FAQ C6 RIO

Homing on current position FAQ No.0002

Part	Version	Revision	Date	Status
en	3.5.4.10	002	2019-01-01	Released

Content

KEB Automation KG
Südstraße 38
32683 Barntrup, Germany
E-mail: info@keb.de
Tel. +49 5263 401-0
Fax +49 5263 401-116
www.keb.de

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

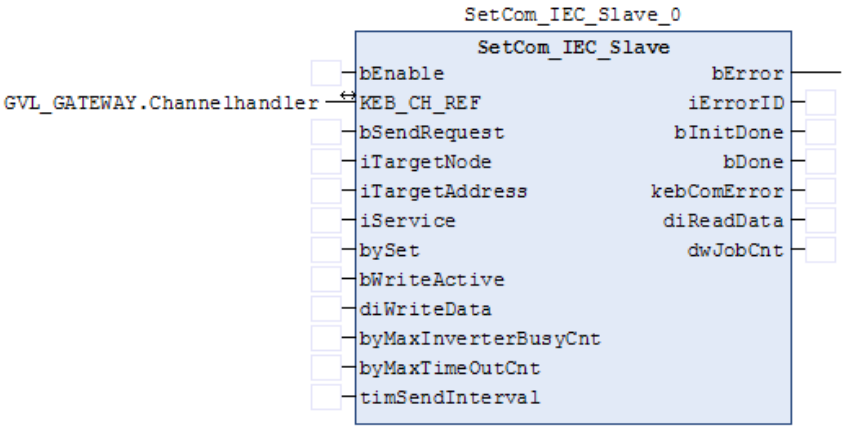
This FAQ describes how to change the actual position (*ActPosition)* of a KEB-I/O ETHERCAT Stepper/BLDC module to any value (e.g. the last value before power down).

Project in the basic version

In order to change the *position actual value* of the module in the basic version, you need the SetCom_IEC_Slave module from the KEB_Gateway_Utility or you must assign parameter *Home offset* ($607C_h$) of the device parameters from the group "ps: position-controlled parameters" to the process data. The version with the SetCom_IEC_Slave is described in the following.

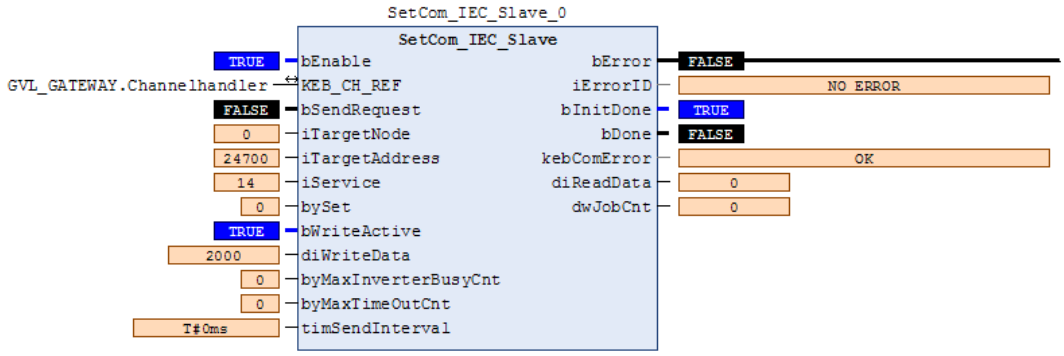
Insert and use of the SetCom_IEC_Slave

In order to change the actual position (*position actual value*) of the module in the basic version, you need the module SetCom_IEC_Slave from the KEB_Gateway_Utility. With this module you can write the parameter *Home offset* ($607C_h$) of the group "ps: position-controlled parameters" and by way the *position actual value* can be changed.

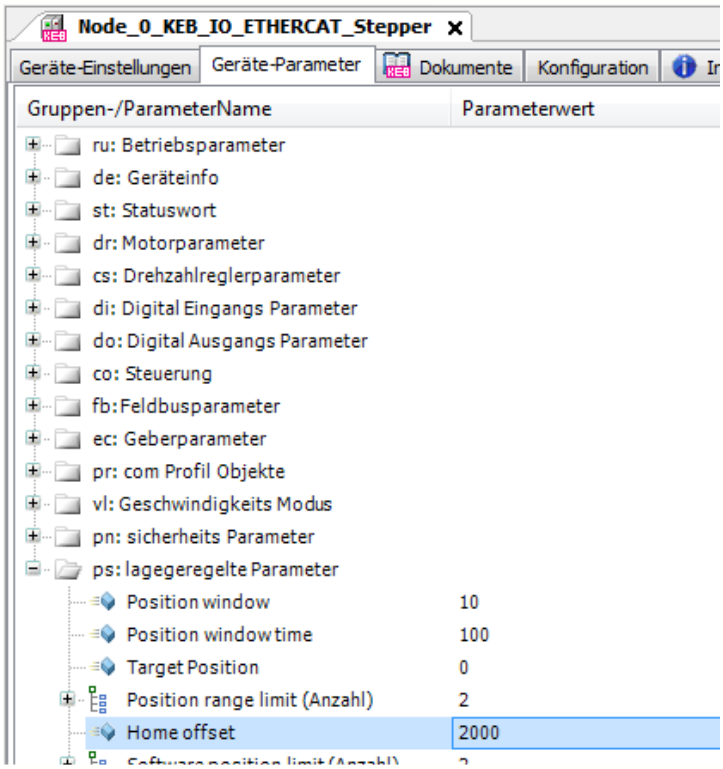


For this module the reference must be specified to the Channelhandler, in order to work. Additionally the parameters shown in the following figure must be adjusted in the module.

