

## PRODUCT INFORMATION

EPOXY JOINTED PORCELAIN

ABB Components have used jointed porcelain since 1956 and epoxy jointed porcelain since 1972. During that period, no failures have been caused by damages in the joint.

A special heat resistant, one component, epoxy resin is used and the curing is performed at high temperature. Routine tests are performed periodically in production in order to check the quality of the joint. The acceptance values for these tests are more than ten times higher than the maximum strength in reality.

A number of tests, both outdoor tests and laboratory tests, have been performed by ABB as well as by their suppliers, in order to achieve as much experience as possible about the porcelain jointing technique.

- \* Outdoor storage of jointed insulators during more than 15 years has not caused any significant decrease in bending strength except a small drop during the first two years.
- \* Accelerated ageing in transformer oil 90°C, combined with air -30°C, shows the same way of ageing appearance with a small drop of strength in the beginning of the test period. After this "conditioning period" the strength is remaining constant.

Epoxy jointed porcelains have been used on more than 20.000 bushings supplied to all over the world. They have been used in arctic climate (Canada), desert climate (USA) and tropic climate (Brazil). Lengths up to 9.5 meters have been manufactured.

Based on the extensive service experience without any problems together with the laboratory experience, ABB Components feel confident to continue to use epoxy jointed porcelains.

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