

## **INDUPERM A/S**

### **Selected References – Isolating Transformers for Airports.**

#### 1. In general.

Right from the establishment of the company INDUPERM A/S in 1969, the basis were development and production of special transformers.

Back in 1970 Induperm started as subsupplier of transformers in general, noise suppressing coils and output transformers for CCR's to airports.

In 1972 was selected by Copenhagen International Airport to develop a series of special isolating transformers. This was the start of a business activity, which have later developed to be one of the strongest in Induperm.

#### 2. The Products.

It is still our goal to be able to fulfil customer demands for isolating transformers with special specification to electrical data or mechanical.

Our standard range, type 29., is types with electrical data according to standard international demands. Within this range all types of cables can be selected, with or without connectors, with or without earth terminal. Compared to standard types, f.i. according to FAA specifications, we have selected to give each type a far bigger power reserve for secondary cable losses etc.

We can supply isolating transformers with almost any current ratio.

We have a wide range of transformers with special characteristics, such as:

- Ratio from variable current (f.i. 3-6,6A) to constant current
- Ratio from variable current (f.i. 3-6,6A) to constant voltage

Our isolating transformers are encapsulated in a resin of polyurethane.

The choice of polyurethane is in our opinion, based on more than 25 years of experience, the optimal solution combining the flexibility of rubber with the strengths of epoxy resin.

In case of changes in a construction or material, the quality of the product are tested in environmental test for a week, including both heating and cooling of the transformer.

#### 3. The customers.

##### A. Copenhagen International Airport.

Have had a very important role both as a technical inspirator and a business partner for more than 25 years. We have supplied a vast number of special solutions and all together more than 10.000 nos. isolating transformers.

##### B. Airports in Africa.

Since 1980 we have supplied equipment for more than 20 airports in Africa, incl. app. 5000 nos. isolating transformers.

### C. Airports in Greenland.

Since 1982 we have supplied equipment for 10 airports in Greenland, incl. app. 2500 isolating transformers.

### D. Latest deliveries.

- Oslo, Gardermoen airport, 1997, more than 7000 isolating transformers
- Arlanda Airport, 1997, app. 400 isolating transformers
- Munich Airport, 1999-2006, app. 3500 isolating transformers
- Other German Airports, 1997-2007, app. 5000 isolating transformers
- Esbjerg airport, 1997-2005, app. 900 isolating transformers
- Budapest Airport, 1996-2001, app. 1200 isolating transformers
- Sofia Airport, 1998, app. 500 isolating transformers
- Frankfurt Int. Airport, 2006, app. 400 isolating transformers
- 8 Regional airports in Greenland, 1997 - 2006, app. 1200 isolating transformers

For additional information, please consult our List of References.

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