

# Ceska Sporitelna Bank

Data Center's Backup



## Application Sheet



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## Ceska Sportelna Bank – Data Center's Backup

Ceska Sportelna is the biggest bank in Czech Republic, its data center in Prague stores important information about credit cards' and cash machines' transactions.

### System description:

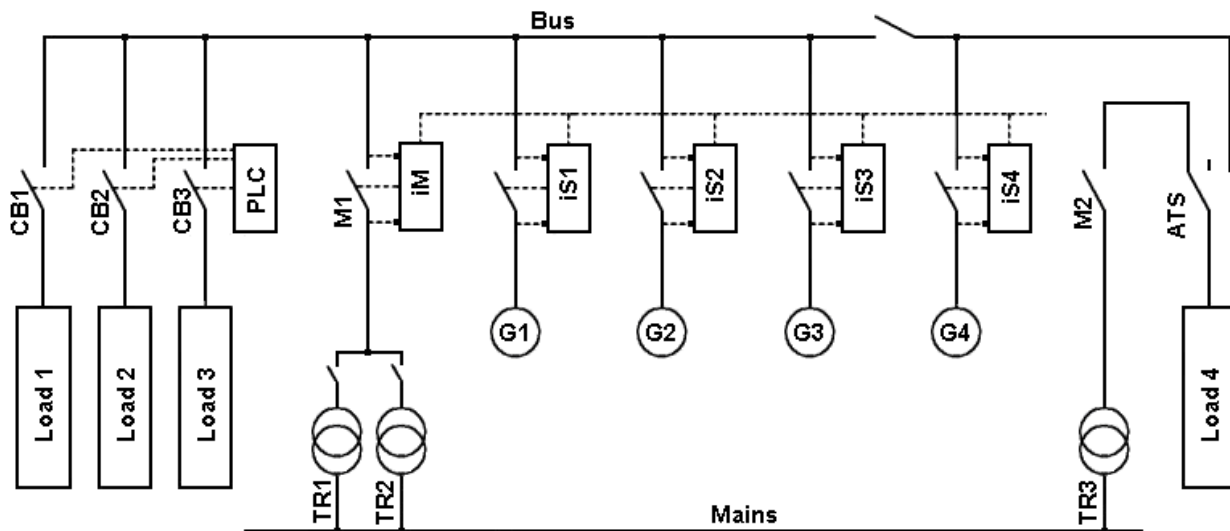
The data center's backup, originally equipped with 3 gen-sets SDMO 630kVA, needed to be reinforced by a new gen-set Perkins 850kVA. On that occasion the whole control system was upgraded. The original Hitzinger control system was replaced by 3 IntelliSys controllers and 1 IntelliMains controller. Basic control philosophy was changed from 2+1 to 3+1 (3 main gen-sets and 1 gen-set as a backup).

The system is basically in an automatic mode. In case of mains failure generators start and loads are connected. After the mains recovers, generators reverse synchronize back to the mains, unload and stop.

Possible operating states:

1. All the mains are OK
  - Loads are connected and powered from transformers.
2. TR1 or TR2 fail
  - Loads 1, 2 and 3 are supplied from gen-sets and Load 4 is supplied from TR3.
3. TR1 and TR2 fail
  - Loads 1, 2 and 3 are supplied from gen-sets and Load 4 is supplied from TR3.
4. TR3 fail
  - All the loads (1-4) are supplied from gen-sets.
5. TR1, TR2 and TR3 fail
  - All the loads (1-4) are supplied from gen-sets.

## System schematic diagram:



|       |   |
|-------|---|
| ATS   | - Automatic Transfer Switch controlled by IntelliMains (iM) |
| CB1-3 | - Load Circuit Breakers controlled by iM (through PLC)      |
| M1    | - Mains Circuit Breaker controlled by iM                    |
| M2    | - Mains Circuit Breaker controlled manually                 |
| G1-4  | - Generators  |
| iM    | - IntelliMains controller                                   |
| iS1-4 | - IntelliSys controllers                                    |
| TR1-3 | - Transformers  |

## Scope of delivery:

4x IntelliSys-CU  
 4x iS-PCLSM-PMS  
 4x iG AVRi + iG-AVRi-Trans/LV  
 1x IntelliMains  
 1x iG-MU  
 1x iM-PCLSM  
 1x i-AOUT8

Site photos:





Perkins 850kVA



SDMO 630kVA

### Customer feedback:

We have received letter of thanks from Ing. Michal Lonek, leader of building administration department.

It says, among other:

„Dear sir,

Let me say a word of thanks to you and ComAp team for your precise work, exemplary approach and helpfulness during solving our problems in Energy Center Bubenska, Prague.”

„We acknowledge that the company ComAp got its bearings in the previous control system DA Hitzinger very fast and replaced it with their new control system, which runs on a completely different level of quality. We are aware of your key involvement in the entire installation and we especially appreciate your brilliant performance during the eight-hour shutdown after which the control system had to be functional.”

### The result:

ComAp successfully realized a challenging project of replacing the old control systems with new ComAp InteliSys controllers and Inteli Mains controller, having done the conversion of one gen-set in only eight-hour shutdown.