixed or mobile equipment.

End distribution ACS (In ≤ 125A) (§ 9.5)[1)]
These boards are located downstream larger distribution boards (main distribution or distribution). Both portable equipment and all the fixed or semi-fixed machinery used on the construction site can be connected to these boards.
Incoming connections to these boards are made via terminals or via a fixed plug with a rated current no greater than 125A and supplying the usual controlgear and switch disconnector (including the automatic thermal-magneto switch) which can be locked in the open position or made accessible via a lockable flap.
The outgoing connections are similar to those indicated for the distribution ACS but the protection to the indirect contacts is provided via a high sensitivity residual current device (differential switch) with an IDN intervention rated current no higher than 39 mA.
The incoming cable must be collected to the terminals or to the input devices (connectors) that are compatible with the unit's rated current. This must not be higher than 125A.

Socket-outlets ACS (In ≤ 63A) (§ 9.6)[1)]
The incoming connector is an appliance inlet, while the outgoing connections of these small boards are exclusively socket-outlets so as to facilitate the transportation of these units without requiring electrical interventions.
The board receives the power supply via an extension lead with appliance coupler using a fixed inlet installed on the board.
The rated current does not exceed 63A. The outgoing sockets must each have their own protection against overloads and must be protected via a 30 mA residual current device (Italian standard IEC 60364-7-704, clause 704.471) which can protect all the socket-outlets.

Two or more functions may be grouped into one ACS by assembling the relative apparatus according to the size of the construction site so as to contain a number of units, for example, a distribution and a transformer unit in a single board. The plug sockets boards must, however, be kept separated.

1) Reference to the paragraph number of the standard EN 60439
) SELV = Safety Extra-Low Voltage
****) FELV = Functional Extra-Low Voltage***

ACS construction site boards - diagram

On the basis of the construction characteristics (plugs and socket-outlets used, protection devices) and the electrical characteristics (rated current, and so the maximum active power foreseeable), the ILME construction boards are defined as ***final distribution ACS*** or ***socket-outlets ACS***, to be connected upstream to a larger ACS.
On the basis of the specific requirements of the various functional types of ACS referred to in the standard EN 60439-4 (§ 9) listed in the preceding page, the ILME boards with fixed power supply plug and rated current of **I_n=125A** and all ILME boards with a terminal board incoming unit are the ***final distribution ACS***, while the ILME boards with rated current of **I_n=63A** with a socket incoming unit are ***the plug socket ACS***.

Legend:

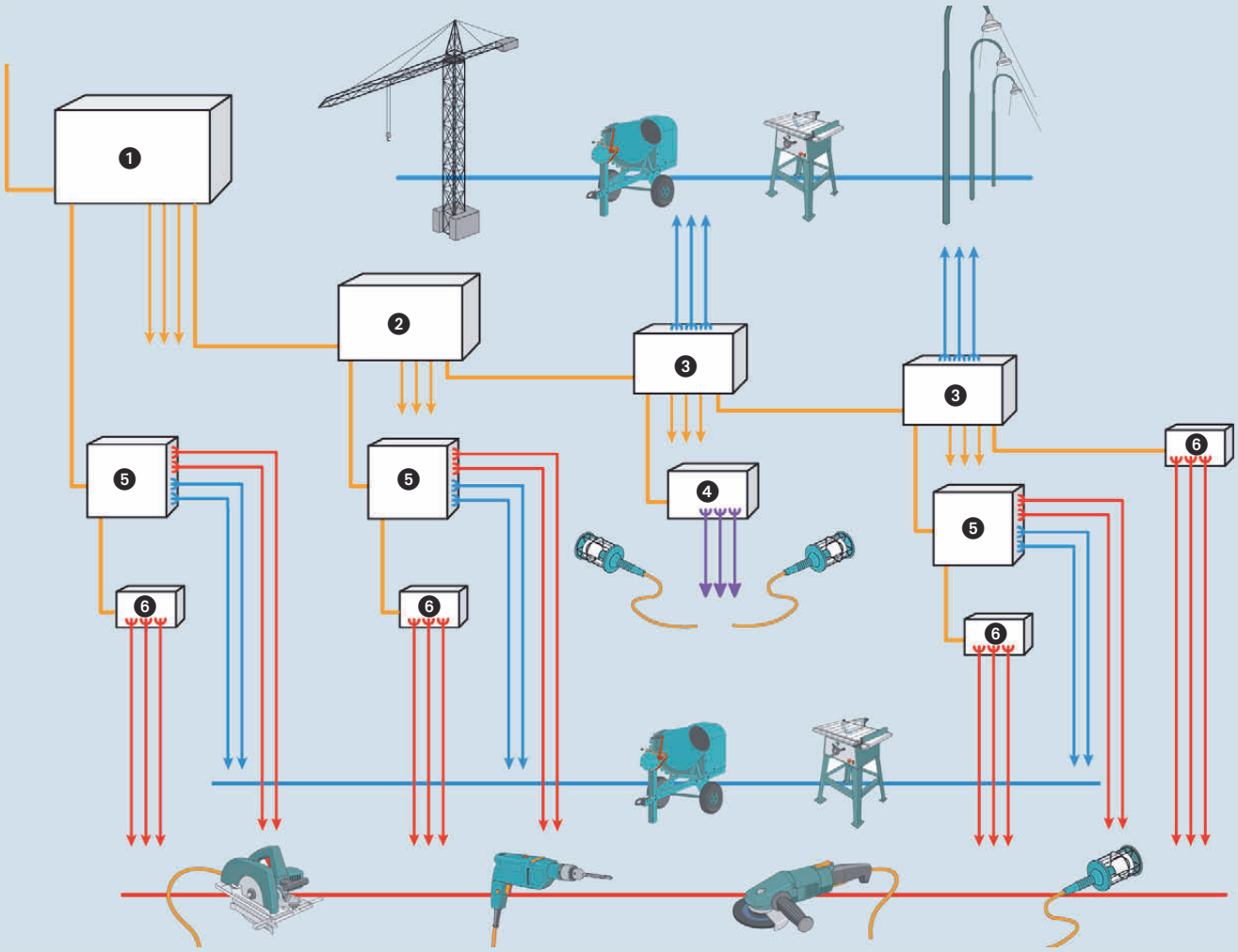
1. Incoming and measuring power supply **ACS**
2. Main distribution **ACS**
3. Distribution **ACS**
4. Transformer **ACS**
5. **Final distribution ACS**
6. **Socket-outlets ACS**

standard types
- **QG TI D**
- **QG SQ D**

standard types
- **QP TI**
- **QP SQ**

standard types
- **QG TI**
- **QG SQ**

standard types
- **QM P**
- **QM S**



QM - factory assembled board for construction sites (ACS)

- basic board type QM V P4 / QM V P6 for 4 / 6 Pluso series flush-mounting sockets type PEW...PQ/PQF (IP67)
- basic board type QM V S2 for 2 series interloked sockets SQ type SQE....5 (IP65)
- magnetothermal mains with intervention charateristc C and Icn = 6 kA
- differential protection with intervention charateristc AC, I∅n = 0,03 A and I∅m = 6 kA
- power cableI = 4m, type H07 RN-F 2G2,5, 3G2,5, 4G2,5 or 4G4 according to rated current and wired plug
- ⓜ with Italian Quality Mark

with socket-outlet PEW PQ / PQF series

	magnetothermal mains switch with differential protection	maximum withdrawable active power values	plug entry	N. socket-outlets	PEW 1663 PQF 16A, 230V, 2P+⏚, 6h	PEW 1664 PQF 16A, 400V, 3P+⏚, 6h	PEW 1665 PQ 16A, 230 / 400V, 3P+N+⏚, 6h	PEW 3264 PQ 32A, 400V, 3P+⏚, 6h	16A - 2P+⏚ Schuko® IP55
	A	kW			●	●	●	●	□
QM PA4	16	3	PEW 1663 SV	4	4				
QM PB4	16	9	PEW 1664 SV	4		4			
QM PC22	16	9	PEW 1665 SV	4	2	2			
QM PD22	16	3	PEW 1663 SV	4	2				2
QM PH211	16	9	PEW 1665 SV	4	2	1	1		
QM PI211	32*	18	PEW 3265 SV	4	2	1		1	

with socket-outlet PEW PQ / PQF series

	magnetothermal mains switch with differential protection	maximum withdrawable active power values	plug entry	N. socket-outlets	PEW 1663 PQF 16A, 230V, 2P+⏚, 6h	PEW 1664 PQF 16A, 400V, 3P+⏚, 6h	PEW 1665 PQ 16A, 230 / 400V, 3P+N+⏚, 6h	PEW 3264 PQ 32A, 400V, 3P+⏚, 6h	16A - 2P+⏚ Schuko® IP55
	A	kW			●	●	●	●	□
QM PA6	16	3	PEW 1663 SV	6	6				
QM PC33	16	9	PEW 1665 SV	6	3	3			
QM PC42	16	9	PEW 1665 SV	6	4	2			
QM PH222	16	9	PEW 1665 SV	6	2	2	2		
QM PI222	32*	18	PEW 3265 SV	6	2	2		2	
QM PL222	16	9	PEW 1665 SV	6	2	2			2

* 16A magnetothermal switch in addition to the magnetothermal mains switch with different protection

QM WITH IP55 SCHUKO® SOCKETS (ACCORDING TO EN 60529)

For technical data-sheet and further information please look at our technical catalogues on website **www.ilme.com**

QM - factory assembled board for construction sites (ACS)

- basic board type QM V P4 / QM V P6 for 4 / 6 Pluso series flush-mounting sockets type PEW...PQ/PQF (IP67)
- basic board type QM V S2 for 2 series interloked sockets SQ type SQE....5 (IP65)
- magnetothermal mains with intervention charateristc C and Icn = 6 kA
- differential protection with intervention charateristc AC, I∅n = 0,03 A and I∅m = 6 kA
- power cableI I=4m, tipo H07 RN-F 2G2,5, 3G2,5, 4G2,5 o 4G4 according to rated current and wired plug
- ⓜ with Italian Quality Mark

with interlocked socket-outlet SQE series

FRONT

BACK

	magnetothermal mains switch with differential protection	maximum withdrawable active power values	plug entry	N. socket-outlets	SQE 1663.5 16A, 230V, 2P+⊕, 6h	SQE 1664.5 16A, 400V, 3P+⊕, 6h	SQE 1665.5 16A, 230 / 400V, 3P+N+⊕, 6h	SQE 3264.5 32A, 400V, 3P+⊕, 6h	SQT 16220 16A, 24V, 2P+⊕
	A	kW			●	●	●	●	●
QM SA2	16	3	PEW 1663 SV	2	2				
QM SB2	16	9	PEW 1664 SV	2		2			
QM SC11	16	9	PEW 1665 SV	2	1	1			
QM SE11	16	9	PEW 1665 SV	2	1		1		
QM SF11	32*	18	PEW 3265 SV	2	1			1	
QM SG11**	16	3	PEW 1663 SV	2	1				1

* 16A magnetothermal switch in addition to the magnetothermal mains switch with different protection
** without IMQ approval

For technical data-sheet and further information please look at our technical catalogues on website **www.ilme.com**

QC - box and factory assembled boards for construction sites (ACS) with socket-outlets TM and SQV series

- in shock proof and self-extinguishing thermoplastic material, colour grey RAL 7012
- for wall-mounting or with support
- assembled version supplied with every accessory (power supply plug, socket-outlets, safety devices, wirings, etc.) ready to be used, fuses and other plugs not included
- assembled board consisting of wall-mount entry plug, basic board QP V, main emergency push-botton and release coil
- degree of protection IP55 (EN 60529), in compliance with standard EN 60439-4
- ⓜ with Italian Quality Mark

with socket-outlets TM series

	magnetothermal mains switch with differential protection	maximum withdrawable active power values	wall plug 400V, 3P+N+ m, 6h (red)	N. socket-outlets	TM 1663 IT 16A, 250V, 2P+ ⊕, 6h (blue)	TM 1664 IT 16A, 400V, 3P+ ⊕, 6h (red)	TM 1665 IT 16A, 400V, 3P+N+ ⊕, 6h (red)	TM 3264 IT 32A, 400V, 3P+ ⊕, 6h (red)	TM 3265 IT 32A, 400V, 3P+N+ ⊕, 6h (red)	TM 16220 T1 16A, 24V, 2P, s.r. (violet)
	A	kW			●	●	●	●	●	●
QP TI A	63	35	63	5	2	2		1		
QP TI A-1	63	35	63	5	2	2			1	
QP TI B	40	20	63	5	2	3				
QP TI B-1	40	20	63	4	2	1	1			
QP TI B-2	40	20	63	5	3	2				
QP TI C	63	35	63	5	3	1		1		
QP TI C-1	63	35	63	5	3	1			1	
QP TI C-2 **	63	35	63	5	2	1		1		1
QP TI D	63	35	63	5	1	3		1		

with socket-outlets SQV series

	magnetothermal mains switch with differential protection	maximum withdrawable active power values	wall plug 400V, 3P+N+ m, 6h (red)	N. socket-outlets	SQV 1663.5 16A, 250V, 2P+ ⊕, 6h (blue)	SQV 1664.5 16A, 400V, 3P+ ⊕, 6h (red)	SQV 1665.5 16A, 400V, 3P+N+ ⊕, 6h (red)	SQV 3264.5 32A, 400V, 3P+ ⊕, 6h (red)	SQV 3265.5 32A, 400V, 3P+N+ ⊕, 6h (red)	SQT 16220 16A, 24V, 2P, s.r. (violet)
	A	kW			●	●	●	●	●	●
QP SQ A	63	35	63	5	2	2		1		
QP SQ A-1	63	35	63	5	2	2			1	
QP SQ A-3	63	35	63	5	2	1	1		1	
QP SQ B	40	20	63	5	2	3				
QP SQ B-1	40	20	63	4	2	1	1			
QP SQ B-2	40	20	63	5	3	2				
QP SQ B-6	40	20	63	4	3		1			
QP SQ B-9	40	20	63	4	2	2				
QP SQ C	63	35	63	5	3	1		1		
QP SQ C-1	63	35	63	5	3	1			1	
QP SQ C-2 **	63	35	63	5	2	1		1		1
QP SQ D	63	35	63	5	1	3		1		
QP SQ E	63	35	63	6	2	2		2		
QP SQ E-1	63	35	63	6	2	3		1		
QP SQ E-2	63	35	63	6	2		2		2	
QP SQ E-3	63	35	63	6	2	2	1		1	
QP SQ E-4	63	35	63	6	2	1	1		2	
QP SQ E-5	63	35	63	6	4				2	
QP SQ E-6	63	35	63	6	4	2				
QP SQ E-7	63	35	63	6	2	2		1	1	
QP SQ E-8	63	35	63	6	4		2			
QP SQ F	63	35	63	6	3	2			1	
QP SQ F-1	63	35	63	6	3	1	1		1	
QP SQ FM	63	35	term.*	6	3	1	1		1	
QP SQ G	63	35	63	5		2		3		

* entry with gland, conductors' fixing on terminal block
** without IMQ approval

Further executions of the factory assembled boards with different ILME sockets, within the maximum power supply, keep the Italian Quality Mark - IMQ.
On request we can supply construction site board with differential mains type A. Please contact the export dept. at ILME SpA. for further information.

For technical data-sheet and further information please look at our technical catalogues on website **www.ilme.com**

QC - box and factory assembled boards for construction sites (ACS) with socket-outlets TM and SQV series

- in shock proof and self-extinguishing thermoplastic material, colour grey RAL 7012
- for wall-mounting or with support
- assembled version supplied with every accessory (power supply plug, socket-outlets, safety devices, wirings, etc.) ready to be used, fuses and other plugs not included
- assembled board consisting of wall-mount entry plug, basic board QG V, main emergency push-botton and release coil
- degree of protection IP55 (EN 60529), in compliance with standard EN 60439-4
- ⓜ with Italian Quality Mark

with socket-outlets TM series

	magnetothermal mains switch with differential protection	maximum withdrawable active power values	wall plug 400V, 3P+N+ m, 6h (red)	N. socket-outlets	TM 1663 IT 16A, 250V, 2P+ ⏚, 6h (blue)	TM 1664 IT 16A, 400V, 3P+ ⏚, 6h (red)	TM 1665 IT 16A, 400V, 3P+N+ ⏚, 6h (red)	TM 3264 IT 32A, 400V, 3P+ ⏚, 6h (red)	TM 3265 IT 32A, 400V, 3P+N+ ⏚, 6h (red)	TM 6364 IT 63A, 400V, 3P+ ⏚, 6h (red)	TM 6365 IT 63A, 400V, 3P+N+ ⏚, 6h (red)	TM 16220 T1 16A, 24V, 2P, s.r. (violet)
	A	kW			●	●	●	●	●	●	●	●
QG TI A	63	35	63	7	2	3		2				
QG TI B	63	35	63	7	3	3		1				
QG TI B-1	63	35	63	7	3	2	1		1			
QG TI B-2 **	63	35	63	7	2	3		1				1
QG TI C	63	35	63	7	2	4		1				
QG TI D	100 *	55	125	7	2	3		1		1		

with socket-outlets SQV series

	magnetothermal mains switch with differential protection	maximum withdrawable active power values	wall plug 400V, 3P+N+ m, 6h (red)	N. socket-outlets	SQV 1663.5 16A, 250V, 2P+ ⏚, 6h (blue)	SQV 1664.5 16A, 400V, 3P+ ⏚, 6h (red)	SQV 1665.5 16A, 400V, 3P+N+ ⏚, 6h (red)	SQV 3264.5 32A, 400V, 3P+ ⏚, 6h (red)	SQV 3265.5 32A, 400V, 3P+N+ ⏚, 6h (red)	TM 6364 IS 63A, 400V, 3P+ ⏚, 6h (red)	TM 6365 IS 63A, 400V, 3P+N+ ⏚, 6h (red)	SQT 16220 16A, 24V, 2P, s.r. (violet)
	A	kW			●	●	●	●	●	●	●	●
QG SQ A	63	35	63	7	2	3		2				
QG SQ B	63	35	63	7	3	3		1				
QG SQ B-1	63	35	63	7	3	2	1		1			
QG SQ B-2 **	63	35	63	7	2	3		1				1
QG SQ C	63	35	63	7	2	4		1				
QG SQ D	100 *	55	125	7	2	3		1		1		
QG SQ D-1	100	55	125	6	2	2		1			1	
QG SQ D-2	100	55	125	6	1				4		1	
QG SQ E	100 *	55	125	8	3	3		2				
QG SQ F	100 *	55	125	9	3	4		2				

* 100A magnetothermal mains switch
Secondary protection switches for the sockets
** without IMQ approval

Further executions of the factory assembled boards with different ILME sockets, within the maximum power supply, keep the Italian Quality Mark - IMQ.
On request we can supply construction site board with differential mains type A. Please contact the export dept. at ILME SpA. for further information.

