rexroth
A Bosch Company
Sales Partner

Catálogos

Levante Sistemas de Automatización y Control S.L.

The Drive & Control Company

Rexroth
Bosch Group

GoTo Europe
Focused Delivery Program

Product Overview Electric Drives and Controls, Tightening Technology

GoTo

The products I need when I need them

In today's global competition every day counts. Fast response times have become an important success factor for machine manufacturers. Reliable, on time delivery of machine components plays a critical role in this regard – especially when talking about individual and custom machine builders. With Rexroth's GoTo Focused Delivery Program you benefit from easy ordering processes and on time delivery of our high demand products across our broad range of technologies.

You receive the most common Rexroth products from industrial and mobile hydraulics, electric drives and controls, tightening technology, as well as linear motion and assembly technologies delivered reliably and on time. And that across Europe, taking into account product-dependent maximum order quantities and with unrivaled simplicity. Construct your machines and systems quickly and efficiently – we support you throughout the whole process.

Your advantages

- Reduced inventories and capital commitment through short, reliable delivery times
- Flexible response to customer and market demands through high availability of many products
- Simple, fast ordering via email, fax, mail or eCommerce at Bosch Rexroth or its sales partners

The GoTo product overviews according to technologies

GoTo product overviews

- **Industrial and Mobile Hydraulics**

- **Electric Drives and Controls, Tightening Technology**

- **Linear Motion Technology**

- **Assembly Technology**

The GoTo Focused Delivery Program offers a targeted selection of our fastest selling products with preferred service: As a result, you receive your products quickly and reliably, allowing you to respond to your market and customer requirements at any time.

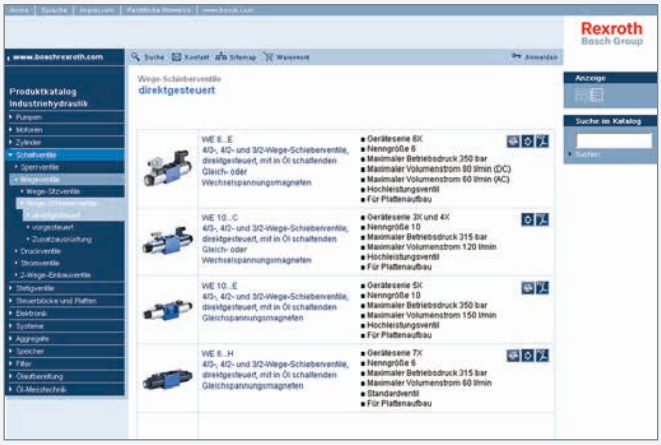
You benefit from simplified access to product information, preferred order processing and reduced delivery times. This allows you to complete your machine or system on schedule.

Our GoTo product overviews, whether in printed form or on the Internet, show you the complete portfolio. In addition, our webpages quickly provide you with additional information on the respective product, on the technical data as well as on ordering.

Get your product in just three steps

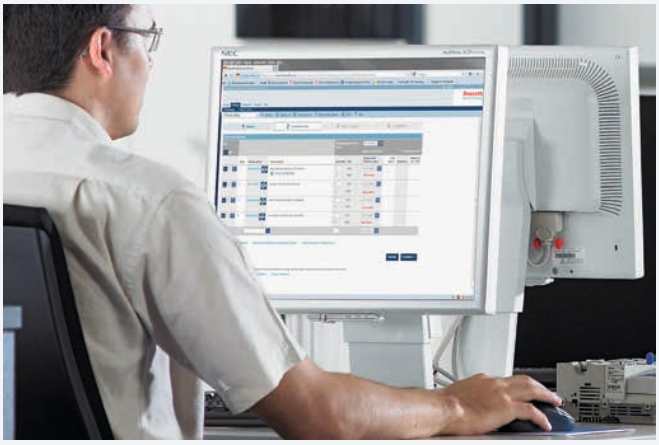
1. Select product

2. View product data



- Product-specific information
- Maximum order quantities
- Availability
- Delivery times
- Prices

3. Order product



1. Select product
Use the GoTo product overviews to find the desired products.

2. View product data
Now visit the Focused Delivery Program website – **www.boschrexroth.com/goto**. It offers simple access to additional product information, including data sheets, part numbers, specifications, downloads and more.

3. Order product
To order, contact Rexroth, your sales partner, or simply order online via our eShop: **www.boschrexroth.com/eshop**

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Frequency converters

With the EFC 3610 and EFC 5610 frequency converters, Rexroth offers both economical and easy-to-use solutions for a variety of applications in which valuable energy has to be used responsibly. Drives with closed-loop speed controls help to substantially reduce operating costs and CO_2 emissions. The standard converters for the 0.4 ... 90 kW performance range offer an outstanding price/performance ratio, are easy to use and come with a broad range of basic functions.

Simple, scalable and economical

- Quick and easy commissioning thanks to an integrated operating panel
- Minimal effort required for assembly and installation
- Scalable in power and function for a broad range of applications
- Economical thanks to the energy efficiency of variable-speed drives

EFC 3610, EFC 5610 frequency converters

- Compact and complete
- Space-saving side-by-side installation/mounting
- Plug-in I/O terminals
- Integrated brake chopper and mains filter
- Removable operating unit with memory and copy functions
- Easy parameter input
- Easy extension with option modules and application firmware

Features

- Series-standard parameters
- Maximized energy efficiency
- Minimized motor noise
- Continuously adjustable pulse frequency
- CE conformity
- UL- and cUL-listed
- Global availability and service

Product description

Rexroth EFC 3610 and EFC 5610 frequency converters are a compact, affordable and energy-efficient drive solution for the 0.4 ... 18.5 kW performance range. Easy installation and commissioning allow for a broad range of applications. With its V/f control, the EFC 3610 is the ideal drive for pumps and fans. It also carries a dual rating at 5.5 kW and higher, making it a cost-effective solution for your application. The powerful SVC vector control in the EFC 5610 provides optimal torque characteristic and high starting torque for special use.

More detailed information:	www.boschrexroth.com/mediadirectory
Instructions	DOC-RCON03-EFC-X610***-IT

Technical data

Motor power	kW	0.4 ... 18.5
Rated motor voltage	VAC	0 ... 480
Mains voltage	VAC	200 ... 240/380 ... 480
Mains frequency	Hz	50 ... 60
Continuous rated current	A	1.2 ... 39.2
Overload capacity (G-type)	%	200 (for 1 sec)/150 (for 1 min)
Motor cable length (C3 internal mains filter)	m	15/30
Motor cable length (C3 external mains filter)	m	50
Ambient temperature	°C	–10 ... +45 (> 45 °C: 1.5% output power derating 1 °C from 45 ... 50 °C)
Controller		PID
Bus systems		Modbus (optional: PROFIBUS, CANopen, Sercos III, PROFINET, EtherNet/IP, EtherCat, Modbus TCP)
Display		4-digit LCD: frequency, output voltage, output current, etc.

For order details on GoTo products, see page 88

EFC 3610, EFC 5610
frequency converter accessories

- FEAE02.1-EA option module
- FEAM04.01-IO1 I/O extension
- FEAM04.1-IO2 relay card
- FEAE03.1-ET Multi-Ethernet card
- FEAE03.1-CO CAN bus card
- FEAE03.1-PB PROFIBUS card
- FCAR01.1W braking resistor
- FCAF01.1A mains filter
- FEAM03.1 shield connection plate

Features

Accessories for EFC 3610 and EFC 5610 frequency converters

Product description

- PROFIBUS card for connecting to a PROFIBUS master
- CAN card for connecting to a CAN interface
- Multi-Ethernet card for connecting to a Sercos III, PROFINET, EtherNet/IP, EtherCat or Modbus TCP master
- Option module for housing two option cards
- I/O extension and relay card for more analog and digital ports
- Extended brake resistors for increased braking power
- Mains filter for extending motor line length to 50 m
- Shield connection plate for easy EMC fastening of shielded lines

More detailed information:	www.boschrexroth.com/mediadirectory
Instructions	DOC-RCON03-EFC-X610***-IT

Automation systems and control components

With IndraLogic XLC, and IndraMotion MLC and MTX, Rexroth offers universal and scaled control solutions for the automation of machines and systems.

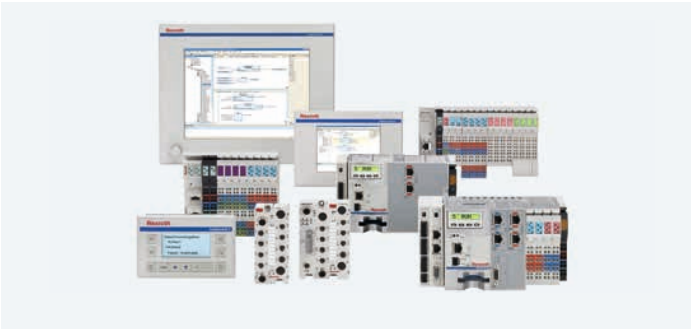
IndraLogic XLC is the basic PLC system for all general automation tasks. Based on the XLC, the IndraMotion MLC motion logic system, offers additional, application-specific technology functions and robot control. IndraMotion MTX offers a broadly scaled portfolio of solutions for all CNC machine tool tasks.

All engineering tools are uniformly available in the IndraWorks framework. With the IndraLogic 2G PLC platform based on CODESYS V3, you can create your application programs in accordance with the 3rd edition of the IEC 61131-3 standard.

Programming is done entirely in IndraWorks with a user-friendly interface that makes creating modular and object-oriented machine software easier.

The scaled IndraControl family of control components allows for uniform automation solutions that are ideal for any application. Option modules and a wide range of I/O modules make it easy to enhance control system functionality.
The Sercos automation bus connects all components, from drives to control systems, to I/O peripherals, into a powerful overall system. With its innovative properties, Sercos offers maximum performance and flexibility in every application in real-time.

IndraLogic XLC
PLC system
FWA-CMLx5*-XLC-xxVRS-D0



- Basic system for all general automation tasks
- Comprehensive functions and numerous interfaces
- Uniform engineering
- Convenient operation

Features

- Latest control hardware with numerous enhancement options
- State-of-the-art IndraLogic 2G PLC core in accordance with IEC 61131-3 3rd edition
- High-performance communication via Sercos III automation bus for all peripherals
- Synchronized motion control functionality

Product description

The IndraLogic XLC PLC system offers demonstrable user benefits for the intelligent automation of machines and systems. The scaling and openness of the IndraControl control hardware form the basis for flexible, application-oriented solutions in centralized or distributed automation topologies. Application-oriented task settings in the motion logic runtime system allow for both fast I/O signal processing and highly dynamic motion control tasks to be executed with ease.

More detailed information:	www.boschrexroth.com/mediadirectory
Brochure	R999000060 (DE) / R999000061 (EN)

Technical data

Control hardware		**IndraControl L25**	**IndraControl L45**	**IndraControl L65/L75**
User memory	MB	12	24	36
Remanent memory	kB	256	256	256

Logic control		**IndraControl L25**	**IndraControl L45**	**IndraControl L65/L75**
PLC runtime system		In accordance with IEC 61131-3	In accordance with IEC 61131-3	In accordance with IEC 61131-3
Freely configurable tasks (priority 0 ... 20)		10	20	20
Min. PLC cycle time (synchronized to Sercos clock)	ms	1	0.5	0.25
Typical processing time for 1,000 instructions (various commands)	µs	35	30	5

For order details on GoTo products, see page 90

IndraMotion MLC
Motion logic system
FWA-CMLx5*-MLC-xxVRS-D0

- Scaled IndraControl hardware platform with flexible extension options
- Synchronized motion control functionality for up to 64 axes
- Easy implementation of complex processes and movement profiles through ready-to-use PLC function modules with the “Technology” function toolkit
- Open Core Interface programming interface for creating high-level language-based applications

Features

- Control system for consistent and modern machine automation
- Integrated runtime system for motion, robot and logic control in accordance with the IEC 61131-3 open PLC standard
- Supports electric, hydraulic and hybrid drives
- Can be used in single- and multi-axis applications with top synchronicity
- Robot control with multi-axis path interpolation
- Flexible integration into a wide array of topologies

Product description

IndraMotion MLC is the first genuinely complete automation solution. Motion, robot and logic control merge into a uniform overall system for any control task. Motion functions, such as master axes, electronic gears, cams and the innovative FlexProfile for complex motion sequences are quick and transparent. Robot control offers all the functions you need for multi-axis path interpolation in space. Hydraulic axes can also be just as quickly and easily integrated into the automation system with the same tools and functions.

