



Reference name:	Control system for theater equipment - KD Akord
Supplier:	ELVAC a.s.
Customer:	Dům kultury Akord Ostrava - Zábřeh, s.r.o.
Market segment:	Theater equipment
Year of implementation:	2013

Introductory text:

ELVAC a.s. participated in the project "Reconstruction of the Dům kultury Akord Ostrava–Zábřeh", by supplying the theater technology control system for the large hall.

Application description:

Control of fifteen decorative strokes and two lighting batteries for the purpose of modernizing the stage technology of a large hall for the implementation of theatrical performances, lectures, concerts, presentations, etc. with the aim of achieving maximum operational variability of DK Akord. Control of a fire curtain with the provision of an automatic start function in the event of a fire.

Products and technologies used:

The control system is based on products from Siemens. SIMATIC IPC277D operator panel with 9" touch screen including software PLC and distributed I/O system based on ET200S elements. The drives are controlled by SINAMICS 120 series inverters with energy recovery back to the network.

The decorative pulls and lighting batteries have a common inverter and the selection is made by switching from the control panel located in the back of the stage. The operator panel displays all information about the individual pulls and you can also choose from three speeds. The pulls are stopped by deceleration and position sensors for the upper and lower positions, safety is ensured by emergency end position sensors.

A separate inverter has a fire curtain, which is also controlled from the control panel in normal operation. However, in the event of a fire and a signal from the EPS, the LOGO unit takes over control autonomously, ensuring reliable brake release and thus lowering of the curtain, even in the event of a power failure using a backup power source.

With the ELVAC a.s. solution, the customer gained the following benefits:

Comfortable and safe operation and maintenance of stage technology with a modern control system.



Photo:

