



EPC 60 Retrofit

State-of-the-art control for older centrifugal separators

Background

Alfa Laval separators, such as the MAPX, MMPX, WHPX, MOPX, FOPX, LOPX and MFPX, were developed decades ago and are equipped with older control systems.

Unlike mechanical parts, it is difficult to assess the condition of the electrical components of these systems. Damage to a single component on a complex circuit board, for instance, can affect the entire separation system and cause downtime. Rather than wasting time to determine which electrical component requires replacement, it is common practice in the marine and diesel industry to replace the entire card often without considering other options.

Application

As a leader at the forefront of marine separator automation and control systems, Alfa Laval offers a reliable way to upgrade older generations of its control systems with new state-of-the-art control technology. The Alfa Laval EPC 60 Retrofit kit is specifically designed to replace all Alfa Laval separator electronic control systems in older separators, including the IPC 231, EPC 30, EPC 41 and EPC 400. Modernizing previous generations of Alfa Laval separators and control systems with EPC 60 control technology:

- Ensures safe, reliable and efficient operation of the separator
- Makes the separator easier to operate
- Prolongs separator system lifetime
- Secures future spare parts supply

Extending separator performance

With its space-saving design, modular I/O cards and ease of operation and maintenance, the EPC 60 Retrofit kit is a solid choice for extending the life of older separation systems. The kit easily mounts into the space occupied by the old control cabinet. Older generations of circuit boards are upgraded with modular I/O cards, which can easily be replaced in a matter of minutes.

One of the features is the built in P & I temperature controller. It is always recommendable to use a P & I controller to secure a steady and high separation temperature on the oil, making sure the separation efficiency is as high as possible.



The Alfa Laval EPC 60 Retrofit kit is a smart way to modernize the control systems of older separation systems.

System components

- EPC 60 cabinet, which has the exact same size, mounting requirements and cable flanges for re-use of existing cables
- Pressure transmitter with adapters to replace existing pressure switches
- Surge protectors to be installed on existing solenoid valves to protect the EPC 60 components from peak voltages
- MT 60 water transducer board replaces all the older boards and sensors for the ALCAP separators
- The EPC 60 control system is ready to utilize coming features introduced for the EPC 60



The Alfa Laval EPC 60 Retrofit kit for FOPX, LOPX and MFPX separators.

Features and benefits

Plug & Play installation

Upgrading the complete control system is easy, and installation cost-effective. No welding is required and there is no need to replace the existing:

- Alfa Laval steam, hot water, thermal oil or electric heater
- Steam control valve or power unit cabinet (if electric heater)
- Starter cabinet
- Cables and piping

Easy operation and maintenance

EPC 60 Retrofit enables the introduction of PLC-based functionality, which meets marine standards for PLC systems as well as Alfa Laval's more stringent requirements. An intuitive menu makes navigation, accessing information about parameters and alarms and changing parameter values easy because all data is displayed in clear text. This eliminates the complicated alarm codes and parameter numbers displayed by older control systems thereby preventing human error and ensuring safer operation and higher separation performance.

Fault finding made easy

The PLC has functional modules stored on separate I/O cards rather than on one large circuit board. Self-diagnostic

capabilities enable faster and easier troubleshooting and I/O replacement, if required. Should a fault occur in the PLC system, an alarm alerts the operator and, upon opening the cabinet door, a flashing red LED indicates the faulty component. I/O card replacement requires less than a minute and no tools or cables are required.

Extended service lifetime of entire separation system

EPC 60 Retrofit not only replaces the old control system but upgrades the entire separation system. Replacing old electronic components such as pressure switches with modern components extends the lifetime of the ancillary equipment and ensures separator uptime as well as spare part availability. Alfa Laval's global service network and spare parts supply chain ensures prompt delivery of parts or service around the world.

Efficient cleaning

Utilizing the benefits with CIP (cleaning in place) secure a clean bowl without dismantling. Regular cleaning provides higher separation efficiency and prevents mechanical damage caused by manual cleaning or, in the worst case scenario, by bowl imbalance resulting from an uneven sludge discharge.

How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com