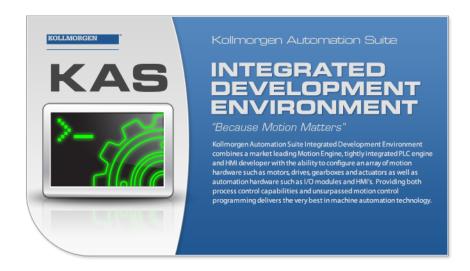
Kollmorgen Automation Suite

Release Notes



Document Edition: G, June 2017

Valid for KAS Software Revision 2.12 Valid for AKD firmware version: 1.16

Part Number: 959720

Keep all manuals as a product component during the life span of the product. Pass all manuals to future users / owners of the product.

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2 Introduction

Welcome to KAS v2.12! This release contains new features and many improvements. This document is intended to help existing users understand the differences between this and KAS v2.11. If you are new to KAS, we recommend that you start off with other documents, such as the Installation Guide.

This document has five sections:

- "Installation" (p. 5) this section covers system requirements as well as provides firmware, software, and hardware information.
- "What's New" (p. 10) an overview of new features.
- "What's Changed" (p. 13) this section discusses how this release may affect some of your older projects. It let's you know what to do when upgrading, especially if there is anything you need to be careful about.
- "What's Fixed" (p. 14) a list of issues addressed in this release.
- "Known Issues" (p. 16) this section contains issues we are aware of, and methods for avoiding or working around them.

NOTE

This document contains links to more complete descriptions in the online help. Wherever you find this icon , you may click it and go to the help topic on KDN. We point to KDN with absolute links so you can use this PDF from any directory.

★ TIP

We recommend that you visit the Kollmorgen Developer Network ("KDN"). KDN is an online resource which includes a knowledge base, provides access to downloads, and has a user community where you can get answers from peers and Kollmorgen employees, and make feature suggestions for KAS. Additionally, beta versions of the help are posted and are searchable. Stop by http://kdn.kollmorgen.com, take a look around, and don't forget to register.

3 Installation

3.1 System Requirements

Element	Description
Operating System	Microsoft® Windows® 7 SP1 (32 or 64-bit). For optimal performance, please be sure your operating system is fully updated with the latest patches.
Processor type	Intel® Pentium® M or equivalent processor at 1.5 GHz or greater.
Memory	1 GB RAM or greater (which is recommended for complex applications)
Storage	1 GB hard drive or compact flash space
Display	WXGA+ (1440 \times 900) or higher-resolution monitor with 24-bit color. See Note #1 below.
Connectivity	1 Ethernet port, at either 100Mbits/s or 1Gbits/s. See Note #2 below.
Web Browser	A modern web browser is required to access the web server and online help. We recommend Internet Explorer (IE9 or later, see Note #3) , Mozilla FireFox ,
	or Google Chrome .

NOTE

- 1. Better results are achieved with OpenGL and 3D cards.
- 2. A 100Mb network is required in order to allow the IDE to Runtime communication to work in all conditions. The AKDWorkBench AutoTuner and Scope both require 100Mb of bandwidth to function properly.
- 3. IE9 should be considered a minimum. Later versions of the browser are more compliant with web standards and afford better performance and compatibility.

★ TIP

See the topic Connect Remotely for information about the ports used by KAS which may need to be opened to support connecting from an external network.

3.2 Firmware & Software Requirements

KAS is comprised of several software components integrated together to provide a complete motion system. We recommend the following component software versions for best performance and compatibility.

