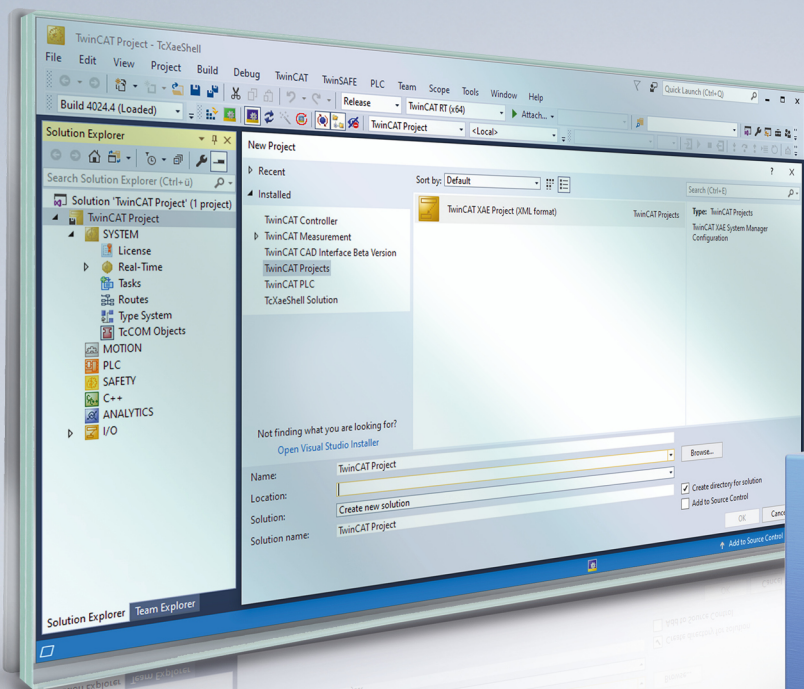


# BECKHOFF New Automation Technology

General Information | EN

## TF3830

TwinCAT 3 | Machine Learning Server Client





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# 1 Foreword

## 1.1 Notes on the documentation

This description is intended exclusively for trained specialists in control and automation technology who are familiar with the applicable national standards.

For installation and commissioning of the components, it is absolutely necessary to observe the documentation and the following notes and explanations.

The qualified personnel is obliged to always use the currently valid documentation.

The responsible staff must ensure that the application or use of the products described satisfies all requirements for safety, including all the relevant laws, regulations, guidelines, and standards.

### Disclaimer

The documentation has been prepared with care. The products described are, however, constantly under development.

We reserve the right to revise and change the documentation at any time and without notice.

No claims to modify products that have already been supplied may be made on the basis of the data, diagrams, and descriptions in this documentation.

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The EtherCAT Technology is covered, including but not limited to the following patent applications and patents:

EP1590927, EP1789857, EP1456722, EP2137893, DE102015105702  
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## 1.2 For your safety

### Safety regulations

Read the following explanations for your safety.

Always observe and follow product-specific safety instructions, which you may find at the appropriate places in this document.

**Exclusion of liability**

All the components are supplied in particular hardware and software configurations which are appropriate for the application. Modifications to hardware or software configurations other than those described in the documentation are not permitted, and nullify the liability of Beckhoff Automation GmbH & Co. KG.

**Personnel qualification**

This description is only intended for trained specialists in control, automation, and drive technology who are familiar with the applicable national standards.

**Signal words**

The signal words used in the documentation are classified below. In order to prevent injury and damage to persons and property, read and follow the safety and warning notices.

**Personal injury warnings****⚠ DANGER**

Hazard with high risk of death or serious injury.

**⚠ WARNING**

Hazard with medium risk of death or serious injury.

**⚠ CAUTION**

There is a low-risk hazard that could result in medium or minor injury.

**Warning of damage to property or environment****NOTICE**

The environment, equipment, or data may be damaged.

**Information on handling the product**

This information includes, for example:  
recommendations for action, assistance or further information on the product.

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To stay informed about information security for Beckhoff products, subscribe to the RSS feed at <https://www.beckhoff.com/secinfo>.

## 2 Overview

The TwinCAT Machine Learning Server enables AI models to be executed directly on the control IPC or on an edge device.

**The TwinCAT Machine Learning Server consists of two components:**

- TF3830 TwinCAT Machine Learning Server Client:  
The PLC function block serves as a client of the Machine Learning Server.
- TF3820 TwinCAT Machine Learning Server:  
The Machine Learning Server as a provider of services (loading, execution, etc. of AI models).

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### **i** Combined documentation

As both components (server and client) are deeply intermeshed, the documentation for function TF3830 is included in the documentation for function TF3820.

Please refer to the [TF3820 TwinCAT Machine Learning Server](#) manual for a detailed description and application of the product.

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## 3 Support and Service

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