

Manual | EN

# TS6371

TwinCAT 2 DriveTop Server





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# 1 Foreword

## 1.1 Notes on the documentation

This description is only intended for the use of trained specialists in control and automation engineering who are familiar with applicable national standards.

It is essential that the documentation and the following notes and explanations are followed when installing and commissioning the components.

It is the duty of the technical personnel to use the documentation published at the respective time of each installation and commissioning.

The responsible staff must ensure that the application or use of the products described satisfy all the 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 prior announcement. No claims for the modification of 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 Safety instructions

### Safety regulations

Please note the following safety instructions and explanations!  
Product-specific safety instructions can be found on following pages or in the areas mounting, wiring, commissioning etc.

### Exclusion of liability

All the components are supplied in particular hardware and software configurations 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 engineering who are familiar with the applicable national standards.

### Description of symbols

In this documentation the following symbols are used with an accompanying safety instruction or note. The safety instructions must be read carefully and followed without fail!

#### **DANGER**

##### **Serious risk of injury!**

Failure to follow the safety instructions associated with this symbol directly endangers the life and health of persons.

#### **WARNING**

##### **Risk of injury!**

Failure to follow the safety instructions associated with this symbol endangers the life and health of persons.

#### **CAUTION**

##### **Personal injuries!**

Failure to follow the safety instructions associated with this symbol can lead to injuries to persons.

#### **NOTE**

##### **Damage to the environment or devices**

Failure to follow the instructions associated with this symbol can lead to damage to the environment or equipment.



##### **Tip or pointer**

This symbol indicates information that contributes to better understanding.

## 1.3 Notes on information security

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In addition, the recommendations from Beckhoff regarding appropriate protective measures should be observed. Further information regarding information security and industrial security can be found in our <https://www.beckhoff.com/secguide>.

Beckhoff products and solutions undergo continuous further development. This also applies to security functions. In light of this continuous further development, Beckhoff expressly recommends that the products are kept up to date at all times and that updates are installed for the products once they have been made available. Using outdated or unsupported product versions can increase the risk of cyber threats.

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

## 2 General information

The TwinCAT DriveTopServer and the Indramat DriveTop software (© Rexroth Indramat) offers in addition to the TwinCAT system manager a further possibility for initialization and visualization of Indramat drives parameter data in a SERCOS system.

From the viewpoint of the SERCOS interfaces the DriveTopServer uses the TwinCAT ADS communication. As an interface between DriveTop software, the data exchange is represented as DDE services with DriveTop convention. Other programs are able to can use the ADS service channel parallel.

The TwinCAT DriveTopServer provides the complete bandwidth of the Indramat DriveTop software functionality. The DriveTopServer, supports all TwinCAT SERCOS master boards up to the version v2.7 (Build 455).

### Preconditions for the TcDriveTopServer

- TwinCAT system service with configured SERCOS interface (v2.7 Build 455).
- Indramat DriveTop Software

### Installation/deinstallation

The installation replaces the Indramat Driveserver and therefore the communication via the serial interface. An installation is only possible, that one supported version of the DriveTop software (13Vxx) is installed already. A deinstallation restores again the original Indramat Driveserver.

Annotation: Therefore, that the DriveTopServer installation will modify some registry entries it is recommended to deinstall the DriveTopServer before removing the complete Indramat DriveTop software.

### Integrated into Windows NT/2000

After the program start the TcDriveTopServer can be find in the Windows systray.



