

MAY 2017

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 shut downs and labour costs

- 9 years maintenance interval generates savings in labour costs and reduces need of shut downs



Verified quality

- 9 years maintenance interval is based on tests that have been made according to 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

- New long-life fans are ABB-specific parts and available only from ABB or Authorized Value Providers

Implementation

- 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

ABB
Approved
Long-life fan

ABB original long-life fans for LV AC drives

Improvement by Product family

**+ 3 years longer
maintenance interval**

ACS880

Power range	Full range
Fan type	Full range

ACS580

Power range*	Over 55 kW
Fan type	Full range

ACSM1

Power range	Full range
Fan type	Full range

ACQ810, ACS850

Power range	Full range
Fan type	Full range

**+ 6 years longer
maintenance 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

Fixed cost elements	Previous generation fan			Long-life fan		
	PM3	PM6	PM9	PM3	PM6	PM9
Coordination						
Logistics						
Man power						
Shut down						
			Fixed cost 12x 		Fixed cost 4x 	

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

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