

# Pure easiness for your application

## Control costs with ABB's general purpose drives



ABB's general purpose drives, ACS580 and ACS480, offer you ready-made solutions for many applications. Along with energy savings, these drives contain enough functionality to replace various external control and monitoring devices, keeping overall project costs down.

### Control costs through easiness

Most drive control panels offer customers a seven-segment display and confusing parameter lists. The ACS580 and ACS480 equip customers with an easy-to-use and informative control panel, featuring a commissioning assistant, ready-made control macros and primary settings. In addition, they can replace a whole set of control and monitoring devices, like timers, counters, contactors, PID loops, motor heater functionality, PLC's automation and condition monitoring functions.

### Control costs through efficiency

Most pump, fan and compressor applications are oversized to meet the system's maximum demand, meaning that more energy is consumed than necessary. Variable speed drives use the exact amount of energy, leading to significant savings as 50% reduction in speed drops energy consumption to one-eighth of the initial consumption.

### Control costs through productivity

In addition to external components and consumed energy, there are also other drains on your money. These costs are usually due to unexpected breakdowns, inaccurate process control or ineffective processes. The ACS580 and ACS480 improve productivity and minimize waste, as they, for example, protect your applications and provide advanced motor control.

- 1) Coming to ACS480
- 2) That consume annually 177 408 kWh and 403200 kWh by running 48 weeks per year
- 3) Annual energy saving for the 22 kW pump is 77.2 kWh and for the 50 kW pump 172.4 kWh
- 4) Assumed cost for energy 0.15 euros/kWh
- 5) Emission factor 0.5 kg/kWh
- 6) Built-in brake chopper up to 22 kW

### Project costs: an example

Item	Price	Price of an item, sourcing and installing it	Replaced with
Micro PLC	200 euros	400 euros	Adaptive programming <sup>1)</sup>
Thermostat to control a cabinet fan	85 euros	130 euros	Drives' standard features
Human-machine-interface	200 euros	400 euros	Drives' assistant control panel
<b>Total</b>		<b>930 euros</b>	

### Energy savings, example

Existing valve flow controls of 22 and 50 kW pumps<sup>2)</sup> are replaced with general purpose drives. With ACS480 and ACS580 controlling the pumps you will meet the process requirements and save:



**249.6 kWh energy<sup>3)</sup>**  
**37 500 euros/year<sup>4)</sup>**  
**125 kg CO<sub>2</sub>/year<sup>5)</sup>**

