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# Original ABB long-life fans

Minimal efforts for optimal cooling for ABB LV AC drives

GSC FI



## Minimal efforts for optimal cooling

Improved energy efficiency and 9 years maintenance interval



### Improved design

 Improved components and EC\* fan technology have enabled longer life span and energy efficiency



### **Eco-friendly**

 Long-life fans help end users save energy, reduce waste and carbon footprint



#### Less shutdowns and labour costs

• 9 years maintenance interval generates savings in labour costs and reduces need of shutdowns



### Verified quality

• 9 years maintenance interval is based on tests that have been made according relevant standards

Available from ABB and authorized value providers only



### ABB original long-life fans for LV AC drives

### Development based on customer needs

#### Motivation

- Long-life fans were developed based on customers requirement of a longer fan maintenance interval
- It is recommended to replace a long-life fan every 9 years of a drive's operation, along with other components maintenance actions



### Availability

### **Implementation**

- New long-life fans are ABB-specific parts and available only from ABB or Authorized Value Providers
- Long-life fans are backward compatible with previous generation fans.
- Most of the ABB item codes (SKU)\* remain the same
- The visible indication of a long-life fan is a sticker on it
- Long-life fans are included in preventive maintenance kits



Approved

Long-life fan



## ABB original long-life fans for LV AC drives

### Improvement by Product family

## + 3 years longer maint enance interval

### **ACS880**

Power range	Fullrange
Fan type	Fullrange

### ACSM1

Power range	Fullrange
Fan type	Fullrange

### **ACS580**

Power range*	Over 55 kW
Fan type	Fullrange

### ACQ810, ACS850

Power range	Full range
Fan type	Fullrange

## + 6 years longer maint enance interval

### **ACS800**

Power range*	Over 170 kVA
Fan type	Module fan

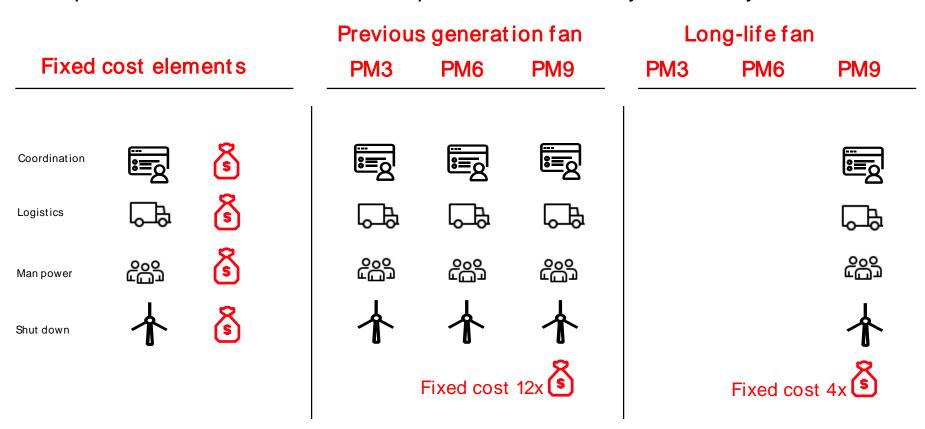
### **ACS600**

Power range*	Over 635 kVA
Fan type	Main fan



## Lower cost of ownership with long-life fans

Example of maintenance interval improvement from 3 years to 9 years



The use of long-life fans reduces fixed costs considerably



### Lower cost of ownership with long-life fans

Operational cost savings because of improved energy efficiency

### **Principle**

- An Electrically Commutated (EC) motor is the heart of a modern fan
- Power control optimizes fan power consumption regardless of network properties

### **Energy saving comparison**

- Actual energy saving compared to previous generation fan depends on ABB drive type and supply network frequency
- Cooling energy consumption of an ABB drive module with an EC fan is 30 - 40 % lower when connected to 50 Hz network
- Cooling energy consumption of an ABB drive module with an EC fan is 60 - 70 % lower when connected to 60 Hz network

Long-life fans bring end users more value and savings via longer life span and energy efficiency



