

## New Technologies

# THERVEST 200 LL

LONG LIFE MAGNET WIRE

### BDV Time-To Failure at 8kV AC



## THERVEST 200 LL

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### ABSTRACT

De Angeli Prodotti is developing a new technology of wire that allows to obtain the same performances as the standard enamelled wire but with lower overall dimension. An interesting subject to improve the efficiency of electric motors.

### INTRODUCTION

The standard enamelled wire used for winding is produced using a quite old process. Today is possible to build a new type of conductor using the best technology available on the market, to optimize the electrical performance allowing the reduction of the overall thickness of enamel.

Looking to the future, De Angeli Prodotti accepts the challenge to innovate the enamelled wire.

One solution that can help to resolve different problems.

### ENGINEERING

De Angeli Prodotti is developing a new technology looking towards a new solution: a thin layer of paint is deposited on the conductor, by enamelling the varnish on it. After this phase, a curing is necessary to allow the paint to adhere to the surface and obtain the desired performances.

### ADVANTAGES

Which are the advantages of this technology? Our laboratory tests shown that LL Family significantly improves dielectric performance under continuous electrical sollicitation. In this field **LL Grade 2 performance is comparable to a standard Grade 3 wire at 4 and 8kV.**

Other test performed at 4 kV confirm this behaviour and **show that LL Family can resist five times the standard wire.**

This means less coatings, longer life and higher filling factors.

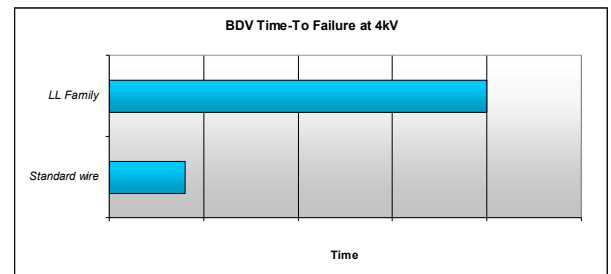


Figure 1. BDV test at 4kV

### CONCLUSIONS

De Angeli Prodotti has developed an innovative wire to improve the electrical performances of magnet wire.

This technology is well known for us and the customer interest for this product is very high!

### CONTACTS

Visit our web site for more information.  
[www.deangeliprodotti.com](http://www.deangeliprodotti.com)