For technical data-sheet and further information please look at our technical catalogues on website **www.ilme.com**

ILME distribution boards for construction sites

The enclosure kits listed below are also available for customers who wish to make socket-outlet combinations different from those listed in this catalogue:

code	description
QM V P4	empty board kit for 4 PLUSO PE / PEW...PQ / PQF socket-outlets (square 80 x 80 mm flange)
QM V P6	empty board kit for 6 PLUSO PE / PEW...PQ / PQF socket-outlets (square 80 x 80 mm flange)
QM V S2	empty board kit for 2 socket-outlets with SQE (or SQV) series blocking device

General features

❶ Supporting structure

Made in **shock proof, self-extinguishing MIL-BOX® thermoplastic material** (750°C classification at glow wire test), colour RAL 7012 dark grey, **stabilized to ultraviolet rays.** The frame is injection moulded by using the **BC-MUL® technology**, already successfully used on the larger QG and QP enclosures for the ASC Q series construction site boards and in the TM series interlocked socket-outlets. This technique makes the frame very sturdy, highly shock resistant and very resistant to the elements (high temperature and humidity) and to many chemicals. The structure features a **high torsion stiffness** ensured by the structural components used in the connections and the **high thickness** of the panels. The **installed socket-outlets are fitted inside a strong edge**, which also acts as a guard to protect the safety equipment from shocks. A wide base makes sure the structure does not tip over. The supporting structure is made in **totally recyclable material**.
The insulating structure ensures total insulation of the boards in accordance with the standards EN 60439-1 and CEI 64-8/4. The panelling resists to energy impacts of 6 J (representative of impacts inside the construction sites).

❷ Fastening hooks (for stacking)
Two housing slots are fitted with 2 strong yellow technopolymer hooks suitably shaped to fasten together stacked multiple units.

❸ Earthing
Both the **QM V...** assembly kits and the factory assembled versions are supplied with an insulated 25 mm² earthing terminal to be installed inside the board, to ease connection of the power plug earth wire.

❹ Cable clamp
A strong cable clamp is provided inside the board to remove dangerous mechanical stresses on the power cable wires and on the switch input terminals.

❺ Cable gland (QM V empty boards)
The empty boards are supplied with an angled IP65 Pg21 cable gland for cables with a 15mm to 21mm diameter.

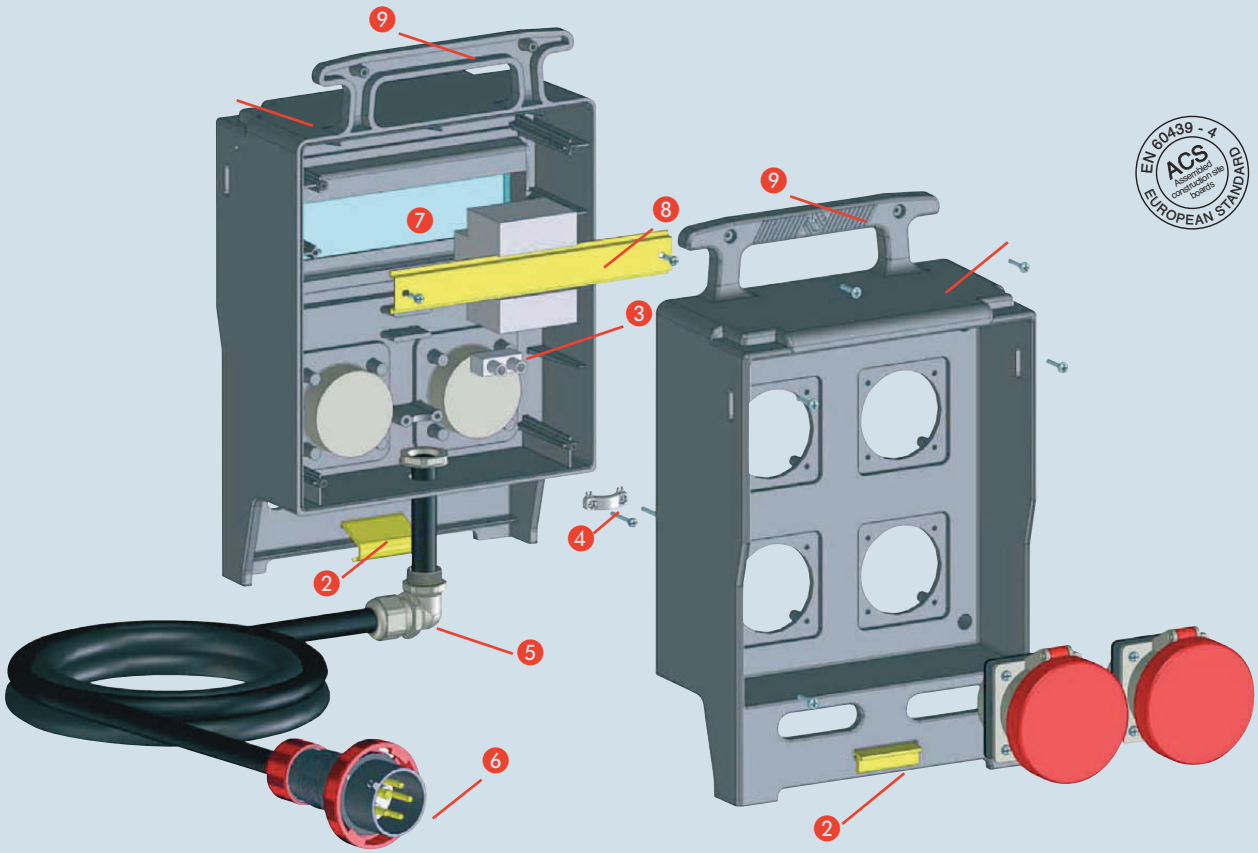
❻ Power supply plug (for assembled boards)
The assembled boards are supplied with an industrial plug ILME PLUSO PEW...SV (IP67) series, connected to the end of the power cable, featuring a 32A or a 16A capacity and different polarity according to the types.

❼ Entry and branching compartment
The internal top section of the board features a large compartment (to house 12 DIN modules) closed by a see-through shock-proof polycarbonate door featuring two strong stainless steel springs which push it close.
The door may be locked to reduce access to operating devices.
The branching compartment can accommodate the isolators and safety devices on a DIN EN 60715 rail.
For assembled boards, see further on for the types of equipment connected.

❽ DIN EN 60715 rail
The **QM V...** empty boards are equipped with a DIN EN 60715 rail measuring 219 mm for connection of a terminal box.
The rail is constructed from zinc plated steel RoHS compliant.
The rail is pre-fitted in the assembled board versions.

Carrying handle
The top section features a strong lifting handle to carry and wind the power cable.

The pre-cabled boards are supplied with a resealable document holder envelope containing the wiring diagram and other documents, such as the Declarations of Conformity.
As for the ACS boards (assembled, standard built equipment for construction sites), an identification plate is also affixed to the side of the board, showing its technical data.



Type Tests (§ 8.2)
The ACS boards illustrated in this booklet have been subjected to all the type tests requested by the standard and to the following individual tests:

No.	Characteristics to be checked	Reference	Test
1	**Overtemperature limits**	**8.2.1**	Verification of the overtemperature limits via test (type test)
2	**Resistance to applied voltage**	**8.2.2**	Verification of the resistance to the applied voltage via test (type test)
3	**Resistance to short-circuit**	**8.2.3**	Verification of the resistance to short-circuit via tests (type test) **Not applied because $I_{cc} \leq 10kA$**
4	**Efficiency of protection circuit**	**8.2.4**	
4a	**Effective connection between the masses of the equipment and the circuit protection circuit**	**8.2.4.1**	Verification of the effective connection between the exposed conductive parts of the apparatus via visual inspection or measurement of resistance (type test)
4b	**Recistance to short-circuit of the protection circuit**	**8.2.4.2**	Verification of the resistance to short-circuit of the protection circuit via test (type test) **Not applied because $I_{cc} \leq 10kA$**
5	**Air and surface distances**	**8.2.5**	Verification of the air and surface distance (type test)
6	**Mechanical function**	**8.2.6**	Verification of the mechanical function (type test)
7	**Protection rating**	**8.2.7**	Verification of the degree of protection (type test)
8	**Mechanical resistance**	**8.2.8**	Verification of the mechanical resistance via test (type test)
8a		**8.2.8.2**	***Impact test:*** 3 impacts on each of the 6 external surfaces of the tested ACS with a steel ball Ø 50mm, mass 500 ± 25 g by 1.2m. 50 HR ≤ Hardness < 58 HR. As an alternative, pendulum
8b		**8.2.8.3**	***Collision test:*** A sinusoidal half-wave pulse of 500 m/s^2 (50g) and of a duration of 11ms, in accordance with IEC 60068-2-27
9	**Resistance to corrosion**	**8.2.9**	Verification of the resistance to corrosion via test (type test)
9a		**8.2.9.1**	***Verification of the resistance to corrosion under normal working conditions:*** three 24h cycles in a climatic chamber
9b		**8.2.9.2**	***Verification of the resistance to corrosion under a highly polluted environment:*** 10 days of continuous exposure to industrial atmospheres in accordance with IEC 60068-2-42
10	**Wiring, electric functions**	**8.3.1**	Visual inspection of the apparatus including inspection of the wiring and, if necessary, test of the electric functions (individual test)
11	**Isolation**	**8.3.2**	Applied voltage test (individual test) **Not applied**
12	**Measures of protection**	**8.3.3**	Verification of the measures of protection and of the electrical continuity (individual tests)

Tests 7, 8a, 8b, 9a, 9b refer to the empty enclosure, the remaining tests refer to the assembled board.

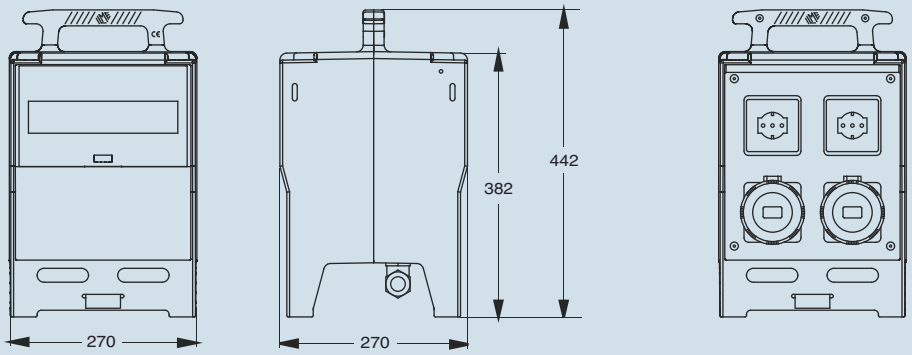
QM factory-assembled construction site boards (ACS)

- other versions of factory-assembled boards with different ILME socket-outlets may be supplied which, within the framework of the maximum withdrawable active power values, maintain their conformity to the IMQ mark

QM construction site, 4 socket-outlet boards with PLUSO PEW....PQ / PQFseries socket-outlets

description	Part No.	Part No.
assembled board comprises: - QM V P4 base boards - PLUSO PEW..PQ / PQF socket-outlets - H07 RN-F 4G4 power cable l = 4 m terminated with a PEW 3265 SV plug (230 / 400V, 32A, 3P+N+⏚, 6h)	**QM PI211** outputs and protections: - 4P 40A, magnetothermal switch, curve C, with 40A differential protection - 4P 16A magnetothermal switch, curve C - one PEW 3264 PQ socket-outlet (400V, 32A, 3P+⏚, 6h) - one PEW 1664 PQF socket-outlet (400V, 16A, 3P+⏚, 6h) - two PEW 1663 PQF socket-outlets (230V, 16A, 2P+⏚, 6h) - maximum withdrawable active power values: 18kW	
assembled board comprises: - QM V P4 base boards - PLUSO PEW..PQ / PQF socket-outlets - H07 RN-F 4G2.5 power cable l = 4 m terminated with a PEW 1665 SV plug (230 / 400V, 16A, 3P+N+⏚, 6h)	**QM PC22** outputs and protections: - 4P 16A, magnetothermal switch, curve C, with 25A differential protection - two PEW 1664 PQF socket-outlets (400V, 16A, 3P+⏚, 6h) - two PEW 1663 PQF socket-outlets (230V, 16A, 2P+⏚, 6h) - maximum withdrawable active power values: 9kW	**QM PH211** outputs and protections: - 4P 16A, magnetothermal switch, curve C, with 25A differential protection - one PEW 1665 PQ socket-outlet (230/400V, 16A, 3P+N+⏚, 6h) - one PEW 1664 PQF socket-outlet (400V, 16A, 3P+⏚, 6h) - two PEW 1663 PQF socket-outlets (230V, 16A, 2P+⏚, 6h) - maximum withdrawable active power values: 9kW
assembled board comprises: - QM V P4 base boards - PLUSO PEW..PQ / PQF socket-outlets - H07 RN-F 3G2.5 power cable l = 4 m terminated with a PEW 1664 SV plug (400V, 16A, 3P+⏚, 6h)		**QM PB4** outputs and protections: - 4P 16A, magnetothermal switch, curve C, with 25A differential protection - four PEW 1664 PQF socket-outlets (400V, 16A, 3P+⏚, 6h) - maximum withdrawable active power values: 9kW
assembled board comprises: - QM V P4 base boards - PLUSO PEW..PQ / PQF socket-outlets - H07 RN-F 2G2.5 power cable l = 4 m terminated with a PEW 1663 SV plug (230V, 16A, 2P+⏚, 6h)	**QM PD22** outputs and protections: - 2P 16A, magnetothermal switch, curve C, with 25A differential protection - two PEW 1663 PQF socket-outlets (230V, 16A, 2P+⏚, 6h) - two Schuko socket-outlets (230V, 16A, 2P+⏚) IP55 - maximum withdrawable active power values: 3kW	**QM PA4** outputs and protections: - 2P 16A, magnetothermal switch, curve C, with 25A differential protection - four PEW 1663 PQF socket-outlets (230V, 16A, 2P+⏚, 6h) - maximum withdrawable active power values: 3kW

dimensions in mm



dimensions are not binding and may be changed without prior notice

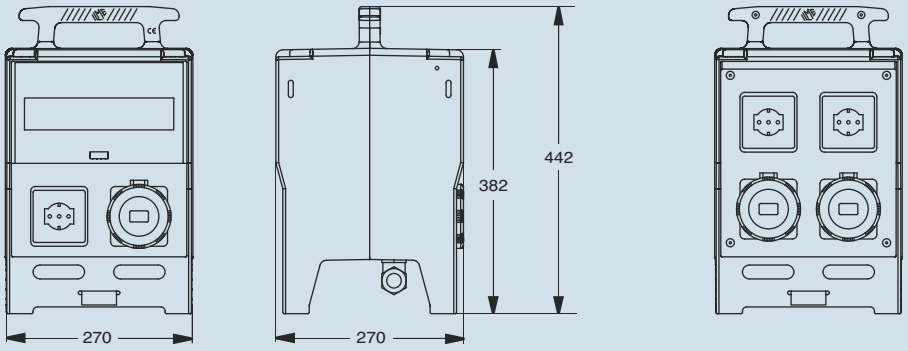
QM factory-assembled construction site boards (ACS)

- other versions of factory-assembled boards with different ILME socket-outlets may be supplied which, within the framework of the maximum withdrawable active power values, maintain their conformity to the IMQ mark

