

ABB DRIVES

# **Drive Application Programming**

# Combine your application knowledge with the world-class variable speed drives



Drive application programming allows you to add a competitive advantage to your machines.

Thanks to the built-in PLC functionality of ACS880 drives, you can combine your application knowledge with the world-class AC drive.

The Drive Application Builder tool helps turn a standard drive into an application specific drive.

The application program runs on top of the drive's standard drive firmware. This enables the seamless implementation of custom control algorithms in addition to the standard drive functionality, access to the drive peripheral I/O and customization of the drive user interface.

Drive application programming is accomplished with the ABB Drive Application Builder tool and is based on the well-known IEC 61131-3 standard. This standard makes it possible to start program development with minimal training and to transfer customized programs to other platforms.

# Benefits and Features of Drive Application Programming include

- Cost savings and higher reliability, thanks to fewer system components and simpler installation work as no external PLC is needed
- Compact solution requires less cabinet space, as the PLC is inside the drive enclosure and has the same IP class
- Performance and productivity improvements, since decentralized machine control enables faster control loops
- No need for a separate HMI, as a drive control panel can be used instead in some applications
- Creation of intelligent applications with several drives, using drive-to-drive communication
- Using drive application programming for data collection and edge computing of field information

## Drive Application Builder is a tool for developing IEC 61131-3 programs in a drive-embedded PLC

#### Standard features

- IEC 61131-3 programming
- 160KB of program memory
- Running application program in parallel drive FW in tree configurable tasks (1 ms-1000 ms)
- Interface to standard drive parameters
- Adding customer parameters
- · Adding customer events
- Drive I/O programming
- Drive-to-drive communication

## Premium version includes standard features plus

- Customization of ABB parameter groups
- Extra program memory (amount depends on a device)
- Project Compare
- Virtual Drive for code development and testing without the need for actual hardware

## Productivity add-on includes

- Interface to SVN version control system
- Static code analysis functionality

# Product variant and ordering codes

Code	Type designator	Description
3AXD50000342389	DABS-STANDARD	Standard version of the Drive Application Builder for IEC 61131-3 programming
3AXD50000342396	DABS-STANDARD-MULTIPLE-WS	Standard version of the Drive Application Builder for IEC 61131-3 programming, multiple workstations (5)
3AXD50000342402	DABP-PREMIUM	Premium version of the Drive Application Builder for IEC 61131-3 programming
3AXD50000343010	DABP-PREMIUM-MULTIPLE-WS	Premium version of the Drive Application Builder for IEC 61131-3 programming, multiple workstations (5)
3AXD50000343027	DABX-PRODUCTIVITY-ADD-ONS	Software development productivity add-ons for Drive Application Builder, version control and static analysis extensions for improve software engineering productivity, single workstation

The Drive Application Builder tool helps turn a standard drive into an application specific drive