More detailed information:	www.boschrexroth.com/mediadirectory
Brochure	R999000031 (DE) / R999000032 (EN)

Technical data

Control hardware		**IndraControl L25**	**IndraControl L45**	**IndraControl L65/L75**
Control systems with master axis		64	64	64
Min. motion cycle time (command value generator)	ms	2	1	1

Motion control		**IndraControl L25**	**IndraControl L45**	**IndraControl L65L75**
Axes		16	32	64
Control axes (centrally controlled)		4	8	32
No. axes per kinematic		16	16	16
Multi-axis kinematics		4	16	16
Electronic cams (FlexProfile)		4	4	4
Min. PLC cycle time	ms	1	0.5	0.25

IndraMotion MTX
CNC system
FWA-CMLx5*-MTX-xxVRS-NN

- Innovative CNC core with broad technology functions for turning, milling, drilling, grinding, bending, nibbling, punching, shape cutting and handling
- Minimal PLC and CNC cycle times even for high-speed processing
- Open system platform
- Individual performance and function scaling

Features

- Sercos III automation bus
- Uniform operating concept for easy programming
- Flexible user interface configuration

Product description

IndraMotion MTX is an individually scalable CNC system with integrated PLC for efficient machining and reshaping concepts. Outstanding performance data and extensive technology functions open up new horizons for maximum productivity and flexibility. Regardless of whether you want to control a standard machine or a fully automated production line – IndraMotion MTX always provides highly dynamic processing with minimized downtimes in your application.

More detailed information:	www.boschrexroth.com/mediadirectory
Brochure	R999000001 (DE) / R999000002 (EN)

Technical data

Version		**IndraMotion MTX standard**	**IndraMotion MTX performance**	**IndraMotion MTX advance**
Control hardware		IndraControl L45	IndraControl L75	IndraControl L85
Max. no. NC axes		8	8 ... 64	8 ... 250
Max. no. spindles		2	32	32
Max. no. NC channels		2	3 ... 12	3 ... 60
Max. no. interpolating axes		4	4 ... 8*	4 ... 8*
Min. interpolation cycle time	ms	4	0.5	0.25 ... 4

* Approval required

For order details on GoTo products, see page 91

IndraControl Lxx
Controller-based control hardware
CMLx5.1-xx-x00-Nx-NNNN-NW

- Uniform hardware platform for all controller-based automation systems
- Flexible performance and function scaling
- Ideal for centralized and distributed controller topologies
- Open thanks to standardized communication interfaces

Features

- DIN rail mounting
- IP20 rating
- Ambient temperature (in operation): +5 ... +55 °C
- Extendable with function and technology modules
- Real-time clock
- Display

Product description

Rexroth IndraControl L is a compact control platform with easy DIN rail mounting and reduced wiring. It is available in various performance classes with numerous extension options.

Together with the IndraLogic XLC, and IndraMotion MLC and MTX control systems, IndraControl L offers maximum flexibility and openness for a wide array of system concepts.

More detailed information:	www.boschrexroth.com/mediadirectory
Instructions	DOC-CONTRL-IC*LX5*****-IT

Technical data

	IndraControl L25	IndraControl L45	IndraControl L65	IndraControl L75	IndraControl L85
CPU	SH4-compatible	x86-compatible/ 500 MHz	x86-compatible/ 1,000 MHz	Atom 2 1,700 MHz	Core2Duo 1,200 MHz
Dimensions (H x W x D)	120 x 175 x 76 mm	120 x 175 x 97.5 mm	120 x 175 x 97.5 mm	120 x 175 x 97.5 mm	120 x 175 x 97.5 mm
On-board I/O (digital)	–	8/8	8/8	8/8	8/8
Local I/O extension	Max. 64 bytes Max. 63 modules	Max. 64 bytes Max. 63 modules	Max. 64 bytes Max. 63 modules	max. 64 bytes, max. 63 modules	Max. 64 bytes Max. 63 modules
Function modules	Max. 2	Max. 4	Max. 4	Max. 4	Max. 4
Sercos III	1 x(2)	1 x(2)	1 x(2)	1 x(2)	1 x(2)
Ethernet TCP/IP	1 x(1)	1 x(1)/2 x(2)	1 x(1)/2 x(2)	1 x(1)/2 x(2)	1 x(1)/2 x(2)
PROFIBUS (master/slave)	1 x(2)	1 x(1)	1 x(1)	1 x(1)	1 x(1)
PROFINET IO (controller/device)	1 x(2)	1 x(2)	1 x(2)	1 x(2)	1 x(2)
EtherNet/IP (scanner/adapter)	1 x(2)	1 x(2)	1 x(2)	1 x(2)	1 x(2)

[1] standard, [2] option

For order details on GoTo products, see page 91

IndraControl Lxx function modules
Extensions for controller-based control hardware
CFL01.1-xx

- Simple function extensions for IndraControl L control hardware
- Flexible combination possibilities

Features

- Supports up to 4 plug-in function modules
- IP20 rating
- Ambient temperature (in operation): +5 ... +55 °C
- Ergonomic design

Product description

Function modules allow IndraControl L to be integrated seamlessly into heterogeneous control systems and functionally suited to your needs. These modules communicate with the controller processor using the fast system bus, meeting high demands for speed and functionality. And since the modules take over some of the functions, the controller CPU is left with less work.

More detailed information:	www.boschrexroth.com/mediadirectory
Instructions	DOC-CONTRL-FM*LXX**V12-AP

Technical data

Function module		**Sercos III CFL01.1–R3**	**Cross communication CFL01.1–Q2**	**Real-time Ethernet/PROFIBUS CFL01.1–TP**
Fieldbus interface		Sercos III	Sercos II	Real-time Ethernet and PROFIBUS
Dimensions (H x W x D)	mm	120 x 20 x 70	120 x 20 x 70	120 x 20 x 70
Adjustable cycle time	ms	–	2/4/8	–
Max. no. slaves		–	15/31/63	–
System support		IndraLogic XLC, IndraMotion MLC	IndraMotion MLC	IndraLogic XLC, IndraMotion MLC

IndraControl XM2x
Controller-based control hardware
XM2x00.01-xx-31-31-x01-NN-100N3NN

Features

- DIN rail mounting
- IP20 rating
- Ambient temperature (in operation): –25 ... +60 °C
- Modular expansion options with extension and I/O modules
- Real-time clock
- On-board Sercos master with 250 µs cycle time
- High control performance via Intel ATOM process architecture with 600 MHz or 1300 MHz
- Gigabit Ethernet, USB, SD card slot, diagnostic LED
- Compact and powerful platform for PLC and motion control applications
- Full I/O performance and functionality of IndraControl S20 I/O range in local control system
- On-board Sercos automation bus
- Flexible extension with additional fieldbus interfaces thanks to extension modules
- Compact control platform even for harsh environmental conditions

Product description

The IndraControl XM control platform is available for a variety of motion logic applications. Local connection to the IndraControl S20 I/O family provides a flexible extension to the control system. Decentralized I/Os, drives and other system peripherals come connected standard via Sercos. Optional extension modules allow further integration options. The service-friendly design is an easy way to reduce installation and commissioning costs. IndraControl XM2 comes in two performance classes (variants available for scaling function and price according to customer requirements).

More detailed information:	www.boschrexroth.com/mediadirectory
Instructions	DOC-CONTRL-IC*XM2*****-IT

Technical data

		IndraControl XM21	IndraControl XM22
CPU		Intel E620T 600 MHz	Intel E660T 1300 MHz
Dimensions (H x W x D)	mm	126 x 100 x 74	126 x 100 x 74
Local I/O extension		IndraControl S20 module port	IndraControl S20 module port
Functional extension		IndraControl XM extension module port	IndraControl XM extension module port
Ethernet TCP/IP		1x 1 GB (standard)	1x 1 GB (standard)
USB		1x USB host, 1x USB device	1x USB host, 1x USB device
Sercos		1x (standard)	1x (standard)
PROFIBUS DP		Master/slave (extension module)	Master/slave (extension module)
PROFINET		Controller/device (extension module)	Controller/device (extension module)
EtherNet/IP		Scanner/adapter (extension module)	Scanner/adapter (extension module)

For order details on GoTo products, see page 92

IndraControl XMx extension modules – extensions for controller-based control hardware XFE01.1-FB-xx

- Simple and comfortable expansion of the system functions
- Flexible configuration of the fieldbus connections via configurable master/slave modules
- High-performance integration in the control system
- Simple and robust design

Features

- Top hat rail mounting
- IP20 rating
- Ambient temperature (in operation): -25 ... +60 °C
- Multi-Ethernet and PROFIBUS fieldbus interfaces
- Master/slave modules to reduce the version numbers
- Powerful system activation via PCIexpress

Product description

IndraControl XFE are the modular extension for all IndraControl XM controls from performance class XM21. The extension modules can expand the function and integration capability of the system easily. The concept enables up to three extension modules on one control at the same time. Communication modules are available for Multi-Ethernet and PROFIBUS as a master/slave interface.

More detailed information:	www.boschrexroth.com/mediadirectory
Instructions	DOC-CONTRL-XFE**EXTMOD-IT

Technical data

		XFE01.1.-FB-03	XFE01.1.-FB-10
Fieldbus interface		PROFINET RT EtherNet/IP	PROFIBUS
Master		●	●
Slave		●	●
Dimensions (H x W x D)	mm	126 x 35 x 55	126 x 35 x 55

For order details on GoTo products, see page 92

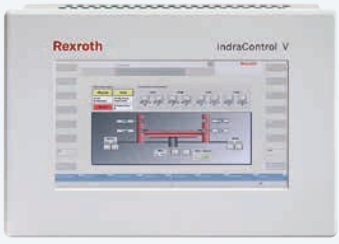
HMI components

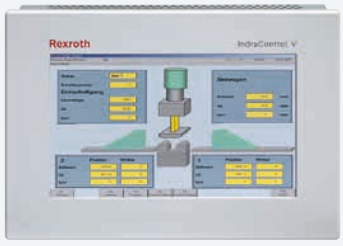
Rexroth IndraControl V is a comprehensive HMI range for individual control, operation and monitoring in all branches of industry. The line ranges from controller-based devices to compact embedded PCs, to high-performance industrial PCs. With its scalable hardware and software, IndraControl V can be adapted to your machine's exact requirements.

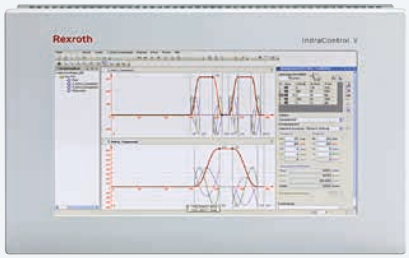
The controller-based IndraControl VR21 and VH21 control panels easily controls machines and clearly displays system data. The luminous widescreen TFT displays provide a detailed display of extensive machine data.

The range of models with resistive or capacitive touchscreens allows systems to be conveniently and comfortably operated. The included Ethernet interface supports OPC UA communication to each control system.

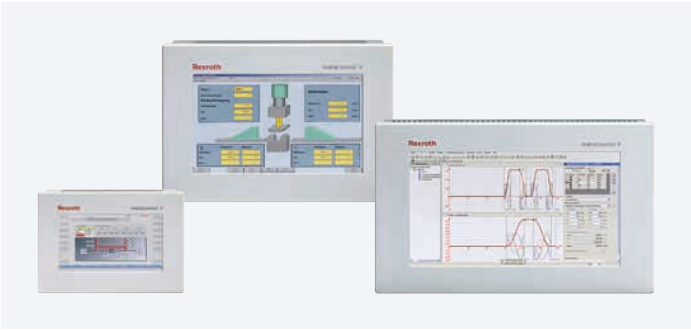
- Affordable base for operation and monitoring
- Luminous widescreen TFT displays
- Resistive and capacitive touchscreen models
- Comprehensive HMI functions with WinStudio visualization tool
- Completely maintenance-free







IndraControl VR21
Controller-based HMI components
VR21xx.01-00-01-N2-NNN-xA



- Compact and powerful
- IP65 rating on front side
- IP20 rating on back side
- Display sizes: 10.8 cm, 17.8 cm, 22.8 cm (4.3", 7", 9")
- Resistive and capacitive touchscreens

Features
- Graphic display
- Widescreen TFT displays with LED backlighting
- Front made of non-reflecting safety glass
- Multi-finger touch functions
- Completely maintenance-free

Product description
IndraControl VR21 is a series of compact control panels with widescreen TFT displays. With their resistive and capacitive touchscreens, the panels can be used in innovative HMI projects.
The compact design and high IP rating make it suitable for a broad range of applications.

