

# Service note

## ACS6000 Upgrade services

### The fast track to enhance your drive



**Benefit from various Hardware Upgrades in order to enhance the efficiency and reliability of your drive and to bring it to the latest level of technology. Our aim is to maximize long-term value for our customers.**

#### Manage the life cycle of your drive

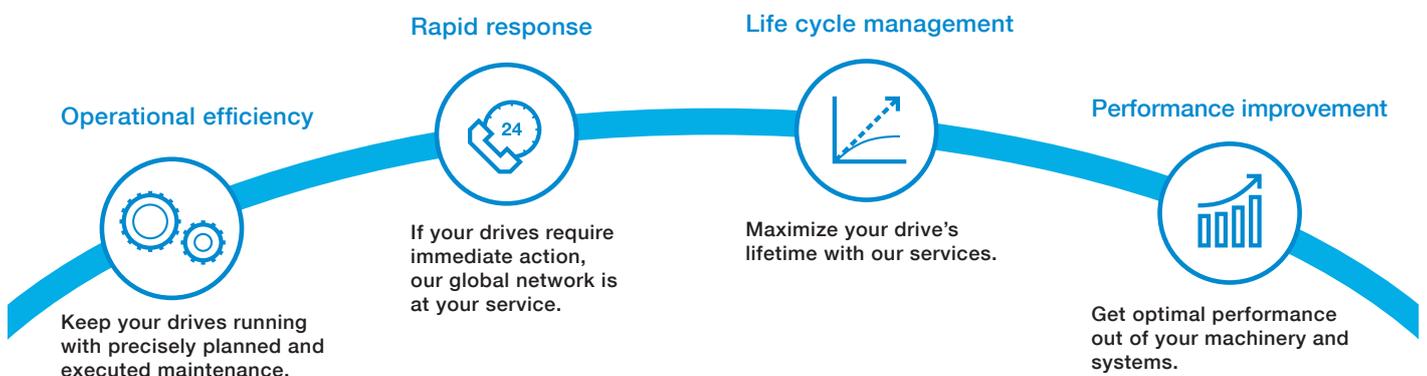
ABB Drives' product life cycle management model offers proactive services in order to maximize the availability and performance of medium voltage drives and improve overall efficiency. This model provides optimum support to end users and a smooth transition to a modern system when the operational life of the existing drive has reached a certain status.

#### Migration to latest technology

ABB commits to apply all expertise and technology improvements to both new and matured drives. With Hardware Upgrades you can enhance the functionality of your drive, thereby providing the best possible return on investment by phased migration to the latest technology.

#### The right time for the right service

It is time to consider a Hardware Upgrade if you are facing growing requirements or when a major maintenance activity is due. Hardware upgrades enhance your drive with new features at minimum costs when planned at the right time of the Lifecycle.



# The way to improved performance

Hardware Upgrades provide enhanced product features, ensure availability and raise the efficiency of your medium voltage drives throughout their entire lifetime. Extended product support and optimized maintenance costs will definitely pay off.

## Main Board upgrade

All control related circuit boards will be upgraded to the latest versions, making available a lot of new features.

### Benefits

- “Black Box”: Faster fault finding ensures a shorter MTTR
- Flash start and improved scalar start
- Protection of IGBTs at unspecified safeline black out
- Higher network robustness prevents transformer saturation
- Increased braking power and higher dynamic
- Provides basic requirements for additional upgrades

## Arc Guard™ upgrade

Optical sensors detect dangerous flash overs and the Arc Guard™ immediately interrupts the main power, protecting your personnel from human injuries or your equipment from damage.

### Benefits

- Increased human and operational safety
- Reduction of downtime
- Scalable scope depending on the specific customer drive
- Compliance with IEC 62271-200 standard

## Fast recovery upgrade

Generator and network failures inevitably lead to a power loss at the converter and a stop or trip of the drive. By using the UPS as power source, the fast recovery modification allows an immediate restart of the equipment.

### Benefits

- Improved availability
- Reduced startup time
- Higher productivity

## Safe torque off (STO) upgrade

The STO option ensures that the drive is not able to energize the motor or apply any torque to it. Thus it is possible for the operators to conduct inspections or maintenance under safe working condition.

### Benefits

- Increased human and operational safety
- Compliance with EN IEC and ISO norms
- Fast and economical solution

## Power upgrade

The most direct approach to improve the performance is a power upgrade, which can be implemented fast and easy. Contact ABB Drive Service to learn more.

### Benefits

- Higher performance
- Straightforward implementation
- Fast realization

## Design upgrades

Depending on your needs, you can implement the following changes in the course of a normal maintenance activity:

- Doorlock with new design
- Water fast connectors
- Doorfans
- Manual output disconnecter

## Tailored solutions

Customized changes for additional motors, remote monitoring, redundancies, etc. are possible. Contact your local ABB representative and we will find a solution for your specific needs.

				
Main Board upgrade	•	•	•	•
Arc Guard™	•			
Fast recovery				•
Safe torque off	•			
Power upgrade				•
Design upgrades	•		•	
Tailored solutions	•	•	•	•

For more information please contact your local ABB representative or visit:



[new.abb.com/drives/services/upgrades-and-retrofits](http://new.abb.com/drives/services/upgrades-and-retrofits)

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