QM construction site, 6 socket-outlet boards with PLUSO PEW....PQ / PQFseries socket-outlets

description	Part No.	Part No.
assembled board comprises: - QM V P6 base boards - PLUSO PEW..PQ / PQF socket-outlets - H07 RN-F 4G4 power cable l = 4 m terminated with a PEW 3265 SV plug (230 / 400V, 32A, 3P+N+⏚, 6h)	**QM PI222** outputs and protections: - 4P 40A, magnetothermal switch, curve C, with 40A differential protection - 4P 16A magnetothermal switch, curve C - two PEW 3264 PQ socket-outlets (400V, 32A, 3P+⏚, 6h) - two PEW 1664 PQF socket-outlets (400V, 16A, 3P+⏚, 6h) - two PEW 1663 PQF socket-outlets (230V, 16A, 2P+⏚, 6h) - maximum withdrawable active power values: 18kW	
assembled board comprises: - QM V P6 base boards - PLUSO PEW..PQ / PQF socket-outlets - H07 RN-F 4G2.5 power cable l = 4 m terminated with a PEW 1665 SV plug (230 / 400V, 32A, 3P+N+⏚, 6h)	**QM PH222** outputs and protections: - 4P 16A, magnetothermal switch, curve C, with 25A differential protection - 4P 16A magnetothermal switch, curve C - two PEW 1665 PQ socket-outlets (230/400V, 16A, 3P+N+⏚, 6h) - two PEW 1664 PQF socket-outlets (400V, 16A, 3P+⏚, 6h) - two PEW 1663 PQF socket-outlets (230V, 16A, 2P+⏚, 6h) - maximum withdrawable active power values: 9kW	**QM PC33** outputs and protections: - 4P 16A, magnetothermal switch, curve C, with 25A differential protection - three PEW 1664 PQF socket-outlets (400V, 16A, 3P+⏚, 6h) - three PEW 1663 PQF socket-outlets (230V, 16A, 2P+⏚, 6h) - maximum withdrawable active power values: 9kW
assembled board comprises: - QM V P6 base boards - PLUSO PEW..PQ / PQF socket-outlets - H07 RN-F 4G2.5 power cable l = 4 m terminated with a PEW 1665 SV plug (230 / 400V, 16A, 3P+N+⏚, 6h)	**QM PC42** outputs and protections: - 4P 16A, magnetothermal switch, curve C, with 25A differential protection - two PEW 1664 PQF socket-outlets (400V, 16A, 3P+⏚, 6h) - four PEW 1663 PQF socket-outlets (230V, 16A, 2P+⏚, 6h) - maximum withdrawable active power values: 9kW	**QM PL222** outputs and protections: - 4P 16A, magnetothermal switch, curve C, with 25A differential protection - two PEW 1664 PQF socket-outlets (400V, 16A, 3P+⏚, 6h) - two PEW 1663 PQF socket-outlets (230V, 16A, 2P+⏚, 6h) - two Schuko socket-outlets (230V, 16A, 2P+⏚) IP55 - maximum withdrawable active power values: 3kW
assembled board comprises: - QM V P6 base boards - PLUSO PEW..PQ / PQF socket-outlets - H07 RN-F 2G2.5 power cable l = 4 m terminated with a PEW 1663 SV plug (230V, 16A, 2P+⏚, 6h)	**QM PA6** outputs and protections: - 2P 16A, magnetothermal switch, curve C, with 25A differential protection - six PEW 1663 PQF socket-outlets (230V, 16A, 2P+⏚, 6h) - maximum withdrawable active power values: 3kW	

dimensions in mm



dimensions are not binding and may be changed without prior notice

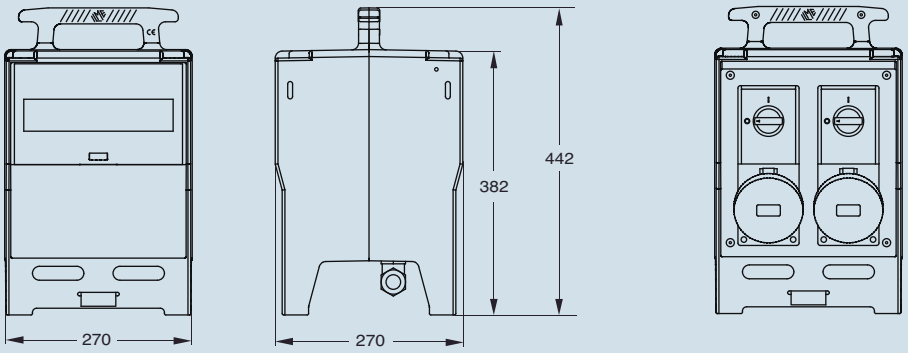
QM factory-assembled construction site boards (ACS)

- other versions of factory-assembled boards with different ILME socket-outlets may be supplied which, within the framework of the maximum withdrawable active power values, maintain their conformity to the IMQ mark

QM 2 socket-outlet construction site boards with SQ series, SQE type interlocked socket-outlets

description	Part No.	Part No.
assembled board comprises: - QM V S2 base boards - SQ series, SQE type interlocked socket-outlets (IP55) - H07 RN-F 4G4 power cable l = 4m terminated with a PEW 3265 SV plug (230 / 400V, 32A, 3P+N+⏚, 6h)	**QM SF11** outputs and protections: - 4P 40A, magnetothermal switch, curve C, with 40A differential protection - 2P 16A magnetothermal switch, curve C - one SQE 3264.5 socket-outlet (400V, 32A, 3P+⏚, 6h) - one SQE 1663.5 socket-outlet (230V, 16A, 2P+⏚, 6h) - maximum withdrawable active power values: 18kW	
assembled board comprises: - QM V S2 base boards - SQ series, SQE type interlocked socket-outlets (IP55) - H07 RN-F 4G2.5 power cable l = 4m terminated with a PEW 1665 SV plug (230 / 400V, 16A, 3P+N+⏚, 6h)	**QM SC11** outputs and protections: - 4P 16A, magnetothermal switch, curve C, with 25A differential protection - one SQE 1664.5 socket-outlet (400V, 16A, 3P+⏚, 6h) - one SQE 1663.5 socket-outlet (230V, 16A, 2P+⏚, 6h) - maximum withdrawable active power values: 9kW	**QM SE11** outputs and protections: - 4P 16A, magnetothermal switch, curve C, with 25A differential protection - one SQE 1665.5 socket-outlet (230/400V, 16A, 3P+N+⏚, 6h) - one SQE 1663.5 socket-outlet (230V, 16A, 2P+⏚, 6h) - maximum withdrawable active power values: 9kW
assembled board comprises: - QM V S2 base boards - SQ series, SQE type interlocked socket-outlets (IP55) - H07 RN-F 3G2.5 power cable l = 4m terminated with a PEW 1664 SV plug (400V, 16A, 3P+⏚, 6h)	**QM SB2** outputs and protections: - 3P 16A, magnetothermal switch, curve C, with 25A differential protection - two SQE 1664.5 socket-outlets (400V, 16A, 3P+⏚, 6h) - maximum withdrawable active power values: 9kW	
assembled board comprises: - QM V S2 base boards - SQ series, SQE type interlocked socket-outlets (IP55) - H07 RN-F 2G2.5 power cable l = 4m terminated with a PEW 1663 SV plug (230V, 16A, 2P+⏚, 6h)	**QM SA2** outputs and protections: - 2P 16A, magnetothermal switch, curve C, with 25A differential protection - two SQE 1663.5 socket-outlets (230V, 16A, 2P+⏚, 6h) - maximum withdrawable active power values: 3kW	**QM SG11** outputs and protections: - 2P 16A, magnetothermal switch, curve C, with 25A differential protection - one SQE 1663.5 socket-outlet (230V, 16A, 2P+⏚, 6h) - one socket-outlet with SQT 16220 safety transformer (230/24V, 150VA, 2P) - maximum withdrawable active power values: 3kW

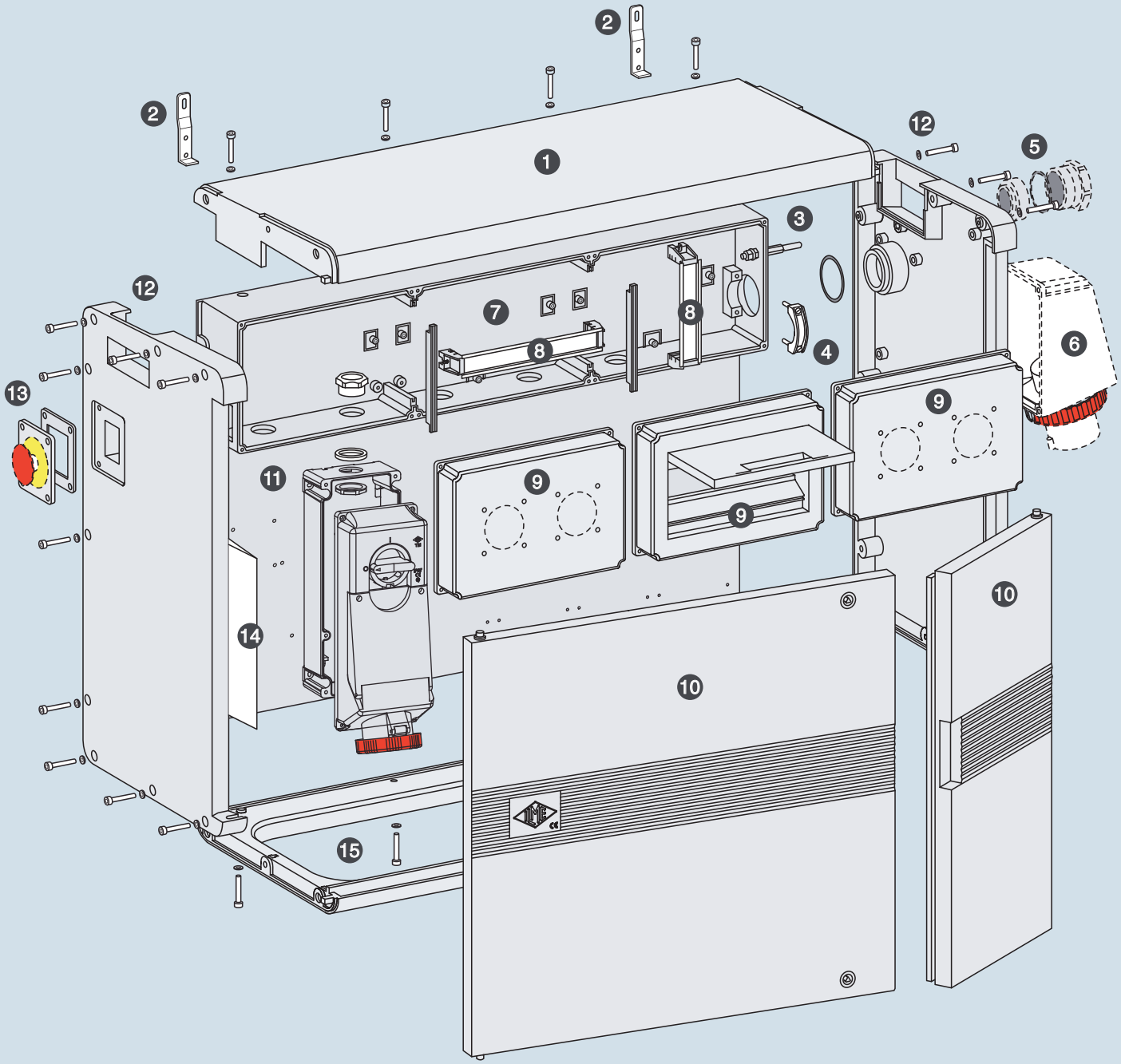
dimensions in mm



dimensions are not binding and may be changed without prior notice

❶ Supporting structure

Made in **anti-impact, self-extinguishing thermoplastic material** (750 °C classification at glow wire test), colour RAL 7012 grey, **stabilized to ultraviolet rays**. Despite the spacious passage at the base of the board (for the output line cables) and the convenient panel flaps for internal access it has a **high torsional rigidity** thanks to the structural elements used for the connections (socket-outlet head screws and stainless steel nuts) and to the **thickness** of the panelling. The supporting structure is made in **totally recyclable material**. The insulating structure ensures total isolation ⧈ of the boards in accordance with the standards EN 60439-1 and IEC 60364-4-... The panelling resist to energy impacts of 6 J (representative of impacts inside the construction sites) as required by the applicable standards.



Construction characteristics

❷ Installation hooks
(fig. 1) There are 4 stainless steel shaped and slotted brackets for fixing the board to the wall or to other suitable structure. Alternatively, a frame may be used (fig. 2, QCP TS or QC TS - optional) for semi-fixed ground installation (portable).

❸ Earthing
Both the empty boards and the factory-assembled versions include a strong external brass bolt earthing terminal that acts internally as earth collector for the board. It facilitates the connection to the protection conductor or local earth disperser and the periodical verification of the efficiency of the local earthing system.
In the case of boards with fixed power supply plugs, if the protection conductor is connected via an extension cord, the provided internal connection to the earth pin of the board power supply plug is sufficient.

❹ Cable clamp
A strong cable clamp is provided inside the input compartment to eliminate dangerous mechanical stress on the conductors of the power supply cable and on the input terminals. If an appliance inlet is used for the power supply, the cable clamp is superfluous.

❺ Cable gland
The empty board has a Pg 48 cable gland with multiple elastomer gasket and a diameter of 36-39-42-45 mm. The cable gland is necessary for power supply via cable, and maintains a declared degree of protection IP55. As an alternative, a fixed power supply wall plug may be used. Upon request on assembled boards.

❻ Power supply plug
The assembled boards may be provided with a fixed wall ILME industrial inlet which is wired directly on the side of the board, 63A or 125A according to the type. The use of a plug facilitates the transportation and the connecting operations of the board to the power supply system.

❼ Entry and branching compartment
The compartment is located inside, towards the top of the board. It is enclosed by covers and acts as input and branching unit. It can house the DIN rails, the insulating and protection apparatus, the mains connections and the command and control devices. As regards assembled boards, see page 18 for the type of wired devices enclosed within.

❽ DIN EN 60715 rails
The empty boards QP V and QG V come with DIN EN 60715 rails measuring:
- 230 mm for the modular apparatus compartment section (up to 12 units)
- 155 mm for the terminal board input compartment section. The rails are in steel and have insulating supports (located at different heights for the mounting of the rails). The rails are already wired in the assembled board versions.

❾ Input and branching compartment covers
The input and branching compartment is enclosed in three identical format covers (simple covers and a window cover for modular devices of 12 modules, with a transparent, hinged and lockable flap). They may be positioned anywhere according to the wiring requirements. The simple covers may contain complementary socket-outlets (Schuko® type).

❿ Door
The spacious internal compartment is accessed via two doors with side hinges and double locks with special triangular removable key to prevent unauthorized access. Alternatively, projecting locks or enclosed flush-mounted locks with keys may be supplied.

⓫ Rear of the board
This is the assembly surface of apparatus and can contain up to 9 interlocked industrial ILME socket-outlets in accordance with the devices assembly diagram (see page 15). The assembled versions house the socket-outlets in accordance to the established configurations.

⓬ Carrying handles
The side panels have sturdy grasp points for carrying the board. The board can also be hoisted using the optional ILME strap (**QC NS**) passed through the handles (fig. 3).

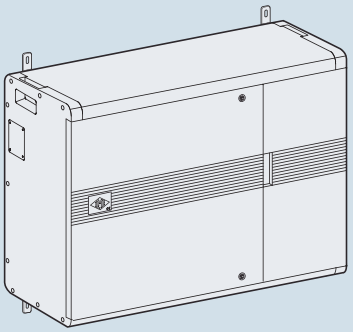
⓭ Cover with gasket (with emergency button in assembled boards)
This cover is provided with the empty board and covers position where the emergency stop button can be mounted. This button (red on yellow background) is to be mounted on the cover which is to be perforated. In the assembled versions the button is already wired.

⓮ Documents holder
Inside the board is a pocket for storing the wiring diagram and other documents, e.g. declaration of conformity. The ACS boards (apparatus assembled on the construction site and in series) also bear an identification label with the board's nominal data.

⓯ Base of the board
The opening on the base of the board allows the passage of the cables and the plugs of the apparatus supplied by the socket-outlets in the board so that the doors can be closed.

