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# Standby Power

## Case History

Zürich International Airport

### Where:

Zürich, Switzerland

### What:

Three C1675 D5 generator sets, each capable of delivering 1675 kVA, configured in parallel for load sharing

### Purpose:

Standby power for the airport's data centre and aircraft handling operations

## Zürich airport hub relies on Cummins Power Generation

Zürich International Airport is a busy place, used by millions of air passengers every year. In addition to aircraft, other kinds of transport depend on it as a hub. Local, national and international trains use it, as well as Zürich streetcars or trams, and even a new kind of shuttle vehicle which rides on air. High levels of availability must be guaranteed to all these passenger services, whether they are in the air, on the ground or below ground in tunnels.

At the heart of the airport's activities are the data centre and the aircraft handling operations, which are mission critical services essential to the functioning of the site. Standby power for these has been provided by Cummins Power Generation distributor AKSA Würenlos.



AKSA Würenlos installed three C1675 D5 generator sets



The generator sets are located in a specially designed room

Zürich airport, also known locally as Kloten Airport, is operated by Flughafen Zürich. It is Switzerland's largest international flight gateway, handling 23 million passengers in 2010, and acts as a hub for Swiss International Air Lines. A railway station located underneath the terminal building has services to many parts of the country and a direct service to Munich in Germany. It is also on the local Zürich rail system, the S-Bahn, and the city's streetcar network. Including the railway station, the total power requirement for the airport site and its associated public railway is around 6 MW.

The airport has been expanding in recent years. In 2003 it added new covered parking facilities and a midfield terminal that is connected by a novel kind of underground train called the Skymetro - pulled by cable and floating on a cushion of air like a hovercraft. Skymetro takes passengers 1.1km in just under three minutes.

The contract to provide standby power to safeguard the airport's data centre and aircraft handling operations was won by AKSA Würenlos. The Swiss distributor came in ahead of a rival supplier which had installed two generator sets on the site as recently as 2003. According to CEO Franz R. Duerr, "Cummins won the order thanks to its ability to meet the customer's special requirements," and thanks to the ability to integrate the system into the existing airport infrastructure.

*AKSA Würenlos, the Cummins Power Generation distributor for Switzerland, is providing the standby power for Zürich International Airport's data centre and aircraft handling operations.*

To meet the standby power requirements of the data centre and airport handling operations, AKSA Würenlos has installed three Cummins Power Generation C1675 D5 generator sets. Each is capable of delivering 1675 kVA, and the three are configured in parallel for load sharing.

The generator sets are installed in a pre-built room with particular consideration for noise level and air quality. Specific adaptations included soot filters, a specially adapted Programmable Logic Controller, emission after-treatment and a special remote cooling layout. Handover of the standby power system followed a successful 24-hour reliability test run. The system is expected to be required to operate 25 hours a year, including an annual 24-hour test.

For more information about integrated standby power systems, contact your local Cummins Power Generation distributor or visit [www.cumminspower.com](http://www.cumminspower.com).



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