Preparing a C0001401B for TwinSAFE Project

Overcoming an issue with the DS402 protocol on the AMI8121-3100-0F21 motor

Contents

Problem

Solution

Update EEPROM Driver

Comments

Problem

The specification of the GY and GZ motors on A2032 and A2033 included a TwinSAFE system, which makes it difficult to operate within a non-TwinSAFE environment.

Beckhoff have a solution to this, which is to use the TwinSAFE logic controller contained inside the AMI motor / drive to control its own STO "always on"

However

There is a problem with the particular spec of the AMI8121-3100-0F21 - the 2 denotes a DS402 communication interface profile. This profile needs a firmware update to enable the TwinSAFE communication.

Solution



...The safety project defined in the following steps is saved on the Software Updates board. The following steps are for reference and for recreating this project - IT DOES NOT NEED TO BE DONE EVERY TIME

The solution takes the following steps:

- Ensure the TwinCAT environment is up to date
- Ensure the latest ESI (device description tables) are downloaded
- Ensure the latest Drive Manager 2 Installed

Update EEPROM Driver

- Device
- Online Tab
- Right click on the AMI->Write EEProm
- Pick AMI8000-0100-0018
- Allow download
- PowerCycle the AMI Motor
- Enter Config mode
- Scan boxes ->Device Manager may need motors replacing with the new type to make the configuration identical
- Activate configuration