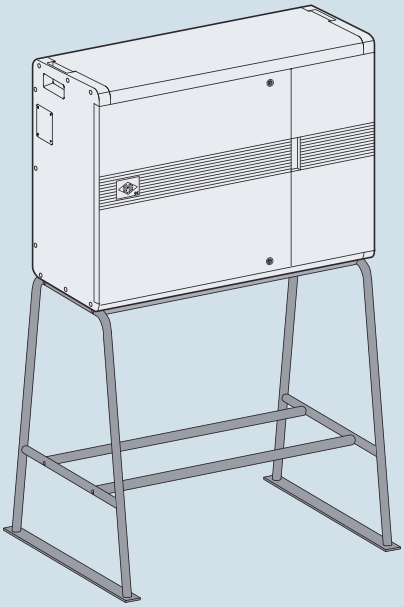
Wall installation

fig. 1



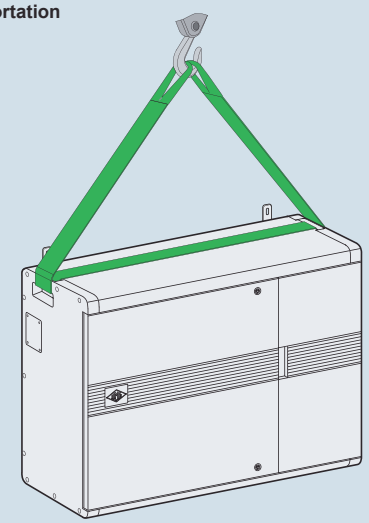
Semi-fixed installation

fig. 2



Transportation

fig. 3



Type tests (§ 8.2)

The ACS boards illustrated in this booklet have been subjected to all the type tests requested by the standard and to the following individual tests:

No.	Characteristics to be checked	Reference	Test
1	**Overtemperature limits**	8.2.1	Verification of the overtemperature limits via test (type test)
2	**Resistance to applied voltage**	8.2.2	Verification of the resistance to the applied voltage via test (type test)
3	**Resistance to short circuit**	8.2.3	Verification of the resistance to short circuit via tests (type test) **Not applied because $I_{cc} \leq 10kA$**
4	**Efficiency of protection circuit**	8.2.4	
4a	**Effective connection between the of the equipment and the circuit protection circuit**	8.2.4.1	Verification of the effective connection between the exposed conductive parts of the apparatus via visual inspection or measurement of resistance (type test)
4b	**Resistance to short circuit of the protection circuit**	8.2.4.2	Verification of the resistance to short circuit of the protection circuit via test (type test) **Not applied, because $I_{cc} \leq 10kA$**
5	**Air and surface distances**	8.2.5	Verification of the air and surface distance (type test)
6	**Mechanical function**	8.2.6	Verification of the mechanical function (type test)
7	**Degree of protection**	8.2.7	Verification of the degree of protection (type test)
8	**Mechanical resistance**	8.2.8	Verification of the mechanical resistance via test (type test)
8a	**Mechanical resistance**	8.2.8.2	***Impact test*:** 3 impacts on each of the 6 external surfaces of the tested ACS with a steel ball Ø 50 mm, mass 500 ± 25 g. by 1.2 m. 50 HR ≤Hardness < 58 HR As an alternative - pendulum
8b		8.2.8.3	***Collision test*:** A sinusoidal half-wave pulse of 500m/s² and of a duration of 11 ms, in accordance with IEC 60068-2-27
9	**Resistance to corrosion**	8.2.9	Verification of the resistance to corrosion via test (type test)
9a		8.2.9.1	***Verification of the resistance to corrosion under normal working conditions*:** three 24h cycles in a climatic chamber
9b		8.2.9.2	***Verification of the resistance to corrosion under normal working conditions*:** 10 days of continuous exposure to industrial atmospheres in accordance with IEC 60068-2-42
10	**Wiring, electric functions**	8.3.1	Visual inspection of the apparatus including visual inspection of the wiring and, if necessary, test of the electric functions (individual test)
11	**Isolation**	8.3.2	Applied voltage test (individual test)
12	**Measures of protection**	8.3.3	Verification of the measures of protection and of the electrical continuity of the protection circuits (individual tests)

Tests 7, 8a, 8b, 9a, 9b refer to the empty enclosure, the remaining tests refer to the assembled board.

** For power supply rated voltage of less than 230/400V - at equivalent rated current the maximum active power withdrawable reduces in proportion to the voltage. For example: 63A board [35kW - 230/400V~] > [20kW - 130/230V~]*

Q technical characteristics for ACS boards

Electric characteristics and selection of electric components in construction site boards (§ 7.6.1)

rated voltage	U_e **= 230/400 V**
rated frequency	**50 Hz**
rated insulation voltage	U_i **= 400 V**
connection to public mains network distribution	three-phase with neutral system + protective earth connector, via a coupler IP67 3P+N+⏚ (e.g. 63A **PEW 6365 PVor** 125A **PEW 12565 PV** depending on the type)
degree of pollution	**3**
maximum active power foreseeable	**20 kW** QP TI B and QP SQ B types with 63A power supply plug **35 kW** QP TI A/C/D, QP SQ A/C/D, QG TI A/B/C and QG SQ A/B/C types with 63A power supply plug **55 kW** QG TI D and QG SQ D/E/F types with 125A power supply plug
rated contemporaneity factor	since the output circuits are not employed continuously by the rated load (16A, 32A or 63A), to perform the overtemperature verification the maximum power continuously withdrawable as indicated above is assumed which determines the rated contemporaneity factors
protection against short circuit and resistance to short circuit (§ 7.5)	- maximum value allowed of the assumed short circuit current I_{cp} **= 10 kA** - conditioned rated short circuit current I_{cc} **= 10 kA** - rated peak short circuit current which may be admitted and relative power factor: I_{pk} **= 17 kA @ cos φ 0.5** (tab. 5 EN 60439-1 standard) NOTE: short circuit tests for conditioned rated short circuit current of I_{cc} ≤ 10 kA are not performed.
internal earth terminal	in conformance with standard EN 60948-7-1, type ILME 70 mm²

Protection against electric shocks (direct and indirect) (§ 7.4)

protection against direct contacts (§ 7.4.2)	assured by the design and construction of the ACS. IP55 degree of protection with doors either open and closed, with the ring nuts of the plugs and the plug covers tightened as far as they will go and the apparatus carrier compartment door closed
earthing	via fixed socket-outlet, the earth cavity is connected to the internal earth terminal in the factory (standard EN 60439-4, art. 7.4.3.1.5.f and 5g). Although not indispensable, the assembly kit also contains an external earth terminal comprising a sturdy brass screw for connection to the ground installation earthing electrode via cable terminal
protection against indirect contacts (§ 7.4.3)	In accordance with IEC 60364-7-704, via differential switch with I_{dn} of 30 mA for protection. Earth terminals of the socket-outlets connected to the main ACS earth terminal (§7.4.3.1.5), which in turn is connected to the earth pin of the fixed power supply plug of the board and to the external earth terminal (which facilitates the local earthing in the absence of distribution of the protection conductor in the power supply cable). Section of each protection conductor within the board not less than 2.5 mm² (see wiring diagram)

Components installed in the boards (§ 7.6)

internal wiring	state-of-the-art internal wiring with flexible anti-flame PVC-insulated conductors in accordance with standards EN 50266 and EN 50268, type **N07V-K** (IMQ certified) in the sections specified in the wiring diagram for each circuit
power supply appliance inlet (input)	ILME **Pluso series** (63A) or (125A). In conformance with standards EN 60309-1 and EN 60309-2
interlocked socket-outlets (output)	ILME **TM and SQV series** (IMQ certified) type with plug fuse carrier in accordance with standard EN 60269-3-1, Diazed DIII, or E-16 (for TM IT sockets) or with sectionable (TM..IS) or plug (SQV) fuse carriers in accordance with standard EN 60269-2-1, size 10x38, 14x51, 22x58. In compliance with standards EN 60309-1 and EN 60309-2, with blocking device comprising a switchgear - ILME insulator **Z series** (certified in conformance with standard EN 60947-3, type tested performed by IEN Galileo Ferraris). Individual protection against overcurrents and short circuits via fuses (**fuses excluded**). User good quality fuses that conform to the rated values.
residual current switch	***63A***: in compliance with standards EN 61009-1 and EN 61009-2-1, *rated residual current* I_{dn}**: ≤ 30 mA**
automatic magnetothermal switches	***100A***: in conformance with standard EN 60898, with magnetothermal releasing device of C characteristic (instant intervention above $5I_n$ up to $10I_n$ inclusive); control lever may be lead blocked in the **O** or **I**; rated cut-off power in a.c. in accordance with EN 60898: I_{cn} **= 10 kA** at 400V c.a.; in accordance with EN 60947-2: I_{cu} **= 20 kA** at 400V c.a. ***63A***: in conformance with standard EN 60898, with magnetothermal releasing device of C characteristic (instant intervention above $5I_n$ up to $10I_n$ inclusive); control lever may be lead blocked in the **O** or **I**; rated cut-off power in a.c. in accordance with EN 60898: I_{cn} **= 6 kA** at 400V c.a.; in accordance with EN 60947-2: I_{cu} **= 6 kA** at 400V c.a. ***40A***: in conformance with standard EN 60898, with magnetothermal releasing device of C characteristic (instant intervention above $5I_n$ up to $10I_n$ inclusive); control lever may be lead blocked in the **O** or **I**; rated cut-off power in a.c. in accordance with EN 60898: I_{cn} **= 6 kA** at 400V c.a.; in accordance with EN 60947-2: I_{cu} **= 6 kA** at 400V c.a. ***32A***: in conformance with standard EN 60898, with magnetothermal releasing device of C characteristic (instant intervention above $5I_n$ up to $10I_n$ inclusive); control lever may be lead blocked in the **O** or **I**; rated cut-off power in a.c. in accordance with EN 60898: I_{cn} **= 6 kA** at 400V c.a.; in accordance with EN 60947-2: I_{cu} **= 6 kA** at 400V c.a. ***16A***: in conformance with standard EN 60898, with magnetothermal releasing device of C characteristic (instant intervention above $5I_n$ up to $10I_n$ inclusive); control lever may be lead blocked in the **O** or **I**; rated cut-off power in a.c. in accordance with EN 60898: I_{cn} **= 6 kA** at 400V c.a.; in accordance with EN 60947-2: I_{cu} **= 6 kA** at 400V c.a.
magnetothermal differential switch	***63A***: in compliance with standards EN 61009-1; C magnetothermal unhooking device (instant intervention above $5I_n$ up to $10I_n$ inclusive), Rated cut-off power in a.c. in accordance with EN 61009-1 and EN 60898: I_{cn} **= 6 kA** at 400V c.a.; in accordance with EN 60947-2: I_{cu} **= 10 kA** at 400V c.a.; *rated residual current* I_{dn} **≤ 30 mA**; limited energy class: 3 ***40A***: in compliance with standards EN 61009-1; C magnetothermal unhooking device (instant intervention above $5I_n$ up to $10I_n$ inclusive), control lever may be lead blocked in the **O** or **I** position. Rated cut-off power in a.c. in accordance with EN 61009-1 and EN 60898: I_{cn} **= 6 kA** at 400V c.a.; in accordance with EN 60947-2: I_{cu} **= 10 kA** at 400V c.a.; *rated residual current* I_{dn} **≤ 30 mA**; limited energy class: 3

Construction characteristics of boards from Q series sites

The mechanical design of the boards fully conforms to the requirements of the standard (§ 7.1.1 - § 7.1.5). And specifically:

Cable entry devices:
Power is supplied to the empty board in the assembly kit version via a Pg 48 cable gland with a multiple elastomer gasket (for cables of Ø 35 ÷ 45 mm. and degree of protection IP55, or via a fixed wall plug. In the assembled boards power is supplied via a 63A fixed wall plug (models A-B-C) or 125A (model D-E-F).

Protection against corrosion (§ 7.1.4):
Stainless steel screws. Resistant to corrosion (test according to the provisions of standard EN 60439-4, §8.2.9.1 and §8.2.9.2).

Mechanical resistance (§ 7.1.5):
- Able to resist mechanical impacts corresponding to an acceleration of 500 m/s^2 (50 g), in the form of a sinusoidal half-wave pulse of a duration of 11 ms (impacts considered as corresponding to the impacts on the ACS transported on normal road or rail vehicles without anchorage and for long periods of time).
- Able to resist to energy impacts of 6 J (corresponding to collisions with mechanical apparatus used on the construction site).

Atmospheric conditions for external installations
- ***relative humidity***: may temporarily reach 100% at a maximum temperature of +25 °C
- ***minimum operating temperature***: -25 °C
- ***maximum operating temperature***: +40 °C (its average value referred to a period of 24 hours must not exceed +35 °C)

Degree of protection (§ 7.2.1.1):
IP55, against contact with active parts, the penetration of solid and liquid foreign bodies, in accordance with the European standard EN 60529 (IEC 60529), greater than the minimum degree IP43 required by the construction site board standard EN 60439-4 (§ 7.2.1.1).
The degree of protection marked refers to the factory-assembled board when installed in a vertical position, with doors closed, with the removable panels and cover plates assembled, the socket-outlet covers closed, the plugs inserted and the ring nut locked. In the case of the empty boards, (QP V e QG V) with degree of protection IP55, it assumes the lowest of the assembled boards' degree of protection.

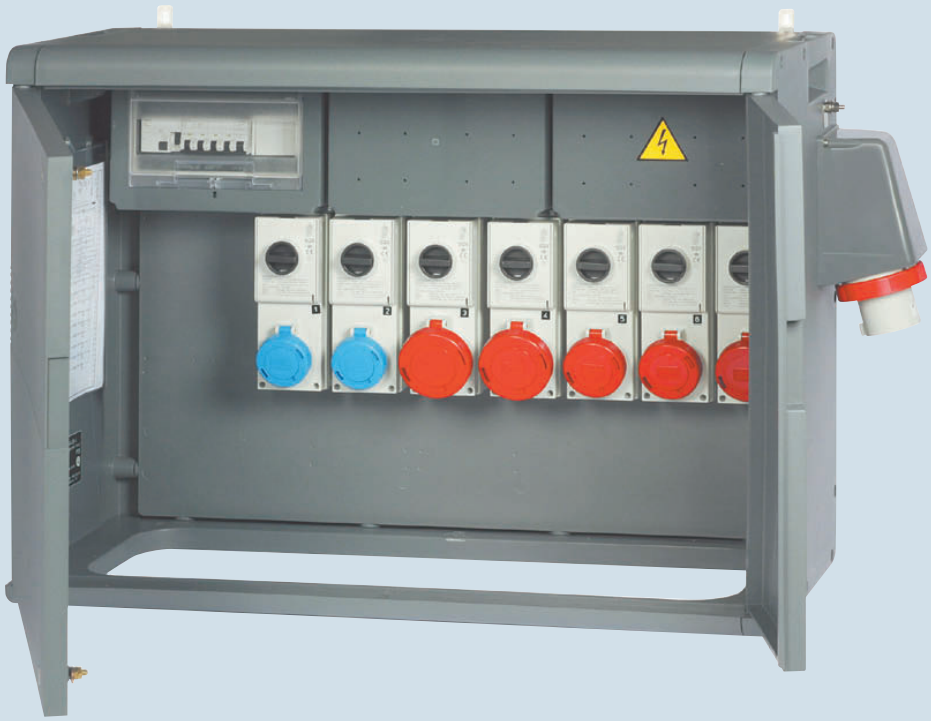
Supports and fastening devices (§ 7.2.4):
Fastening system for a vertical wall using metallic brackets; alternatively: Metal ground frame **QCP TS** or **QC TS** in heat painted steel.

Socket-outlets
Internally mounted, with plugs, protected from accidental impacts.

Cable exits
At a minimum distance from the ground compatible with the curve ray of the largest cable that can be connected to the ACS.

Hoisting and handling devices (§ 7.2.5):
2 carrying handles incorporated in the cover of the enclosure. To hoist the board using a pulley block or crane, use a hoisting strap/s passed through the handles.

Type tests (§ 8.2):
The ACS have been subjected to all the type tests prescribed by the standard, as well to the relative individual tests.



