

# ELECTRONICS DATA SHEET

**Some important notes on the execution of works on the premises of  
K+S Transport GmbH, KALIKAI, Blumensand 27, 21107 Hamburg.**

Connecting conditions for electrical equipment and technical specifications

## 1. Connecting conditions for electrical equipment

For construction and assembly work, we provide contractors with electrical power close to the construction site for the machinery necessary to the job to be carried out and, if necessary, for site huts.

The following voltage sources are possible:  
230 V, 50 Hz, AC  
400 V, 50 Hz, DC

The connected load must be agreed in advance with our electrical department.

For voltages of 230 V – AC and 400 V – DC, zeroing with a separate protective earth is used in the plant grid.

Construction site equipment must not be connected via autotransformers. The construction site equipment may only be connected to the plant grid if the electrical equipment on the construction site corresponds to the VDE-EVU regulations and VDE 0100/5.73 § 55.

The contractor is responsible for the setting up, maintenance and operation of electrical equipment on the construction site. He bears responsibility for carrying out the necessary functional testing of safety equipment, general checking of the electrical equipment and the correction of any defects identified.

In the case of defects in electrical equipment on the construction site, which has a detrimental effect on our plant grid (e.g. earth leakages), the defective components must be put out of operation immediately. Damage to our electrical equipment must be reported immediately.

**The contractor is liable for any damage.**

The following plugs and connectors have to be provided:  
230 V – AC      Protected plug equipment (Schuko)  
400 V – DC      CEE or CEKON round plugs and connectors (DIN 49462/63),  
and these must be 400 V 32 and 63 A-pole

Protection class IV equipment must be used for movable equipment such as lamps, drilling equipment and grinding machinery.

## 2. Technical specifications

Mounting material, which is included in the fixed prices, is defined as screws, dowels and clamps. Cables of type NYY (not NYM) must always be used, which are either laid on cable trays or in protective tubes (plastic armoured tubes from Fränkische Kunststoffwerke, type FPKU-ES-F25/40 or FPKU-EM-F63). Switches, sockets and lamps must not be used as through sockets. HENSEL enclosures type D9040 must always be used for junctions. Lamps must be split between 3 phases. Equipment, switches and junction boxes must not remain open or be stored open during assembly (risk of corrosion and flashover). The screws in the plugs and equipment must be greased before insertion (as must lid screws of plastic boxes). Ensure good fit and tightness of cable glands. Cable glands must not be oriented upwards. Fastening screws should be made of V2A and dowels only of plastic. No components made of light alloy may be used. Steel components (cable trays, tool supports) must be sandblasted and galvanised. After galvanisation, preserve with a paint application specified by us.

Deviations from the above rules are subject to prior consultation with us.