More detailed information:	www.boschrexroth.com/mediadirectory
Instructions	DOC-SUPPL*-VR21**.01**-IT**-**-*

Technical data

		IndraControl VR2104	IndraControl VR2107	IndraControl VR2109
Processor		ARM Cortex A8 800 MHz	ARM Cortex A8 800 MHz	ARM Cortex A8 800 MHz
RAM/Flash memory	MB	512/256	512/256	512/256
Display		Widescreen TFT	Widescreen TFT	Widescreen TFT
Size	cm/in	10.8/4.3	17.8/7	22.8/9
Colors		65,536	262,144	16,000,000
Resolution	px	480 x 272	800 x 480	800 x 480
Touch operation		Resistive	Resistive/capacitive	Resistive/capacitive
Interfaces		1x Ethernet/2x USB	1x Ethernet/2x USB	1x Ethernet/2x USB
Power	VDC	24	24	24
Max. temperature (in operation)	°C	±0 ... +50	±0 ... +50	±0 ... +50
Max. humidity (in operation)	%	20 ... 85 (EN 61131-2)	20 ... 85 (EN 61131-2)	20 ... 85 (EN 61131-2)

For order details on GoTo products, see page 93

IndraControl VH21 – HMI components for manual operation VH2110.01-00-02-N3-111-CA

- Compact and powerful
- Fatigue-free working: thanks to the low weight and ergonomic design
- Suitable for mobile and stationary operation for flexible use
- Simple and innovative operation via multitouch functions
- IP54 protection type

Features

- Lightweight, ergonomic handheld terminal in tablet design
- Widescreen TFT display with LED backlighting
- Robust front made of non-reflecting safety glass
- Capacitive touchscreen for operation with multitouch gestures
- Certified safety functions for safer system operation

Product description

IndraControl VH21 is a high-performance portable control panel in tablet design. With its large TFT display in wide-screen format and capacitive touchscreen, it is an ideal and comfortable option for operating and setting up machines and systems. The integrated 3-stage enabling switch and the emergency stop button in 2-circuit design guarantee maximum safety.

More detailed information:	www.boschrexroth.com/mediadirectory
Instructions	DOK-SUPPL*-VH*21**.01*-IT

Technical data

Processor		ARM Cortex A9 1 GHz
RAM/Flash memory	MB	512 / 512
Display		Widescreen TFT
Size	cm/in	25.6 / 10.1
Colors		262.144
Resolution	px	1,280 x 800
Touchscreen operation		capacitive, multi-touch
Button		enable (2-circuit, 3-stage), emergency stop button (2-circuit)
Supply voltage	VDC	24
Max. temperature	°C	±0 ...+45
Max. humidity	%	20 ... 95, EN 61131-2

I/O components

Fieldbus coupler
To connect I/O modules to a higher fieldbus system.

Digital input modules
To read digital signals from, e.g., keys, limit switches or proximity switches.

Digital output modules
For the output of digital signals to, e.g., relays, valves or indicator lights.

Analog input modules
To read analog signals from standard sensors.

Analog output modules
For the output of analog signals to standard actuators.

Supply/section modules
To supply logic voltage or galvanically isolating sections, used in major system extensions.

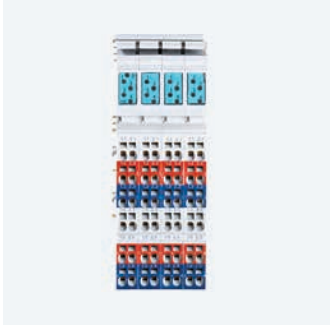
Technology modules
To read rapid pulse sequences or encoder signals.

Temperature modules
To read analog signals from temperature sensors.

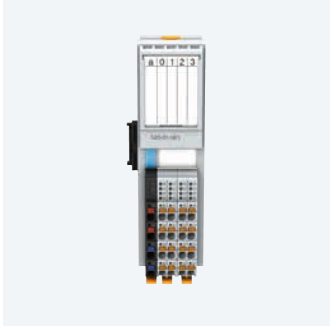
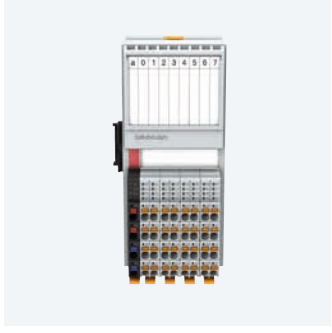
Communication modules
To connect serial interface devices.

Block I/O modules
The finished module minimizes costs compared to modular stations and is the ideal solution for compact control cabinets.

Accessories
The right accessories for I/O components.




Sercos III
Inline fieldbus coupler with digital inputs/outputs
R-IL S3 BK DI8 DO4-PAC

- IP20 rating
- Sercos III interfaces
- Sercos III connection via RJ45 socket
- Diagnostic and status indicators
- Accessories included (connector plug and labeling field)

Features

- 8x 24 VDC digital input
- 4x 24 VDC digital output
- 2- and 3-wire sensor/actuator connection
- 100 MBit/s transfer rate with a minimum cycle time of 250 µs
- Supports Sercos III

Product description

The fieldbus coupler is designed for use in a Sercos III network and connects to the Inline installation system. Connect up to 61 Inline nodes anywhere to an existing Sercos III network.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILS3BKDI8DO-KB

Technical data

Power	VDC	24
Fieldbus system		Sercos III
Connection type		RJ45
Digital inputs		8
Digital outputs		4
Local bus connection type		Inline data jumper
Max. local bus nodes		63 (incl. 2 on fieldbus coupler)
Max. temperature (in operation)	°C	–25 … +55
Max. humidity (in operation)	%	5 … 90, no condensation
Weight	g	375
Dimensions (W x H x D)	mm	80 x 120 x 71.5

For order details on GoTo products, see page 93

PROFINET
Inline fieldbus coupler with digital inputs/outputs
R-IL PN BK DI8 DO4-PAC

- IP20 rating
- PROFINET IO interface
- PROFINET IO connection via RJ45 socket
- Diagnostic and status indicators
- Accessories included (connector plug and labeling field)

Features

- 8x 24 VDC digital inputs
- 4x 24 VDC digital outputs
- 2- and 3-wire sensor/actuator connection
- IP parameter setting via PROFINET IO controller

Product description

The fieldbus coupler is the connection between a PROFINET network and the Inline installation system. It comes with 8 digital inputs and 4 digital outputs. Up to 61 additional Inline modules can be connected in series to the PROFINET fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILPN-BKDIO**-DA

Technical data

Power	VDC	24
Fieldbus system		PROFINET
Connection type		RJ45
Digital inputs		8
Digital outputs		4
PROFIsafe support		in preperation
Local bus connection type		Inline data jumper
Max. local bus nodes		63 (incl. 2 on fieldbus coupler)
Max. temperature (in operation)	°C	–25 … +55
Max. humidity (in operation)	%	5 … 90, no condensation
Weight	g	375
Dimensions (W x H x D)	mm	80 x 120 x 71.5

PROFIBUS
Inline fieldbus coupler with digital inputs/outputs
R-IL PB BK DI8 DO4/CN-PAC

- IP20 rating
- PROFIBUS interface
- PROFIBUS connection via D-SUB-9-pin socket
- Diagnostic and status indicators
- Accessories included (connector plug and labeling field)

Features

- 8x 24 VDC digital inputs
- 4x 24 VDC digital outputs
- 2- and 3-wire sensor/actuator connection
- Runs PROFIsafe nodes
- Rotary encoding switch for assigning PROFIBUS addresses

Product description

The PROFIBUS fieldbus coupler can be used to build a decentralized Inline station. It comes with 8 digital inputs and 4 digital outputs. The channels are consistently labeled. Up to 62 additional Inline modules on the local bus can be connected in series to the PROFIBUS fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILPBBKDIOCN-KB

Technical data

Power	VDC	24
Fieldbus system		PROFIBUS DP
Connection type		D-sub 9-pin socket
Digital inputs		8
Digital outputs		4
PROFIsafe support		Yes
Local bus connection type		Inline data jumper
Max. local bus nodes		63 (incl. 2 on fieldbus coupler)
Max. temperature (in operation)	°C	–25 … +55
Max. humidity (in operation)	%	5 … 90, no condensation
Weight	g	320
Dimensions (W x H x D)	mm	80 x 120 x 71.5

For order details on GoTo products, see page 93

PROFIBUS
Inline fieldbus coupler
R-IL PB BK DP/V1-PAC

- IP20 rating
- PROFIBUS interface
- PROFIBUS connection via D-SUB-9-pin socket
- Diagnostic and status indicators
- Accessories included (connector plug and labeling field)

Features

- Modular extension with Inline terminals
- Galvanic isolation of PROFIBUS interface and logic
- DP/V1 for Class 1 and Class 2 master

Product description

The PROFIBUS fieldbus coupler can be used to build a decentralized Inline station. Up to 62 additional Inline modules on the local bus can be connected in series to the PROFIBUS fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILPBDPV1***-KB

Technical data

Power	VDC	24
Fieldbus system		PROFIBUS DP
Connection type		D-sub 9-pin socket
PROFIsafe support		No
Max. local bus nodes		63
Local bus connection type		Inline data jumper
Max. temperature (in operation)	°C	–25 … +55
Max. humidity (in operation)	%	5 … 90, no condensation
Weight	g	297
Dimensions (W x H x D)	mm	85 x 120 x 72

Inline
Digital input modules
R-IB IL 24 DI xx-xxx

- IP20 rating
- Diagnostic and status indicators
- Accessories included (connector plug and labeling field)

Features

- 4x, 8x, 16x, 32x 24 VDC digital input
- 1-, 2-, 3- and 4-wire sensor connection
- Up to 250 mA load current per sensor

Product description

These Inline modules read digital input signals from, e.g., keys, limit switches or proximity switches.
The modules are connected locally to the CLM controller or remotely using an Inline fieldbus coupler.

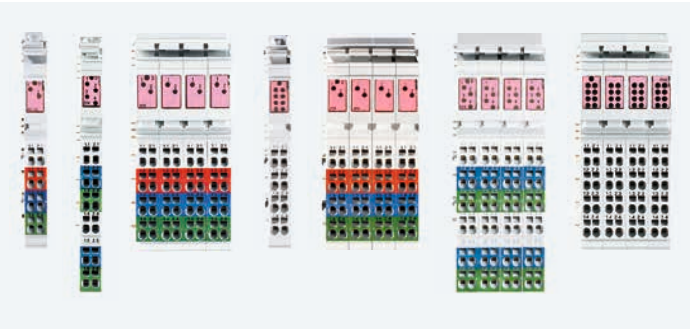
More detailed information:	www.boschrexroth.com/mediadirectory	
Data sheet	DOC-CONTRL-ILDI4******-KB DOC-CONTRL-ILDI8******-KB	DOC-CONTRL-ILDI16*****-KB DOC-CONTRL-ILDI32/HD**-KB

Technical data

		R-IB IL 24 DI 4-PAC	R-IB IL 24 DI 8-PAC	R-IB IL 24 DI 16-PAC	R-IB IL 24 DI 32/HD-PAC
Digital inputs		4	8	16	32
Connection type		Spring cage terminals			
Rated input voltage U_{IN}	VDC	24			
Nominal input current at U_{IN}	mA	Min. 3	Min. 3	Min. 3	2.8
No. wires in connection		2, 3 and 4	2, 3 and 4	2 and 3	1
Local bus connection type		Inline data jumper			
Max. temperature	°C	–25 ... +55			
Max. humidity	%	5 ... 90, no condensation			
Weight	g	66	178	182	185
Dimensions (W x H x D)	mm	12.2 x 141 x 71.5	48.8 x 120 x 71.5	48.8 x 141 x 71.5	48.8 x 120 x 71.5

For order details on GoTo products, see page 93

Inline
Digital output modules
R-IB IL 24 DO xx-xxx



- IP20 rating
- Diagnostic and status indicators
- Accessories included (connector plug and labeling field)

Features

- 2x, 4x, 8x, 16x, 32x 24 VDC digital outputs (0.5 or 2 A)
- 1-, 2-, 3- and 4-wire actuator connection
- Short-circuit and overload protection
- Partially approved for use in a safety-related segment circuits

Product description

These Inline modules are used to output digital signals. 2 A variants are used to control solenoid valves, contactors, encoders, relays or other electrical loads. The modules are connected locally to the CLM controller or remotely using an Inline fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory		
Data sheet	DOC-CONTRL-ILDO4******-KB	DOC-CONTRL-IL24DO8*HD*-DA	DOC-CONTRL-ILDO16*****-KB
DOC-CONTRL-ILDO2*2A***-KB	DOC-CONTRL-ILDO8******-KB	DOC-CONTRL-ILDO8*2A***-KB	DOC-CONTRL-ILDO32/HD**-KB