Q factory-assembled construction site boards (ACS)

- other versions of factory-assembled boards with different ILME socket-outlets may be supplied which, within the framework of the maximum withdrawable active power values, maintain their conformity to the IMQ mark
- versions with terminal board input units produced on demand (add "M" at the end of the code, before any suffixes "-1" identifying the variants)**

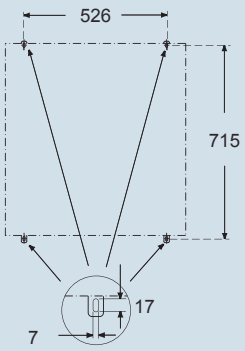
*) For power supply rated voltage of less than 230/400V - at equivalent rated current the maximum active power withdrawable reduces in proportion to the voltage. For example: board 63A [35kW - 230/400V~] > [20kW - 130/230V~]

**) e.g. QP TI A → QP TI AM
QP TI B-1 → QP TI BM-1

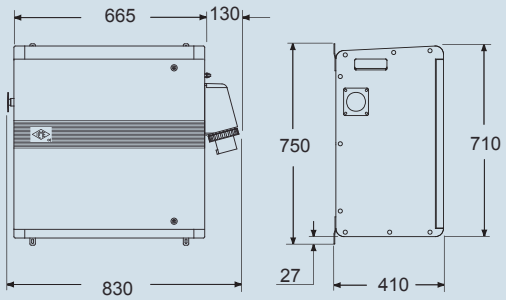
QP site boards
with TM series interblocked sockets

description	part No.	part No.
assembled board comprises: - QP V base board - TM series interblocked sockets - general emergency push-button - main switch undervoltage release coil	**QP TI A** variants: - 63A magnothermal differential switch - one TM 3264 IT (380V, 32A, 3P+ ⏚, 6h) socket-outlet - two TM 1664 IT (380V, 16A, 3P+ ⏚, 6h) socket-outlets - two TM 1663 IT (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW (maximum active power foreseeable*)	**QP TI A-1** variants: - 63A magnothermal differential switch - one TM 3265 IT (380V, 32A, 3P+N+ ⏚, 6h) socket-outlet - two TM 1664 IT (380V, 16A, 3P+ ⏚, 6h) socket-outlets - two TM 1663 IT (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)
assembled board comprises: - QP V base board - TM series interblocked sockets - general emergency push-button - main switch undervoltage release coil	**QP TI B** variants: - 40A magnothermal differential switch - three TM 1664 IT (380V, 16A, 3P+ ⏚, 6h) socket-outlets - two TM 1663 IT (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 20kW maximum active power foreseeable*)	**QP TI B-1** variants: - 40A magnothermal differential switch - one TM 1665 IT (380V, 16A, 3P+N+ ⏚, 6h) socket-outlet - one TM 1664 IT (380V, 16A, 3P+ ⏚, 6h) socket-outlet - two TM 1663 IT (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 20kW maximum active power foreseeable*)
assembled board comprises: - QP V base board - TM series interblocked sockets - general emergency push-button - main switch undervoltage release coil	**QP TI B-2** variants: - 40A magnothermal differential switch - two TM 1664 IT (380V, 16A, 3P+ ⏚, 6h) socket-outlets - three TM 1663 IT (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 20kW maximum active power foreseeable*)	

fixing interaxes in mm



dimensions in mm



Rated current	fuse carrier type*
socket part	
16A	E16
32A	E33 - DIII

*fuses excluded

dimensions are not binding and may be changed without prior notice

- other versions of factory-assembled boards with different ILME socket-outlets may be supplied which, within the framework of the maximum withdrawable active power values, maintain their conformity to the IMQ mark
- versions with terminal board input units produced upon request (add "M" at the end of the code, before any suffixes "-1" identifying the variants)**

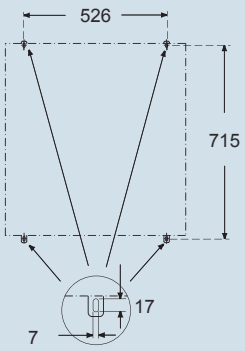
*) For power supply rated voltage of less than 230/400V - at equivalent rated current the maximum active power withdrawable reduces in proportion to the voltage. For example: board 63A [35kW - 230/400V~] > [20kW - 130/230V~]

**) e.g. QP TI A → QP TI AM
QP TI B-1 → QP TI BM-1

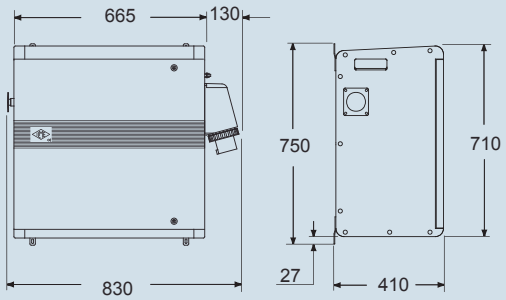
QP site boards with TM series interblocked sockets

description	part No.	part No.
assembled board comprises: - QP V base board - TM series interblocked sockets - general emergency push-button - main switch undervoltage release coil	**QP TI C** variants: - 63A magnothermal differential switch - one TM 3264 IT (380V, 32A, 3P+ ⏚, 6h) socket-outlet - one TM 1664 IT (380V, 16A, 3P+ ⏚, 6h) socket-outlet - three TM 1663 IT (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	**QP TI C-1** variants: - 63A magnothermal differential switch - one TM 3265 IT (380V, 32A, 3P+N+ ⏚, 6h) socket-outlet - one TM 1664 IT (380V, 16A, 3P+ ⏚, 6h) socket-outlet - three TM 1663 IT (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)
assembled board comprises: - QP V base board - TM series interblocked sockets - general emergency push-button - main switch undervoltage release coil	**QP TI C-2** variants: - 63A magnothermal differential switch - one TM 3264 IT (380V, 32A, 3P+ ⏚, 6h) socket-outlet - one TM 1664 IT (380V, 16A, 3P+ ⏚, 6h) socket-outlet - two TM 1663 IT (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one TM 16220 T1 (24V, 16A, 2P) socket-outlet - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	
assembled board comprises: - QP V base board - TM series interblocked sockets - general emergency push-button - main switch undervoltage release coil	**QP TI D** variants: - 63A magnothermal differential switch - one TM 3264 IT (380V, 32A, 3P+ ⏚, 6h) socket-outlet - three TM 1664 IT (380V, 16A, 3P+ ⏚, 6h) socket-outlets - one TM 1663 IT (220V, 16A, 2P+ ⏚, 6h) socket-outlet - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	

fixing interaxes in mm



dimensions in mm



Rated current	fuse carrier type*
socket part	
16A	E16
32A	E33 - DIII

*fuses excluded

dimensions are not binding and may be changed without prior notice

- other versions of factory-assembled boards with different ILME socket-outlets may be supplied which, within the framework of the maximum withdrawable active power values, maintain their conformity to the IMQ mark
- versions with terminal board input units produced upon request (add "M" at the end of the code, before any suffixes "-1" identifying the variants)**

*) For power supply rated voltage of less than 230/400V - at equivalent rated current the maximum active power withdrawable reduces in proportion to the voltage. For example: board 63A [35kW - 230/400V~] > [20kW - 130/230V~]

**) e.g. QP TI A → QP TI AM
QP TI B-1 → QP TI BM-1

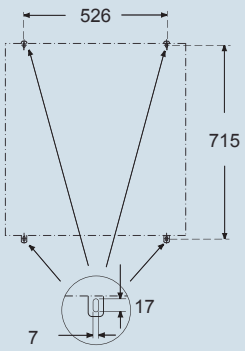
EN 60439 - 4 ACS assembled construction site boards EUROPEAN STANDARD

CERTIFIED CERTIFIED CERTIFIED

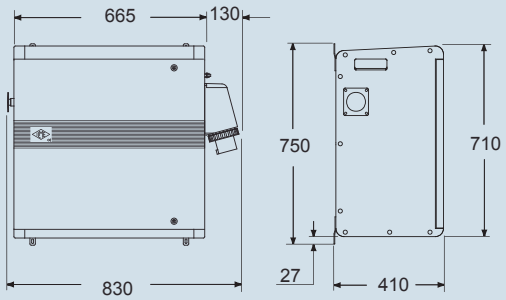
QP site boards with SQV series interblocked sockets

description	part No.	part No.
assembled board comprises: - QP V base board - SQV series interblocked sockets complete with wall mounting case (SQC 923 CS) - general emergency push-button - main switch undervoltage release coil	**QP SQ A** variants: - 63A magnothermal differential switch - one SQV 3264.5 (380V, 32A, 3P+ ⏚, 6h) socket-outlet - two SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlets - two SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	**QP SQ A-1** variants: - 63A magnothermal differential switch - one SQV 3265.5 (380V, 32A, 3P+N+ ⏚, 6h) socket-outlet - two SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlets - two SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)
assembled board comprises: - QP V base board - SQV series interblocked sockets complete with wall mounting case (SQC 923 CS) - general emergency push-button - main switch undervoltage release coil	**QP SQ B** variants: - 40A magnothermal differential switch - three SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlets - two SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 20kW maximum active power foreseeable*)	**QP SQ B-1** variants: - 40A magnothermal differential switch - one SQV 1665.5 (380V, 16A, 3P+N+ ⏚, 6h) socket-outlet - one SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlet - two SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 20kW maximum active power foreseeable*)
assembled board comprises: - QP V base board - SQV series interblocked sockets complete with wall mounting case (SQC 923 CS) - general emergency push-button - main switch undervoltage release coil	**QP SQ B-2** variants: - 40A magnothermal differential switch - two SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlets - three SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 20kW maximum active power foreseeable*)	

fixing interaxes in mm



dimensions in mm



Rated current socket part	fuse carrier type*
16A	10 x 38
32A	10 x 38

*fuses excluded

dimensions are not binding and may be changed without prior notice

- other versions of factory-assembled boards with different ILME socket-outlets may be supplied which, within the framework of the maximum withdrawable active power values, maintain their conformity to the IMQ mark
- versions with terminal board input units produced upon request (add "M" at the end of the code, before any suffixes "-1" identifying the variants)**

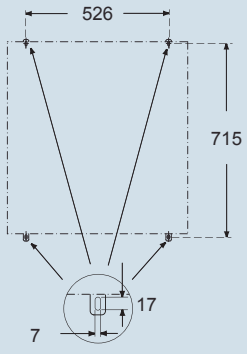
*) For power supply rated voltage of less than 230/400V - at equivalent rated current the maximum active power withdrawable reduces in proportion to the voltage. For example: board 63A [35kW - 230/400V~] > [20kW - 130/230V~]

**) e.g. QP TI A → QP TI AM
QP TI B-1 → QP TI BM-1

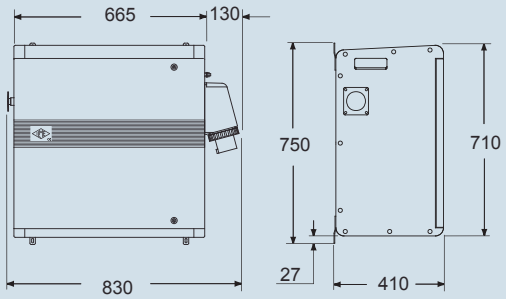
QP site boards with SQV series interblocked sockets

description	part No.	part No.
assembled board comprises: - QP V base board - SQV series interblocked sockets complete with wall mounting case (SQC 923 CS) - general emergency push-button - main switch undervoltage release coil	**QP SQ C** variants: - 63A magnothermal differential switch - one SQV 3264.5 (380V, 32A, 3P+ ⏚, 6h) socket-outlet - one SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlet - three SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	**QP SQ C-1** variants: - 63A magnothermal differential switch - one SQV 3265.5 (380V, 32A, 3P+N+ ⏚, 6h) socket-outlet - one SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlet - three SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)
assembled board comprises: - QP V base board - SQV series interblocked sockets complete with wall mounting case (SQC 923 CS) - general emergency push-button - main switch undervoltage release coil	**QP SQ C-2** variants: - 63A magnothermal differential switch - one SQV 3264.5 (380V, 32A, 3P+ ⏚, 6h) socket-outlet - one SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlet - two SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one SQT 16220 (24V, 16A, 2P) socket-outlet - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	
assembled board comprises: - QP V base board - SQV series interblocked sockets complete with wall mounting case (SQC 923 CS) - general emergency push-button - main switch undervoltage release coil	**QP SQ D** variants: - 63A magnothermal differential switch - one SQV 3264.5 (380V, 32A, 3P+ ⏚, 6h) socket-outlet - three SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlets - one SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlet - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	

fixing interaxes in mm



dimensions in mm



Rated current socket part	fuse carrier type*
16A	10 x 38
32A	10 x 38

*fuses excluded

dimensions are not binding and may be changed without prior notice

Q factory-assembled construction site boards (ACS)

- other versions of factory-assembled boards with different ILME socket-outlets may be supplied which, within the framework of the maximum withdrawable active power values, maintain their conformity to the IMQ mark
- versions with terminal board input units produced upon request (add "M" at the end of the code, before any suffixes "-1" identifying the variants)**

*) For power supply rated voltage of less than 230/400V - at equivalent rated current the maximum active power withdrawable reduces in proportion to the voltage. For example: board 63A [35kW - 230/400V~] > [20kW - 130/230V~]

**) e.g. QP TI A → QP TI AM
QP TI B-1 → QP TI BM-1

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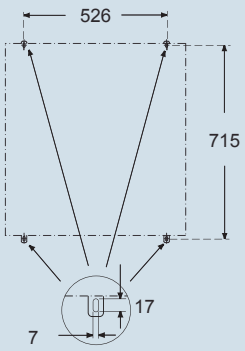
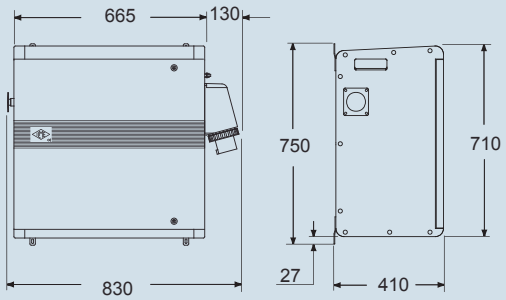
QP site boards with SQV series interblocked sockets

description	part No.	part No.
assembled board comprises: - QP V base board - SQV series interblocked sockets complete with wall mounting case (SQC 923 CS) - general emergency push-button - main switch undervoltage release coil	**QP SQ E** variants: - 63A magnothermal differential switch - two SQV 3264.5 (380V, 32A, 3P+ ⏚, 6h) socket-outlets - two SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlets - two SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	**QP SQ E-1** variants: - 63A magnothermal differential switch - one SQV 3264.5 (380V, 32A, 3P+ ⏚, 6h) socket-outlet - three SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlets - two SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)
assembled board comprises: - QP V base board - SQV series interblocked sockets complete with wall mounting case (SQC 923 CS) - general emergency push-button - main switch undervoltage release coil	**QP SQ E-2** variants: - 63A magnothermal differential switch - two SQV 3265.5 (380V, 32A, 3P+N+ ⏚, 6h) socket-outlets - two SQV 1665.5 (380V, 16A, 3P+N+ ⏚, 6h) socket-outlets - two SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	**QP SQ E-3** variants: - 63A magnothermal differential switch - one SQV 3265.5 (380V, 32A, 3P+N+ ⏚, 6h) socket-outlet - one SQV 1665.5 (380V, 16A, 3P+N+ ⏚, 6h) socket-outlet - two SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlets - two SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)
assembled board comprises: - QP V base board - SQV series interblocked sockets complete with wall mounting case (SQC 923 CS) - general emergency push-button - main switch undervoltage release coil	**QP SQ E-4** variants: - 63A magnothermal differential switch - two SQV 3265.5 (380V, 32A, 3P+N+ ⏚, 6h) socket-outlets - one SQV 1665.5 (380V, 16A, 3P+N+ ⏚, 6h) socket-outlet - one SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlet - two SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	

fixing interaxes in mm



dimensions in mm



Rated current socket part	fuse carrier type*
16A	10 x 38
32A	10 x 38

*fuses excluded

dimensions are not binding and may be changed without prior notice

- other versions of factory-assembled boards with different ILME socket-outlets may be supplied which, within the framework of the maximum withdrawable active power values, maintain their conformity to the IMQ mark
- versions with terminal board input units produced upon request (add "M" at the end of the code, before any suffixes "-1" identifying the variants)**

*) For power supply rated voltage of less than 230/400V - at equivalent rated current the maximum active power withdrawable reduces in proportion to the voltage. For example: board 63A [35kW - 230/400V~] > [20kW - 130/230V~]

**) e.g. QP TI A → QP TI AM
QP TI B-1 → QP TI BM-1

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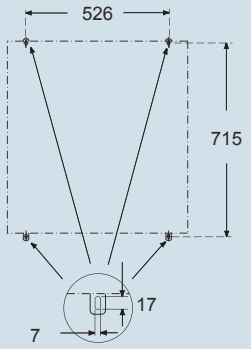
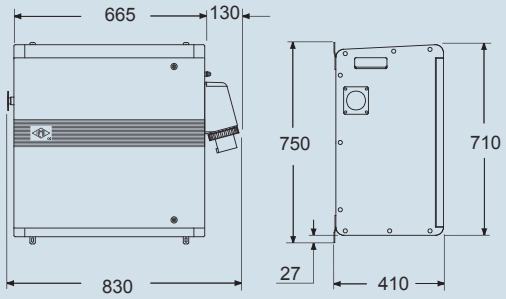
QP site boards with SQV series interblocked sockets

description	part No.	part No.
assembled board comprises: - QP V base board - SQV series interblocked sockets complete with wall mounting case (SQC 923 CS) - general emergency push-button - main switch undervoltage release coil	**QP SQ F** variants: - 63A magnothermal differential switch - one SQV 3265.5 (380V, 32A, 3P+N+⏚, 6h) socket-outlet - two SQV 1664.5 (380V, 16A, 3P+⏚, 6h) socket-outlets - three SQV 1663.5 (220V, 16A, 2P+⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+⏚, 6h) plug - 35kW maximum active power foreseeable*)	**QP SQ F-1** variants: - 63A magnothermal differential switch - one SQV 3265.5 (380V, 32A, 3P+N+⏚, 6h) socket-outlet - one SQV 1665.5 (380V, 16A, 3P+N+⏚, 6h) socket-outlet - one SQV 1664.5 (380V, 16A, 3P+⏚, 6h) socket-outlet - three SQV 1663.5 (220V, 16A, 2P+⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+⏚, 6h) plug - 35kW maximum active power foreseeable*)

fixing interaxes in mm



dimensions in mm



Rated current socket part	fuse carrier type*
16A	10 x 38
32A	10 x 38

*fuses excluded

dimensions are not binding and may be changed without prior notice

Q factory-assembled construction site boards (ACS)

