



# Glossary

## ► C

### **CDI**

Compact Display Interface – interface for connecting the separate operating display to the control cabinet PC

### **CFC**

Short for Continuous Function Chart; graphics-oriented programming language for creating PLC user programs

### **CNC**

Computerized Numerical Control. Digital control for machine tools.

## ► D

### **DeviceNet**

CAN-based communication system for linking industrial automation components to higher-order control equipment in a network

### **DVI**

Digital Visual Interface – interface for digital transmission of video data

## ► E

### **Electronic cam**

The target position of the slave axis is calculated from the actual position of the master axis using a mathematical “cam” function

### **Electronic gear**

Electronic simulation of a mechanical gear by software

### **Embedded systems**

Systems with embedded computer functions

### **EtherNet/IP adapter**

Slave in an EtherNet/IP network (see slave)

### **EtherNet/IP scanner**

Master in an EtherNet/IP network (see master)

## ► F

### **FDT/DTM**

Manufacturer-independent concept allowing the configuration of field devices from different manufacturers with only one program

### **Fieldbus**

Conducted communication system which connects control units, sensors and actuators. Standardized through IEC 61158.

### **Firmware**

Device-specific software for automation components. Not exchangeable when filed to a read-only memory, or on removable memory media such as CompactFlash.

### **FlexProfile**

Motion functionality for non-linear motion sequences with master-axis-related or time-related profile segments

### **FO**

Fiber optic cable

### **Function library**

Collection of function blocks or functions, for example according to IEC 61131-3 or PLCopen

### **FBD**

Function Block Diagram; graphics-oriented programming language for creating PLC user programs according to IEC 61131-3

## ► G

### **GAT**

Generic Application Template – general adjustable software templates for selective implementation of application tasks

## ► H

### **HMI**

Human Machine Interface. System for operating and visualizing machines and systems.

### **Hot-plug principle**

Failure-free connection and disconnection of devices during running operation



► **I**

**I/O**

Input/output – I/Os are discrete interfaces for transmitting or receiving digital or analog signals

**IL**

Short Instruction List; textual assembler-like programming language for creating PLC programs according to IEC 61131-3

**IndraControl L**

Controller-based PLC system family from Rexroth

**IndraControl V**

IPC and visualization platform from Rexroth

**IndraDrive**

Drive platform from Rexroth

**IndraDyn**

Motor platform from Rexroth

**IndraLogic**

Consistent PLC platform according to IEC 61131-3 from Rexroth

**IndraLogic L**

Controller-based PLC system family from Rexroth

**IndraLogic V**

PC-based and embedded-PC-based PLC system family from Rexroth

**IndraLogic XLC**

Control system with PLC kernel IndraLogic 2G (based on CoDeSys V3)

**IndraMotion**

System family of integrated motion logic solutions from Rexroth

**IndraMotion MLC**

Controller-based system solution with integrated motion logic from Rexroth

**IndraMotion MLD**

Drive-based system solution with integrated motion logic from Rexroth

**IndraMotion MTX**

System family of CNC solutions from Rexroth

**IndraWorks**

Software framework for engineering and operation, consistent for all solutions from Rexroth

**IPC**

Industrial PC – sturdy design of a standard PC, which meets the conditions of an industrial environment

► **L**

**LD**

Ladder Diagram; graphics-oriented programming language for creating PLC user programs according to IEC 61131-3

► **M**

**Master**

Central bus user controlling bus access

**Master axis**

Position or velocity command value of a master for the following slave axes

**Motion control**

Intelligent and complex guidance of the movements of multi-axis systems. Control and drive functionalities are integrated in a single system.

**Motion logic**

Automation software or firmware with integrated motion control and PLC logic

**MotionProfile**

Motion functionality for non-linear motion sequences with master-axis-related profile segments

**Motion profile**

Method for describing motion using speed, time, and position

**Multikinematics**

Multiple motions in space, described by path, velocity, acceleration

► **O**

**OPC**

OLE for Process Control, communication standard for components in the automation sector, to ensure smooth standardized data exchange between controls, operating and visualization systems, field devices and office applications of various manufacturers

► **P**

**PLC**

A programmable logic controller, PLC or programmable controller is a small computer used for automation of real-world processes, such as control of machinery on factory assembly lines. Where older automated systems would use hundreds or thousands of relays and cam timers, a single PLC can be programmed as a replacement. Programmable controllers were initially adopted by the automotive manufacturing industry, where software revision replaced the re-wiring of hard-wired control panels.



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## **PLCopen**

International community of interests, established by control manufacturers, software companies and institutes (independent of manufacturers and products). In compliance with the PLC standard IEC 61131-3, technical committees define standards facilitating an increase in the efficiency of application software.

## **PROFIBUS DP**

Process Field Bus – today, mainly serial fieldbuses are used as communication systems for exchanging information among automation systems as well as with the connected distributed field devices.

## **PROFINET controller**

Master in a PROFINET network  
(see master)

## **PROFINET device**

Slave in a PROFINET network  
(see slave)

## **Programmable limit switch**

Function emitting a binary signal in relation to the current position or to the distance traveled. In the past, this function was realized mechanically. Today, it is executed by programmable electronic controls.

## ► **R**

## **RDS**

Remanent Data Storage

## **Ready-to-apply solution**

See turnkey solution

## **Robot control**

Motion functionality for path interpolation in space

## ► **S**

## **Safety on Board**

Integrated safety solutions from Rexroth

## **SFC**

Short for Sequential Function Chart; graphical programming language for structuring PLC user programs according to IEC 61131-3

## **sercos II**

Serial Real-time Communications Standard Interface – open and serial real-time communication standard for high-precision motion control applications, designed by leading manufacturers of numerically controlled drives

## **sercos III**

Third sercos generation – further development of the existing sercos II standard according to IEC/EN 61491, based on standard Ethernet. In this generation, the known sercos mechanisms, such as motion control profiles, telegram structure and hardware synchronization, have been applied for real-time communication.

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## **Slave**

Network user not allowed to participate in data exchange except when addressed by the master

## **SSD**

Solid State Disk – flash-based bulk storage medium with HDD form factor

## **ST**

Structured Text; Pascal-like programming language for PLC according to IEC 61131-3

## ► **T**

## **Technology function**

Pre-developed software code for quick and safe implementation of master functions, e.g. winder, probe

## **Technology library**

Collection of available technology functions

## **Technology module**

See Technology function

## **Technology package**

Compilation of several technology functions for a specific application

## **Turnkey solution**

Preconfigured and ready-to-use automation system

## ► **U**

## **UPS**

Uninterruptible Power Supply – ensures continuous user supply for a certain time in the event of a power failure

## **User library**

Collection of user-specific function blocks or functions in the form of a downloadable PLC library

## **User program**

Application-specific software

## ► **V**

## **Virtual master axis**

Calculated position or velocity command value of a virtual master for the following slave axes