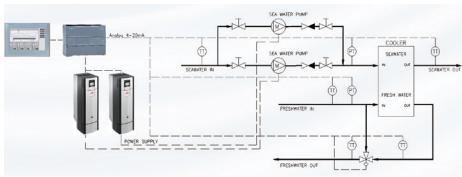


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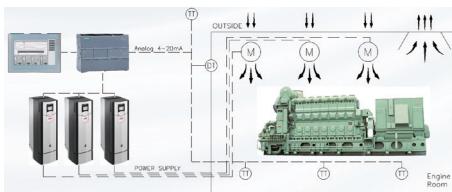
Frequency conversion energy-saving system

► Overview

Frequency conversion energy-saving system is a technical application that optimizes the motor operating frequency based on the system operating conditions to achieve energy-saving effects. It adopts advanced electronic technology and intelligent management strategies to comprehensively manage and control equipment, improve energy utilization efficiency, reduce energy consumption and emissions, and achieve the goal of energy conservation and emission reduction. The frequency conversion energy-saving system is divided into cooling water pump energy-saving system and fan energy-saving system.



Cooling water pump energy-saving system



Fan energy-saving system

► Product features

- The frequency conversion energy-saving system is equipped with a comprehensive electrical protection mechanism, which can monitor the real-time operation status of the equipment and respond quickly.
- By precisely controlling the motor speed, the operating efficiency of the entire system can be optimized, reducing impact and wear, thereby extending maintenance cycles.
- Automatically adjust the motor speed according to actual load requirements, reducing unnecessary energy consumption and achieving energy savings of up to about 80%.
- Energy saving rate of water pump/fan at different frequencies:

Frequency	rotational speed	Flow	Head	Shaft power	power saving rate
50	100%	100%	100%	100%	0%
45	90%	90%	81%	72.9%	27.1%
40	80%	80%	64%	51.2%	48.8%
35	70%	70%	49%	34.3%	65.7%
30	60%	60%	36%	21.6%	78.4%
25	50%	50%	25%	12.5%	87.5%

► Product functions

- Real time monitoring of the operating status and parameters of equipment, such as voltage, current, speed, etc.
- Automatically adjust the operating status and output power of the equipment based on its operational requirements and parameter changes, achieving optimized operation of the equipment.
- At the same time, customized development can be carried out according to user needs to meet the application requirements of different fields and scenarios.

► Product composition

The frequency conversion energy-saving system mainly consists of VFD, PLC, HMI. Composed of sensors, relays, buttons, indicator lights, and other electronic components.

► Technical index

- Working voltage: AC380V/AC440V/AC480V/AC690V
- Working frequency: 50/60Hz
- Protection grade: IP23, IP44
- Surrounding temperature: 45°C