3.2.1 Controller Software

Software Images	Recommended Version
KASIDE	2.12.0
PAC master image (Previous KVB 1.2 runtime pre-installed)	2012-04-30

3.2.2 Firmware Requirements

Controller Firmware to use with KAS version 2.12

Description	Туре	Name
800 MHz PCMM	KAS Runtime	KAS Runtime Firmware for AKD-PCMM (KAS-PCMM-M-MCEC)
800 MHz PDMM	KAS Runtime	KAS Runtime Firmware for AKD-PDMM (KAS-PDMM-M-MCEC)
1.2 GHz PCMM	KAS Runtime	KAS Runtime Firmware for AKD-PCMM (KAS-PCMM-M-M1EC)
1.2 GHz PDMM	KAS Runtime	KAS Runtime Firmware for AKD-PDMM (KAS-PDMM-M-M1EC)
PAC Master Image	(Previous KVB 1.2 runtime pre-installed)	v.2012-04-30

KAS is compatible with AKD-M (PDMM Drive), AKD-P (Motion Tasking Drive or Position Indexer), AKD-C, and AKD-N drives. The recommended firmware version is dependent upon your drive's model and revision. The operational image recommended with this release is 01-16-00-002.

Drive Firmware to use with version 2.12

Description	Туре	Name
AKD Firmware for KAS	Operational	AKD-Firmware-for-KAS-V01-16-00-002
	Resident	R_00-00-56-000.i00
Firmware for drive built into PDMM	800 MHz AKD PDMM	AKD PDMM Servo Drive Firmware AKD-M-MCEC-01-16-00-002.i00
	1.2 GHz AKD PDMM	AKD PDMM Servo Drive Firmware AKD-M-M1EC-01-16-00-002.i00
AKD Drive Firmware	AKD-N	AKD-N-xxEC-01-16-00-002.i00
	AKD-P	AKD-P-NBxC-01-16-00-002.i00

★ TIP

Please be aware that you may get a F106 error after upgrading your AKD firmware. This indicates that non-volatile parameters are not compatible between the two firmware versions. Resetting the drive to the default memory values using Parameter Load will fix this error.

★ TIP

FBUS.PARAM05 bit 5 should be set to 0, which is the default value. This will prevent an error E33 and EtherCAT not starting.

If it is not set to the default, the rotary switch of the drive is used to set the EtherCAT Station Alias. This can conflict with the address that KAS is writing.

3.2.2.1 Mandatory Resident Firmware

The recommended resident firmware is v56 (R_00-00-56-000). The recommended resident firmware for AKD-C and AKD-N is v56 (R_00-00-56-000). To reliably support the EtherCAT Firmware Download, the resident firmware must be at least version 35. Please contact Kollmorgen for any AKD Drive with resident firmware lower than v35.

3.2.3 Kollmorgen Visualization Builder

Software Images	Recommended Version	Download
Kollmorgen Visualization Builder (KVB) master image	2.20	

The new installation package contains both the IDE and runtime for TxC panels. The KVB ZIP file contains two different installers:

Install Type	File	Notes
New installation	setup.exe	This is the complete package which will install all prerequisite components.
Runtime	RuntimeSetup.exe	This package contains runtime software for TxC panels.

Supported by KVB 2.20

Hardware / Software	Versions
Operating Systems	Windows® 7, Windows 8, Windows 10
Controllers	PCMM, PDMM
НМІ	All Kollmorgen AKI panels

NOTE

The KAS IDE creates projects using KVB 2.0. When you open a version 2.0 project by double-clicking on it, KVB will upgrade the project to version 2.20.



① IMPORTANT

KVB 1.2 projects are not compatible with KVB 2.x. An attempt to open a v1.2 project with v2.x will result in an alert message. If accessing v1.2 projects is important, we recommend keeping both versions installed on your system. New panels will automatically use KVB 2.0.

★ TIP

If you have a KVB 1.2 project that needs to be updated in KVB 2.x, please contact Kollmorgen.

3.3 KAS Controls

KAS Runtime is compatible with, and has been verified with the following hardware models:

Description	Model Number	Main Characteristics
PCMM	AKC-PCM-MC-80-00N-00-E00	800 MHz Standard Mutli-axis Controller
PCMM	AKC-PCM-M1-120-00N-00- E00	1.2 GHz High Performance Multi-Axis Controller
PDMM	AKD-M0xxxx-MCEC-0000	800 MHz Standard Drive Resident Controller
PDMM	AKD-M0xxxx-M1EC-0000	1.2 GHz High Performance Drive Resident Controller
Panel PAC	AKC-PNC-C1-224-10N-00-000	Mono-core 1.2 GHz CPU, 2GB RAM, 10" display
Panel PAC	AKC-PNC-C1-224-15N-00-000	Mono-core 1.2 GHz CPU, 2GB RAM, 15" display
Panel PAC	AKC-PNC-D1-224-15N-00-000	Dual-core 1.86 GHz CPU, 2GB RAM, 15" display
Panel PAC	AKC-PNC-D1-224-17N-00-000	Dual-core 1.86 GHz CPU, 2GB RAM, 17" display
Performance Box Controller	AKC-PLC-C1-224-00N-00-000	Mono-core 1.2 GHz CPU, 2GB RAM
Performance Box Controller	AKC-PLC-D2-224-00N-00-000	Dual-core 1.86 GHz CPU, 2GB RAM
Performance Box Controller	AKC-RMC-D2-224-00N-00-000	Dual-core 1.86 GHz CPU, 2GB RAM

NOTE

KAS IDE and Simulator should not be installed on a PAC, PDMM, or PCMM.

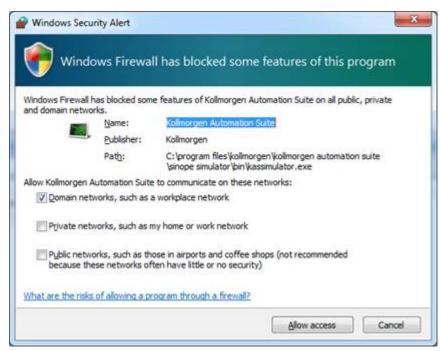
★ TIP

In order to prevent CF card corruption when shutting down the PAC, we recommend using the Enhanced Write Filter (EWF). This filter redirects all the write operations in memory in order to avoid making physical write operations in the compact flash.

The filter should be activated on the PAC when it is fully set up, programmed, and will not change. In case of a significant change, such as a new KAS version or downloading a new application, the recommendation is to turn off the EWF, make the change, and then reactivate it. Please see the user help to learn how to use the EWF.

3.4 Allow Simulator to Use HTTP Communication

The Simulator needs to open HTTP ports to allow communication. The first time Simulator is run, Windows will prompt you to block or unblock the KAS application. You should allow access to all of these requests to ensure correct behavior.



The Simulator uses port 80 for the web server. This communication channel is mandatory for Simulator to work properly. So please close any application, such as VOIP, that may use port 80 before starting Simulator.

For more information see Start KAS Simulator in the online help.



4 What's New

4.1 AKD2G Support

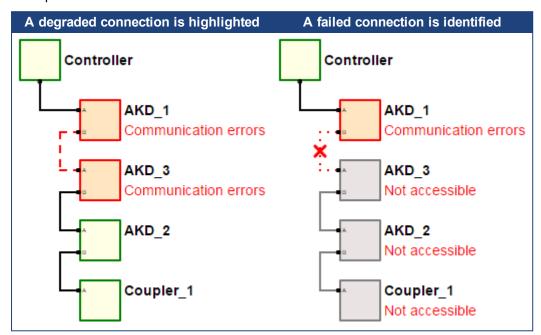
This release of KAS supports the forthcoming AKD2G drives.

4.2 EtherCAT Diagnostics

This release provides users with ways to diagnose/fix EtherCAT communication problems and maintain EtherCAT network operation.

Web-server EtherCAT Diagnostics tab: The web-server diagnostics EtherCAT tab provides information about communication problems. It can identify the location(s) of either failed or degraded communication.

Examples:



Configurable Working Counter Error Limit: A user-configurable limit has been added. If the working counter error limit is exceeded, the EtherCAT network communication will be shutdown with an E30 error. The default value is the same as the previous release for backwards compatibility. For more details, see the KAS documentation sections:

- KAS IDE Reference > Configuring EtherCAT > EtherCAT Master Settings
- Troubleshooting > EtherCAT Diagnostics & Errors > EtherCAT Error Messages

EtherCAT Working Counter Error Alarm (A31): If an EtherCAT Working Counter Error occurs it means that one (or more) EtherCAT devices did not respond properly to the controller. The A31 alarm

provides notification when a Working Counter Error occurs. An A31 indicates an EtherCAT cable problem, the EtherCAT device is busy, or device failure.

