



# ABB i-bus® KNX Reconstruction of KNX products with the software “IT Tool Reconstruction” Tips & Tricks

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**Exclusion of liability:**

This document is provided for technical information purposes and is intended to offer practical tips and suggestions. This document does not replace the technical information used for engineering, installation and commissioning of the product. Subject to changes and errors excepted.

Despite checking that the contents of this document match the hardware and software, deviations cannot be completely excluded. We therefore cannot accept any liability for this. Any necessary corrections will be inserted in new versions of the document.

Please inform us of any suggested improvements.

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# Overview

## 1 The software “IT Tool Reconstruction”

The “IT Tool Reconstruction” is a PC software package from IT GmbH (www.it-gmbh.de). It can read out the memory content of KNX devices via the bus and reconstruct (reverse engineering) the parameters, communication objects and group addresses of the devices.

The software is frequently used with KNX projects to reconstruct an ETS project planning file, which is no longer available.

## 2 Reconstruction capacity of KNX devices

The newer ABB devices of the BIM M112 BAU type can be reverse engineered by the IT Tool Reconstruction (version 2.2 or higher). Furthermore, devices which did not use the standard parameterisation dialog of the ETS (so-called “plug-in devices”) could not be reverse engineered.

However, most devices that use a different BAU type can be reverse engineered.

Since April 2009, all devices of BAU type BIM M112 can be reverse engineered using the IT Tool Reconstruction.

Furthermore, all “plug-in” devices with the exception of the Application Unit AB/S 1.1 can be reverse engineered. Refer also to the product list from page 5ff.

ETS3 is required for reconstruction (reverse engineering).

# Instructions for reconstruction

## 1 Import of the current application programs

In order to read out ABB devices, only the current product data file “All ABB i-bus® products” (.VD3) must be imported in the ETS3.

## 2 Updating the reconstruction software

Ensure that you have installed the current version of the IT Tool Reconstruction. Version 2.2.327 or higher is required.

## 3 Importing old VD3 files

After scanning the project using the reconstruction software, it is generally necessary to import older or non-available application programs.

An archive of VD3 files can be found on the Internet under “Download – Archive and reconstruction” as well as with the respective product under “Product tree – Discontinued Products.”

A list of the device types and version numbers of the application programs can be found in the download area of the ABB Internet website.

## 4 Reconstruction limitations

Experience has shown that the reconstruction of an ETS project generally functions well. For certain (complex) parameter settings, it is possible that individual segments of information (e.g. individual parameter and communication objects) cannot be reconstructed.

A list of reverse engineering capable products can be found further below.

### Important:

Please note that ABB cannot accept any liability regarding the accuracy and completeness of the reconstruction. Please contact the manufacturer of the reconstruction software (IT GmbH) directly with your questions.

The following products cannot be reconstructed at the moment:

- Application Unit AB/S 1.1 (planned)
- Control Panel CPx/U x.1
- Touch Panel RP/U x.1

# List of reverse engineering capable products

The following list provides an overview of the products that can most be at least partly reverse engineered. ABB cannot accept any liability regarding the accuracy and completeness of this list.

Please observe the instructions in section "Instructions for reconstruction", point 4.