Technical data

		R-IB IL 24 DO 2-2A-PAC	**R-IB IL 24 DO 4-PAC**	**R-IB IL 24 DO 8-PAC**	**R-IB IL 24 DO 8/HD-PAC**	**R-IB IL 24 DO 8-2A-PAC**	**R-IB IL 24 DO 16-PAC**	**R-IB IL 24 DO 32/HD-PAC**
Digital outputs		2	4	8	8	8	16	32
Connection type		Spring cage terminals						
Rated output voltage U_{Out}	VDC	24						
Rated current I_{NENN} per channel	A	2	0.5	0.5	0.5	2	0.5	0.5
Total output current	A	4	2	4	4	8	8	8
No. wires in connection		2, 3 and 4	2 and 3	2, 3 and 4	1	2, 3 and 4	2 and 3	1
Local bus connection type		Inline data jumper						
Max. temperature	°C	–25 … +55						
Max. humidity	%	5 … 90, no condensation						
Weight	g	61	66	190	60	190	152	195
Dimensions (W x H x D)	mm	12.2 x 120 x 71.5	12.2 x 141 x 71.5	48.8 x 120 x 71.5	12.2 x 120 x 71.5	48.8 x 120 x 71.5	48.8 x 141 x 71.5	48.8 x 120 x 71.5

For order details on GoTo products, see page 93

Inline
Analog input modules
R-IB IL AI x/xx-xxx

- IP20 rating
- To read current and voltage signals
- Diagnostic and status indicators

Features

- 2x or 8x analog inputs
- Up to 5 current ranges
- Up to 7 voltage ranges
- 2- and 3-wire sensor connection

Product description

These Inline modules read analog voltage or current signals. The modules are connected locally to the CLM controller or remotely using an Inline fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory	
Data sheet	DOC-CONTRL-ILAI2/SF***-KB	DOC-CONTRL-ILAI8/SF***-KB

Technical data

		R-IB IL AI 2/SF-PAC	R-IB IL AI 8/SF-PAC
Digital inputs		2 (single-ended)	8 (single-ended)
Connection type		Spring cage terminals	Spring cage terminals
Input voltage range	V	0 ... 10, ±10	0 ... 5, ±5, 0 ... 10, ±10, 0 ... 25, ±25, 0 ... 50
Input current range	mA	0 ... 20, ±20, 4 ... 20	0 ... 20, 4 ... 20, ±20, 0 ... 40, ±40
No. wires in connection		2 and 3	2
Measurement resolution	Bit	16	16
Process data update	ms	< 1.5	< 1.5
Local bus connection type		Inline data jumper	Inline data jumper
Max. temperature	°C	–25 ... +55	–25 ... +55
Max. humidity	%	5 ... 90, no condensation	5 ...90, no condensation
Weight	g	69	213
Dimensions (W x H x D)	mm	12.2 x 135 x 71.5	48.8 x 135 x 71.5

For order details on GoTo products, see page 93

Inline
Analog output modules
R-IB IL AO x/xx-xxx

- IP20 rating
- Output current and voltage signals
- Diagnostic and status indicators
- Accessories included (connector plug and labeling field)

Features

- 1x or 2x analog outputs
- Up to 2 voltage ranges
- Up to 2 current ranges
- 2-wire actuator connection

Product description

These Inline modules are used to output analog voltage or current signals. The modules are connected locally to the CLM controller or remotely using an Inline fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory		
Data sheet	DOC-CONTRL-ILAO1/SF***-KB	DOC-CONTRL-ILAO2/SF***-KB	DOC-CONTRL-ILAO2/U/BP*-KB

Technical data

		R-IB IL AO 1/SF-PAC	R-IB IL AO 2/SF-PAC	R-IB IL AO 2/U/BP-PAC
Analog output		1	2 (configures itself according to terminal point used)	2 (single-ended)
Connection type		Spring cage terminals	Spring cage terminals	Spring cage terminals
Output voltage range	V	0 ... 10	0 ... 10	±10, 0 ... 10
Output current range	mA	0 ... 20, 4 ... 20	0 ... 20, 4 ... 20	–
No. wires in connection		2	2	2
Measurement resolution	Bit	16	16	16
Process data update	ms	< 1	< 1	< 1
Local bus connection type		Inline data jumper	Inline data jumper	Inline data jumper
Max. temperature	°C	–25 ... +55	–25 ... +55	–25 ... +55
Max. humidity	%	5 ... 90, no condensation	5 ... 90, no condensation	5 ... 90, no condensation
Weight	g	126	190	96.8
Dimensions (W x H x D)	mm	24.4 x 135 x 71.5	48.8 x 135 x 71.5	12.2 x 135 x 71.5

For order details on GoTo products, see page 93

Inline
Temperature module with 2 resistive temperature sensor inputs
R-IB IL TEMP 2 RTD-PAC

- IP20 rating
- Resistive temperature sensor ports
- Diagnostic and status indicators
- Accessories included (connector plug and labeling field)

Features

- 2x analog inputs
- Supported sensor types: Pt, Ni, Cu, KTY
- 2-, 3- and 4-wire sensor connection

Product description

This Inline module reads resistive temperature sensors. It supports platinum and nickel sensors in accordance with DIN standard and SAMA directive. Cu10, Cu50, Cu53 as well as KTY81 and KTY84 sensors are also supported.
The measuring temperature is displayed using 16-bit values in 2 process data words (1 word per channel). The module is connected locally to the CLM controller or remotely using an Inline fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILTEMP2RTD*-KB

Technical data

Analog inputs		2
Connection type		Spring cage terminals
Supported sensor types		Pt, Ni, Cu, KTY
Accuracy	°C	±0.26
No. wires in sensor connection		2, 3 and 4
Measurement resolution	Bit	16
Process data update	ms	30
Local bus connection type		Inline data jumper
Max. temperature	°C	–25 ... +55
Max. humidity	%	5 ... 90, no condensation
Weight	g	67
Dimensions (W x H x D)	mm	12.2 x 135 x 71.5

For order details on GoTo products, see page 94

Inline
Temperature module with 8 resistive temperature sensor inputs
R-IB IL TEMP 4/8 RTD/EF-PAC

- IP20 rating
- Resistive temperature sensor ports
- Diagnostic and status indicators
- Accessories included (connector plug and labeling field)

Features

- 8x analog inputs
- Supported sensor types: Pt, Ni, Cu, KTY
- Measures temperature with extreme accuracy
- 4-wire sensor connection

Product description

This Inline module is an 8-channel detection module with 3 linear resistance regions for resistive temperature sensors. The measuring temperature is displayed using 16-bit values in 4 multiplexed process data words. The module is connected locally to the CLM controller or remotely using an Inline fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILTEMP4/8RT-KB

Technical data

Analog inputs		8
Connection type		Spring cage terminals
Supported sensor types		Pt, Ni, Cu, KTY, linear resistors
Accuracy	°C	±0.05
No. wires in sensor connection		4
Measurement resolution	Bit	16
Process data update	s	1.8 (up to 3.3 depending on operating mode)
Local bus connection type		Inline data jumper
Max. temperature	°C	–25 ... +55
Max. humidity	%	5 ... 90, no condensation
Weight	g	190
Dimensions (W x H x D)	mm	48.8 x 135 x 71.5

Inline
Temperature module with 2 thermo element inputs
R-IB IL TEMP 2 UTH-PAC

- IP20 rating
- Thermo element ports
- Diagnostic and status indicators
- Accessories included (connector plug and labeling field)

Features

- 2x analog inputs
- Supported sensor types:
  B, C, E, J, K, L, N, R, S, T, U, W, HK
- Absolute or differential temperature measuring
- 2-wire sensor connection

Product description

This Inline module reads signals from standard thermo elements. It supports 13 different types of DIN EN 60584-1 and DIN 43710 thermo elements, as well as a linear voltage input of –15 ... +85 mV. The module is connected locally to the CLM controller or remotely using an Inline fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILTEMP2UTH*-KB

Technical data

Analog inputs		2
Connection type		Spring cage terminals
Supported sensor types		B, C, E, J, K, L, N, R, S, T, U, W, HK
Accuracy	°C	±0.6
No. wires in sensor connection		2
Measurement resolution	Bit	15 (incl. prefix)
Process data update	ms	Max. 30 (for both channels)
Local bus connection type		Inline data jumper
Max. temperature	°C	–25 ... +55
Max. humidity	%	5 ... 90, no condensation
Weight	g	67
Dimensions (W x H x D)	mm	12.2 x 135 x 71.5

For order details on GoTo products, see page 94

Inline
Supply module for main/segment power
R-IB IL 24 PWR IN-PAC

- IP20 rating
- Main power U_M
- Section power U_S
- Diagnostic indicators
- Accessories included (connector plug and labeling field)

Features

- Supplies 24 VDC main power U_M
- Supplies 24 VDC segment power U_S
- 19.2 ... 30 VDC power range
- Main and section circuits can be protected by an external fuse

Product description

This Inline module is used to supply 24 VDC power to the main circuit (U_M). Power for a 24 VDC segment circuit (U_S) can also be provided at this terminal. The module is connected locally to the CLM controller or remotely using an Inline fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILPWRIN****-KB

Technical data

Main power U_M	VDC	24
Current at U_M	A	Max. 8
Section power U_S	VDC	24
Current at U_S	A	Max. 8
Max. temperature	°C	–25 ... +55
Max. humidity	%	5 ... 90, no condensation
Weight	g	59
Dimensions (W x H x D)	mm	12.2 x 120 x 71.5

Inline
Supply module for main/segment/logic/peripheral power
R-IB IL 24 PWR IN/R-PAC

- IP20 rating
- Main power U_M
- PowerU_L, U_S and U_{ANA}
- Diagnosis indicators
- Accessories included (connector plug and labeling field)

Features

- To supply the complete 24 VDC power needed for the small signal range of an Inline station (main power U_M, segment power U_S, logic power U_L, peripheral power U_{ANA})
- 19.2 ... 30 VDC power range

Product description

This Inline module is designed for use in an Inline station. If the maximum ampacity of the potential jumper U_L has been reached, this module can be used to supply logic power. Just apply 24 VDC power (U_{24V}) to the terminal in order to supply logic power (U_L) and power to analog terminals (U_{ANA}). The module also supplies 24 VDC main power (U_M) and segment power (U_S). The module is connected locally to the CML controller or remotely using an Inline fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILPWRIN/R**-KB

Technical data

Main power U_M	VDC	24
Current at U_M	A	Max. 8
Segment power U_S	VDC	24
Current at U_L	A	Max. 8
Logic power	VDC	24
Current at U_L	A	Max. 2
Peripheral power U_{ANA}	VDC	24
Current at U_{ANA}	A	Max. 0.5
Max. temperature	°C	–25 ... +55
Max. humidity	%	5 ... 90, no condensation
Weight	g	192
Dimensions (W x H x D)	mm	48.8 x 120 x 71.5

For order details on GoTo products, see page 94

Inline
Segment module
R-IB IL 24 SEG/F-PAC

- IP20 rating
- Build a segment circuit
- Protect segment circuit with fuse
- Diagnosis indicators
- Accessories included (connector plug and labeling field)

Features

- Automatically builds a segment circuit within the main circuit
- Protects the segment circuit with an internal fuse

Product description

This Inline module is designed for use in an Inline station. It can be used to build a fuse-protected sub-circuit (segment circuit) within a main circuit. Since it cannot be used to supply power, it does not come with any reverse polarity or overvoltage protection. The module is connected locally to the CML controller or remotely using an Inline fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILSEG/F****-KB

Technical data

Fuse	A	6.3
Local bus connection type		Inline data jumper
Max. temperature	°C	–25 ... +55
Max. humidity	%	5 ... 90, no condensation
Weight	g	59
Dimensions (W x H x D)	mm	12.2 x 120 x 71.5

Inline
Potential distributor module
R-IB IL PD 24V-PAC

- IP20 rating
- For outputting section power U_S
- Diagnosis indicators
- Accessories included (connector plug and labeling field)

Features

- 24 VDC power for 1-wire sensors

Product description

This Inline module is designed for use in an Inline station and enables the output of 24 VDC power from the segment circuit (U_S).
It can supply power to 1-wire sensors connected to the R-IB IL 24 DI 32/HD-PAC terminal. The module is connected locally to the CML controller or remotely using an Inline fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILPD24V*GND-DA

Technical data

Max. current U_M	A	Max. 8
Local bus connection type		Inline data jumper
Max. temperature	°C	–25 ... +55
Max. humidity	%	5 ... 90, no condensation
Weight	g	59
Dimensions (W x H x D)	mm	12.2 x 120 x 71.5

Inline
Line skip module for Inline local bus extension
R-IB IL 24 LSKIP-PAC

- IP20 rating
- Line skip within an Inline station
- Low voltage backup possible
- Diagnostic indicators
- Accessories included (connector plug and labeling field)

Features

- Begins a new line in an Inline station
- Supplies power to inline stations

Product description

This Inline module is used to skip a line in an Inline station. Together with the R-IB IL 24 FLM-PAC (Inline branch module for Fieldline Modular connection), a line can be skipped in an Inline station. All necessary Inline station power can be supplied. The module is connected locally to the CML controller or remotely using an Inline fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILLSKIP****-KB

