



CHALLENGE: MEET DEMANDS FOR ENERGY SAVING IN THE INDUSTRIAL MARKET

General pump and fan industries faced the dual challenge of rising energy costs and increased pressure to reduce their carbon footprint. Conventional systems led to inefficient energy consumption, resulting in excessive operational expenses and significant environmental impact. These companies recognized the need for an innovative solution and committed to retrofitting their pumps and fans with AC15 and AC20 AC drives.

SOLUTION: AC15 AND AC20 AC DRIVES

Parker has developed two completely new families of AC drive from 0,37kW to 180 kW. They are suitable for both open loop and closed loop control of induction motors.

BENEFITS: PRECISE CONTROL OF MOTOR SPEED, REDUCTION IN ENERGY CONSUMPTION

Industrial markets embarked on a journey of energy efficiency enhancement by adopting AC15 and AC20 AC drives in their manufacturing processes. These drives promise precise control of motor speed, giving a reduction in energy consumption.

ENERGY EFFICIENCY FOR INDUSTRIAL PUMPS AND FANS

Parker AC Drives cuts energy consumption for pumps and fans in the industrial market



AC15 and AC20 variable speed drives

Industries are looking for ways to reduce harmful emissions with the goal of reducing environmental impact and promoting sustainable production processes

According to the International Energy Agency, pumps and fans account for up to 20% of the total electricity consumption in the industrial sector. However, it is important to note that this percentage can vary significantly from one industry to another. For example, in some industries such as petrochemicals, metallurgy, and water treatment, pumps and fans are among the largest energy consumers.

Energy efficiency is an important area of concern for industrial businesses, driving energy savings and operating cost reductions.

Meet the Challenge

Industrial sectors face the daunting challenge of aligning their operations with a zero-carbon emissions vision. Conventional systems are notorious for their waste of energy, contributing to CO2 gas emissions.

Parker Hannifin, a respected name in the industrial market, has embraced energy saving innovations in AC drives.

AC15 and AC20, variable frequency drives (VFDs) are



designed to optimize both new and existing manufacturing processes, enabling precise control of motor speed and better efficiency.

Key Success Factors

- Implementation of AC drives

AC15 and AC20 series are the right answer for pump and fan applications when the customers are seeking for performance, reliability, and simplicity.

- Customized system design

Customers work closely with our partners and Parker AC drive specialists to develop the application.

Being **Easy to choose, Easy to use, Easy to program and Easy to commission** are key factors to ensure AC15 and AC20 will be integrated seamlessly into new and existing machines.

- Continuous Monitoring and Analysis

Real-time data collection from AC15 and AC20 drives allows users to make informed decisions

about energy usage and efficiency. Modbus TCP, Profinet and Ethernet IP as standard allow connections to all the main PLC platforms.

Business Results

- Energy Savings

By integrating AC15 and AC20 into a system, **energy saving expectation can raise up to 30%**, dependent on the process.

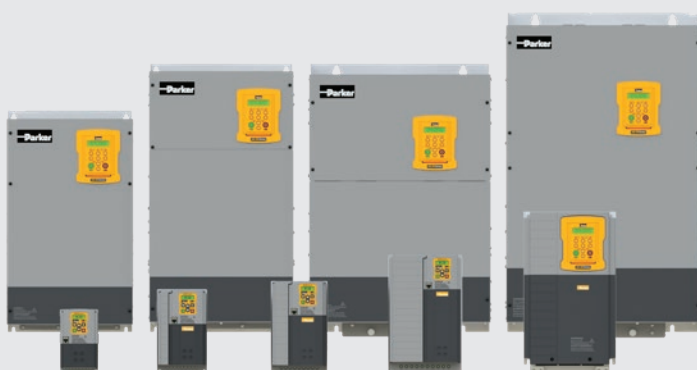
- Increased competitiveness

Innovative approaches to energy efficiency with AC drives allows competitive solutions thanks to cost reduction results.

- Progress towards Zero Carbon Emissions

To align with the needs of green initiatives, Parker AC drives support customer goals by reducing their carbon footprint.

Of course, this includes not only AC drive installations. Parker's commitment to reducing waste and recycling supports all our sustainability efforts.



AC20 drive family from 1.5 to 180 kW

“Parker AC15 and AC20 series are recognized as key enablers for energy efficiency in manufacturing industries. Their energy saving features will help to optimize manufacturing processes for years to come.” Tim Dobbin, Product Manager AC/DC drives EMEA