Product type	Product name	Order No.
ABL/S 2.1	Application Unit, Logic, MDRC	2CDG110073R0011
ABZ/S 2.1	Application Unit, Time, MDRC	2CDG110072R0011
AE/A 2.1	Analogue Input, 2-fold, SM	2CDG110086R0011
AE/S 4.2	Analogue Input, 4-fold, MDRC	2CDG110030R0011
AT/S 2.16	Binary Output, 2-fold, 16 A, MDRC	GHQ6310003R0121
AT/S 2.6	Binary Output, 2-fold, 6 A, MDRC	GHQ6050011R0001
AT/S 2.6.2	Binary Output, 2-fold, 6 A, MDRC	GHQ6050026R0001
AT/S 2.6.5	Switch Actuator, 2-fold, 10 A, MDRC	GHQ6310042R0111
AT/S 4.16	Binary Output, 4-fold, 16 A, MDRC	GHQ6310003R0131
AT/S 4.16.1	Switch Actuator, 4-fold, 16 A, MDRC	GHQ6310021R0111
AT/S 4.16.5	Switch Actuator, 4-fold, 16 A, C-Load, MDRC	GHQ6310028R0111
AT/S 4.6.2	Switch Actuator, 4-fold, 10 A, MDRC	GHQ6310033R0111
AT/S 6.6.1	Switch Actuator, 6-fold, 10 A, MDRC	GHQ6310023R0111
AT/S 8.10.1	Switch Actuator, 8-fold, 10 A, MDRC	GHQ6310075R0111
AT/S 8.16.5	Switch Actuator, 8-fold, 16 A, C-Load, MDRC	GHQ6310047R0111
AT/S 8.4.1	Switch Actuator, 8-fold, 4 A, MDRC	GHQ6310041R0111
BA/S 32.1	Binary Display, 32-fold, MDRC	GHQ6310005R0111
BE/S 4.20.1	Binary Input, 4-fold, Contact Scanning, MDRC	2CDG110053R0011
BE/S 4.230.1	Binary Input, 4-fold, 230 V, MDRC	2CDG110051R0011
BE/S 4.24.1	Binary Input, 4-fold, 24 V, MDRC	2CDG110052R0011
BE/S 8.20.1	Binary Input, 8-fold, Contact Scanning, MDRC	2CDG110056R0011
BE/S 8.230.1	Binary Input, 8-fold, 230 V, MDRC	2CDG110054R0011
BE/S 8.24.1	Binary Input, 8-fold, 24 V, MDRC	2CDG110055R0011
DG/S 1.1	DALI Gateway, 1-fold, MDRC	2CDG110026R0011
DG/S 1.16.1	DALI Gateway, 1-fold, 16 group, MDRC	2CDG110103R0011
DG/S 8.1	DALI Gateway, 8-fold, MDRC	2CDG110025R0011
DZ+ 2105 W E	EIB Delta-Meter Plus, 1 x 57...288 V, 5 A, Class 1	2CMA139121R1000
DZ+ 2105 W PE	EIB Delta-Meter Plus, 1 x 57...288 V, 5 A, Class 1, PTB	2CMA139044R1000
DZ+ 2280 W E	EIB Delta-Meter Plus, 1 x 57...288 V, 5 (80) A, Class 2	2CMA139051R1000
DZ+ 2280 W PE	EIB Delta-Meter Plus, 1 x 57...288 V, 5 (80) A, Class 2, PTB	2CMA139124R1000
DZ+ 3105 W E	EIB Delta-Meter Plus, 3 x 100...500 V, 5 A, Class 1	2CMA139045R1000
DZ+ 3105 W PE	EIB Delta-Meter Plus, 3 x 100...500 V, 5 A, Class 1, PTB	2CMA139122R1000
DZ+ 3280 W E	EIB Delta-Meter Plus, 3 x 100...500 V, 5 (80) A, Class 2	2CMA139052R1000
DZ+ 3280 W PE	EIB Delta-Meter Plus, 3 x 100...500 V, 5 (80) A, Class 2, PTB	2CMA139125R1000
DZ+ 4105 K E	EIB Delta-Meter Plus, 3 x 57...288/100...500 V, 5 A, Class 1	2CMA139056R1000
DZ+ 4105 K PE	EIB Delta-Meter Plus, 3 x 57...288/100...500 V, 5 A, Class 1, PTB	2CMA139057R1000
DZ+ 4105 W E	EIB Delta-Meter Plus, 3 x 57...288/100...500 V, 5 A, Class 1	2CMA139046R1000
DZ+ 4105 W PE	EIB Delta-Meter Plus, 3 x 57...288/100...500 V, 5 A, Class 1, PTB	2CMA139047R1000
DZ+ 4105 WT E	EIB Delta-Meter Plus, 3 x 57...288/100...500 V, 5 A, Class 1	2CMA139048R1000
DZ+ 4105 WT PE	EIB Delta-Meter Plus, 3 x 57...288/100...500 V, 5 A, Class 1	2CMA139123R1000
DZ+ 4180 W E	EIB Delta-Meter Plus, 3 x 57...288/100...500 V, 5 (80) A, Class 1	2CMA139049R1000
DZ+ 4180 W PE	EIB Delta-Meter Plus, 3 x 57...288/100...500 V, 5 (80) A, Class 1, PTB	2CMA139050R1000
DZ+ 4280 K E	EIB Delta-Meter Plus, 3 x 57...288/100...500 V, 5 (80) A, Class 2	2CMA139127R1000
DZ+ 4280 K PE	EIB Delta-Meter Plus, 3 x 57...288/100...500 V, 5 (80) A, Class 2, PTB	2CMA139128R1000
DZ+ 4280 W E	EIB Delta-Meter Plus, 3 x 57...288/100...500 V, 5 (80) A, Class 2	2CMA139053R1000
DZ+ 4280 W PE	EIB Delta-Meter Plus, 3 x 57...288/100...500 V, 5 (80) A, Class 2, PTB	2CMA139054R1000
DZ+ 4280 WT E	EIB Delta-Meter Plus, 3 x 57...288/100...500 V, 5 (80) A, Class 2	2CMA139055R1000
DZ+ 4280 WT PE	EIB Delta-Meter Plus, 3 x 57...288/100...500 V, 5 (80) A, Class 2, PTB	2CMA139126R1000
DZ2200WE	Delta-Meter Energy Consumption Meter, 1x 230 V, 5(65) A	GHV7822000R0100

