

# Manual for OKJK Cable Distribution Cabinets

**NOTE. ! Read the instructions carefully before starting work. The installation work can be done only by a sufficiently qualified person!**

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Additional instructions (switches and connectors installation instructions)

- Manual of OKJK cable distribution cabinet installation
- Switch Installation guide
- Fuse-switch-disconnector guide

## 1. General

These instructions are adhered when working on energized OKJK cable distribution cabinet.

It is required to follow the general principles set out in the standard SFS 6002. This protocol is designed to ensure the standard principles of safe working.

### Additional guidance

Work under voltage includes general guidelines for the working groups and their training, tools and protective equipment and safety guidelines for the energy industry.

### The general conditions

Voltage: up to 1000 V

Touch protection: IP 2X (additional requirements if the above-mentioned protection against accidental contact occurs).

Safety distance: this limit is not valid for contact (IP 2X) - 200 mm, if the protection against accidental contact is inadequate, see also the standard SFS 6002 Table 1.1.

Required for personnel: 1 person (IP 2X)

## 2.1 Tools of personal safety

Hard helmet

Protective clothing (BS EN 531)

Tools for work under voltage

Special dielectric gloves

Other instruments of protection if accidental contact IP 2X occurs:

Face protective shield

Dielectric insulating boots or platform

## 2.2 Tools and accessories:

The cabinet front opening tool – key with triangular section 10 mm  
Voltage metering tool  
Screwdriver, hex wrench for work under voltage  
Torque wrench for work under voltage  
Tongs for molding  
Cable knife  
Cable finishing materials  
Tools and equipment for the cable connection

### 3. Basic principles of work and installation instructions

The instructions are attached below.

KJK cable distribution cabinets are equipped with touch-protected (IP20) busbars and fuse-switch-disconnectors, cable terminals have IP20 protection class.

The table of contents of the above mentioned operations, the enclosed working instructions 4-8 should follow with the general principles in part 1-2.

### 4. Fuse-switch-disconnector adding under voltage into OKJK-cable distribution cabinet.

There is a possibility to install the following strip types of fuse-switch-disconnectors  
Sizes 1-3, produced by JEAN MULLER

SL00-3X3/185/KU00/2/IP20, SL1-3X3/9/KM2G/IP20, SL2-3X3/9/KM2G/IP20,  
SL2-3X3/SR/KM2G/IP20, SL2-3X3/SR/KM2GX/IP20,  
SL3-3X3/SR/KM2GX/IP20, SL3-3X3/9/KM2G/IP20, SL3-3X3/SR/KM2G/IP20

4.1 Check that there is no voltage in the outgoing cables and energizing is prevented.

4.2 Open the front panel/door of the cabinet and inspect if there are no visible damage.

4.3 Visually control that the busbars have covers and all conductive parts are isolated acc. to IP2X – protection class.

4.4 Put aside the cabinet front panel and remove its threshold.

4.5 Take out the fuses from the fuse-switch-disconnectors.

4.6 Put on the hand the protection gloves.

4.7 The frame of fuse-switch-disconnector mount acc. to its installation guide.

- Check that the switch is in good condition,
- Check that there is a possibility to make earthing to the PEN-bar and to install fuse-switch-disconnector.

4.8 Fix base of the switch on the busbars using screwdriver or hex wrench for work under voltage:

- In attachment below you can find the corresponding installation instructions of the fuse-switch-disconnectors.

All the switches, the connections can be tightened using tools for work under voltage. Proper tightening torque be achieved when key is becomes flexible.

To control the necessary strenght use the torque wrench (dinamo-metric key).

4.9 Install back the switch cover.

4.10 Take off the gloves.

4.11 Install into the place the cabinet threshold of the doors and front panel. Lock the cabinet.

## 5. CABLE CONNECTION / REMOVAL

NOTE: This guide is used only acc. to the standard SFS 6002 – Work under voltage. Cable connecting/removal under voltage. For example if you make installation near the uninsulated live parts. It is required to follow the principles that are described in the standard SFS 6002 Part 6.1.