See EtherCAT Error Messages for more information.

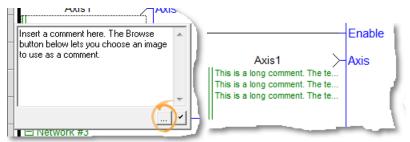
Functions: A set of functions have been added that can be used in a project to help diagnose EtherCAT communications issues.



- ECATWCStatus(...): The EtherCAT working counter error count can be read using the function ECATWCStatus(...). This function provides a quick way to monitor if there any network communic ation errors between the EtherCAT master and devices.
- ECATMasterStatus(...): The EtherCAT master state and lost frame counter can be read using the function block ECATMasterStatus(...). This function block is useful to determine the EtherCAT network state and quantify the EtherCAT communication failures in the return path to the controller.
- ECATDeviceStatus(...): The EtherCAT slave device state and link status for each port can be read using the function block ECATDeviceStatus(...). This function block is useful to locate the device(s) with communication errors, when the ECATWCStatus(...) function indicates there are EtherCAT communication errors from the network device(s).
- ECATCommErrors(...): EtherCAT communication problem details can be read using the function block ECATCommErrors(...). This function block is useful to identify the EtherCAT degraded connections and to quantify the EtherCAT communication errors between device connections.

4.3 FFLD Editor Comments

The IDE supports comments within an individual cell. Comments can be entered by selecting a cell and using the right-click context menu item (Insert Comment) or by using the keyboard shortcut (Shift+C). If the text is long it can display beyond the bounds of the cell (to the right, and below) until another item is found.



4.4 AKI2G HMI Panel Support

This release provides support for the new AKI2G-CDA (5" and 7") and -CDB (7" and 12") HMI panels.



4.5 Kollmorgen Visualization Builder 2.20

With this release KAS offers a new version of the Kollmorgen Visualization Builder (KVB). $oldsymbol{\dot{0}}$



4.6 MC MoveContVel

The function block MC MoveContVel has been added to support a continuous velocity move. This function block is easy to use, it features:

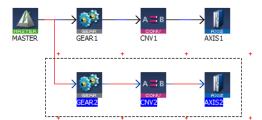
- No direction input, it uses the sign of the velocity input to specify the direction
- Continuous Update input input values (velocity, acceleration, etc.) are applied to the executing move, when Continuous Update is TRUE.
- Allows a speed input equal to zero.

This function block is recommended instead of the MC MoveVelocity(...) function block, due to the additional features and easier to use programming inputs. For more details, see MC MoveContVel in the documentation.

4.7 Pipe Network Editor Improvements

The Pipe Network Editor has received the following enhancements.

- Multiple blocks can be selected by Ctrl-clicking on blocks and connectors
- An area of blocks and connectors can be selected by right mouse click and dragging a selection box
- Select all blocks and connectors with Ctrl-A
- Move multiple blocks and connectors as a group with the mouse
- · Delete key will delete the selected items
- · Cut, Copy, and Paste shortcuts and context menus
- Alt+Enter with open the properties window



For more information see the KAS documentation section Pipe Network Editor Controls.

4.8 SSH Security

PCMM and PDMM controllers can now be accessed via Secure Shell (SSH) for maintenance or troubleshooting. SSH has replaced Telnet for security reasons. Please note that you should change the controller's default root password for security reasons. See Using SSH.