Product type	Product name	Order No.
DZ2200WPE	Delta-Meter Energy Consumption Meter, 1x 230 V, 5(65) A	GHV7822000R0101
DZ2210WE	Delta-Meter Energy Consumption Meter, 1x 230 V, 2(6) A	GHV7822100R0100
DZ2210WPE	Delta-Meter Energy Consumption Meter, 1x 230 V, 2(6) A	GHV7822100R0101
DZ3110WE	Delta-Meter Energy Consumption Meter, 3x 110 V, 2(6) A	GHV7831100R0100
DZ3110WPE	Delta-Meter Energy Consumption Meter, 3x 110 V, 2(6) A	GHV7831100R0101
DZ3400WE	Delta-Meter Energy Consumption Meter, 3x 400 V, 5(65) A	GHV7834000R0100
DZ3400WPE	Delta-Meter Energy Consumption Meter, 3x 400 V, 5(65) A	GHV7834000R0101
DZ3410WE	Delta-Meter Energy Consumption Meter, 3x 400 V, 2(6) A	GHV7834100R0100
DZ3410WPE	Delta-Meter Energy Consumption Meter, 3x 400 V, 2(6) A	GHV7834100R0101
DZ3510WE	Delta-Meter Energy Consumption Meter, 3x 500 V, 2(6) A	GHV7835100R0100
DZ4000KE	Delta-Meter Energy Consumption Meter, 3x 230/400 V, 5(65) A	GHV7840000R2100
DZ4000KPE	Delta-Meter Energy Consumption Meter, 3x 230/400 V, 5(65) A	GHV7840000R2101
DZ4000WE	Delta-Meter Energy Consumption Meter, 3x 230/400 V, 5(65) A	GHV7840000R0100
DZ4000WPE	Delta-Meter Energy Consumption Meter, 3x 230/400 V, 5(65) A	GHV7840000R0101
DZ4000WTE	Delta-Meter Energy Consumption Meter, 3x 230/400 V, 5(65) A	GHV7840000R0140
DZ4000WTPE	Delta-Meter Energy Consumption Meter, 3x 230/400 V, 5(65) A	GHV7840000R0141
DZ4001WE	Delta-Meter Energy Consumption Meter, 3x 230/400 V, 5(65) A	GHV7840001R0100
DZ4001WPE	Delta-Meter Energy Consumption Meter, 3x 230/400 V, 5(65) A	GHV7840001R0101
DZ4010KE	Delta-Meter Energy Consumption Meter, 3x 230/400 V, 2(6) A	GHV7840100R2100
DZ4010KPE	Delta-Meter Energy Consumption Meter, 3x 230/400 V, 2(6) A	GHV7840100R2101
DZ4010WE	Delta-Meter Energy Consumption Meter, 3x 230/400 V, 2(6) A	GHV7840100R0100
DZ4010WPE	Delta-Meter Energy Consumption Meter, 3x 230/400 V, 2(6) A	GHV7840100R0101
DZ4010WTE	Delta-Meter Energy Consumption Meter, 3x 230/400 V, 2(6) A	GHV7840100R0140
DZ4010WTPE	Delta-Meter Energy Consumption Meter, 3x 230/400 V, 2(6) A	GHV7840100R0141
