

ABB drive lifecycle management

Drive lifecycle phases:

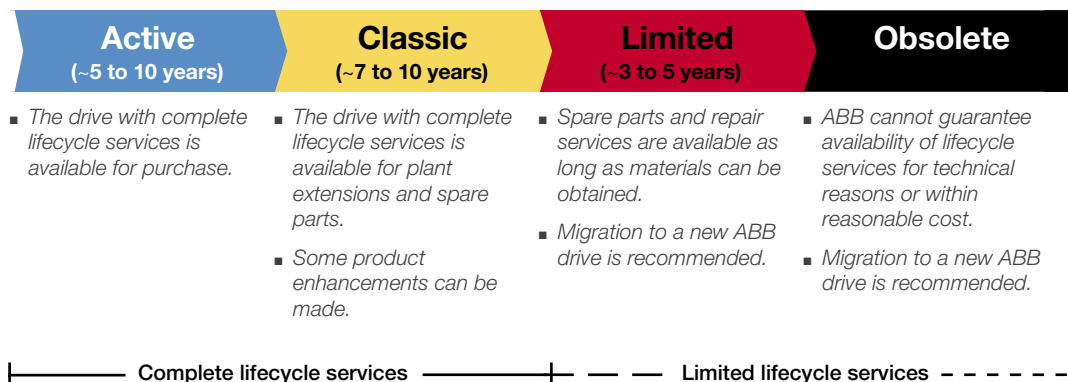


ABB is following a four-phase model for managing lifecycles of its drives for enhanced customer support and improved efficiency.

Lifecycle management model

ABB has developed a product lifecycle management model aimed to provide proactive service for maximizing availability and performance. This model provides not only optimum support to end-users but also a smooth transition to a new drive when the service life of the current drive ends.

The model divides a product's lifecycle into four phases: **active**, **classic**, **limited** and **obsolete**. Each phase has different implications for the end-user in terms of services and support provided.

Benefits of lifecycle management

Drives lifecycle management maximizes the value of the equipment and maintenance investments by:

- ensuring spare part and competence availability throughout the lifecycle
- enabling efficient product support & maintenance for improved reliability
- adding functionality to the initial product by following the upgrade path
- providing smooth transition to new technology in the end of the lifecycle

Active phase

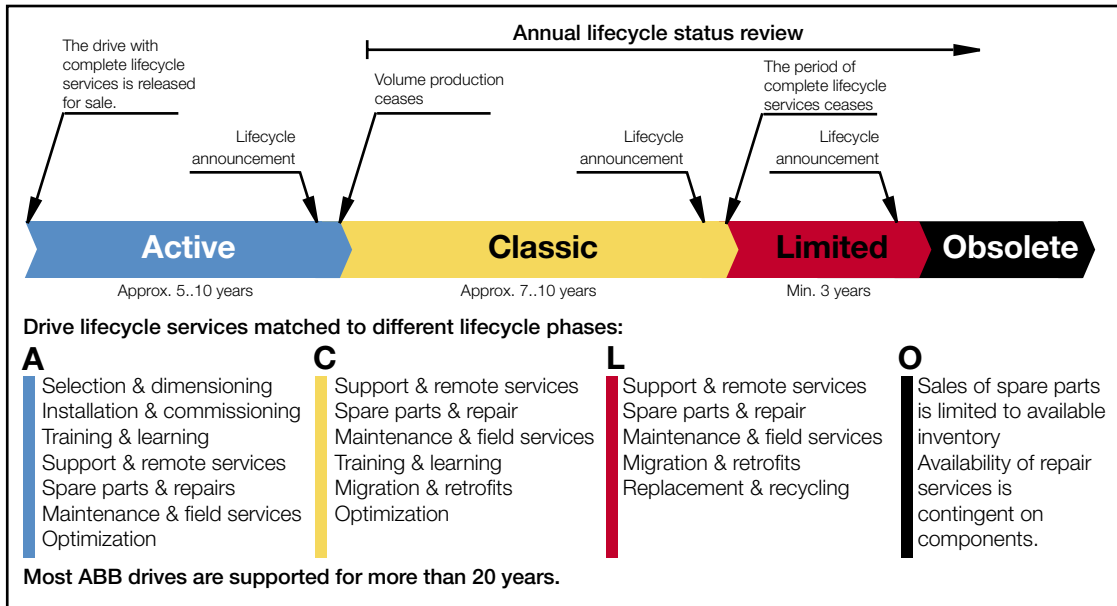
The 'active' phase usually lasts for about five to ten years starting from the time the drive is launched. During this phase the end-user benefits from warranty options and other services such as initial training and technical support including drive adjustment for optimum performance. Complete lifecycle services ranging from spare part availability contracts to scheduled preventive maintenance services is also provided. This phase ends when the volume production of a particular drive ends and ABB issues a 'Last buy notice' through its sales and service channels.

Classic phase

Drive users continue to benefit from complete drive lifecycle services throughout the 'classic' phase. The classic phase, typically lasting seven to ten years, is closely aligned with ABB's research and development work to provide continuing support for its drives while developing future generations. In this phase new hardware and software development may be required to provide the maintenance techniques and upgrades needed to guarantee that the drive continues to operate at peak performance.

- Product Lifecycle Services
- Installation & Commissioning
 - Training
 - Support & Remote Services
 - Spare Parts & Repairs
 - Maintenance & Field Services
 - Migration & Retrofits
 - Optimization





Lifecycle phases, services and announcements

Even though drive products are no longer marketed in this phase some units may still be purchased. Complete drives and drive modules for extensions, spare parts and software upgrades are still available.

First major maintenance need of drive products occurs typically after seven to ten years of continuous operation. By following ABB's maintenance schedules lifecycle costs can usually be minimized. These recommendations, that are available for every drive product family, are based on years of experience obtained in manufacturing and maintaining drives. Drives upgrade and retrofit services are designed for improved performance and extending the lifecycle to provide end-users with the best possible return on their assets. Throughout the classic phase ABB issues an annual updates on the lifecycle plan of the drive products so that end-users are kept fully informed.

Limited phase

In the 'limited' phase the product development has come to its end. Spare part services continue as long as components and materials are available, and in course of time the use of reconditioned parts increases. Towards the

end of this phase drive models are becoming more and more obsolete. ABB issues a lifecycle statement alerting end-users of product shifting into the 'obsolete' phase in well advance to give end-users enough time to make final spare part purchases or to transfer to new technology before product support ceases.

Obsolete phase

A product is transferred to the 'obsolete' phase when it is no longer possible to provide lifecycle services within reasonable cost, or when ABB can no more support the product technically, or the old technology is no more available.

In practice this means that availability of support, spare parts, repair & field services can not be guaranteed, but usually spare parts and repair services are available as long as ABB does not run out of the spares stock or components can be obtained.

Most ABB drives are supported for more than 20 years.

Drives lifecycle management model ensures that end-users are always aware of support plans of their valuable assets.