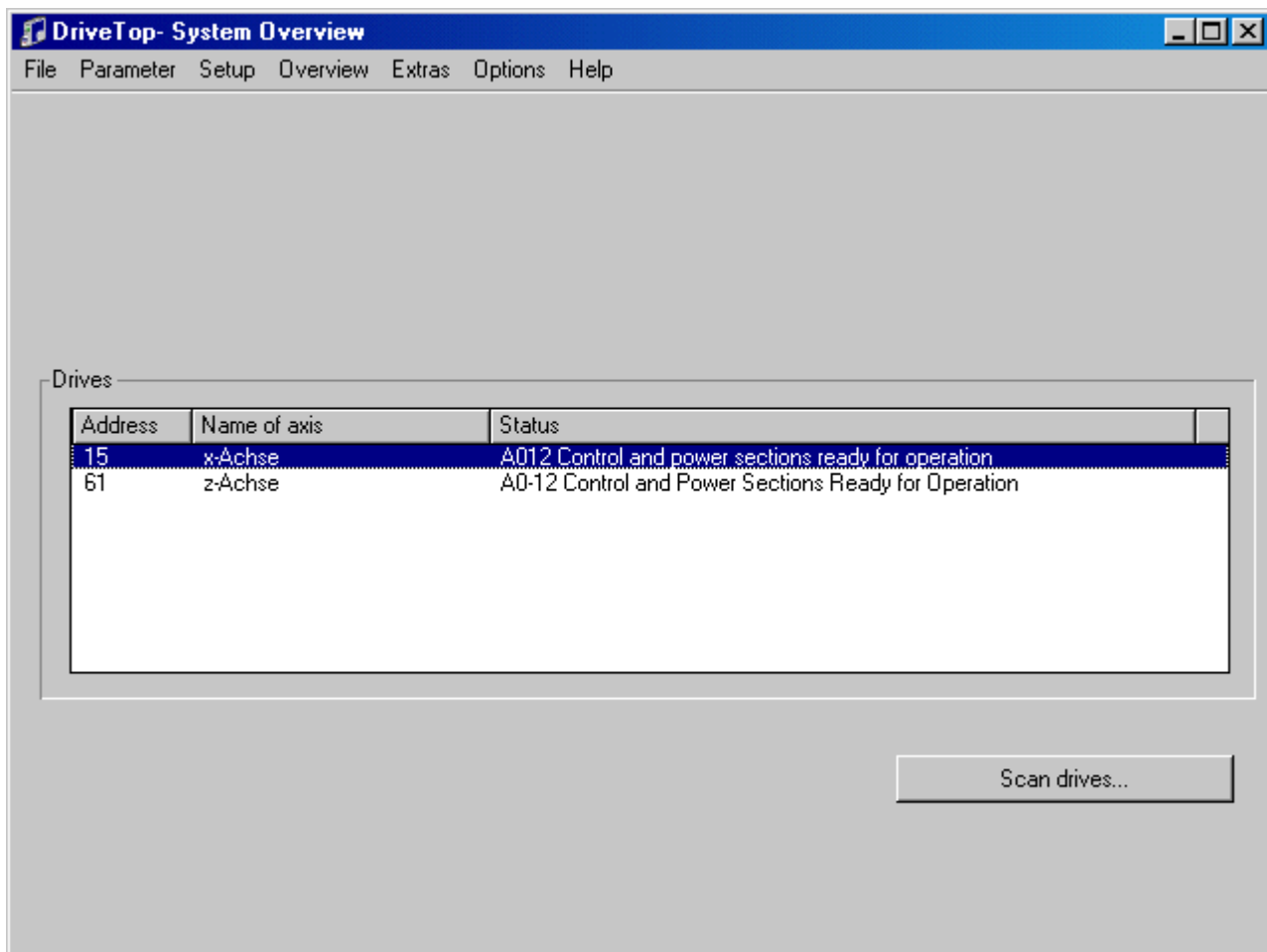
### Connection buildup DriveTop <> TwinCAT DriveTopServer

The connection between the DriveTop application (client) and the TwinCAT DriveTopServer is to set up via 'Options/Connection/Online RS232/485 (Drive)'. The combination of '.../No connection' disables the connection. The TcDriveTopServer is gone down during disassembly of the combination. The DDE combination can also be closed via termination of the DriveTopServers.





The DriveTopServer searches for disposable SERCOS drives, if the connection is available. The corresponding device is then selectable in the case of the DriveTop.



### Configured TwinCAT ADS interface

The combination between the DriveTop application (client) and the TwinCAT DriveTopServer propose a configured SERCOS ring system and the availability to the TwinCAT ADS interface. If the ADS interface is unavailable itself the DriveTopServer shuts down after a message confirmation.

### Several SERCOS rings within one PC system

If several SERCOS interface boards are in a system, the drives are also DriveTopServer via the TwinCAT and a DriveTop is conveniently parametrizable. Available drives are represented in the list the DriveTop tool. The address area of the drives is 0 to 127 permissible.

If the SERCOS interface results identical drive identifiers from the multitude rings, are reorganized and represented these ascendingly from 0. For these cases the addresses are to be virtual and correspond to the physical attitudes no more. For slight handling, it is advisable to form the axis denotation significantly.



More Information:  
**[www.beckhoff.com/ts6371](http://www.beckhoff.com/ts6371)**

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