4.9 v1-16 AKD Firmware

- The AKD Firmware v1-16 (and higher) supports a new drive parameter, ECAT.LEGACYREV, to enable a backwards compatibility RevisionNo (0x2). By default, AKD-Series drives will ship with the latest production release firmware, with ECAT.LEGACYREV = 1, for backwards compatibility.
- The AKD Firmware version 1-16 (and higher) supports a 3rd FMMU if the ECAT.LEGACYREV = 0.
 The advantage of using a 3rd FMMU is 30% performance improvement with the KAS IDE embedded Workbench communication.
- EtherCAT RevisionNo: EtherCAT provides an optional field to identify a vendor specific RevisionNo for a device and a field to specify the logic to CheckRevisionNo for device compatibility. The KAS IDE and Runtime supports multiple RevisionNos for the same Vendor/ProductID. In previous KAS versions, the EtherCAT initialization would generate a device mismatch error, if the device's RevisionNo and the project's RevisionNo did not match. If the device's ESI file does not specify the CheckRevisionNo logic, then by default the KAS Runtime will allow any RevisionNo at EtherCAT initialization. Also, the IDE will allow you to map physical devices to project devices with different RevisionNos and keep the project device configurations.
- Limitation: The CheckRevisionNo options "equal or greater than" (EQ_OR_G, LW_EQ_HW_EQ_OR_G, and HW EQ LW EQ OR G) are not supported. They will be evaluated as "equal" (EQ).

5 What's Changed

This section discusses changes in products that you should be aware of.

5.1 Oscilloscope Trace Times

The measurements for the PLCProgExecTime and RealTimeMargin traces have been improved.

- The **PLCProgExecTime** is minimally affected; compared to an identical PCMM/PDMM program from a previous version v2.12 may report a 0µs to 1µs decrease in PLC execution time.
- The **RealTimeMargin** now includes other processes needed by the PDMM/PCMM (e.g., the web server, and 7-segment display). Consequently, for an identical PDMM program, the RealTimeMargin may show a decrease corresponding to 3% to 4% of the cycle time.

For more details, see the KAS documentation section Using Trace Time To Measure CPU Load.

6 What's Fixed

Following are the issues corrected by this release.

Items Fixed By KAS v2.12

Items Fixed	HBy KAS v2.12	
Defect	Description	
BZ-9358	Coordinated Motion Abort with Simulator	
BZ-9335	MLProfileBuild fails when cam point lies on the output boundary	
DT-3443	Kollmorgen drive position feedback for object 0x6064	
DT-3436	Drag-and-drop to create a UDFB instance without a default name. To work-around, enter the object name or select an instance form the variable selector pop-up box.	
DT-3433	MLSmpConECAT does not work with AKD at address 1001. Prior to 2.12 RC 18, PDO data types for flexible PDO objects were not recorded correctly. This caused the MLSmpConECAT to fail or on some occasions to connect the PDO object with an incorrect bit width. When updating an application to v2.12 RC18 or later, where MLSmpConECAT is needed for a flexible PDO, then delete and re-Add the flexible PDO entry in the "PDO Editor" tab. This will cause the data type to be recorded correctly. For example: General Properties 1/0 Configuration PDO Selection/Mapping PDO Editor Distributed Clock CoE Inti-Commands CoE Object 1/2	
	AKD_1 (AKD) PDO Editor	
	Editable PDOs PDO Content	
	Ox1AO3 Contents: Size: 8 bytes	
	Index	
DT-3432	Disconnect of the controller from the IDE when doing multiple connects and disconnects	
DT-3429	Ctrl+Space shortcut does not work in the ST editor	
DT-3426	Insert Profinet Master Port with Fieldbus Editor Fails. The previous KAS v2.11 can be patched by replacing the K5BusPNIODev.dll in the installed directory: C:\Program Files (x86)\Kollmorgen\Kollmorgen Automation Suite\Astrolabe\Bin\IOD. Or using the Patch Release version: 2.11.1.69816.	
DT-3425	KAS editor not showing all the objects	
DT-3424	HTTP Get is not working	
DT-3423	KAS Crashes When App is Closed While Workbench Scope is Recording	
DT-3421	Cam-in starts at mid-point	
DT-3420	Status of MC_Power function block cannot be used to start a move	
DT-3415	MC_BUFFER_MODE_BLENDING_NEXT may cause excessive acceleration	
DT-3399	Multi dimensional array variable export to HMI causes compiler error	
DT-3307	Data Exchange Direction parameter in KVB tag setup is being erased	
DT-3276	Negative UserUnits prevents MC_GearInPos working	
DT-3198	MLAxisAbs with new velocity causes overshoot. Multiple calls to MLAxisAbs with same target position and different velocities, made before the move completes, will cause the position to overshoot the target position.	
DT-3040	Function block inputs variables are not updated	
DT-1709	Common shortcuts do not work in Pipe Network editor.	