DZ4011WE	Delta-Meter Energy Consumption Meter, 3x 230/400 V, 1(6) A	GHV7840101R0100
DZ4011WPE	Delta-Meter Energy Consumption Meter, 3x 230/400 V, 1(6) A	GHV7840101R0101
ER/U 1.1	Electronic Relay, 1-fold, FM	GHQ6310044R0111
ES/S 4.1.1	Electronic Switch Actuator, 4-fold, 700 mA, MDRC	GHQ6310061R0111
ET/S 4.230	Binary Input, 4-fold, 230V, MDRC	GHQ6050010R0001
ET/S 6.230.1	Binary Input, 6-fold, 230 V, MDRC	GHQ6310024R0111
ET/S 6.24.1	Binary Input, 6-fold, 24 V, MDRC	GHQ6310025R0111
ET/S 6.24.5	Binary Input, 6-fold, Contact Scanning, MDRC	GHQ6310035R0111
EUB/S 1.1	EIB Monitoring Unit, MDRC	2CDG110066R0011
FCA/S 1.1M	Fan Coil Actuator, MDRC	2CDG110084R0011
IG/S 1.1	IP Gateway, MDRC	GHQ6310067R0111
IPR/S 2.1	IP Router, MDRC	2CDG110061R0011
IPS/S 2.1	IP-Interface, MDRC	2CDG110098R0011
JA/S 2.230.1	Shutter Actuator Module, 2-fold, 230 V AC	GHQ6310071R0111
JA/S 2.6.1	Shutter Actuator, 2-fold, 6 A, MDRC	GHQ6310022R0111
JA/S 4.230.1	Shutter Actuator, 4-fold, 230 VAC, MDRC	GHQ6310072R0111
JA/S 4.230.1M	Shutter Actuator with Manual Operation, 4-fold, 230 VAC, MDRC	GHQ6310064R0111
JA/S 4.24.1	Shutter Actuator, 4-fold, 24 VDC, MDRC	GHQ6310073R0111
JA/S 4.6.1	Shutter Actuator, 4-fold, 230 VAC, 6 A, MDRC	GHQ6310037R0111
JA/S 4.6.5	Shutter Actuator, 4-fold, 24 VDC, 6 A, MDRC	GHQ6310040R0111
JA/S 4.SMI.1M	Shutter Actuator with Manual Operation, 4-fold, SMI, MDRC	2CDG110028R0011
JA/S 8.230.1	Shutter Actuator, 8-fold, 230 V AC, MDRC	GHQ6310063R0111
JA/S 8.230.1M	Shutter Actuator with Manual Operation, 8-fold, 230 VAC, MDRC	GHQ6310078R0111
JSB/S 1.1	Shutter Control Unit, MDRC	GHQ6310084R0111
LF/U 1.1	Light Sensor, FM	GHQ6310039R0111
LF/U 2.1	Light Sensor, FM	2CDG110089R0011
LFA/S 1.1	Blower / Fan Coil Actuator, 1-fold, 6 A, MDRC	2CDG110077R0011
LFA/S 2.1	Blower / Fan Coil Actuator, 2-fold, 6 A, MDRC	2CDG110078R0011
LK/S 2.1	Line Coupler, MDRC	GHQ6050019R0001
LK/S 4.1	Line Coupler, MDRC	2CDG110027R0011
LM/S 1.1	Logic Module, MDRC	GHQ6310080R0111
LR/S 2.16.1	Light Controller, 2-fold, 1-10V, MDRC	2CDG110087R0011

