

MEGADRIVE-LCI modernization with PEC3

Superior performance and reliability coupled with advanced cyber security



Modernizing a MEGADRIVE-LCI variable speed drive with a PEC3 package offers industrial processes increased production output and reduced CO₂ emissions while extending the drive's life expectancy. The modernization package redefines the LCI drive's potential: increasing process power, enhancing reliability and boosting efficiencies.

For over 30 years the MEGADRIVE-LCI has been the variable speed drive of choice for driving high power applications. At the heart of the drive's longevity lie advanced technological upgrades, which optimize performance, availability and energy efficiency of installed drives.

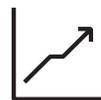
MEGADRIVE-LCI modernization with PEC3 control

ABB offers a control upgrade package for MEGADRIVE-LCIs equipped with PEC2 control. Modernizing them with a PEC3 package will extend the drives' lifetime, enhance process reliability, increase production output and reduce CO₂ emissions. Furthermore, PEC3 software, Windows 10 LCI control terminal and the cyber secure gateway protect the drive against cyber attacks.

A PEC3 control upgrade package includes the following components:

- PEC3 main control processor
- LCI interface board
- LCI control terminal customer interface
- Remote gateway

Main benefits



Up to 5% higher production output
PEC3's Advanced Power Factor Improvement (APFI) software enables up to 5 percent greater power output from the same frame size.



Up to 10% lower CO₂ emissions
APFI contributes to reduced energy costs by saving up to 40 percent in reactive power and 5 percent in system losses, which significantly lowers CO₂ emissions.



Enhanced process reliability
Process reliability can be improved by up to 15 percent with PEC3's Advanced Control Performance Optimization (ACPO) function when the torque is maintained during the voltage sags. In addition, the start of the motors is more reliable thanks to new software that makes the process up to 10 percent faster, eliminating the mechanical bypass.



Extend MEGADRIVE-LCI's life cycle
PEC3 hardware and Windows 10 LCI Control Terminal help future-proof the MEGADRIVE-LCI against electronic component failure and drive obsolescence. This helps relieve pressure on spare part stocks, while giving access to ABB support services for the next 10 years.



Four major components rewrite MEGADRIVE-LCI performances

PEC3 main control processor

The advanced PEC3 controller moves drive control to the next level equipping more precise and quicker control of the motor and higher power output. It provides a leap in computational power, enabled by advances in Central Processing Unit (CPU) technology and an innovative Model Predictive Torque Control (MPC) method. Not only do these features push the performance boundaries experienced by users, but they also provide a modern drive that can be rapidly placed in operation.

Remote gateway

Complete with the most advanced cyber solution with built-in protections against internet attacks, the gateway is used for browser-based, cyber-secure remote monitoring of drive's health

via cloud connectivity in conjunction with ABB Ability™ Condition Monitoring for drives.

Customer interface

The 15-inch LCI Control Terminal (LCT) is a display panel that features a hard drive capable of storing up to 1,000 events. The large display enhances onsite drive inspection. Whether investigating warnings or troubleshooting the drive, the user will always see the bigger picture and the smallest details.

LCI interface board

Product evolution on the LIN3 board comes with a novel design that provides faster measurements of voltages and electrical currents improving the reliability of the process control.

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

new.abb.com/drives/services/modernization-services
new.abb.com/service/motion

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