

### COMBIVERT EtherNet/IP Rockwell Setup

### FAQ No.0002

Part	Version	Revision	Datum	Status
en	1.0	001	2019-12-20	Draft

### Content

Introduction	2
EDS File Installation	2
Addition of the KEB Module with the EDS file	6
Addition of the KEB module using a Generic Module	10
Disclaimer	13

District Court Lemgo HRA 5649 DUNS-No. 314108728 VAT-No. DE309087075 Bank Details: Sparkasse Paderborn-Detmold IBAN DE 19 4765 0130 0000 0060 07 BIC WELADE3L General Partner: Vittorio Tavella KEB Verwaltungs-GmbH, Barntrup District Court: Lemgo HRB 8965 Directors: Curt Bauer CMO, Ralf Lutter COO, Vittorio Tavella CFO, Wolfgang Wiele CTO



### Introduction

The following document shows the steps involved for setting up the KEB S6-A and F6-A devices for firmware versions 2.6.x and later with a Rockwell Automation Programmable Logic Controller (PLC). In this example the following Rockwell Automation hardware and software were used:

- CompactLogix<sup>™</sup> 5380 PLC
- Studio 5000 Logix Designer<sup>®</sup> Version 31.00.00
- RSLinx
- EDS Hardware Installation Tool

### **EDS File Installation**

The EDS file (Electronic Data Sheet) is a text file that contains setup data for the KEB device. The extension of the file ends with \*.eds. The file can be found on the KEB website here: EDS file X6

To register the device follows the following steps:

- Start the EDS Hardware Installation Tool
- > In Logix Designer<sup>®</sup> go to the TOOLS menu
- > You can also find it in the Tools folder in the RSLinx program
- > Select the EDS Hardware Installation Tool as shown:



**Rockwell Tools Menu** 

**RSLinx Folder** 

> Follow the prompts and click "Next" to install





Rockwell Automation's EDS Wi	ard	- 22
	Welcome to Rockwell Automation's EDS Wizard	
	The EDS Wizard allows you to:	
	- register EUS-based devices.	
	- unregister a device.	
	<ul> <li>change the graphic images associated with a device.</li> </ul>	
	- create an EDS file from an unknown device.	
	To continue dick Next	
	Next >	Cancel

**EDS Wizard** 

Select Register an EDS file(s).



**EDS Wizard Task** 

Register a single file or a directory files. Enter the path where your file has been downloaded and click "Next":



Rockwell Automation's EDS Wizard	×
Registration Electronic Data Sheet file(s) will be added to your system for use in Rockwell Automation applications.	
Register a single file     Register a directory of EDS files     Iook in subfolders	
Named	
C:\EDS\02E8000200800100 eds Browse	
• If there is an icon file (ico) with the same name as the file(s) you are registering then this image will be associated with the device. To perform an installation test on the file(s), click Next	
< Back Next >	Cancel

**EDS Wizard File Path Selection** 

Test Results should produce a green check mark indicating no errors. Click "Next" to continue:

Rockwell Automation's EDS Wizard	×
EDS File Installation Test Results This test evaluates each EDS file for errors in the EDS file. This test does not guarantee EDS file validity.	
⊡ Installation Test Results └ ☑ c∴eds\02e8000200800100.eds	
View file < Back Next >	Cancel

EDS Wizard Test Results



> The "KEB" icon should be shown under the Product Types:

Rockwell Automation's	s EDS Wizard	×
Change Graphic I You can change	Image the graphic image that is associated with a device.	
Change icon	Product Types AC Drive Device KEB F6A Drive	
	< Back Next >	Cancel

**EDS Wizard Icon Selection** 

Register the device by clicking "Next"

Rockwell Automation's EDS Wizard	×
Final Task Summary This is a review of the task you want to complete.	
You would like to register the following device. KEB F6A Drive	
< Back Next >	Cancel





**EDS Wizard Register Device** 

> After installation the following screen will be shown. Click "Finish" to exit the wizard.



EDS Wizard Complete

The EDS file has now been successfully installed. Read the next sections to add the module to a project.

Addition of the KEB Module with the EDS file

- Start a new project or open an existing project in Logix Designer<sup>®</sup>
- > Add or create an Ethernet module if one doesn't exist



Ethernet Module



- Right click the Ethernet Module
- Select "New Module..."



**Create New Module** 

- Enter "keb" into the search box.
- Select the KEB module to add
- Click "Create" to make the module

ect Module Type			
Catalog Module Discovery	Favorites		
keb	Clear Fi	Iters	Show Filters 🛛
Catalog Number	Description	Vendor	Category
F6A	KEB F6A Drive	KEB Antriebstechnik GmbH	AC Drive Device
S6A	KEB S6A Drive	KEB Antriebstechnik GmbH	AC Drive Device
X6	KEB X6 Communications Adapter	KEB Antriebstechnik GmbH	Communications Adapter
4	m		•
3 of 530 Module Types Fo	und		Add to Favorites
Close on Create		Cr	eate Close Help

Select Module Type

In the next screen give a name to the module and an IP Address. The default IP Address for the KEB device is 192.168.0.100. It is a good idea to give the device a good descriptive



name to remember which device you will be working with. Example: "KEB\_X6\_Robot\_Alpha\_Z\_Axis"