- 5.1 Check that there is no voltage in the outgoing cables and energizing is prevented.
- 5.2 Open the front panel/door of the cabinet and inspect if there is no visible damage.
- 5.3 Visually control that the busbars have covers and all conductive parts are isolated acc. to IP2X – protection class.
- 5.4 Put aside the cabinet front panel and remove its threshold.
- 5.5 Take out the fuses from the fuse-switch-disconnectors.
- 5.6 Prepare the cable for connecting it in an ordinary way.
- 5.7 Put on the hand the protective gloves.
- 5.8 Join earthing to the PEN-bar, it is marked.
- 5.9 Connect/remove the cables in the terminals on the busbars paying special attention. Pay attention to switching order L3 L2 L1.
- 5.10 Put off the gloves.
- 5.11 Install into the place the cabinet threshold of the doors and front panel. Lock the cabinet.

## 6. Cable connecting to the busbars and fuse-switch-disconnectors under voltage

There are necessary two additional accessories;

- Connectors for busbars,
- Cable`s lugs

- 6.1 Check that there is no voltage in the outgoing cables and energizing is prevented.  
**Note! The busbars can be under voltage!**
- 6.2 Open the front panel/door of the cabinet and inspect if there is no visible damage.
- 6.3 Visually control that the busbars have covers and all conductive parts are isolated acc. to IP2X – protection class.
- 6.4 Put aside the cabinet front panel and remove its threshold from the cabinet and basement.
- 6.5 Prepare the cable for connecting it in an ordinary way.
- 6.6 Put on the hand the protective gloves.
- 6.7 Join earthing to the PEN-bar, it is marked.
- 6.8 Join the cables to the busbar`s terminals according to the instructions on the packing. Cable connectors are controlled by torque wrench (dinamo-metric key) for work under voltage. Pay attention to switching order L3 L2 L1.
- 6.9 Take off the gloves.
- 6.10 Install into the place the basement and cabinet thresholds of the door and front panel. Lock the cabinet.

## 7. REMOVAL THE FUSE-SWITCH-DISCONNECTORS UNDER VOLTAGE

- 7.1 Check that there is no voltage in the outgoing cables and energizing is prevented.
- 7.2 Open the front panel/door of the cabinet and inspect if there is no visible damage.
- 7.3 Visually control that the busbars have covers and all conductive parts are isolated acc. to IP2X – protection class.
- 7.4 Put aside the cabinet front panel and remove its threshold.
- 7.5 Take out the fuses from the fuse-switch-disconnector.
- 7.6 Put on the hand the protective gloves.

- 7.7 See section 5. Cable removing. Disconnected cables must be isolated.
- 7.8 Unscrew the fuse-switch-connector fully using tools for work under voltage. In this position, the switch can be lifted up slightly and pull it to yourself and take it off. (In this way it is possible to transpose fuse-switch-connectors, if it's necessary).
- 7.9 Take off the gloves.
- 7.10 Install into the place the cabinet threshold of the doors and front panel. Lock the cabinet.

## 8. REMOVAL OF CABLE CONNECTORS FROM BUSBARS

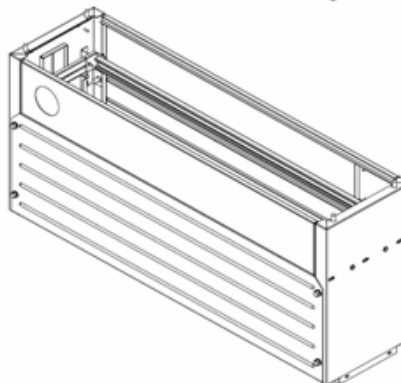
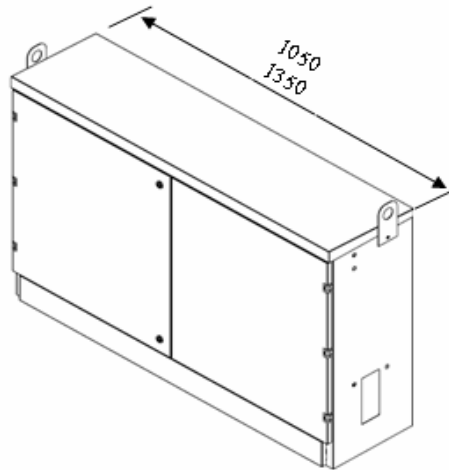
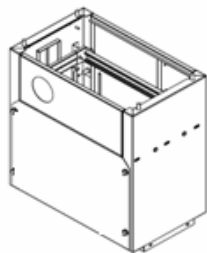
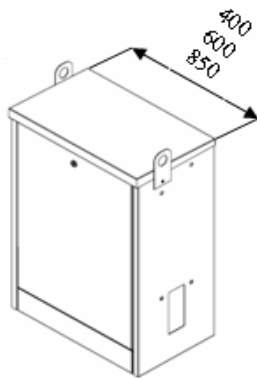
- 8.1 Check that there is no voltage in the outgoing cables and energizing is prevented.
- 8.2 Open the front panel/door of the cabinet and inspect if there is no visible damage.
- 8.3 Visually control that the busbars have covers and all conductive parts are isolated acc. to IP2X – protection class.
- 8.4 Put aside the cabinet front panel and remove its threshold.
- 8.5 Put on the hand the protective gloves.
- 8.6 Turn the connector fixing screws fully by tools for work under voltage. Isolate the removed cable. Lifted up slightly the busbar connectors and pull them to yourself and take them off
- 8.7 Disconnect earthing to the PEN bar only after removal of the phase conductors.
- 8.8 Removed cables / connectors must be isolated.
- 8.9 Take off the gloves.
- 8.10 Install into the place the cabinet threshold of the doors and front panel. Lock the cabinet.