Product type	Product name	Order No.
LR/S 2.2.1	Light Controller / Switch/Dim Actuator, 2-fold, 1-10 V, MDRC	GHQ6310036R0111
LR/S 4.16.1	Light Controller, 4-fold, 1-10 V, MDRC	2CDG110088R0011
MT/S 4.12.1	Zone Terminal, 4-fold, MDRC	GHQ6310027R0111
MT/U 2.12.1	Zone Terminal, 2-fold, FM	GHQ6310060R0111
RA/S 4.230.1	Shutter Actuator Standard, 4-fold, 230 VAC, MDRC	GHQ6310076R0111
RC/A 8.1	Room Controller, Basis Device for 8 Modules, SM	2CDG110001R0011
RM/S 1.1	Room Master Basic, MDRC	2CDG110094R0011
RM/S 2.1	Room Master Premium, MDRC	2CDG110095R0011
SA/S 12.10.1	Switch Actuator, 12-fold, 10 A, MDRC	2CDG110042R0011
SA/S 12.16.1	Switch Actuator, 12-fold, 16A-AC1, MDRC	2CDG110082R0011
SA/S 12.16.5	Switch Actuator, 12-fold, 16 A, C-Load, MDRC	2CDG110046R0011
SA/S 12.6.1	Switch Actuator, 12-fold, 6A, MDRC	2CDG110038R0011
SA/S 2.10.1	Switch Actuator, 2-fold, 10A, MDRC	2CDG110039R0011
SA/S 2.16.1	Switch Actuator, 2-fold, 16A, MDRC	2CDG110062R0011
SA/S 2.16.5S	Switch Actuator, 4-fold, 16 A, C-Load, Current Detection, MDRC	2CDG110043R0011
SA/S 4.10.1	Switch Actuator, 4-fold, 10 A, MDRC	2CDG110040R0011
SA/S 4.16.1	Switch Actuator, 4-fold, 16A, MDRC	2CDG110063R0011
SA/S 4.16.5S	Switch Actuator, 4-fold, 16 A, C-Load, Current Detection, MDRC	2CDG110044R0011
SA/S 4.6.1	Switch Actuator, 4-fold, 6A, MDRC	2CDG110036R0011
SA/S 8.10.1	Switch Actuator, 8-fold, 10 A, MDRC	2CDG110041R0011
SA/S 8.16.1	Switch Actuator, 8-fold, 16A, MDRC	2CDG110064R0011
SA/S 8.16.5S	Switch Actuator, 8-fold, 16 A, C-Load, Current Detection, MDRC	2CDG110045R0011
SA/S 8.6.1	Switch Actuator, 8-fold, 6A, MDRC	2CDG110037R0011
SCM/S 1.1	Safety Module, MDRC	2CDG110024R0011
SD/S 2.16.1	Switch/Dim Actuator, 2-fold, 16 A, MDRC	2CDG110079R0011
SD/S 4.16.1	Switch/Dim Actuator, 4-fold, 16 A, MDRC	2CDG110080R0011
SD/S 8.16.1	Switch/Dim Actuator, 8-fold, 16 A, MDRC	2CDG110081R0011
SM/S 3.16.30	Current Sensor, 3-channel, MDRC	GHQ6310034R0111
SMB/S 1.1	Fault Monitoring Unit, MDRC	GHQ6310085R0111
TG/S 3.1	Telephone Gateway, Basis, Analogue, MDRC	GHQ6310083R0111
TG/S 3.2	Telephone Gateway, Analogue, MDRC	2CDG110068R0011
UD/S 2.300.1	Universal Dim Actuator, 2-fold, 300 VA, MDRC	GHQ6310045R0111
UD/S 2.300.2	Universal Dim Actuator, 2-fold, 300 VA, MDRC	2CDG110074R0011
UK/S 32.1	Universal Concentrator, 32-fold, MDRC	GHQ6310026R0111
UK/S 32.2	Universal I/O Concentrator, 32-fold, MDRC	2CDG110071R0011
US/U 2.2	Universal Interface, 2-fold, FM	GHQ6310074R0111
US/U 4.1	Universal Interface, 4-fold, FM	GHQ6310031R0111
US/U 4.2	Universal Interface, 4-fold, FM	GHQ6310070R0111
WS/S 4.1	Weather Station, 4-fold, MDRC	2CDG110032R0011
WZ/S 1.1	Weather Unit, MDRC	2CDG110034R0011
XS/S 1.1	Interface for Intrusion Alarm Panel	2CDG110075R0011
ZS/S 1.1	Meter Interface Module, MDRC	2CDG110083R0011

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