Items Fixed By KVB v2.20

Defect	Description
DT-3434	KVB View all objects not working
DT-3422	KVB Serious error
DT-3392	Cannot add new tags to KVB project without Rebuild
DT-3307	Data Exchange Direction parameter in KVB tag setup is being erased (requires KAS v2.12 RC15 or higher).
DT-3281	KVB unhandled exception error

7 Known Issues

7.1 KAS Runtime Fails to Start on the PAC over Remote Desktop

Symptom: When accessing the PAC via Remote Desktop, KASRuntime fails to start. Instead, this pop-up is displayed:

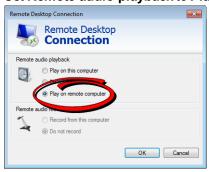


Workaround: Set the Remote Desktop "Remote audio playback" setting to "Play on remote computer":

- 1. In Remote Desktop, before connecting to the PAC, click on the **Show Options** arrow.
- 2. Click on the Local Resources tab and click Settings....



3. Set Remote audio playback to Play on remote computer.



4. Click **OK** and connect as usual.

7.2 Miscellaneous Known Issues

	icous itilowii issues
	PDO objects not defined in the object dictionary (or 24bit size) will not work properly with MLSmpXxxxx() functions
	IDE hangs if AKD variable added to watch window before opening AKD-GUI. To workaround, open the AKD-GUI (Configuration tab) first.
	Tree view on Leftside of integrated Workbench doesn't appear sometimes. If the IDE to controller Ethernet connection has a degraded connection with low bandwidth (< 10Mbit), the integrated Workbench views may take several seconds to minutes to become visible.
	PLCopen move blending with jerk. If the blending move is commanded with an unreachable velocity, the move may abruptly decelerate to the final position within one sample, exceeding the specified deceleration rate.
DT-3427	E21 when IDE running O-Scope is disconnected
DT-3419	Adding ESI File After Scanning Results in No Selected PDOs
DT-3418	PLCopen S-Curve move may not reach target with small Jerk
	EtherCAT scan fails after a AKD drive firmware download failure with a wrong EtherCAT topology
DT-3413	KAS IDE cannot open projects with Korean characters in path
DT-3410	Recovered projects don't recover imported libraries (.kal files)
	When a crash report fails due to error (ex: timeout, connection failure,) report is lost. User cannot resend
DT-3383	IDE displays LREAL with same precision as REAL.
DT-3382	MLInitTrig does not configure the AKD Capture engine correctly for a negative edge trigger.
DT-3367	ECAT network restore fails to recover from drive FW download failure.
DT-3328	PipeNetwork Trigger block inaccuracies due to 6 sample latency
	PDOs need padding to meet byte boundary requirement. The IDE PDO Editor does not automatically pad PDOs on non-byte boundaries. The problem can be avoided by manually adding dummy objects to pad the PDO size to line-up on byte boundaries. For more details, see the article on KDN: kdn.kollmorgen.com/content/how-do-i-insert-pdo-padding-kas-pdo-editor
	KL3314 Operation. Temperature values are not calibrated properly to the thermocouple. To work-around the problem, use ECATWriteData to setup the control word (16xE0) and send value (16x2006) to Register R32 and a second ECATWriteData to write zero (0) to the control word to set up the continual output of the temperature.
	Modbus renumber address does not work with String variables. In the Fieldbus Editor Modbus configurator, if you right click input registers and choose the renumber address option, it will make the addresses overlap.
	EOT Drive limits and KAS profile generator. The AKD-series drives will ignore the KAS command position when the EOT limits are activated.
DT-3041	Missed cycles while doing file operations
	KVB checkbox is present for variable of type PLC lib;xxx structures and on click it brings the Edit Variable Window
DT-3013	Modified cam file is not downloaded when forcing an Online Change.
DT-2940	WebBrowser component not working for TxB panels
DT-2935	K-Bus slices analog inputs Offset parameter does not work
DT-2798	IDE disconnects from the controller after several days
DT-2615	"Find unused variables" used while program is running opens error pop-ups
DT-2590	D
	Breakpoint with For() loop, increases VM load significantly IDE animation with non-matching project versions