Technical data

Main power U_M	VDC	24
Current at U_M	A	Max. 8
Section power U_S	VDC	24
Current at U_S	A	Max. 8
Logic power U_L	VDC	24
Current at U_L	A	Max. 2
Peripheral power U_{ANA}	VDC	24
Current at U_{ANA}	A	Max. 0.5
Local bus connection type		Inline data jumper
Max. temperature	°C	–25 ... +55
Max. humidity	%	5 ... 90, no condensation
Weight	g	207
Dimensions (W x H x D)	mm	48.8 x 135 x 71.5

Inline
Branch module for Fieldline Modular connection
R-IB IL 24 FLM-PAC

- IP20 rating
- Connects Fieldline Modular to Inline station
- Diagnostic indicators
- Accessories included (connector plug and labeling field)

Features

- Hybrid cable bus line connection
- Converts the transfer physics of the Inline local bus to those of the Fieldline Modular local bus

Product description

This Inline module is used to couple the Fieldline Modular range or start a line skip in an Inline station. The module is connected locally to the CML controller or remotely using an Inline fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILFLM******-KB

Technical data

Hybrid cable connection type		Spring cage terminals
Local bus connection type		Inline data jumper
Max. temperature	°C	–25 ... +55
Max. humidity	%	5 ... 90, no condensation
Weight	g	43
Dimensions (W x H x D)	mm	12.2 x 135 x 71.5

Inline
Counter module
R-IB IL CNT-PAC

- IP20 rating
- 4 different operating modes
- Diagnostic and status indicators
- Accessories included (connector plug and labeling field)

Features

- 4x 24 VDC and 5 VDC digital inputs
- 1x digital output
- 2-, 3- and 4-wire sensor connection
- 1x switching output
- 2-wire actuator connection

Product description

This inline module reads and processes rapid pulse sequences from sensors. It comes with a counter input, a control input and a freely parameterizable switching output that is set apart from the assembly. This allows fast reaction times that do not depend on the bus and controller. This module can be operated in 4 different operating modes.
The module is connected locally to the CML controller or remotely using an Inline fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILCNT******-KB

Technical data

Counter inputs		2 (1x counter input for 24 V signals, 1x counter input for 5 V signals)
Control inputs		2 (1x control input for 24 V signals, 1x cotrol input for 5 V signals)
Connection type		Spring cage terminals
Input voltage	VDC	5/24
Operating modes		Event counting, frequency measuring, time measuring, pulse generating
Output		1
Rated output voltage U_{Out}	VDC	24
Rated current I_{Nenn}	A	0.5
Local bus connection type		Inline data jumper
Max. temperature	°C	–25 … +55
Max. humidity	%	5 … 90, no condensation
Weight	g	110
Dimensions (W x H x D)	mm	24.4 x 135 x 71.5

Inline
Incremental encoder detection module
R-IB IL INC-IN-PAC

- IP20 rating
- Incremental encoder input
- Diagnostic and status indicators
- Accessories included (connector plug and labeling field)

Features

- 3x 24 VDC digital input
- 2- and 3-wire sensor connection
- Incremental encoder input
- 5 VDC and 24 VDC encoder power incl. monitoring
- LED direction indicator

Product description

This Inline module reads positions (lengths) or angles with relative encoder systems. It reads position or angle data from incremental value encoders with rectangular signals. Both symmetric encoders (RS422) and asymmetric encoders with rectangular signals can be connected to the module.
The module is connected locally to the CML controller or remotely using an Inline fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILINC*IN***-KB

Technical data

Encoder detection		1 (incremental encoder)
Input description		Symmetric (RS422) or asymmetric (3.5 ... 27 V)
Digital inputs		3
Rated input voltage U_{In}	VDC	24
No. wires in sensor connection		2 and 3
Digital outputs		1
Output type		NPN (switches against ground)
Local bus connection type		Inline data jumper
Max. temperature	°C	–25 ... +55
Max. humidity	%	5 ... 90, no condensation
Weight	g	143
Dimensions (W x H x D)	mm	24.4 x 135 x 71.5

For order details on GoTo products, see page 94

Inline
SSI absolute encoder detection module
R-IB IL SSI-IN-PAC

- IP20 rating
- For absolute encoders with SSI interface
- Module configurable for 8 ... 25 bits
- Diagnostic and status indicators
- Accessories included (connector plug and labeling field)

Features

- 1x encoder input
- 5 VDC encoder power
- Supports single-turn, multi-turn or length measurement systems
- Processes gray code or binary code

Product description

This Inline module is used to read data from absolute encoders with SSI interface up to 25 bits (single-turn, multi-turn or length measurement systems). It increases operational reliability by independently checking the parity of the data received at the SSI interface. The module is connected locally to the CML controller or remotely using an Inline fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILSSIIN****-KB

Technical data

Encoder detection		1
Encoder type		Single-turn, multi-turn or length measurement system with SSI interface
Connection type		Spring cage terminals
Resolution	Bit	8 ... 25 (parameterizable)
	kHz	100/200/400/800
Local bus connection type		Inline data jumper
Max. temperature	°C	–25 ... +55
Max. humidity	%	5 ... 90, no condensation
Weight	g	71
Dimensions (W x H x D)	mm	12.2 x 135 x 71.5

Inline
Communication module for serial data transfer (RS232)
R-IB IL RS232-PRO-PAC

- IP20 rating
- RS232 serial interface
- Configurable transfer rate up to 38.4 kBaud
- Diagnostic and status indicators
- Accessories included (connector plug and labeling field)

Features

- Configurable number of data bits, stop bits and parity
- 4 kB reception and 1 kB transmittance buffer
- Process data parameterization and data exchange via bus

Product description

This Inline module is used to operate standard peripherals with RS232 serial interface in a bus system. Process data is used for parameterization and data exchange via the bus. The module is connected locally to the CML controller or remotely using an Inline fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILRS232*P**-KB

Technical data

Serial interface		RS232
Connection type		Spring cage terminals
Max. configurable transfer rate	kBaud	38.4
Receive buffer	kB	4
Transmit buffer	kB	1
Local bus connection type		Inline data jumper
Max. temperature	°C	–25 … +55
Max. humidity	%	5 … 90, no condensation
Weight	g	135
Dimensions (W x H x D)	mm	24.4 x 135 x 71.5

For order details on GoTo products, see page 94

Inline
Communication module for serial data transfer (RS485/422)
R-IB IL RS485/422-PRO-PAC

- IP20 rating
- RS485 or RS422 serial interface
- Configurable transfer rate up to 38.4 kBaud
- Diagnostic and status indicators
- Accessories included (connector plug and labeling field)

Features

- Configurable number of data bits, stop bits and parity
- 4 kB receive and 1 kB transmit buffer
- Process data parameterization and data exchange via bus

Product description

This Inline module is used to operate standard peripherals with serial interface (RS485/RS422) in a bus system.
The module is connected locally to the CML controller or remotely using an Inline fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILRS485*P**-KB

Technical data

Serial interface		RS485/422
Connection type		Spring cage terminals
Max. configurable transfer rate	kBaud	38.4
Receive buffer	kB	4
Transmit buffer	kB	1
Local bus connection type		Inline data jumper
Max. temperature	°C	–25 … +55
Max. humidity	%	5 … 90, no condensation
Weight	g	135
Dimensions (W x H x D)	mm	24.4 x 135 x 71.5

Inline
IO-Link master module
R-IB IL 24 IOL 4 DI 12-PAC

- IP20 rating
- Diagnostic and status indicators
- Accessories included (connector plug and labeling field)

Features

- 4x IO-Link ports
- 4x output operable in SIO mode
- 12x 24 VDC digital inputs
- 2- and 3-wire sensor connection

Product description

This Inline module is used to operate IO-Link sensors and actuators (devices). It is also used to read digital signals. IO-Link is the standard for universal communication from the controller to the lowest field level. The module is connected locally to the CML controller or remotely using an Inline fieldbus coupler.

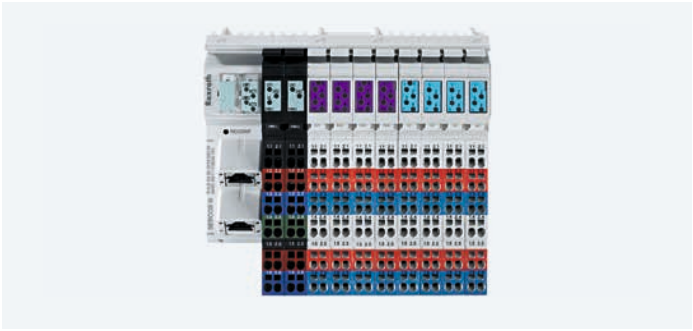
More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-ILIOL4DI12*-DA

Technical data

IO-Link ports		4
Rated current per IO-Link port	mA	200
Rated current per device	mA	800
Digital inputs		12
Connection type		Spring cage terminals
Rated input voltage U_{In}	VDC	24
Nominal input current at U_{IN}	mA	2.2
No. wires in sensor connection		2 and 3
Max. temperature	°C	–25 ... +55
Max. humidity	%	5 ... 90, no condensation
Weight	g	200
Dimensions (W x H x D)	mm	48.8 x 120 x 71.5

For order details on GoTo products, see page 94

Inline
Sercos III Block I/O module with digital inputs/outputs
R-ILB S3 24 DI16 DIO16



- IP20 rating
- Sercos III fieldbus system
- Diagnostic and status indicators

Features

- 16x or 32x 24 VDC digital inputs
- Max. load current per sensor: 125 mA
- 16x 24 VDC 500 mA digital outputs
- Short-circuit and overload protection
- 2- and 3-wire sensor and actuator connection

Product description

This Inline Block I/O module is designed for use in a Sercos III network. It is used to read digital input signals and output digital output signals. It is connected remotely to the controller via the Sercos III network.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-S3DI16DIO16-KB

Technical data

Power	VDC	24
Fieldbus system		Sercos III
Connection type		RJ45
Digital inputs		16/32
No. wires in sensor connection		2 and 3
Digital outputs		16
No. wires in actuator connection		2 and 3
Max. temperature	°C	–25 ... +55
Max. humidity	%	5 ... 90, no condensation
Weight	g	500
Dimensions (W x H x D)	mm	156 x 141 x 57

Inline
PROFIBUS Block I/O module with digital inputs/outputs
R-ILB PB 24 DI16 DO16

- IP20 rating
- PROFIBUS DP fieldbus system
- Diagnostic and status indicators

Features

- 16x 24 VDC digital inputs
- Max. load current per sensor: 125 mA
- 16x 24 VDC 500 mA digital outputs
- Short-circuit and overload protection
- 2- and 3-wire sensor and actuator connection

Product description

This Inline Block I/O module is designed for use in a PROFIBUS network. It is used to read digital input signals and output digital output signals. It is connected remotely to the controller via the PROFIBUS network.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-PBDI16/DO16-KB

Technical data

Power	VDC	24
Fieldbus system		PROFIBUS DP
Connection type		D-sub 9-pin socket
PROFIsafe support		No
Digital inputs		16
No. wires in sensor connection		2 and 3
Digital outputs		16
No. wires in actuator connection		2 and 3
Max. temperature	°C	–25 ... +55
Max. humidity	%	5 ... 90, no condensation
Weight	g	500
Dimensions (W x H x D)	mm	156 x 141 x 57

For order details on GoTo products, see page 94

Inline
Sercos III Block I/O module with analog inputs/outputs
R-ILB S3 AI4 AO2

- IP20 rating
- Sercos III fieldbus system
- Diagnostic and status indicators

Features

- 4 shielded analog differential signal inputs or 4 universal RTD inputs (to read current and voltage signals)
- 2 analog outputs (for the output of current and voltage signals)

Product description

This Inline Block I/O module is designed for use in a Sercos III network. It is used to read analog input signals and output analog output signals. It is connected remotely to the controller via the Sercos III network.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-S3AI4AO2***-KB

Technical data

Power	VDC	24
Fieldbus system		Sercos III
Connection type		RJ45
Analog inputs		4
No. wires in sensor connection		2, 3 and 4
Analog Outputs		2
No. wires in actuator connection		2
Measurement resolution	Bit	16
Max. temperature	°C	–25 ... +60
Max. humidity	%	10 ... 95, no condensation
Weight	g	465
Dimensions (W x H x D)	mm	156 x 141 x 57

Inline
Sercos III Block I/O module with analog I/O and SSI interface
R-ILB S3 AI12 AO4 SSI-IN4

- IP20 rating
- Sercos III fieldbus system
- Diagnostic and status indicators

Features

- 12 analog inputs (to read current and voltage signals)
- 4 analog outputs (for the output of current and voltage signals)
- 4 SSI interfaces
- 2- and 3-wire sensor/actuator connection

Product description

This Inline Block I/O module is designed for use in a Sercos III network and is used to read analog input signals and output analog signals. The SSI interfaces are used to read data from absolute value encoders with SSI interface up to 31 bits. It supports encoders with gray and binary code. It is connected remotely to the controller via the Sercos III network.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-S3AI*AO*SSI-DA

Technical data

Power	VDC	24
Fieldbus system		Sercos III
Connection type		RJ45
Encoder detection		4
Encoder type		Single-turn, multi-turn or length measurement system with SSI interface
Analog inputs		12
Analog outputs		4
Measurement resolution	Bit	16
Max. temperature	°C	–25 ... +55
Max. humidity	%	10 ... 95, no condensation
Weight	g	505
Dimensions (W x H x D)	mm	156 x 141 x 57

For order details on GoTo products, see page 94

IndraControl S20
Fieldbus coupler
S20-xx-BKx

- IP20 rating
- Up to 63 additional IndraControl S20 nodes can be connected
- Electronic device nameplate
- Diagnostic and status indicators

Features

- Sercos, PROFINET RT or PROFIBUS DP
- Address selection switch
- CIP Safety on Sercos
- PROFIsafe on PROFIBUS or PROFINET

Product description

The IndraControl S20 fieldbus couplers act as an interface to the fieldbus system in an IndraControl S20 station. They are the first module of an IndraControl S20 station. The individual IndraControl S20 I/O modules can be connected to it in a series.