- other versions of factory-assembled boards with different ILME socket-outlets may be supplied which, within the framework of the maximum withdrawable active power values, maintain their conformity to the IMQ mark
- versions with terminal board input units produced upon request (add "M" at the end of the code, before any suffixes "-1" identifying the variants)**

*) For power supply rated voltage of less than 230/400V - at equivalent rated current the maximum active power withdrawable reduces in proportion to the voltage. For example: board 63A [35kW - 230/400V~] > [20kW - 130/230V~]

**) e.g. QG TI A → QG TI AM
QG TI B-1 → QG TI BM-1

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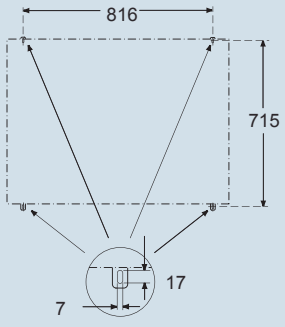
QG site boards with TM series interblocked sockets

description	part No.	part No.
assembled board comprises: - QG V base board - TM series interblocked sockets - general emergency push-button - main switch undervoltage release coil	**QG TI A** variants: - 63A magnothermal differential switch - two TM 3264 IT (380V, 32A, 3P+ ⏚, 6h) socket-outlets - three TM 1664 IT (380V, 16A, 3P+ ⏚, 6h) socket-outlets - two TM 1663 IT (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	
assembled board comprises: - QG V base board - TM series interblocked sockets - general emergency push-button - main switch undervoltage release coil	**QG TI B** variants: - 63A magnothermal differential switch - one TM 3264 IT (380V, 32A, 3P+ ⏚, 6h) socket-outlet - three TM 1664 IT (380V, 16A, 3P+ ⏚, 6h) socket-outlets - three TM 1663 IT (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	**QG TI B-1** variants: - 63A magnothermal differential switch - one TM 3265 IT (380V, 32A, 3P+N+ ⏚, 6h) socket-outlet - one TM 1665 IT (380V, 16A, 3P+N+ ⏚, 6h) socket-outlet - two TM 1664 IT (380V, 16A, 3P+ ⏚, 6h) socket-outlets - three TM 1663 IT (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)
assembled board comprises: - QG V base board - TM series interblocked sockets - general emergency push-button - main switch undervoltage release coil	**QG TI B-2** variants: - 63A magnothermal differential switch - one TM 3264 IT (380V, 32A, 3P+ ⏚, 6h) socket-outlet - three TM 1664 IT (380V, 16A, 3P+ ⏚, 6h) socket-outlets - two TM 1663 IT (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one TM 16220 T1 (24V, 16A, 2P) socket-outlet - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	

fixing interaxes in mm

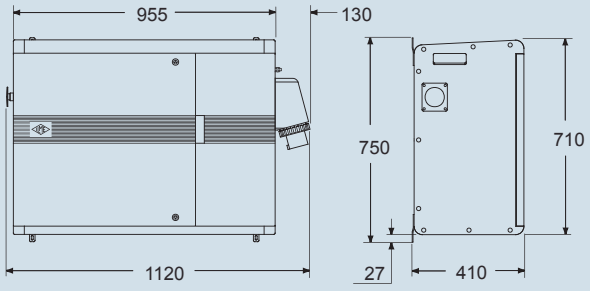


Rated current socket part	fuse carrier type*
16A	E16
32A	E33 - DIII

*fuses excluded

dimensions are not binding and may be changed without prior notice

dimensions in mm



- other versions of factory-assembled boards with different ILME socket-outlets may be supplied which, within the framework of the maximum withdrawable active power values, maintain their conformity to the IMQ mark
- versions with terminal board input units produced upon request (add "M" at the end of the code, before any suffixes "-1" identifying the variants)**

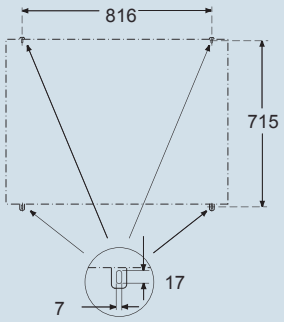
*) For power supply rated voltage of less than 230/400V - at equivalent rated current the maximum active power withdrawable reduces in proportion to the voltage. For example: board 63A [35kW - 230/400V~] > [20kW - 130/230V~]

**) e.g. QG TI A → QG TI AM
QG TI B-1 → QG TI BM-1

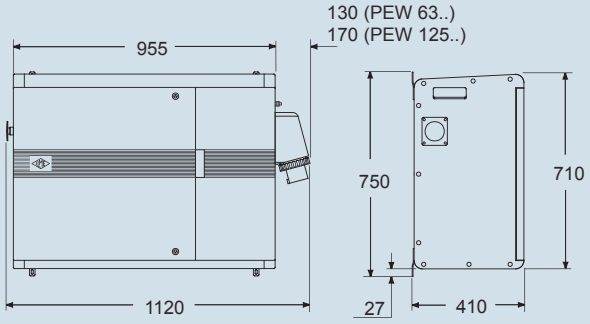
QG site boards with TM series interblocked sockets

description	part No.	part No.
assembled board comprises: - QG V base board - TM series interblocked sockets - general emergency push-button - main switch undervoltage release coil	**QG TI C** variants: - 63A magnothermal differential switch - one TM 3264 IT (380V, 32A, 3P+ ⏚, 6h) socket-outlet - four TM 1664 IT (380V, 16A, 3P+ ⏚, 6h) socket-outlets - two TM 1663 IT (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	
assembled board comprises: - QG V base board - TM series interblocked sockets - general emergency push-button - main switch undervoltage release coil	**QG TI D** variants: - 100A magnothermal switch 63A magnothermal differential switch one TM 6364 IT (380V, 63A, 3P+ ⏚, 6h) socket-outlet one TM 3264 IT (380V, 32A, 3P+ ⏚, 6h) socket-outlet 63A differential switch 32A magnothermal switch three TM 1664 IT (380V, 16A, 3P+ ⏚, 6h) socket-outlets 16A magnothermal switch two TM 1663 IT (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 12565 SM (380V, 125A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	**QG TI D-1** variants: - 100A magnothermal switch - one TM 6365 IT (380V, 63A, 3P+N+ ⏚, 6h) socket-outlet - one TM 3264 IT (380V, 32A, 3P+ ⏚, 6h) socket-outlet - two TM 1664 IT (380V, 16A, 3P+ ⏚, 6h) socket-outlets - two TM 1663 IT (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 12565 SM (380V, 125A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)

fixing interaxes in mm



dimensions in mm



Rated current socket part	fuse carrier type*
16A	E16
32A	E33 - DIII
63A	E33 - DIII

*fuses excluded

dimensions are not binding and may be changed without prior notice

Q factory-assembled construction site boards (ACS)

- other versions of factory-assembled boards with different ILME socket-outlets may be supplied which, within the framework of the maximum withdrawable active power values, maintain their conformity to the IMQ mark
- versions with terminal board input units produced upon request (add "M" at the end of the code, before any suffixes "-1" identifying the variants)**

*) For power supply rated voltage of less than 230/400V - at equivalent rated current the maximum active power withdrawable reduces in proportion to the voltage. For example: board 63A [35kW - 230/400V~] > [20kW - 130/230V~]

**) e.g. QG TI A → QG TI AM
QG TI B-1 → QG TI BM-1

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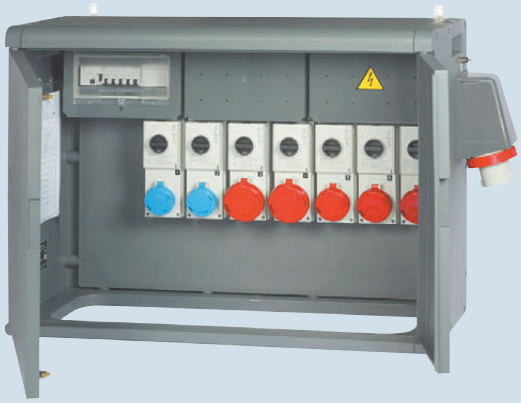
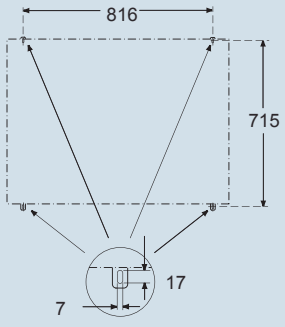
QG site boards with SQV series interblocked sockets



description	part No.	part No.
assembled board comprises: - QG V base board - SQV series interblocked sockets complete with wall mounting case (SQC 923 CS) - general emergency push-button - main switch undervoltage release coil	**QG SQ A** variants: - 63A magnothermal differential switch - two SQV 3264.5 (380V, 32A, 3P+ ⏚, 6h) socket-outlets - three SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlets - two SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	
assembled board comprises: - QG V base board - SQV series interblocked sockets complete with wall mounting case (SQC 923 CS) - general emergency push-button - main switch undervoltage release coil	**QG SQ B** variants: - 63A magnothermal differential switch - one SQV 3264.5 (380V, 32A, 3P+ ⏚, 6h) socket-outlet - three SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlets - three SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	**QG SQ B-1** variants: - 63A magnothermal differential switch - one SQV 3265.5 (380V, 32A, 3P+N+ ⏚, 6h) socket-outlet - one SQV 1665.5 (380V, 16A, 3P+N+ ⏚, 6h) socket-outlet - two SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlets - three SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)
assembled board comprises: - QG V base board - SQV series interblocked sockets complete with wall mounting case (SQC 923 CS) - general emergency push-button - main switch undervoltage release coil	**QG SQ B-2** variants: - 63A magnothermal differential switch - one SQV 3264.5 (380V, 32A, 3P+ ⏚, 6h) socket-outlet - three SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlets - two SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one SQT 16220 (24V, 16A, 2P) socket-outlet - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	

fixing interaxes in mm

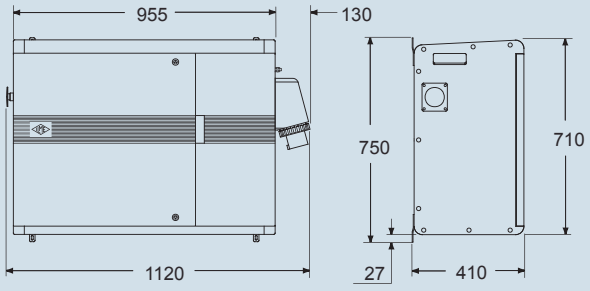


Rated current	fuse carrier type*
socket part	
16A	10 x 38
32A	10 x 38

*fuses excluded

dimensions are not binding and may be changed without prior notice

dimensions in mm



Q factory-assembled construction site boards (ACS)

- other versions of factory-assembled boards with different ILME socket-outlets may be supplied which, within the framework of the maximum withdrawable active power values, maintain their conformity to the IMQ mark
- versions with terminal board input units produced upon request (add "M" at the end of the code, before any suffixes "-1" identifying the variants)**

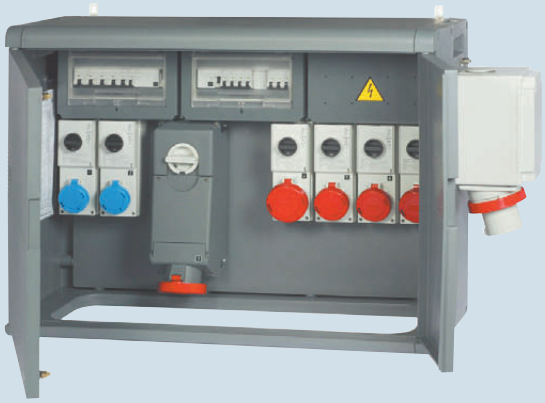
*) For power supply rated voltage of less than 230/400V - at equivalent rated current the maximum active power withdrawable reduces in proportion to the voltage. For example: board 63A [35kW - 230/400V~] > [20kW - 130/230V~]

**) e.g. QG TI A → QG TI AM
QG TI B-1 → QG TI BM-1

EN 60439 - 4 ACS Assembled construction site boards EUROPEAN STANDARD

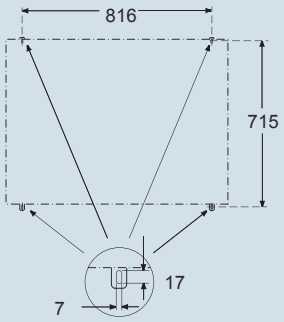
CERTIFIED CERTIFIED CERTIFIED

QG site boards with SQV series interblocked sockets

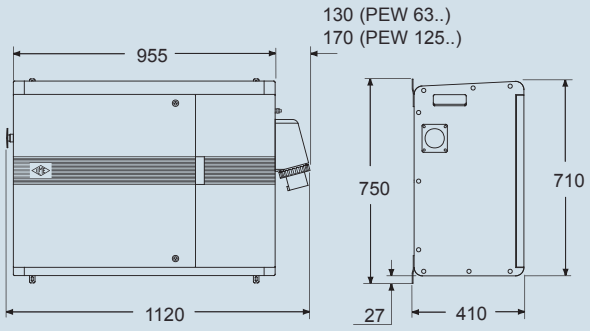


description	part No.	part No.
assembled board comprises: - QG V base board - SQV series interblocked sockets complete with wall mounting case (SQC 923 CS) - general emergency push-button - main switch undervoltage release coil	**QG SQ C** variants: - 63A magnothermal differential switch - one SQV 3264.5 (380V, 32A, 3P+ ⏚, 6h) socket-outlet - four SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlets - two SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 6365 SM-S (380V, 63A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	
assembled board comprises: - QG V base board - 16A and 32A SQV series interblocked sockets complete with wall mounting case (SQC 923 CS) - TM series interblocked sockets 63A IS - general emergency push-button - main switch undervoltage release coil	**QG SQ D** variants: - 100A magnothermal switch 63A magnothermal differential switch one TM 6364 IS (380V, 63A, 3P+ ⏚, 6h) socket-outlet one SQV 3264.5 (380V, 32A, 3P+ ⏚, 6h) socket-outlet 63A differential switch 32A magnothermal switch three SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlets 16A magnothermal switch two SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 12565 SM (380V, 125A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)	**QG SQ D-1** variants: - 100A magnothermal differential switch - one TM 6365 IT (380V, 63A, 3P+N+ ⏚, 6h) socket-outlet - one SQV 3264.5 (380V, 32A, 3P+ ⏚, 6h) socket-outlet - two SQV 1664.5 (380V, 16A, 3P+ ⏚, 6h) socket-outlets - two SQV 1663.5 (220V, 16A, 2P+ ⏚, 6h) socket-outlets - one PEW 12565 SM (380V, 125A, 3P+N+ ⏚, 6h) plug - 35kW maximum active power foreseeable*)

fixing interaxes in mm



dimensions in mm



Rated current	fuse carrier type*
socket part	
16A	10 x 38
32A	10 x 38
63A	22 x 58

*fuses excluded

dimensions are not binding and may be changed without prior notice

- other versions of factory-assembled boards with different ILME socket-outlets may be supplied which, within the framework of the maximum withdrawable active power values, maintain their conformity to the IMQ mark
- versions with terminal board input units produced upon request (add "M" at the end of the code, before any suffixes "-1" identifying the variants)**

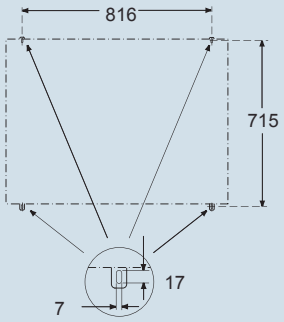
*) For power supply rated voltage of less than 230/400V - at equivalent rated current the maximum active power withdrawable reduces in proportion to the voltage. For example: board 63A [35kW - 230/400V~] > [20kW - 130/230V~]

**) e.g. QG TI A → QG TI AM
QG TI B-1 → QG TI BM-1

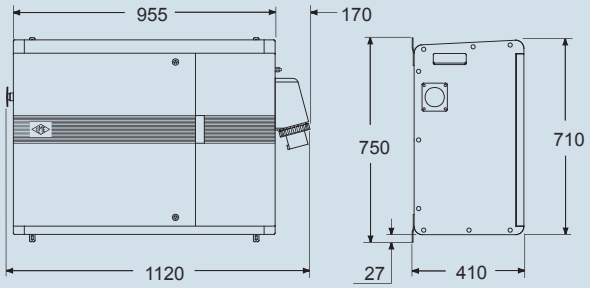
QG site boards with SQV series interblocked sockets

description	part No.
assembled board comprises: - QG V base board - SQV series interblocked sockets complete with wall mounting case (SQC 923 CS) - general emergency push-button - main switch undervoltage release coil	**QG SQ E** variants: - 100A magnothermal switch 63A magnothermal differential switch two SQV 3264.5 (380V, 32A, 3P+, 6h) socket-outlets 63A differential switch three SQV 1663.5 (220V, 16A, 2P+, 6h) socket-outlets 32A magnothermal switch three SQV 1664.5 (380V, 16A, 3P+, 6h) socket-outlets - one PEW 12565 SM (380V, 125A, 3P+N+, 6h) plug - 55kW maximum active power foreseeable*)
assembled board comprises: - QG V base board - SQV series interblocked sockets complete with wall mounting case (SQC 923 CS) - general emergency push-button - main switch undervoltage release coil	**QG SQ F** variants: - 100A magnothermal switch 63A magnothermal differential switch two SQV 3264.5 (380V, 32A, 3P+, 6h) socket-outlets one SQV 1664.5 (380V, 16A, 3P+, 6h) socket-outlet 63A differential switch three SQV 1663.5 (220V, 16A, 2P+, 6h) socket-outlets 32A magnothermal switch three SQV 1664.5 (380V, 16A, 3P+, 6h) socket-outlets - one PEW 12565 SM (380V, 125A, 3P+N+, 6h) plug - 55kW maximum active power foreseeable*)

fixing interaxes in mm



dimensions in mm



Rated current socket part	fuse carrier type*
16A	10 x 38
32A	10 x 38

*fuses excluded

dimensions are not binding and may be changed without prior notice

ILME empty boards for construction site boards

The user of ILME empty boards (**QM V....**) for the construction of his own ACS boards must declare that he has performed all the relative type tests required by the EN 60439-4 standard.
If the board assembler does not make any changes to the **QM V...** enclosures that would alter their characteristics, it will not be necessary for him to repeat ***tests 7, 8a, 8b, 9a, 9b*** as listed in the table "**Type tests (§ 8.2)**" on page 3.
He may make reference to the type tests performed by **IMQ** (Italian Institute of Quality Mark) during the course of the conformity certification of the Q series and provided in the attachment to the relative ILME CE Declaration of Conformity.