DT-2523	On windows 7 Home Premium Edition on HP computers, there is a known issue when using the simulation. This issue documented on MSDN. https://blogs.msdn.microsoft.com/b/brandonwerner/archive/2010/03/14/the-nasty-visual-studio-platform-mcd-error-in-visual-studio-2010-rc.aspx
DT-1537	User units are not applied to the "spinning wheels"
DT-1134	IDE always reports the project has been modified

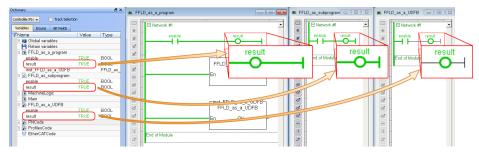
8 Known Limitations

- The undo action is not possible for all operations.
- Find/Search/Replace function: Search & Replace function is not supported in Pipe Network. Search and replace for HMI are supported only with local CTRL+F
- In SFC programs, breakpoints can only be set on transitions (i.e. in First Level diagram), and not in steps or conditions. With a breakpoint set on transition, you can debug cycle by cycle.
- SFC programs are limited to 64kByte size due to the bytecode engine. If the SFC program exceeds 64kBytes, the compiler will generate a warning message: Warning: limit is 64KB!
- · Plugging the EtherCAT cable to the OUT port is not detected and is not reported as an error
- PLC Variable mapping: each PLC variable can be mapped to an EtherCAT IO and exclusively to:
 - · Modbus for an HMI
 - Or to an PDMM Onboard IO
 - Or to an external driver like Profibus

For example, a PLC variable cannot be mapped to Modbus and Onboard PDMM IO at the same time.

8.1 FFLD Animation Limitation

The animation of FFLDs defined as UDFBs has a limitation where connected rails are not being animated. This is not the case when FFLDs are defined as programs or subprograms.



8.2 EtherCAT Limitations

- Cabling: Plugging the EtherCAT cable from an OUT port to an OUT port is not detected and not reported as an error.
- Cabling: The following pertains to cases where an Ethernet hub is present between the PAC and the first EtherCAT device. If the cable between the hub and the EtherCAT device is disconnected, the controller will not stop the motion and the axis will not be shown as being in fault. The axis will only display the fault state after the cable is reconnected. To recover from this situation the PAC must be power cycled.
- External EtherCAT Configuration: If an external EtherCAT XML file needs to be used, the file AKD-for-KAS.xml should be used as the ESI file for AKD. This ensures proper operation with KAS. It can be found at

C:\Users\<user.name>\AppData\Local\Kollmorgen\KAS\Astrolabe\ESI\.

9 Third Party EtherCAT Device Support

This section summarizes the known capabilities and limitations with KASsupport for 3rd party EtherCAT devices:

9.1 Requirements

- All 3rd party devices must have an ESI file containing the device information, features, and settings.
- MDP devices must support automatic module discovery at EtherCAT network scan.

9.2 Limitations

- KAS may not discover MDP fieldbus gateway devices that require MDP gateway profiles, implemented to the ETG 5001.3 specification. This includes gateway protocols: CAN, CANopen, DeviceNet, Profibus, Interbus, and IO Link.
- 3rd party drives are not supported by the motion engine. Mapping axes to 3rd party drive is not supported.
- PDO upload is not supported.
- Manual slot configuration is not supported with MDP devices.

About KOLLMORGEN

Kollmorgen is a leading provider of motion systems and components for machine builders. Through world-class knowledge in motion, industry-leading quality and deep expertise in linking and integrating standard and custom products, Kollmorgen delivers breakthrough solutions that are unmatched in performance, reliability and ease-of-use, giving machine builders an irrefutable marketplace advantage.



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