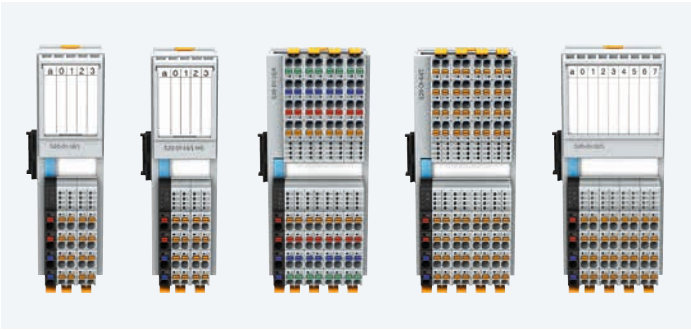
More detailed information:	www.boschrexroth.com/mediadirectory	
Data sheet	DOC-CONTRL-S20*S3*BK+*-DA DOK-CONTRL-S20*PN*BK+*-DA	DOK-CONTRL-S20*PB*BK**-DA

Technical data

		S20-S3-BK+	S20-PN-BK+	S20-PB-BK
Power	VDC	24	24	24
Fieldbus system		Sercos	PROFINET	PROFIBUS
Connection type		RJ45 socket with autonegotiation and autocrossing	RJ45 socket with autonegotiation and autocrossing	D-SUB 9-pin (socket)
Transfer rate	MBit/s	100 (full-duplex)	100 (full-duplex)	< 12
Device type		Sercos slave	PROFINET IO device	PROFIBUS DP slave
Update rate	µs	31.25	250	–
Max. temperature	°C	–25 ... +60	–25 ... +60	–25 ... +60
Max. humidity	%	5 ... 95, no condensation	5 ... 95, no condensation	5 ... 95, no condensation
Weight	g	177	173	173
Dimensions (W x H x D)	mm	45 x 125.9 x 74	40 x 125.9 x 75	40 x 125.9 x 75

For order details on GoTo products, see page 94

IndraControl S20
Digital input modules
S20-DI-x



- IP20 rating
- Electronic device nameplate
- Diagnostic and status indicators

Features

- 16 or 64 digital inputs 24 VDC
- 1-, 2-, 3- and 4-wire sensor connection
- Min. update time: < 5 µs
- Filter times can be set in stages: < 5 µs, 100 µs, 1000 µs or 3000 µs

Product description

The IndraControl S20 modules are used for recording digital input signals e.g. keys, limit switches or proximity switches. They are connected locally to the IndraControl XM controller or remotely using an IndraControl S20 fieldbus coupler.

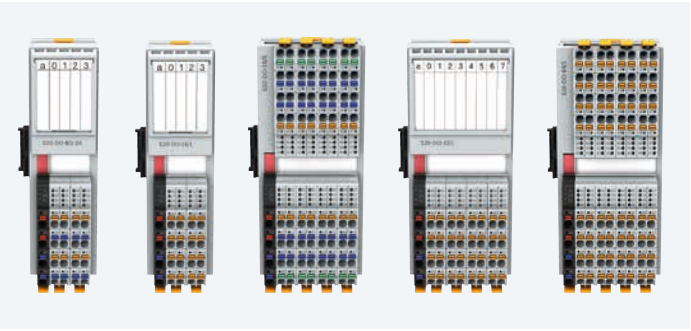
More detailed information:	www.boschrexroth.com/mediadirectory		
Data sheet	DOC-CONTRL-S20*DI*16*1-DA DOK-CONTRL-S20*DI161HS-DA	DOC-CONTRL-S20*DI*16*4-DA DOC-CONTRL-S20*DI*32*1-DA	DOK-CONTRL-S20*DI*64*1-DA

Technical data

		S20-DI-16/1	S20-DI-16/1-HS	S20-DI-16/4	S20-DI-32/1	S20-DI-64/1
Inputs		16	16	16	32	64
Connection type		Direct-insert spring-cage				
No. wires in connection		1	1	2, 3 and 4	1	1
Rated input voltage $V_{RatedIn}$	VDC	24	24	24	24	24
Max. current consumption from V_I	A	0.02	0.02	2	0.05	0.05
Rated input current at $V_{RatedIn}$	mA	2.4	2.4	2.4	2.4	2.4
Input protection circuit		Inverse-polarity protection				
Input filter time configurable	µs	< 100, 1000, 3000 (default)	< 5 (no filter, default); 1000, 3000	500 (default), < 100	< 100, 1000, 3000 (default)	< 100, 1000, 3000 (default)
Max. temperature	°C	–25 ... +60				
Max. humidity	%	5 ... 95, no condensation				
Mass	g	133	133	231	167	167
Dimensions (W x H x D)	mm	35 x 126.1 x 54	35 x 126.1 x 54	53.6 x 129.9 x 54	53.6 x 126.1 x 54	53.6 x 126.1 x 54

For order details on GoTo products, see page 94

IndraControl S20
Digital output modules
S20-DO-x



- IP20 rating
- Electronic device nameplate
- Diagnostic and status indicators

Features

- 8, 16, 32, 64 digital outputs
- 24 VDC, 0.5 or 2 A
- 1-, 2- and 3-wire actuator connection
- Short-circuit-proof outputs

Product description

The IndraControl S20 modules are used to output digital signals. 2 A variants are used to control solenoid valves, contactors, encoders, relays or other electrical loads. They are connected locally to the IndraControl XM controller or remotely using an IndraControl S20 fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory		
Data sheet	DOC-CONTRL-S20*DO*8*2A-DA DOC-CONTRL-S20*DO*16*1-DA	DOC-CONTRL-S20*DO*16*3-DA DOC-CONTRL-S20*DO*32*1-DA	DOC-CONTRL-S20*DO*64*1-DA

Technical data

		S20-DO-8/2-A	S20-DO-16/1	S20-DO-16/3	S20-DO-32/1	S20-DO-64/1
Outputs		8	16	16	32	64
Connection type		Direct-insert spring-cage				
No. wires in connection		2	1	2 and 3	1	1
Rated output voltage V_{Out}	VDC	24	24	24	24	24
Rated current I_{Rated} per channel	A	2	Max. 0.5	Max. 0.5	Max. 0.5	Max. 0.5
Total output current	A	Max. 16 (w/external fuse)	Max. 8 (w/external fuse)	Max. 8 (w/external fuse)	Max. 8 (w/external fuse)	Max. 8 w/external fuse)
Protection		Short-circuit/overload				
Max. temperature	°C	–25 ... +60				
Max. humidity	%	5 ... 95, no condensation				
Mass	g	136	134	234	191	191
Dimensions (W x H x D)	mm	35 x 126.1 x 54	35 x 126.1 x 54	53.6 x 129.9 x 54	35 x 126.1 x 54	53.6 x 129.9 x 54

For order details on GoTo products, see page 94

IndraControl S20
Relay module with 4 outputs
S20-DOR-4/2-220-AC

- IP20 rating
- Electronic device nameplate
- Diagnostic and status indicators

Features

- 4 monostable relays
- Potential-free connections for 4 actuators
- Rated current per output: 8 A
- Direct current or alternating current
- Fulfills the requirements of IEC 61850-3 and IEE 1614

Product description

The IndraControl S20 module is used to provide the required relay contacts. It has four relay make contacts that are independent from each other and potential-free.
Low voltage and extra low voltage modules can be used directly next to each other in an IndraControl S20 station.
The module is connected locally to the IndraControl XM controller or remotely using an IndraControl S20 fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-S20*DOR4*AC-DA

Technical data

Outputs		4 (make contacts)
Connection type		Direct-insert spring-cage
Connection technology of the actuators		2-wire technology
Nominal output voltage	VDC	220
	VAC	230
Output current	A	Max. 8 (per channel, safeguard externally)
Total output current	A	Max. 32 (per module)
Protection		Short-circuit/overload
Max. temperature	°C	–25 ... +60
Max. humidity	%	5 ... 95, no condensation
Mass	g	206
Dimensions (W x H x D)	mm	53.6 x 126.1 x 54

For order details on GoTo products, see page 94

IndraControl S20
Digital input/output modules
S20-DIDO-8/1

- IP20 rating
- Electronic device nameplate
- Diagnostic and status indicators

Features

- 8 digital inputs
- 8 digital outputs
- 1-wire sensor and actuator connection
- Reverse polarity protection on the inputs
- Short-circuit-proof outputs

Product description

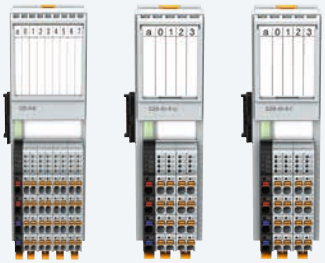
This IndraControl S20 module is used to acquire and output digital signals. The digital inputs are used for recording sensors and the digital outputs are used for outputting 24 VDC signals. Sensors or actuators can be connected in 1-wire technology. The module is connected locally to the IndraControl XM controller or remotely using an IndraControl S20 fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-S20*DIDO8*1-DA

Technical data

Inputs / outputs		8
Connection type		Direct-insert spring-cage
Sensor/actuator connection technology		1-wire technology
Max. current consumption from V_I	A	0.02
Rated input current at $V_{RatedIn}$	mA	2.4
Input protection circuit		Inverse-polarity protection
Configurable input filter time	µs	3000 (default)
Rated output current per channel	A	0.5
Total output current	A	Max. 4 (w/external fuse)
Protection		Short-circuit/overload
Max. temperature	°C	–25 ... +55
Max. humidity	%	5 ... 95, no condensation
Mass	g	133
Dimensions (W x H x D)	mm	35 x 126.1 x 54

IndraControl S20
Analog input modules
S20-AI-x-x



- IP20 rating
- Electronic device nameplate
- Diagnostic and status indicators

Features

- 4, 8 analog inputs
- Current and voltage measuring ranges
- 500 Ω and 5 kΩ linear inputs
- Linear voltages of –100 mV ... +100 mV
- Switchable or programmable filters

Product description

The IndraControl S20 modules record analog voltage or current signals. They are connected locally to the IndraControl XM controller or remotely using an IndraControl S20 fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory		
Data sheet	DOC-CONTRL-S20*AI*8***-DA	DOC-CONTRL-S20*AI*4*U*-DA	DOC-CONTRL-S20*AI*4*I*-DA

Technical data

		S20-AI-8	S20-AI-4-U	S20-AI-4-I
Inputs		8 (differential inputs, voltage or current individually selectable)	4 (differential inputs, voltage)	4 (differential inputs, current)
Connection type		Direct-insert spring-cage		
No. wires in connection		2	2	2
Input voltage range	V	0 ... 5, –5 ... 5, 0 ... 10, –10 ... 10	0 ... 5, –5 ... 5, 0 ... 10, –10 ... 10	–
Input current range	mA	0 ... 20, 4 ... 20, –20 ... 20	–	0 ... 20, 4 ... 20, –20 ... 20
Measurement resolution	Bit	16	16	16
Max. temperature	°C	–25 ... +60		
Max. humidity	%	5 ... 95, no condensation		
Mass	g	204	145	145
Dimensions (W x H x D)	mm	53.6 x 126.1 x 54	35 x 126.1 x 54	35 x 126.1 x 54

