



Maintenance Instruction

Material: PVC Enclosed Conductor System
LSV



1. General

Before start to work follow the safety regulations for work with electrical equipment as per VDE 0105, part 1:

- Disconnect mains
- Prevent reconnection
- Test for absence of harmful voltages
- Cover or close off nearby live parts
- Ground and short circuit.
- To energize, apply in reverse order



2. Powerail

General

Under normal operation conditions the Powerail does not require any maintenance except a general inspection for any external damage in 4-weeks intervals, i.e. visual check of

- joints
- dead section areas
- transfer guide areas
- copper profile (in case of any damage caused by arcing, smoothen copper profile with emery cloth)

Cleaning

We recommend to clean the Powerail in 6 months intervals with a vacuum cleaner to remove loose dust and carbon-wear, if necessary also the inside of the housing. Use suitable respiratory protection.

3. Collector

General

Removal and checking in 3 to 6 months intervals depending on operation frequency. The life of carbon brushes is approx. 5.000 to 8.000 km, depending on site conditions.

Mechanical parts

Check runner and guide wheels, collector body and collector neck for any wear. Replace collector necks if more than 1 mm deep grooves or area wear become visible.



Replace runner and guide wheels when their running diameter changes as follows:

Type SWN Runner wheels from 31,5 mm to 29,5 mm diameter
 Guide wheels from 29,0 mm to 27,0 mm diameter

Type SWK Runner wheels from 28,5 mm to 26,5 mm diameter
 Guide wheels from 26,5 mm to 24,5 mm diameter

Carbon brushes

The lateral carbon brushes have a wear height of 6 mm. They protude 13 (10) mm from their housing and must be replaced when they protude 7 (4) mm only.

The upper carbon brush has a wearing height of 6 mm. It protudes 10 mm from its housing and must be replaced when it protudes 4 mm only. The wearing height of 6 mm is marked at the carbon brush. (Figures in parentheses refer to wearing height for SWK)

Change of brushes

Loosen clamping screw and remove carbon housing.

Insert new housing with brush and pre-assemble clamping screw.

Clean contact surface and tighten screw carefully.

Cleaning

Clean collectors after every removal with compressed air.

4. Damage and malfunction

Any damage and fault of the system occuring between the maintenance intervals must be removed immediately.