The board assemblers (who use the empty boards **QM V...**) may consider their boards ACS ILME type equivalent apparatus by selecting configurations whose performance does not deviate significantly from those provided in the ILME assembled ACS board series and are **IMQ certified**, in accordance with the definition given in clause 2.1.1.1 of the standard.
It is thus possible to refer to the type tests of the equivalent ILME board assembled in the factory. Individual tests need to be performed, which are required for each product model. Naturally, the components used must be of the same technical and functional characteristics as those used by ILME.

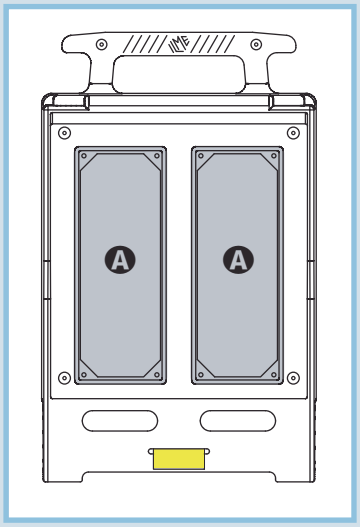
The manufacturer has full responsibility for preparing the declaration of conformity to the standards applicable to the assembled boards.

The empty board is supplied with a complete assembly kit (socket-outlets and other electric devices excluded). The table below lists the range of socket-outlets that may be assembled on the three basic kits **QM V P6, QM V P4, QM V S2**.

ILME socket-outlets assembled in empty boards (QM V P6, QM V P4 and QM V S2)

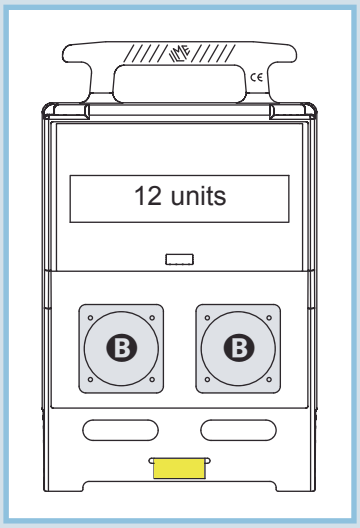
socket-outlets and plugs description	ILME series	degree of protection	rated current	socket-outlets/ plugs basic dimensions	fastening centre distance	diagram reference
interlocked switched socket-outlet without fuse carrieri	**SQE**	IP44	16A and 32A	89 x 231 mm	68 x 192 mm	ref. Ⓐ
interlocked switched socket-outlet without fuse carrier	**SQE .5**	IP55	16A and 32A	89 x 231 mm	68 x 192 mm	ref. Ⓐ
interlocked switched socket-outlet with fuse carrier	**SQV**	IP44	16A and 32A	89 x 231 mm	68 x 192 mm	ref. Ⓐ
interlocked switched socket-outlet with fuse carrier	**SQV .5**	IP55	16A and 32A	89 x 231 mm	68 x 192 mm	ref. Ⓐ
socket-outlet with safety transformer	**SQT**	IP55	16A	89 x 231 mm	68 x 192 mm	ref. Ⓐ
complementary built-in socket-outlet (Schuko® type) with door and gasket	**FM 88 RBT**	IP55	16A	80 x 80 mm	60 x 60 mm	ref. Ⓑ
basic socket-outlet	**PE...PQ / PQF**	IP44	16A and 32A	80 x 80 mm	60 x 60 mm	ref. Ⓑ
basic socket-outlet	**PEW...PQ / PQF**	IP67	16A and 32A	80 x 80 mm	60 x 60 mm	ref. Ⓑ
complementary built-in socket-outlet (Schuko® type) with door and gasket	**FM 923 RAV**	IP55	16A	89 x 231 mm	68 x 192 mm	ref. Ⓐ

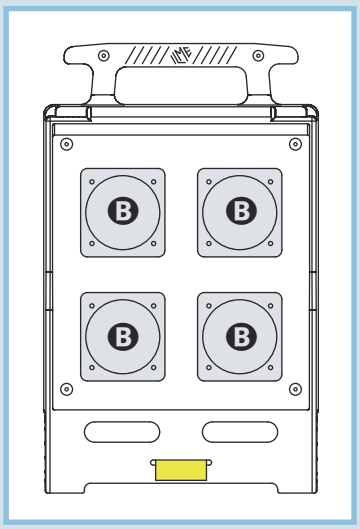
Diagram of the SQE/SQV/SQT devices to be assembled in the empty QM V... boards



SQV

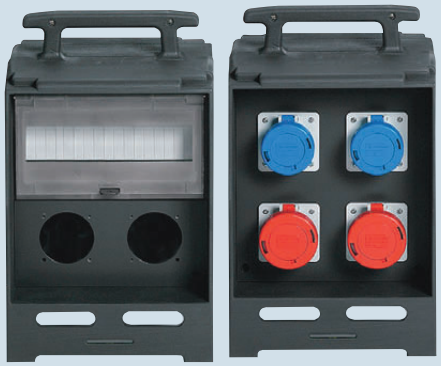
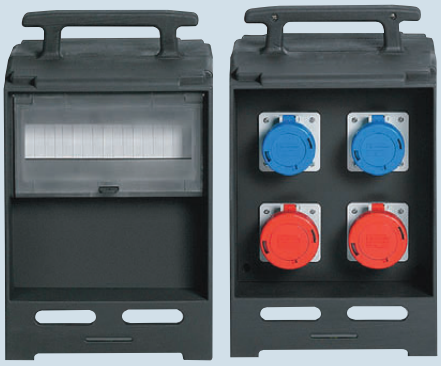
Diagram of the PE/PEW...PQ/PQF devices to be assembled in the empty QM V... boards





PE .. PQ
PEW .. PQ

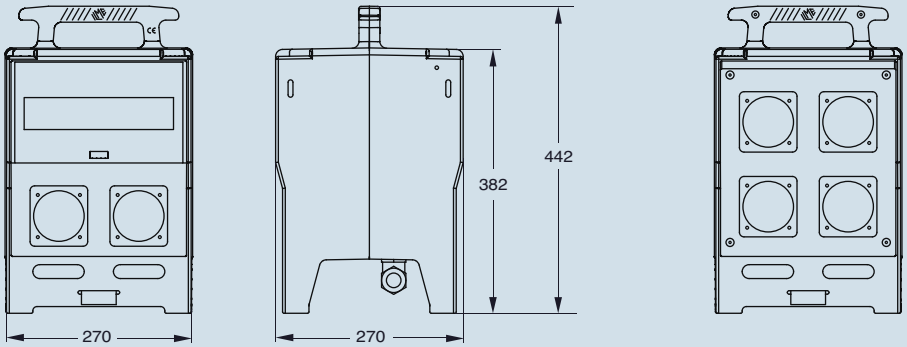
1) The above diagrams are purely an example of the installation options and do not remove the need to verify the compatibility between the spaces where the protection apparatus will be situated (max. 12 modular units) and the installable output socket-outlets, or the need to verify heat conditions (terminal overtempreature) for the many possible combinations, this remaining the responsibility of the board manufacturer. The versions wired by ILME and included in the present catalogue have already been verified
2)The use of socket-outlets that do not incorporate protection devices against overcurrents and short circuits (fuses or automatic magnetothermal switches), e.g. for SQE and PE/PEW...PQ/PQF socket-outlets, suitable devices must be installed upstream said socket-outlets, as specified by Standard EN 60439-4.

	QM V P6 site board assembly kit	QM V P4 site boards assembly kit
		
description	Part No.	Part No.
empty board to be assembled: - 6 openings for PE / PEW...PQ / PQF socket-outlets with 80x80mm flange	**QM V P6**	
empty board to be assembled: - 4 openings for PE / PEW...PQ / PQF socket-outlets with 80x80mm flange		**QM V P4**

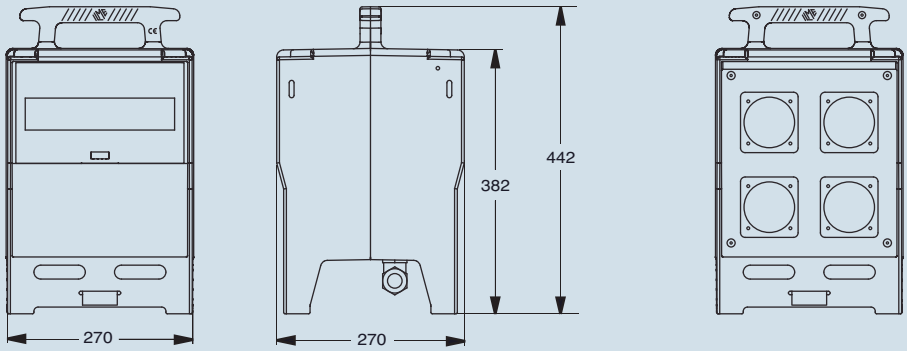
comprising:
- 1 rail half shell complete with spring hinged cover
- 1 socket-outlet half shell
- 1 DIN EN 60715, 219 mm rail with fastening screws
- 1 Pg 21 IP65 angled cable gland
- 1 25 mm² earth terminal
- 16 self tapping stainless steel screws, suitable for plastics, 3.9x19 mm (QM V P4), mixed cuts / Ph (to fasten socket-outlets)
- 24 self tapping stainless steel screws, suitable for plastics, 3.9x19 mm (QM V P6), mixed cuts / Ph (to fasten socket-outlets)
- 1 cable clamp + 2 screws, 3.9x32 mm + 2 flat washers Ø 4x8 mm to fix the cable clamp
- 6 self tapping screws, 3.9x22 mm with stainless steel flat washers (to fix half shells)
- 2 DIN module blanking units
- 1 plate to be filled with data
- 1 document holder pocket

dimensions in mm

QM V P6



QM V P4



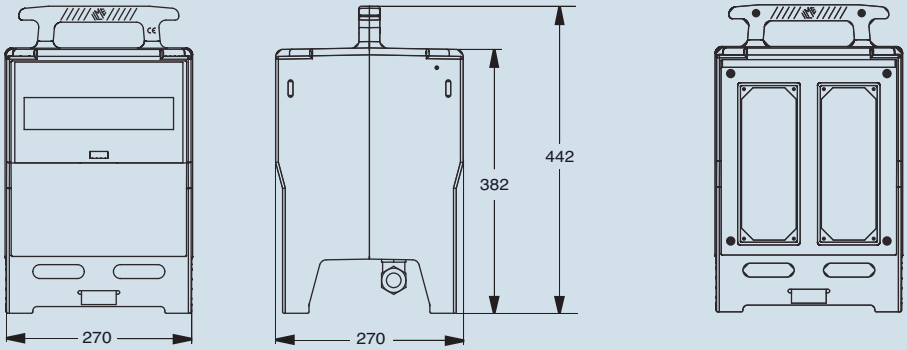
dimensions are not binding and may be changed without prior notice

QM V S2 site board assembly kit

description	Part No.
empty board to be assembled: - 2 openings for SQE/SQV/SQT interlocked socket-outlets	**QM V S2**

comprising:
- 1 rail half shell complete with spring hinged cover
- 1 socket-outlet half shell
- 1 DIN EN 60715, 219 mm rail with fastening screws
- 1 Pg 21 IP65 angled cable gland
- 1 25 mm² earth terminal
- 8 self tapping stainless steel screws, suitable for plastics, 3.9x19 mm, mixed cuts / Ph (to fasten socket-outlets)
- 1 cable clamp + 2 screws, 3.9x32 mm + 2 flat washers Ø 4x8 mm to fix the cable clamp
- 6 self tapping screws, 3.9x22 mm with stainless steel flat washers (to fix half shells)
- 2 DIN module blanking units
- 1 plate to be filled with data
- 1 document holder pocket

dimensions in mm



dimensions are not binding and may be changed without prior notice

ILME empty board for construction site boards

The user of ILME empty boards (**QP V** and **QG V**) for the construction of his own ACS boards must declare that he has performed all the relative type tests required by the EN 60439-4 standard.
If the board assembler does not make any changes to the **QP V** or **QG V** enclosure that would alter its characteristics, it will not be necessary for him to repeat ***tests 7, 8a, 8b, 9a, 9b*** as listed in the table "**Type tests (§ 8.2)**" (see page 11).
He may make reference to the type tests performed by **IMQ** (Italian Institute of Quality Mark) during the course of the conformity certification of the Q series and provided in the attachment to the relative ILME CE declaration of conformity.

The board assemblers (who use the empty boards **QP V** and **QG V**) may consider their boards ACS ILME type equivalent apparatus by selecting configurations whose performance does not deviate significantly from those provided in the ILME assembled ACS board series and are **IMQ certified**, in accordance with the definition given in clause 2.1.1.1 of the standard.
It is thus possible to refer to the type tests of the equivalent ILME board assembled in the factory. Individual tests need to be performed, which are required for each product model. Naturally, the components used must be of the same technical and functional characteristics as those used by ILME.

The board assembler has full responsibility for preparing the declaration of conformity to the standards applicable to the assembled board.

The empty board is supplied with a complete assembly kit (socket-outlets and other electric devices excluded). The table here below lists the range of socket-outlets that may be assembled on the basic kit.

Accompanying documents to the ILME enclosure (QP V and QG V)

Each empty board with mounting kit is supplied with:
- Instructions for the handling, assembly, installation and maintenance thereof.
- Template for perforation of branching enclosure.
- ILME declaration of EC conformity with Standard EN 60439-4.

ILME plugs assembled in the empty boards (QP V and QG V)

socket-outlets and plugs description	ILME series	degree of protection	rated current	sizes socket outlets/plugs base	fastening centre distance	diagram reference
interlocked switched socket-outlets without fuse carrier**	**SQE**	IP44	16A and 32A	89 x 231 mm	68 x 192 mm	ref. Ⓐ
interlocked switched socket-outlets without fuse carrier**	**SQE .5**	IP55	16A and 32A	89 x 231 mm	68 x 192 mm	ref. Ⓐ
interlocked switched socket-outlets with fuse carrier	**SQV**	IP44	16A and 32A	89 x 231 mm	68 x 192 mm	ref. Ⓐ
interlocked switched socket-outlets out fuse carrier	**SQV .5**	IP55	16A and 32A	89 x 231 mm	68 x 192 mm	ref. Ⓐ
socket-outlet with safety transformer	**SQT**	IP55	16A	89 x 231 mm	68 x 192 mm	ref. Ⓐ
wall mounting case for sockets SQE/SQV/SQT	**SQC 923 CS**	—	—	89 x 231 mm	68 x 192 mm	ref. Ⓐ
interlocked switched socket-outlets without fuse carrier**	**TM..SP**	IP67	16A and 25A	114 x 255 mm	97 x 205 mm	ref. Ⓑ
interlocked switched socket-outlets with plug fuse carrier	**TM..IT**	IP67	16A and 25A	114 x 255 mm	97 x 205 mm	ref. Ⓑ
interlocked switched socket-outlets with sectionable fuse carrier	**TM..IS**	IP67	16A and 25A	114 x 255 mm	97 x 205 mm	ref. Ⓑ
interlocked switched socket-outlets without fuse carrier	**TM..SP**	IP67	32A and 63A	144 x 370 mm	127 x 320 mm	ref. Ⓒ
interlocked switched socket-outlets with plug fuse carrier	**TM..IT**	IP67	32A and 63A	144 x 370 mm	127 x 320 mm	ref. Ⓒ
interlocked switched socket-outlets with sectionable fuse carrier	**TM..IS**	IP67	32A and 63A	144 x 370 mm	127 x 320 mm	ref. Ⓒ
socket-outlet with safety transformer	**TM..T1**	IP67	16A	114 x 255 mm	97 x 205 mm	ref. Ⓑ
complementary built-in socket (Schuko® type)	**PEW 216 PQF**	IP67	10/16A	80 x 80 mm	60 x 60 mm	ref. Ⓓ
wall plug	**PEW 6365 SM-S**	IP55*	63A	115 x 190 mm	91 x 137 mm	ref. Ⓔ
wall plug	**PEW 12565 SM**	IP67	125A	144 x 250 mm	125 x 210 mm	ref. Ⓕ

* for installations with site QG and QP boards
** usable by installing appropriate protection devices against overcurrents and short circuits (fuses, automatic magnetothermal switches) in accordance with Standard EN 60439-4.