Value 24700 results from the conversion of parameter $607C_h$ to a decimal value. Additionally writing on the parameter must be activated by setting the variable *bWriteData* to True and the value to be written must be entered in the variable *diWriteData*. Further information to this module is available in the help of COMBIVIS studio 6.

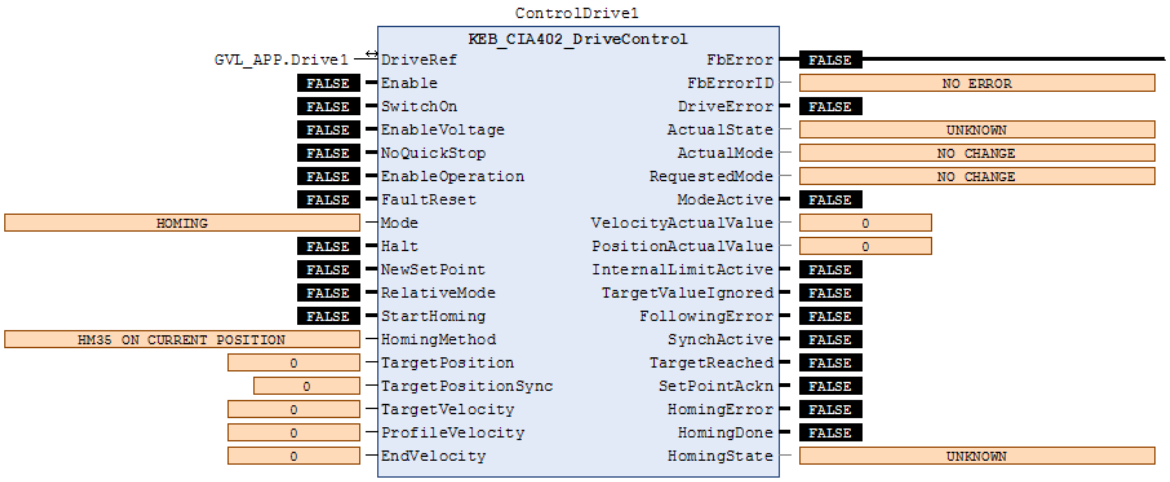


The value of *diWriteData* can now be written to parameter *Home Offset* with the variable *bSendRequest* = True. It can be queried via the variable *bDone* if the value has been set and then reset the *bSendRequest*.

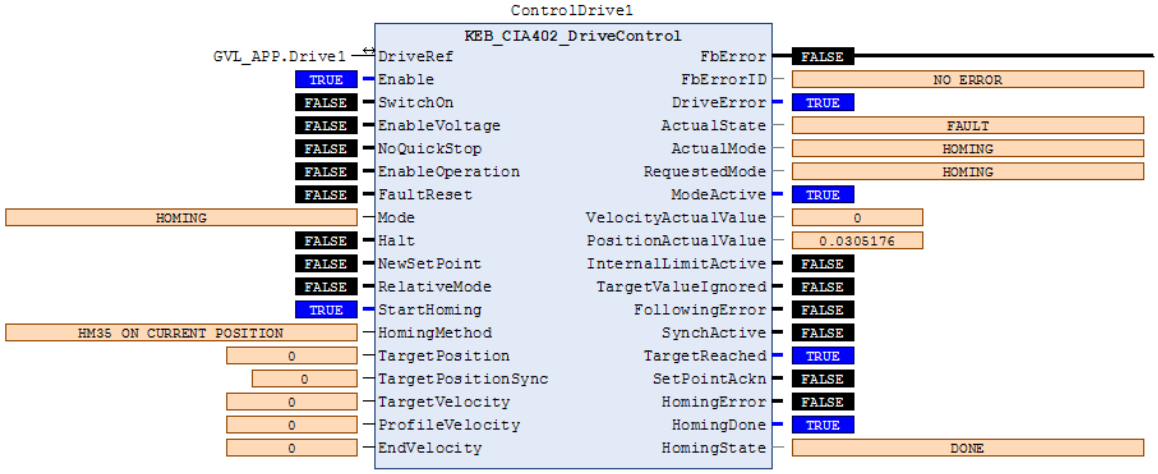


Start Homing

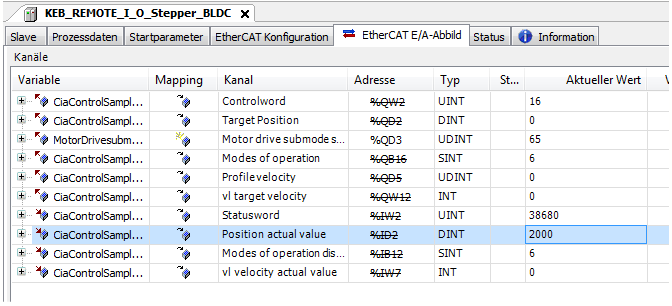
In order to accept the value which is written to parameter *Home offset* to *position actual value*, change into the Homing Mode of module KEB_CIA402_DriveControl. This can be reached if value 6 is entered at *Mode*.