New Module		23
General* Conr	ection   Module Info   Internet Protocol   Port Configuration   Network	
Type:	F6A KEB F6A Drive	
Vendor:	KEB Antriebstechnik GmbH	
Parent:		
Name:	X6_Robot_Alpha_Z_Axis Ethemet Address	
Description:	Private Network: 192.168.1.	-
	IP Address:     192 . 168 . 0 . 100	)
	⊘ Host Name:	
	-	
- Module Defin	ition	
Revision:	1.001	
Electronic K	eying: Compatible Medule	
Connections	Basic Speed Control	
	Change	
Status: Creating	OK Cancel H	elp

New Module Name and IP Address Entry

- > The default connection is setup for you as Basic Speed Control.
- > Select the "Change..." button to select the Assembly and size and type of data.
- > Basic Speed Control has 4 bytes of Input and 4 bytes of Output. Use 2 INTs for the size.



Module Definition* Revision:	0 O	01 🚖	•		X
Connections:					
Name		Size		Tag Sut	ffix
Basic Speed Control	Input: Output:	2	INT	1	X6_Robot_Alpha_Z_Axis:I1 X6 Robot Alpha Z Axis:O1
Select a connection				1	

New Module Assembly Basic Speed Control

KEB Control I/O Process Data by default uses 13 Bytes Input and 22 Bytes Output. Use SINT for the type.

Module Definition*     Image: State Sta						
Connections:	e Module		•			
Name		Size		Tag Su	ffix	
KEB Control VO Process	Input:	13	SINT	1	X6_Robot_Alpha_Z_Axis:I1	
Data	Output:	22	5111	· ·	X6_Robot_Alpha_Z_Axis:01	
Select a connection						
			OK		Cancel	
			UK			

New Module KEB Control



Select the "Connection" tab.

💽 New Module				23
General Connection Module Info Internet Protocol	Port Configuration Network			
Name	Requested Packet Interval (RPI) (ms)	Connection over EtherNet/IP	Input Trigger	
VO Process Data	20.0 ≑ 1.0 - 3200.0	Unicast 🗸	Cyclic	-
Inhibit Module Major Fault On Controller If Connection Fails While Module Fault	in Run Mode			
Status: Creating				

New Module RPI

- Set up your Requested Packet Interval time in milliseconds. By default it is set to 20.0ms.
- Click "OK" to add the module.

### Addition of the KEB module using a Generic Module

This sets up the device using a generic module with the KEB Control 100/101 Assemblies. This can be used if you need a quick simple I/O connection or do not have the necessary .EDS file for device setup.

- Start a new project or open an existing project in Logix Designer<sup>®</sup>
- > Add or create an Ethernet module if one doesn't exist





Ethernet Module

- Right click the Ethernet Module
- Select "New Module..."



**Create New Generic Module** 

- > Enter "generic Ethernet module" into the search box.
- > Select the Generic Ethernet Module to add.
- > Click "Create" to make the module.



generic ethernet module	Clea	Filters	
Module Type Catego	ory Filters		
AC Drive Device			
Analog			
CIP Motion Converte	r		
Communication			
Communications			
Catalog Number	Description	Vendor	Catego
ETUERNET MORILIE		Declared Astronotics (Allow Decilies	Comment

**Create Generic Ethernet Module** 

- Fill in the Name and IP Address
- > Make the Comm Format and Connection Parameters as follows:

New Module				23
Type: ETHERNET-MODULE Generic Ethemet Vendor: Rockwell Automation/Allen-Bradley Parent: Local Name: KEB_X6 Description: Comm Format: Data - SINT Address / Host Name IP Address: 192 . 168 . 0 . 100	: Module - Connection Par- Input: Output: Configuration: Status Input: Status Output	Assembly Instance: 101 100 1	Size: 32 • 32 • 0 •	(8-bit) (8-bit) (8-bit) (8-bit)
✓ Open Module Properties	ОК	Can	cel	Help

Setup Generic Ethernet Module

> Click OK to accept the module settings.



### Disclaimer

KEB Automation KG reserves the right to change/adapt specifications and technical data without prior notification. The safety and warning reference specified in this manual is not exhaustive. Although the manual and the information contained in it is made with care, KEB does not accept responsibility for misprint or other errors or resulting damages. The marks and product names are trademarks or registered trademarks of the respective title owners.

The information contained in the technical documentation, as well as any user-specific advice in verbal or in written form are made to the best of our knowledge and information about the application. However, they are considered for information only without responsibility. This also applies to any violation of industrial property rights of a third-party.

Inspection of our units in view of their suitability for the intended use must be done generally by the user. Inspections are particular necessary, if changes are executed, which serve for the further development or adaption of our products to the applications (hardware, software or download lists). Inspections must be repeated completely, even if only parts of hardware, software or download lists are modified.

Application and use of our units in the target products is outside of our control and therefore lies exclusively in the area of responsibility of the user.

**KEB Automation KG** Südstraße 38 • D-32683 Barntrup fon: +49 5263 401-0 • fax: +49 5263 401-116 net: <u>www.keb.de</u>• mail: <u>info@keb.de</u>