Diagram of the SQV/SQE/SQT devices to be assembled in the empty QP V board

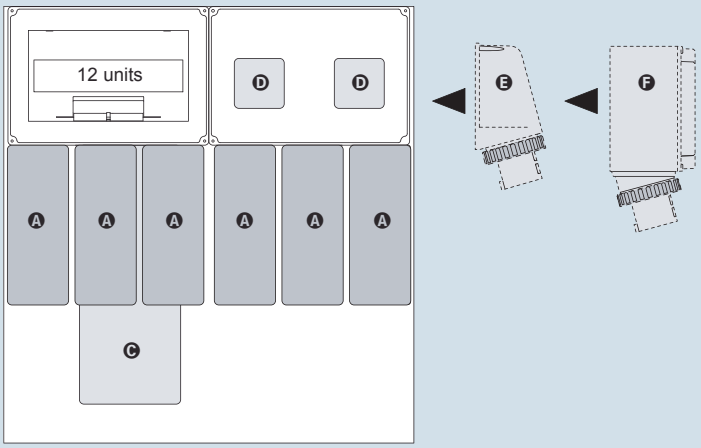


Diagram of the TM devices to be assembled in the empty QP V board

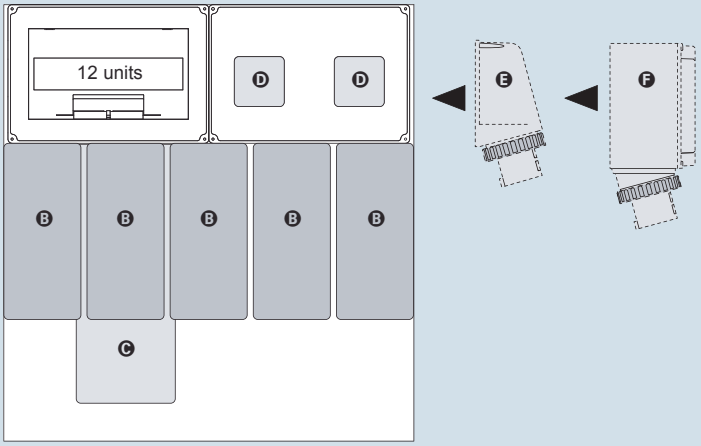


Diagram of the SQV/SQE/SQT devices to be assembled in the empty QG V board

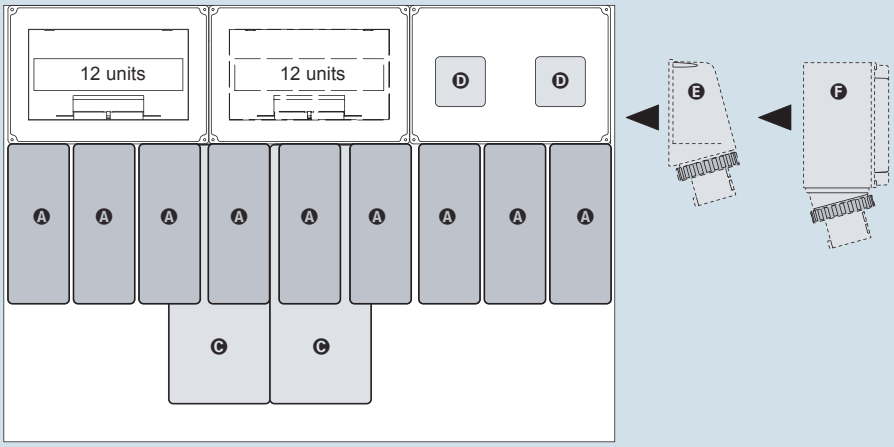
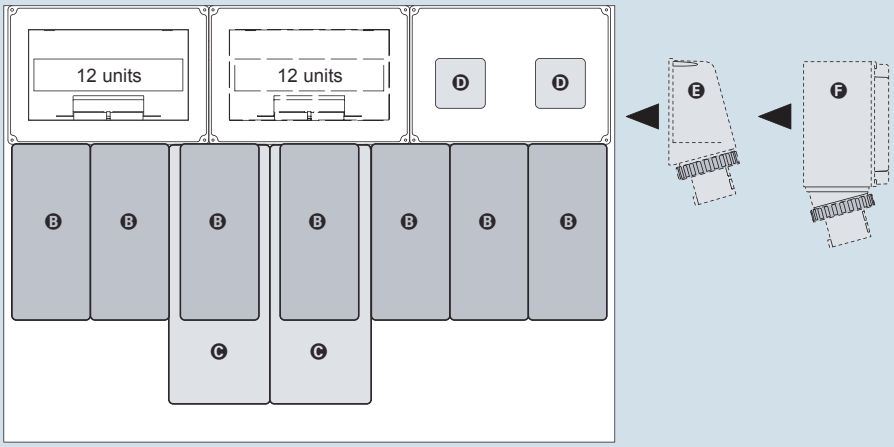


Diagram of the TM devices to be assembled in the empty QG V board



1) The above diagrams are purely an example of the installation options and do not remove the need to verify the compatibility between the spaces where the protection apparatus will be situated and (12 modular units) and the installable output sockets, or the need to verify heat conditions (terminal overtemperature) for the many possible combinations, this remaining the responsibility of the board manufacturer. The versions wired by ILME and included in the present catalogue have already been verified.
2) The use of sockets that do not incorporate protection devices against overcurrents and short circuits (fuses or automatic magnetothermal switches), e.g. for SQE and TM..SP sockets, suitable devices must be installed upstream said sockets, as specified by Standard EN 60439-4.

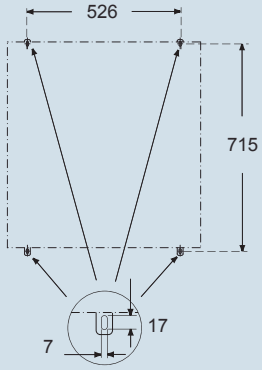
QP site boards assembly kit

QG site boards assembly kit

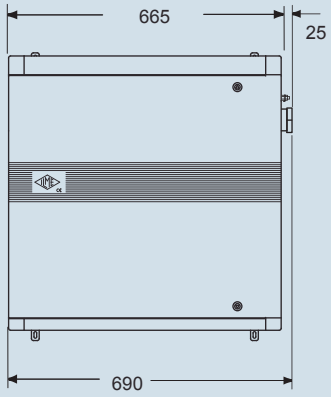
description	part No.	part No.
empty board to be assembled comprising: - 1 top panel (closed) - 1 bottom panel (open) - 2 side panels - 1 rear panel with compartment complete with 2 DIN EN 60715 rails, cable clamp, earth screw - 3 covers (2 smooth and 1 with door) to close the branching, connections, protection devices compartment - 1 panel door with triangular key locks - Pg 48 cable glands with gasket - stainless steel screws and small parts for assembly	**QP V**	
empty board to be assembled comprising: - 1 top panel (closed) - 1 bottom panel (open) - 2 side panels - 1 rear panel with compartment complete with 2 DIN EN 60715 rails, cable clamp, earth screw - 3 covers (2 smooth and 1 with door) to close the branching, connections, protection devices compartment - 2 panel door with triangular key locks - Pg 48 cable glands with gasket - stainless steel screws and small parts for assembly		**QG V**

fixing interaxes in mm

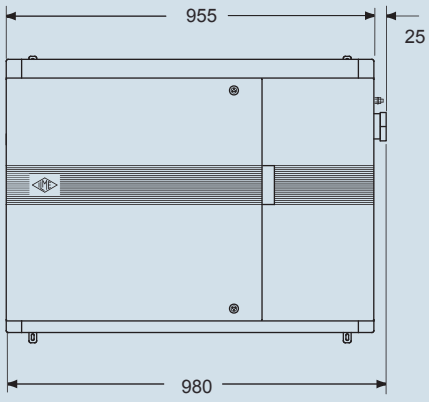
QP V



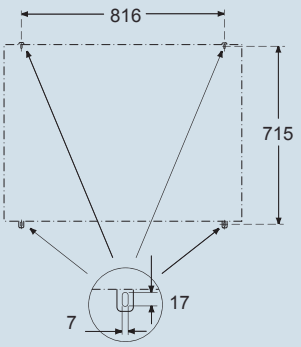
dimensions in mm

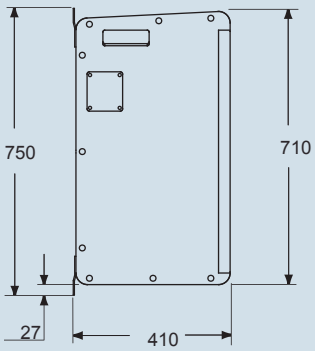


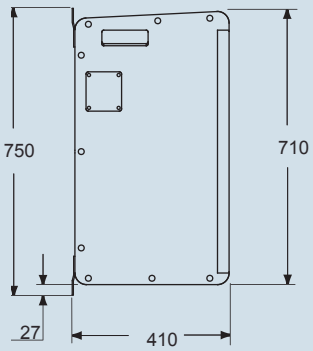
dimensions in mm



QG V







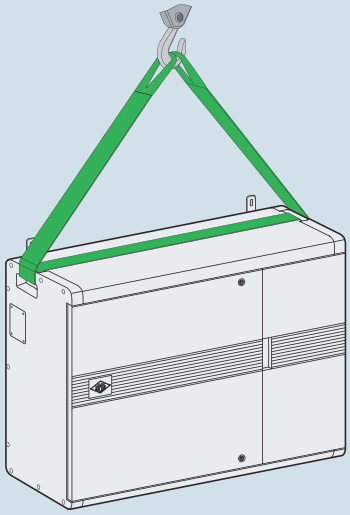
dimensions are not binding and may be changed without prior notice

assembly kit

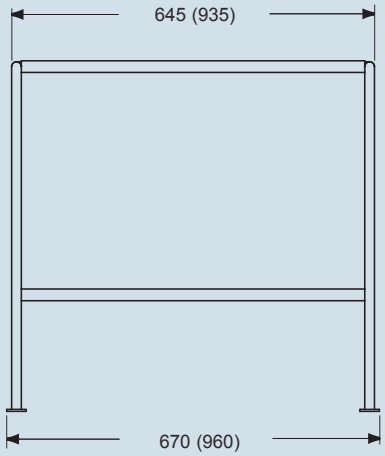
hoisting strap, compartment covers emergency push-button

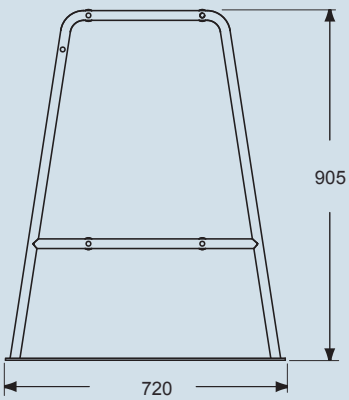
description	part No.	part No.
support frame comprising: - 2 tubular metal side supports - 4 tubular metal horizontal side members - stainless steel screws for assembly for QP boards for QG boards	 **QCP TS** **QC TS**	
cover for modular compartment (12 units) cover for branching compartment		**QC 2920 R** **QC 2920 P**
hoisting strap (2000 kg max.) for transportation and handling		**QC NS**
emergency push-button 1NC-660V preset to be fixed on: QP and QG boards		**QC PE**

use of hoisting strap



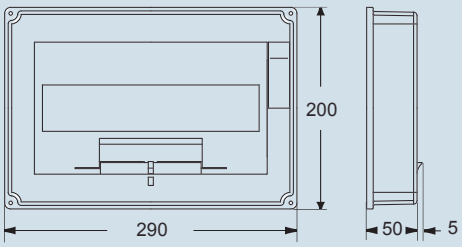
dimensions in mm



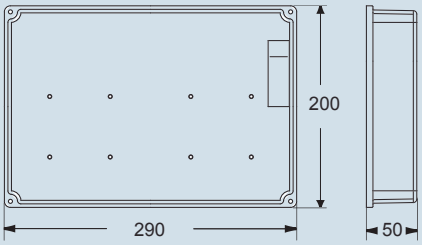


dimensions in mm

QC 2920 R



QC 2920 P



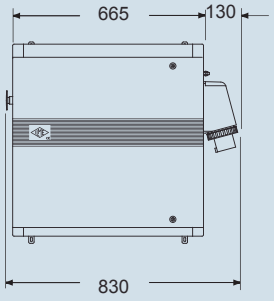
dimensions are not binding and may be changed without prior notice

wall plug
plug cover

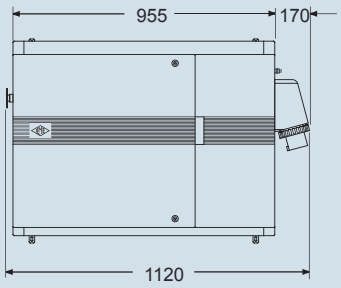
description	part No.
63A wall plug, 380V, 3P+N+⏚, 6h 125A wall plug, 380V, 3P+N+⏚, 6h	**PEW 6365 SM-S** **PEW 12565 SM**
IP67 protection cap - for 63A board plug - for 125A board plug	**PEW 63 CS** **PEW 125 CS**

dimensions in mm

PEW 6365 SM-S (QP) (L = 670 mm)



PEW 12565 SM (QG) (L = 960 mm)

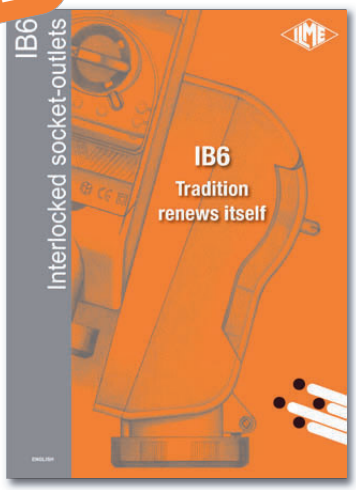


dimensions are not binding and may be changed without prior notice

NEW

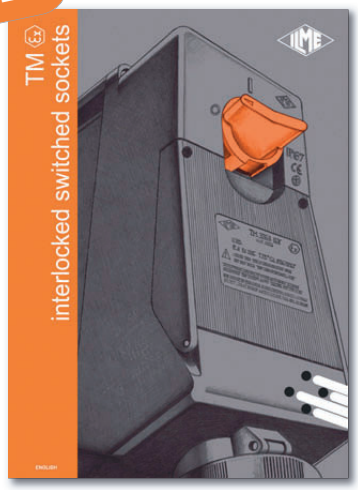
PES
Save time - Squich® connection

NEW

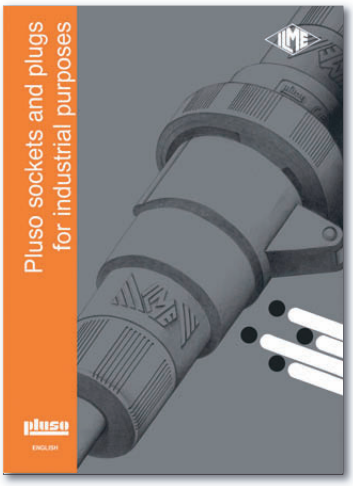


IB6
Tradition renews itself

NEW

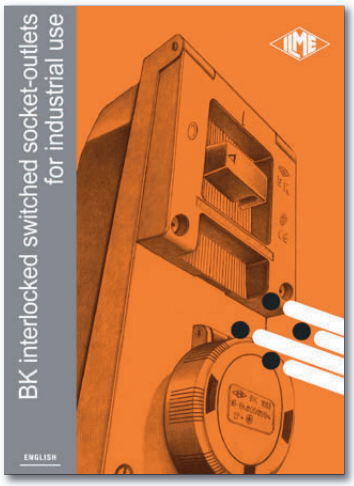


TM ATEX
Potentially explosive atmospheres

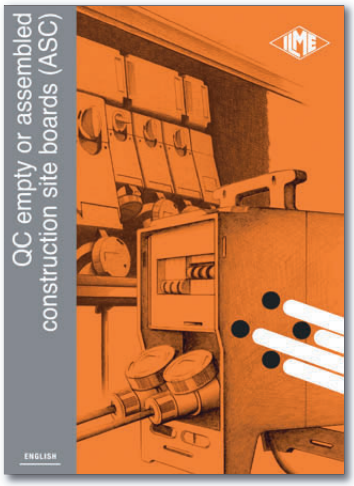


PLUSO
Sockets and Plugs

SQV
Interlocked socket-outlets



BK
Interlocked socket-outlets



QC
Site boards

TM
Interlocked switched sockets

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