

CASE STUDY

ELHAND Transformatory for the Drives Systems

CLIENT

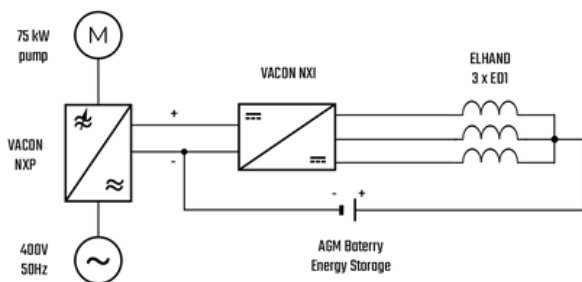
JMS manufactures, sells and services industrial automation systems. The company is an authorized partner of Danfoss Drives Poland. JMS offers professional service of VLT and VACON drives.

CHALLENGE

The RADPEC district heating plant in Radom required a fail-proof backup system for a critical 75kW water pump. Continuity of the pump's operation is essential for maintaining heating supply to the city, making it imperative that the system would withstand power outages without affecting performance.

SOLUTION

Elhand supplied DC reactors for an intermediate circuit between a Danfoss DC-DC converter and a battery energy storage unit, executed by JMS. The DC backup system ensures continuous, uninterrupted operation, crucial for the plant's operation.



RESULTS

JMS designed a 75kW pump control system using VACON (Danfoss Drives) frequency inverters and Elhand's DC reactors, offering seamless control of the PPI pump with 400VAC supply and ensuring operation for at least 15 minutes during power outage. The system, featuring an uninterruptible switch from mains to a VRLA-type AGM battery supply, maintains pump performance and recharges batteries during normal operation. The AGM batteries have a lifespan of 10-12 years.



Photo: 75kW pump control system using VACON (Danfoss Drives) frequency inverters and Elhand's DC reactors

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The Elhand EDIX-1mH/92A 750V reactor is distinguished by its precision engineering, ensuring that the DC-DC conversion process operates within the desired parameters and significantly contributed to the success of our project. This experience with Elhand not only showcases their capability to provide solutions that meet unique demands of drive systems but also cements their reputation as a reliable and trustworthy partner.

Janusz Mamla
JMS-Automatyka