INSTALLATIONS AND POWER SUPPLY REGULATIONS

6.1 Power supply

All electrical energy supplied to the stand shall be provided by Fira de Barcelona, the characteristics thereof being 400 V between phases and 230 V between phases and neutral.

A direct current supply or a supply in any other condition of stability and continuity which differs from the general supply and does not belong to Fira de Barcelona will be charged to the stand exhibitor and requires the prior authorization of Fira de Barcelona.

Fira de Barcelona may limit the supply power when it may have a negative effect on other users or through the risk of overload or the safety of its own lines and installations.

The users of the stands and installations are required to maintain a cos $\varphi$ power factor of between 0.95 and 1.

In the case that the installed electricity-consuming equipment requires some type of precaution in the shutdown processes or is sensitive to possible cuts in the power supply, the equipment installer must install elements that prevent the risk of a possible power supply failure, such as uninterruptible power supply (UPS) systems.

Since the power supply of the Gran Vía venue depends on the power company providing the services, Fira de Barcelona is not responsible for the external defects thereto, including both supply failure and the quality thereof (variations in frequency, variations in voltage, transitions, spikes, sags, short outages, micro-cuts, etc.).

6.2 Legalization of the installation

All installations must be carried out in accordance with the requirements required by the Low-Voltage Electrotechnical Regulations (LVER) and the supplementary technical instructions thereof by an electrician officially authorized by the Industry Department of the Generalitat of Catalonia, in compliance with the corresponding electrical installation report (official certificate).

EU electricians who do not have the official Catalan electrician license are required to register themselves at any of its offices. Next, they must also register themselves with an ICO (Inspection and Control Organization).

Non-EU electricians must make Fira de Barcelona directly responsible for the electrical distribution switchboard. If Fira de Barcelona is not made responsible for the electrical distribution switchboards, the stand constructor or exhibitor, if applicable, shall ensure that this service becomes the responsibility of an officially certified electrician in Catalonia or a European electrician who has prior experience in carrying out the aforementioned procedure.
All exhibitors who do not make Fira de Barcelona responsible for an electrical distribution switchboard of the stand must fill out the electricity request form in order to have a power supply in the stand. Electricity consumption will be billed before the event and Fira de Barcelona must have received payment for the installation to be approved and to ensure electricity at the stand.

The electrical connections in the Gran Vía venue are made by using CEE PLUG 3P+N+T 6h three-phase connectors.

To legalize the electrical installation, the documentation of the installation, duly certified by an electrical installer authorized by the Generalitat of Catalonia, must be delivered to the Fira de Barcelona Industry Service (present in the Customer Service Offices), providing the necessary documentation:

**Stands with up to 50 kW shall require a technical design report that must include the following documentation:**

- Electrical installation report.
- Electrical diagram with calculations.

**Stands with more than 50 kW must be legalized by means of a technical project created by a licensed engineer. This means:**

- A project stamped by the Catalonia School of Engineers.
- A stamped certificate for completion of the work.
- An electrical installation report.

All installations powered by a generator must also be legalized in the case that the said generator exceeds 10 Kva.

The costs of legalization, carrying out the project and the necessary documentation shall always be charged to the exhibitor. Fira de Barcelona may provide the service for carrying out the projects if so required by the exhibitor.

It must always be taken into account that the electrical distribution in a stand must be legalized by a sole owner, the legalization being separate for each stand. In the case of stand islands for several exhibitors, each of the stands must be legalized separately in accordance with Industrial Safety Law 12/2008 of July 31st.

**6.3 Electrical connection to service chests or exhibitor boxes**

The power supply in the halls shall be exclusively activated by the Fira de Barcelona personnel, and it shall be provided once the electrical installations of the stand have been approved and authorized by the corresponding Industry Service present in the Fira de Barcelona Customer Service Office.
In the Gran Vía venue, connections up to 63 A shall be made by means of a CEE PLUG 3P+N+T 6h form with the proper intensity (16, 32 and 63 A, threephase). The physical connection to the outlet must be made by the electrical installer of the stand, who shall note the number of the electrical base used.

For consumption greater than 63 A, the stand switchboard shall be directly connected to the service line that Fira de Barcelona will install, and the TN-C distribution system must be used.

6.4 Power supply through service lines

When the power supply is greater than 63 A, the available connection points have been used up or a power supply is required in areas without services, an electrical service line connected to the Fira de Barcelona fixed installations must be installed.

This service line consists of a cable hose and a switch for supply to the exhibitor. This final switch can sometimes be omitted upon providing the supply in an exhibitor switchboard. This installation shall be carried out by the Fira de Barcelona technical personnel.

In this case and for all purposes, the point where the electrical service line installed by Fira de Barcelona ends shall be considered the starting point of the electrical installation of the stand.

When it is necessary to install an electrical service line, it must be requested from the Fira de Barcelona Sales Department (www.servifira.com) two (2) weeks prior to the start of the event build up. The costs associated with the installation of a service line shall be charged to the exhibitor requiring the service.

6.5 Electricity distribution of the stands

The following requirements must be fulfilled:

- The main electrical distribution switchboard of the stand must incorporate a main breaker with heat and magnetic protection.
- The use of fuses is not permitted.
- The main breaker must be adjusted to the power requested to Fira de Barcelona.
- All lighting circuits and exits of less than 32 A must be protected by a residual-current protective device of 30 mA. Likewise, all electrical equipment accessible to the public must also be protected by a residual current protective device of 30 mA.
- All circuits must be protected against current overload with omnipolar cut (phase-neutral) at its source.
- All distribution switchboards must be able to be opened solely with the use of a tool.
- In covered areas, the distribution switchboards must have a minimum protection level of IP 4X, and, in open areas, the degree of protection will be IP 45.
• The distribution switchboards of the stands must be duly fixed to the structure at a height between 1 m and 1.80 m and must be accessible.
• Electrical switchboards that do not fulfill the conditions set forth in the Low-Voltage Electrotechnical Regulations (LVER), according to technical instruction, shall not be accepted.

24-hour or permanent switchboard

When the distribution switchboards and their electrical connections require a supply for 24 hours, they must be independent of the daytime distribution switchboards and exhibitors must contract Fira de Barcelona, expressly indicating the timetable for the 24 hours. Likewise, they must be legalized with the Industry Service, clearly indicating that they will be used for 24 hours.

Switchboards that have been previously contracted for daytime use cannot be extended to 24 hours; in this instance, the exhibitor must contract a new permanent switchboard (24 hours).

6.7 Electrical shut down

Fira de Barcelona shall establish off time for the electrical circuits during the event and once the said event has finished. This off time shall be applied to both the daytime switchboards (during the event) and the 24-hour switchboards (once the aforementioned event has finished). In the case of requiring a power supply after this time, the corresponding request must be made to Fira de Barcelona 24 hours prior to the final show day.

It is the responsibility of the company carrying out the break down to check, prior to the commencement of the works, that there is no voltage throughout the entire work area of their stand.

6.8 General conditions for installing and contracting a power supply

In the case of contracting through the Fira de Barcelona Sales Department (www.servifira.com):

• All services are provided on a rental basis.
• Exhibitors who hire electrical switchboards through Servifira delegate to Fira de Barcelona the management of their installation.
• Power consumption and the corresponding fees are included in the cost of the electrical switchboards.
• The rental prices of the electrical switchboards for show days include the legalization thereof but not the electrical project in the case it is equal to or greater than 50 kW in the stand.
• The electrical consumption rates are open to any possible official variations that may occur.
• In any case, only the supply of goods and services contracted at least two weeks prior to the commencement of the build up is guaranteed. Fira de Barcelona shall not process any order that has not been previously paid for.
• Fira de Barcelona accepts no responsibility for interruptions to the power supply due to causes beyond its control.

With regard to the electrical installation of the exhibitor (Fira de Barcelona has not been contracted):

• The exhibitor must pay the amount of electricity consumption and the corresponding fees through the Fira de Barcelona Sales Department (www.servifira.com).
• The cost of electricity consumption derived from the show day switchboards shall be billed according to the fees and the full requested power (power of the stand + extra power).
• The electrical consumption rates are open to any official variations that may occur.
• Fira de Barcelona accepts no responsibility for interruptions to the power supply due to causes beyond its control.