Subsequently the module must be connected with the *DriveRef* and can be started via the input *Enable*. The *HomingMethod* must be set to value 35 (HM35 On Current Position). Now if you set the input *StartHoming* to True, the value written onto parameter *Home offset* is written to *position actual value*. The successful homing is represented with the output *HomingDone*.



Now you can see the transferred value in the EtherCAT E/A image of the module under parameter *Position actual value*.

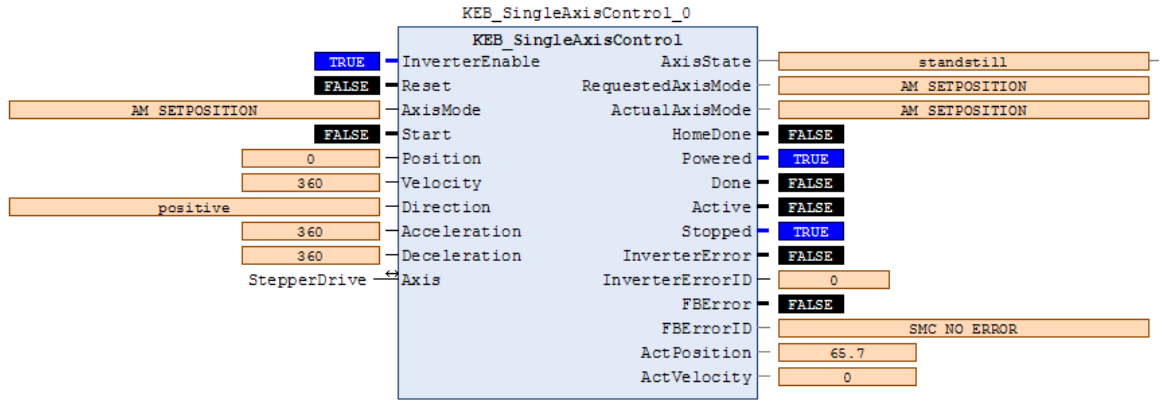


Project in the version PRO

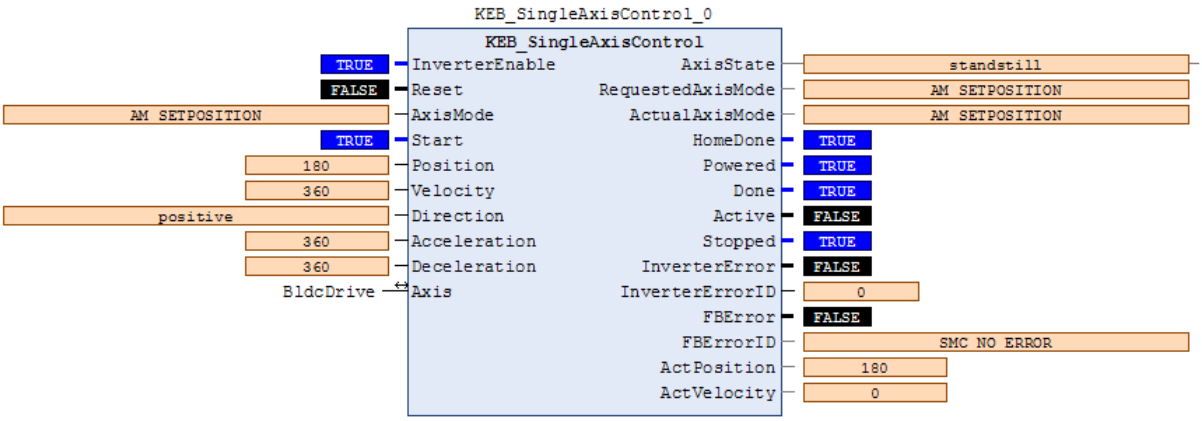
In the PRO version a software-based referencing can be triggered directly via the KEB AxisControl modules.

Write value to position actual value

In order to write a value to Position actual value, change at the KEB_SingleAxisControl module to the AxisMode "AM SETPOSITION" (6).
Additionally the Variable Axis is to be linked and the module must be started via the Variable InverterEnable.



The value which shall be entered now in Position actual value must be entered in Position.
Then start the module with Start, a feedback is given via the Variable Done.



Now you can see the position currently set on the module at ActPosition.
Now the module must be changed to the AxisMode (required for operation) again.

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: www.keb.de • mail: info@keb.de