

MKBC 72.5

ARKASIL

Type

Voltage class

PDD-27-20-071

PRODUCT DESCRIPTION

Dry type cable termination MKBC 72.5 (300x300) has been designed for linking of HV underground cable lines with overhead lines or outdoor switchgears. Termination is suitable for an extruded XLPE high voltage cable with stranded Cu or Al conductor and Cu or Al multiwire screen. Base plate size – 300x300 mm. Minimum guaranteed creepage distance – 1850 mm. Maximum system voltage $U_m = 72.5$ kV.

BASIC COMPONENTS:

- Pre molded and factory tested silicone rubber stress-cone with integrated field control element. No liquid or gas insulating medium inside.
- Self-supporting design.
- Cable sheath electrically insulated from cable screen.
- No maintenance throughout the entire operation period.
- Base plate with 300x300 mm interface dimensions.

TECHNICAL FEATURES:

| | | |
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| Maximum system voltage, (kV) | 72.5 | |
| Cable conductor cross-section range, (mm sq.) | 185 ÷ 1600 | |
| Prepared insulation diameter range, (mm) | 32..74 | |
| Outer sheath diameter range, (mm) | up to 125 | |
| Type test requirements: | | |
| AC testing voltage, (kV) | 90 kV throughout 30 min | |
| Lightning impulse testing voltage, (kV) | 10 positive and 10 negative 5/50 µs impulses 325 kV | |
| Partial discharge level, (pC) | below 5 pC at 54 kV | |
| Nominal operating current, (A) | limited by cable specification | |
| Maximum short circuit current (kA, s) | | |
| Environmental conditions: | | |
| Minimum guaranteed creepage distance, (mm) | 1850 | 2290 |
| Pollution level according to IEC 60815 | III | IV |
| Insulator routine test requirements: | | |
| AC testing voltage, (kV) | 90 kV throughout 30 min | |
| Partial discharge level, (pC) | below 5 pC 54 kV | |
| Pedestal insulator withstand voltage: | | |
| AC withstand voltage, (kV) | 10 kV | |
| DC withstand voltage, (kV) | 20 kV | |
| Mechanical restrictions: | | |
| Inclination angle | up to 90° | |
| Approximate weight, (kg) | 80 | |
| Max mechanical load at top bolt (including intrinsic weight), (kN) | 5 kN (transversal) | |

ALL TYPE TESTS ACCORDING TO

IEC 60840

MKBC 72.5

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Type MOUNTING

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MKBC 72.5 has to be mounted by trained/certified personnel. Mounting site shall be protected from any dust and moisture. Temperature range at installation site +10 °C..+40 °C.

ADDITIONAL OPTIONS:

- Extended base plate size.
- Optical fiber outlet (O) or cable armoring termination.
- Main cable lug for screwing (B) or welding (M). Screen bundle cable lug with shearing bolts.
- Flexible design with no self-supporting (H).

SHELF LIFE OF COMPONENTS:

| | |
|--|----------|
| Flexible insulator, insulator cap | 5 years |
| Rigid supporting insulator, pedestal insulators | 30 years |
| Base plate, cantilever, cable holder | 30 years |
| Cable lugs | 30 years |
| Kit of fasteners | 30 years |
| Copper mesh tape | 30 years |
| Mastic tape | 2 years |
| Spring elements | 30 years |
| HS tube | 5 years |
| Self-adhesive tape, PVC tape and other winding materials | 5 years |
| OF outlet components | 30 years |
| Mounting consumables | 5 years |
| Silicone paste | 2 years |
| Welding wire | 30 years |

STORAGE AND TRANSPORTATION REQUIREMENTS OF KITS:

1. Kits and parts of MKBC 72.5 cable terminations shall be stored and transported in original package with intact Arkasil SK LLC label. Label damaging leads to warranty void.
2. Storage conditions for MKBC 72.5 cable terminations:
 - Temperature range +5 °C..+40 °C. Temperature shall be above dewpoint anyway.
 - Average relative humidity – 60%.
 - Maximum relative humidity – 80% at 25 °C.
 - Indoor storage conditions only.
 - Packages shall be protected from dust, rain, snow, fog, etc.
 - Aggressive environments (i.e. acids, bases, ozone, solvents) are restricted.
 - Piling according to storage instruction.
3. Transportation requirements:
 - Solid trailer or tent with no direct UV-radiation.
 - Boxes shall be firmly fixed throughout transportation.
 - No falling, striking and excessive shaking is allowed.
4. Shelf life of MKBC 72.5 cable termination components is specified in the table above. Components with expired shelf life have to be replaced.