Adding TwinSAFE projects to AMI Motors

How to add the twinSAFE Internal Safety Projects to GY and GZ axis

Difficulty	Hard
Difficulty	

O Duration 15 minute(s)

Contents

Introduction

Prerequisites

Step 1 - Create copies of the safety project

Step 2 - Rename the project filenames

Step 3 - Add to SAFETY

Step 4 - Download to Devices

Step 5 - Repeat

Comments

Introduction

The AMI8xxx-3100 motor series is a TwinSAFE enabled motor. To enable this motor to work with a non-TwinSAFE system, a TWINSAFE project needs to be placed into the Safety Logic circuit on board the motor. This dokit describes this process.

I ... The process of DOWNLOADING the TwinSAFE project will need to be done if the motor is replaced

Prerequisites

- TwinCAT machine project connected, scanned and debugged
- Drive Manager 2 Project installed
- AMI motors connected and powered up
- Latest Device Description (ESI) updates see Updating Device Description Tables
- AMI Motor TwinSAFE Project from Software Versions Board

For instructions on how to create the AMI Motor twinSAFE project from scratch, see AMI TwinSAFE Workaround - Safety Project Creation

Step 1 - Create copies of the safety project

Copy the contents of the AMI Motor TwinSAFE project to the BuildNo project folder.

Create a copy for each axis and rename accordingly:

GY_	SafetyProj
GZ_	SafetyProj

lame	Date modified	Туре	Size
.vs	14/03/2025 12:30	File folder	
_Boot	14/03/2025 12:19	File folder	
_Config	14/03/2025 12:19	File folder	
GY_SafetyProj	14/03/2025 12:40	File folder	
GZ_SafetyProj	14/03/2025 12:40	File folder	
PLC_Reset	14/03/2025 12:32	File folder	
tc3Multi	14/03/2025 12:31	File folder	
AMI_SafetyProj.zip	14/03/2025 12:39	Compressed (zipp	13 KE
] Test.project.~u	14/03/2025 12:40	~U File	1 KE
Test.sin	14/03/2025 12:19	TcXaeShell Solution	3 KE
TwinCAT Project4.tsproj	14/03/2025 12:19	TSPROJ File	1 KE
TwinCAT Project4.tsproj.bak	05/11/2018 12:55	bak	1 KE

Step 2 - Rename the project filenames

Open each folder and rename the safety PLC project according to the axis



Step 3 - Add to SAFETY

Right click and "Add Existing item" Navigate Inside the folder and select the "[Axis]_SafetyProj.splcproj"



Step 4 - Download to Devices

Follow Downloading AMI Motor Safety Project

Step 5 - Repeat

Repeat the whole process for multiple motors