### NOTE:

Al-conductors have to be brushed and greased before connection.  
Cable lug must be tin coated.

### Technical characteristic:

- Frequency 50 Hz
- Nominal insulation voltage  $U_i \leq U_n (U_e)$  - AC690 V
- Short circuit capacity – 50 kAeff
- Protection against electric shock: protection class, protective earth – Class 1
- Network system: TN-C system
- EMC ambient: A and B



Cable distribution cabinets:

Type	Height, mm	Width, mm	Depth, mm	Weight, kg
OKJK K00B 850	850	400	360	35
OKJK K0B 850	850	600	360	45
OKJK K1B 850	850	850	360	57
OKJK K2B 850	850	1050	360	78
OKJK K3B 850	850	1350	360	96
OKJK K00B 1200	1200	400	360	45
OKJK K0B 1200	1200	600	360	56
OKJK K1B 1200	1200	850	360	74
OKJK K2B 1200	1200	1050	360	98
OKJK K3B 1200	1200	1350	360	118

Basements:

Type	Height, mm	Width, mm	Depth, mm	Weight, kg
J-OKJK K00	650	400	360	30
J-OKJK K0	650	600	360	35
J-OKJK K1	650	850	360	41
J-OKJK K2	650	1050	360	50
J-OKJK K3	650	1350	360	58

## Installation of the basement and cabinet

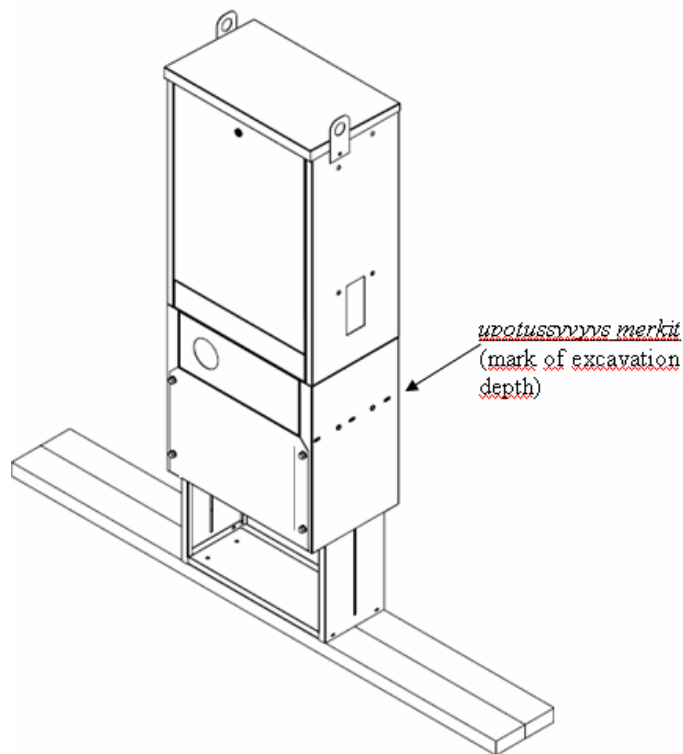
### Excavation depth of basement

To ensure an attractive and functional installation in the ground, we recommend excavating to a depth at which about 20 cm of the foundation is visible above the surface. A marking label indicates the ground level. Fix the basement to the timbers.

The length of the legs is individually adjustable. To reduce the risk of condensation, we recommend filling the foundation with sand.

Mount the cabinet on the basement.

**To reduce the risk of condensation we recommend filling the basement with haydite or using a moisture barrier!!!**



We reserve the right to make changes without any prior notice.