For order details on GoTo products, see page 94

IndraControl S20
Analog output modules
S20-AO-x

- IP20 rating
- Electronic device nameplate
- Diagnostic and status indicators

Features

- 4, 8 analog bipolar outputs
- Current and voltage measuring ranges
- 16 bit output value
- Overload and short circuit protected

Product description

The IndraControl S20 modules are used to output analog voltage or current signals. They are connected locally to the IndraControl XM controller or remotely using an IndraControl S20 fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory	
Data sheet	DOC-CONTRL-S20*AO*4***-DA	DOC-CONTRL-S20*AO*8***-DA

Technical data

		S20-AO-4	S20-AO-8
Outputs		4	8
Connection type		Direct-insert spring-cage	
No. wires in connection		2 (shielded, twisted pair)	2 (shielded, twisted pair)
Output voltage range	V	0 ... 5, −5 ... 5, 0 ... 10, −10 ... 10	0 ... 5, −5 ... 5, 0 ... 10, −10 ... 10
Output current range	mA	0 ... 20, 4 ... 20	0 ... 20, 4 ... 20, −20 ... 20
Protection circuit		Overvoltage/inverse-polarity/transient protection	
Measurement resolution	Bit	16	16
Max. temperature	°C	−25 ... +60	
Max. humidity	%	5 ... 95, no condensation	
Mass	g	145	260
Dimensions (W x H x D)	mm	35 x 126.1 x 54	53.6 x 126.1 x 54

IndraControl S20
Analog input/output module
S20-AIAO-2

- IP20 rating
- Electronic device nameplate
- Diagnostic and status indicators

Features

- 2 analog inputs and 2 outputs
- Current and voltage measuring ranges
- Current and voltage output ranges
- 2-wire sensor and actuator connection
- Process data update < 150 µs

Product description

This IndraControl S20 module records and outputs analog voltage or current signals. The module is connected locally to the IndraControl XM controller or remotely using an IndraControl S20 fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-S20*AIAO*2*-DA

Technical data

Inputs		2 (differential inputs, voltage or current individually selectable)
Outputs		2
Connection type		Direct-insert spring-cage
Sensor/actuator connection technology		2-wire technology
Input/output voltage range	V	0 ... 5, –5 ... 5, 0 ... 10, –10 ... 10
Input/output current range	mA	0 ... 20, 4 ... 20, –20 ... 20
Measurement resolution	Bit	16
Input filter		30 Hz, 12 kHz and averaging (parameterizable)
Protection circuit		Overvoltage/inverse-polarity/transient protection
Accuracy	%	0.1 (from end output range value)
Max. temperature	°C	–25 ... +60
Max. humidity	%	5 ... 95, no condensation
Mass	g	210
Dimensions (W x H x D)	mm	35 x 126.1 x 54

For order details on GoTo products, see page 95

IndraControl S20
Analog temperature modules
S20-AI-x-RTD or S20-AI-x-UTH

- IP20 rating
- Resistive temperature sensor ports
- Thermo element ports
- Electronic device nameplate
- Diagnostic and status indicators

Features

- 4, 8 analog inputs for temperature measuring resistors or thermo elements
- Current and voltage measuring ranges
- 500 Ω and 5 kΩ linear inputs
- Linear voltages of -100 mV to +100 mV
- Switchable or programmable filters

Product description

The IndraControl S20 modules are used for recording signals from temperature measuring resistors or thermo elements. They are connected locally to the IndraControl XM controller or remotely using an IndraControl S20 fieldbus coupler.

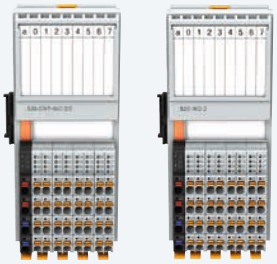
More detailed information:	www.boschrexroth.com/mediadirectory	
Data sheet	DOC-CONTRL-S20*AI*4*RT-DA	DOC-CONTRL-S20*AI*4*UT-DA
	DOC-CONTRL-S20*AI*8*RT-DA	DOC-CONTRL-S20*AI*8*UT-DA

Technical data

		S20-AI-4-RTD	S20-AI-8-RTD	S20-AI-4-UTH	S20-AI-8-UTH
Inputs		4 (for resistive temperature sensors)	8 (for resistive temperature sensors)	8 + 1 (8 for thermo elements or linear voltage, 1 input –5 V ... +5 V)	4 + 1 (4 for thermo elements or linear voltage, 1 input –5 V ... +5 V)
Connection type		Direct-insert spring-cage			
No. wires in connection		2, 3 and 4	2, 3 and 4	2	2
Input voltage range	V	–	–	–0.1 ... 0.1	–0.1 ... 0.1
Measurement resolution	Bit	16	16	16	16
Max. temperature	°C	–25 ... +60			
Max. humidity	%	5 ... 95, no condensation			
Mass	g	144	215	144	203
Dimensions (W x H x D)	mm	35 x 126.1 x 54	53.6 x 126.1 x 54	35 x 126.1 x 54	53.6 x 126.1 x 54

For order details on GoTo products, see page 95

IndraControl S20
Input module with counter and incremental encoder inputs S20-CNT-INC-2/2 or S20-INC-2



- IP20 rating
- Electronic device nameplate
- Diagnostic and status indicators

Features

- 2 counter inputs (32 bit)
- 2 incremental value encoder interfaces (32 bit) for symmetric or asymmetric encoders
- 8, 10 digital inputs (gate, direction signal, latch, reference switch)
- 2 digital outputs
- 1-wire sensor connection (2- and 3-wire optional)

Product description

The IndraControl S20 modules are used for counting pulses and detecting positions with incremental encoders. They are connected locally to the IndraControl XM controller or remotely using an IndraControl S20 fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory	
Data sheet	DOC-CONTRL-S20*CNT*INC-DA	DOC-CONTRL-S20*INC*2**-DA

Technical data

		S20-CNT-INC-2/2	S20-INC-2
Encoder inputs		2 (incremental value encoders)	2 (incremental value encoders)
Input description		Symmetric or asymmetric encoders	Symmetric or asymmetric encoders
Digital inputs		8	10
Rated input voltage $V_{RatedIn}$	VDC	24	24
Counter inputs		2 (S1, S2)	–
Input frequency	kHz	300/150 (depending on circuitry)	–
Digital outputs		2 (Out1, Out2)	2 (Out1, Out2)
Rated output voltage V_{Out}	VDC	24	24
Rated current I_{Rated} per channel	A	0.5	0.5
Max. temperature	°C	–25 ... +60	–25 ... +60
Max. humidity	%	5 ... 95, no condensation	5 ... 95, no condensation
Mass	g	205	205
Dimensions (W x H x D)	mm	35 x 126.1 x 54	53.6 x 126.1 x 54

For order details on GoTo products, see page 95

IndraControl S20
Detection module for SSI absolute value encoders
S20-SSI-AO-1/1

- IP20 rating
- Electronic device nameplate
- Diagnostic and status indicators

Features

- Position detection with absolute encoders with SSI interface
- Encoder resolution up to 56 bit
- Transfer frequency up to 2 MHz
- Gray or binary code
- Reverse spin direction

Product description

This IndraControl S20 module is used to detect positions with absolute encoders with SSI interface. An analog output used, e.g., to preset the command value of a drive controller can also be used. The module is connected locally to the IndraControl XM controller or remotely using an IndraControl S20 fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-S20*SSI*AO1-DA

Technical data

Encoder input		1 (incremental value encoders)
Input description		Symmetric or asymmetric encoders with SSI interface
Resolution	Bit	8 ... 56 (parameterizable)
Transfer frequency	MHz	2
Analog outputs		1
Output voltage range	V	0 ... 5, –5 ... 5, 0 ... 10, –10 ... 10
Output current range	mA	0 ... 20, 4 ... 20, –20 ... 20
No. wires in actuator connection		2 (shielded, twisted pair)
Connection type		Direct-insert spring-cage
Max. temperature	°C	–25 ... +60
Max. humidity	%	5 ... 95, no condensation
Mass	g	135
Dimensions (W x H x D)	mm	35 x 126.1 x 54

IndraControl S20
Detection module for SSI absolute value encoders with analog I/O
S20-AI6-AO2-SSI2

- IP20 rating
- Electronic device nameplate
- Diagnostic and status indicators

Features

- 6 analog inputs
- 2 analog outputs
- 2 inputs for position detection with absolute encoders with SSI interface
- Synchronous data processing (with S20-S3-BK+)

Product description

This IndraControl S20 module is used to control two hydraulic axes. The following inputs/outputs are available per hydraulic axis: three analog inputs, a digital position detection via SSI and an analog output for actuating continuous valves.
The module is connected locally to the IndraControl XM controller or remotely using an IndraControl S20 fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-S20AI6AO2SI-AP

Technical data

Encoder inputs		2 (incremental value encoders)
Input description		Symmetric or asymmetric encoders
Analog inputs		6 (differential inputs, voltage or current individually selectable)
No. wires in sensor connection		2
Input voltage range	V	0.1 ... 10, 0 ... 10, −10 ... 10
Input current range	mA	±10, ±20, 0 ... 20 mA, 4 ... 20 mA
Analog outputs		2
Output voltage range	V	0 ... 10, −10 ... 10
Output current range	mA	±10 mA, ±20 mA, 0 ... 20 mA, 4 ... 20 mA
No. wires in actuator connection		2 (shielded, twisted pair)
Max. temperature	°C	−25 ... +60
Max. humidity	%	5 ... 95, no condensation
Mass	g	205
Dimensions (W x H x D)	mm	53.6 x 126.1 x 54

For order details on GoTo products, see page 95

IndraControl S20
Communication module for serial data transmission
S20-RS-UNI

- IP20 rating
- Electronic device nameplate
- Diagnostic and status indicators

Features

- 1 serial channel
- RS232, RS485/422
- Configurable baud rate

Product description

This IndraControl S20 module is used to connect devices with RS232-, RS485/422 interfaces. The module is connected locally to the IndraControl XM controller or remotely using an IndraControl S20 fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-S20*RS*UNI*-DA

Technical data

Serial interface		RS232, RS485/422
Max. configurable transfer rate	kBit/s	110 ... 250
Connection type		Direct-insert spring-cage
Input buffer	kByte	4
Output buffer	kByte	1
Data bits		5 ... 8
Stop bits		1 or 2
Max. temperature	°C	–25 ... +60
Max. humidity	%	5 ... 95, no condensation
Mass	g	135
Dimensions (W x H x D)	mm	35 x 126.1 x 54

IndraControl S20
Digital PROFISafe safety input modules
S20-PSDI-8/4

- IP20 rating
- Electronic device nameplate
- Diagnostic and status indicators

Features

- 8/4 secure digital inputs
- SIL 3 according to EN 61508
- SILCL 3 according to EN 62061
- Category 4 / PL e according to EN ISO 13849-1
- PROFIsafe

Product description

This IndraControl S20 module is used to record safety-relevant digital input signals in a PROFIsafe system. The module has 4 safe digital inputs for two-channel assignment or 8 safe digital inputs for single-channel assignment. The module is connected locally to the IndraControl XM controller or remotely using an IndraControl S20 fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOK-CONTRL-S20*PSDI*8*-AP

Technical data

Inputs		4 / 8 (twin channel / single channel)
Connection type		Direct-insert spring-cage
No. wires in sensor connection		2, 3 and 4
Rated input voltage $V_{RatedIn}$	VDC	24
Max. current consumption from V_I	mA	4.2
Achievable SIL Claim Limit (EN 62061)		SIL CL 2 = SIL 2 (single channel), SIL CL 3 = SIL 3 (twin channel)
Achievable SIL (EN 61508)		SIL 2 (single channel), SIL 3 (twin channel)
Achievable Performance Level (ISO 13849-1)		PL d (single channel), PL e (twin channel)
Configurable input filter time	µs	< 100, 1000, 3000 (default)
Max. temperature	°C	–25 ... +60
Permissible humidity	%	5 ... 95, no condensation
Mass	g	222
Dimensions (W x H x D)	mm	53.6 x 126.1 x 54

For order details on GoTo products, see page 85

IndraControl S20
Digital PROFISafe safety output modules
S20-PSDO-8/3

- IP20 rating
- Electronic device nameplate
- Diagnostic and status indicators

Features

- 8/4 secure digital outputs
- SIL 3 according to EN 61508
- SILCL 3 according to EN 62061
- Category 4 / PL e according to EN ISO 13849-1
- PROFIsafe

Product description

This IndraControl S20 module is used to output safety-relevant digital signals in a PROFIsafe system. The module has 4 safe digital outputs for two-channel assignment or 8 safe digital outputs for single-channel assignment. The module is connected locally to the IndraControl XM controller or remotely using an IndraControl S20 fieldbus coupler.

More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-S20*PSDO*8*-AP

Technical data

Outputs		4 / 8 (twin channel / single channel)
Connection type		Direct-insert spring-cage
No. wires in sensor connection		2 and 3
Rated output voltage V_{Out}	VDC	24
Rated current I_{Rated} per channel	A	2 (per channel), 4 (per group)
Achievable SIL Claim Limit (EN 62061)		Max. 3 (twin channel; depending on the parametrization and circuitry)
Achievable SIL (EN 61508)		Max. 3 (twin channel; depending on the parametrization and circuitry)
Achievable Performance Level (ISO 13849-1)		Max. e (twin channel; depending on the parametrization and circuitry)
Category		Max. 4 (twin channel; depending on the parametrization and circuitry)
Configurable input filter time	µs	< 100, 1000, 3000 (default)
Max. temperature	°C	–25 ... +60
Permissible humidity	%	5 ... 95, no condensation
Mass	g	222
Dimensions (W x H x D)	mm	53.6 x 126.1 x 54

IndraControl S20
Backup module for the local bus
S20-PWR

- IP20 rating
- Diagnostic and status indicators

Features

- Logic voltage 24 VDC
- Logic power supply 4 A

Product description

This IndraControl S20 module is used to feed the local bus supply within an IndraControl S20 station. The module is connected locally to the IndraControl XM controller or remotely using an IndraControl S20 fieldbus coupler.

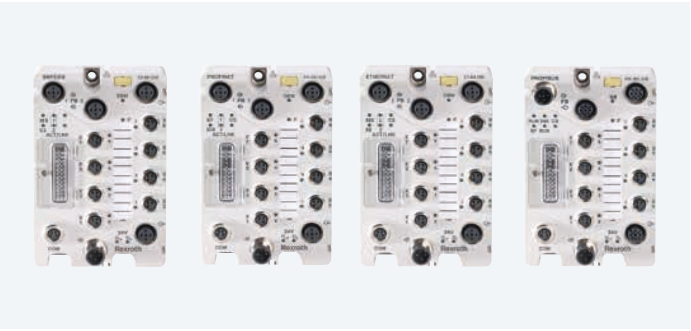
More detailed information:	www.boschrexroth.com/mediadirectory
Data sheet	DOC-CONTRL-S20*PWR****-DA

Technical data

Logic supply voltage	VDC	24
Power supply at IBUS	A	4
Max. temperature	°C	–25 ... +60
Permissible humidity	%	5 ... 95, no condensation
Mass	g	107
Dimensions (W x H x D)	mm	35 x 126.1 x 54

For order details on GoTo products, see page 95

IndraControl S67
Fieldbus coupler with 8 digital inputs
S67-xx-BK-DI8-M8



- IP67 rating
- Interfaces Sercos III, PROFINET, PROFIBUS, Ethernet, EtherNet/IP
- M8 plug for digital inputs
- M12 plug for connection technology
- Diagnostic and status indicators
- Accessories included (module and channel labeling, M8 protective caps)

Features

- 8 x 24 VDC digital inputs
- 2- and 3-wire sensor connection
- Parametrization via description files or DTM
- Lockable control panel (operating mode and address switches)
- Optional carrier rail and profile assembly

Product description

The fieldbus couplers are used to connect the IndraControl S67 I/O modules to the fieldbus system. They come with 8 digital inputs. They support up to 64 modules on the local system bus. The maximum distance between two modules is 50 m, with a maximum total extension of 500 m per station.

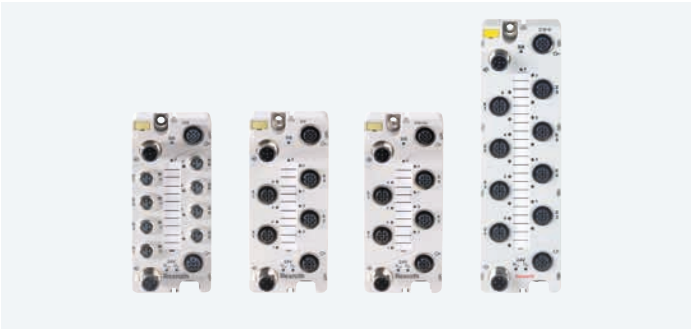
More detailed information:	www.boschrexroth.com/mediadirectory	
Application description	DOC-CONTRL-S67S3BKDI8*-AP	DOC-CONTRL-S67ETBKDI8*-AP
	DOC-CONTRL-S67PNBKDI8*-AP	DOC-CONTRL-S67PBBKDI8*-AP

Technical data

		S67-S3-BK-DI8-M8	S67-PN-BK-DI8-M8	S67-ET-BK-DI8-M8	S67-PB-BK-DI8-M8
Supply voltage	VDC	24	24	24	24
Fieldbus system		Sercos III	PROFINET RT	EtherNet/IP o. Ethernet	PROFIBUS DP
Fieldbus system connection type		B-coded 5-pin shielded M12 plug			
Digital inputs		8			
Rated input voltage U_{IN}	VDC	24			
Sensor connection type		A-coded 3-pin M8 plug			
Local bus connection type		B-coded 5-pin shielded M12 plug			
Max. local bus nodes		64			
Max. temperature	°C	–25 ... +60			
Mass	g	360	360	360	360
Dimensions (W x H x D)	mm	75 x 117 x 35	75 x 117 x 35	75 x 117 x 35	75 x 117 x 35

For order details on GoTo products, see page 96

IndraControl S67
Digital input modules
S67-DI8-Mxx



- IP67 rating
- M8 or M12 plug for connection technology
- Diagnostic and status indicators
- Accessories included (module and channel labeling, M8 or M12 protective caps)

Features

- Digital input modules
- 8 digital inputs
- 8x M8, 4x M12 (double assigned), 8x M12
- Some high-speed-capable
- 2- and 3-wire sensor connection
- Optional carrier rail and profile assembly

Product description

This IndraControl S67 module reads digital input signals from, e.g., keys, limit switches or proximity switches. It is connected remotely using an IndraControl S67 fieldbus coupler. Parameters are set through the fieldbus coupler and offer a broad range of diagnostic options. The maximum distance between two modules in an IndraControl S67 station is 50 m, with a maximum total extension of 500 m.

More detailed information:	www.boschrexroth.com/mediadirectory	
Application description	DOC-CONTRL-S67DI8M8***-AP DOC-CONTRL-S67DI8M12**-AP	DOC-CONTRL-S67DI8M12HS-AP DOC-CONTRL-S67DI8M12*8-AP

Technical data

		S67-DI8-M8	S67-DI8-M12	S67-DI8-HS-M12	S67-DI8-M12x8
Digital inputs		8 (8x M8)	8 (4x M12, double assigned)		8 (8x M12)
Fieldbus system connection type		3-pin M8 plug	A-coded 5-pin M12 plug	A-coded 5-pin M12 plug, double assigned	A-coded 4-pin M12 plug
Rated input voltage U_{IN}	VDC	24	24	24	24
Nominal input current at U_{IN}	mA	7.3	7.3	2.3	7.3
Design		Type 2 in accordance with IEC 61131-2	Type 2 in accordance with IEC 61131-2	Type 3 in accordance with IEC 61131-2	Type 2 in accordance with IEC 61131-2
No. wires in sensor connection		2 and 3	2 and 3	2 and 3	2 and 3
Local bus connection type		B-coded 3-pin shielded M12 plug			
Max. temperature	°C	–25 ... +60			
Weight	g	270	282	270	361
Dimensions (W x H x D)	mm	50 x 117 x 35	50 x 117 x 35	50 x 117 x 35	50 x 170 x 35

For order details on GoTo products, see page 96

IndraControl S67
Digital output modules
S67-DO8-Mxx

- IP67 rating
- M8 or M12 plug for connection technology
- Diagnostic and status indicators
- Accessories included (module and channel labeling, M8 or M12 protective caps)

Features

- Digital output modules
- 8x 24 VDC digital outputs (0.5 or 2 A)
- 8x M8, 4x M12 (double assigned), 8x M12
- Some high-speed-capable
- 2- and 3-wire sensor connection
- Optional carrier rail and profile assembly

Product description

This IndraControl S67 module is used for the output of digital signals. The 2 A variants are used to control solenoid valves, contactors, encoders, relays or other electrical loads. It is connected remotely using an IndraControl S67 fieldbus coupler. Parameters are set through the fieldbus coupler and offer a broad range of diagnostic options. The maximum distance between two modules in an IndraControl S67 station is 50 m, with a maximum total extension of 500 m.

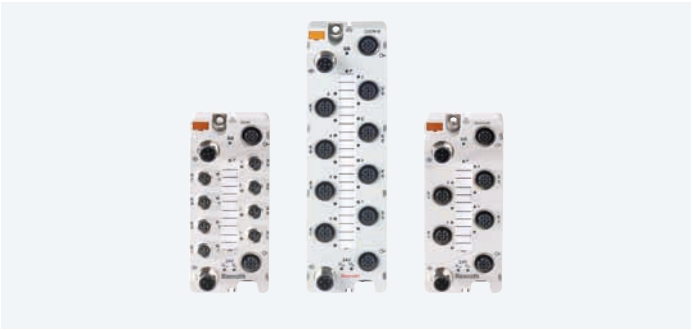
More detailed information:	www.boschrexroth.com/mediadirectory		
Application description	DOC-CONTRL-S67DO8M8***-AP	DOC-CONTRL-S67DO8M12**-AP	DOC-CONTRL-S67DO8M122A-AP
	DOC-CONTRL-S67DO8M82A*-AP	DOC-CONTRL-S67DO8M12HS-AP	DOC-CONTRL-S67DO8M12*8-AP

Technical data

		S67-DO8-M8	S67-DO8-M8-2A	S67-DO8-M12	S67-DO8-HS-M12	S67-DO8-M12-2A	S67-DO8-M12x8
Digital outputs		8	8	8 (4x M12, double assigned)			8 (8x M12)
Fieldbus system connection type		M8 plug 3-pin		M12 plug A-coded, 5-pin, double assigned		M12 plug 3-pin	A-coded, 4-pin
Rated output voltage U_{OUT}	VDC	24	24	24	24	24	24
Rated current I_{Nenn} per channel	A	0.5	2	0.5	0.1	2	0.5
Total output current	A	4	8	4	0.8	8	8
No. wires in connection		2 and 3	2 and 3	2 and 3	2 and 3	2 and 3	2 and 3
Local bus connection type		B-coded 5-pin shielded M12 plug					
Max. temperature	°C	–25 ... +60					
Weight	g	270	277	260	260	250	385
Dimensions (W x H x D)	mm	50 x 117 x 35	50 x 117 x 35	50 x 117 x 35	50 x 117 x 35	50 x 117 x 35	50 x 170 x 35

For order details on GoTo products, see page 96

IndraControl S67
Digital input/output modules
S67-DIOx-Mxx



- IP67 rating
- M8 or M12 plug for connection technology
- Diagnostic and status indicators
- Accessories included (module and channel labeling, M8 or M12 protective caps)

Features

- Digital input/output modules
- 8x 24 VDC digital inputs/outputs (0.2 or 0.5 A)
- 8x M8, 4x M12 (double assigned), 8x M12, partly high-speed-capable
- 2- and 3-wire sensor and actuator connection
- Optional carrier rail and profile assembly

Product description

This IndraControl S67 module is used to read and output digital signals. It is connected remotely using an IndraControl S67 fieldbus coupler. Parameters are set through the fieldbus coupler and offer a broad range of diagnostic options. The maximum distance between two modules in an IndraControl S67 station is 50 m, with a maximum total extension of 500 m.

More detailed information:	www.boschrexroth.com/mediadirectory		
Application description	DOC-CONTRL-S67DIO8M8**-AP	DOC-CONTRL-S67DIO8M12*-AP	DOC-CONTRL-S67DIO4M12H-AP

Technical data

		S67-DIO8-M8	S67-DIO8-M12x8	S67-DIO4-HS-M12
Digital inputs/outputs		8	8	4
Fieldbus system connection type		A-coded 3-pin M8 plug	A-coded 3-pin M12 plug	A-coded 4-pin M12 plug
Rated input voltage U_{INenn}	VDC	24	24	24
Rated input current at U_{INenn}	mA	3	7	2.9
Input design		Type 1 in accordance with IEC 61131-2	Type 2 in accordance with IEC 61131-2	Type 1 in accordance with IEC 61131-2
Rated output voltage U_{Out}	VDC	24	24	24
Rated current I_{Nenn} per channel	A	0.5	0.5	0.2
No. wires in connection		2 and 3	2 and 3	2 and 3
No. counter inputs		2 of 8 channels configurable as counter inputs		1
Max. temperature	°C	–25 ... +60		
Weight	g	260	361	255
Dimensions (W x H x D)	mm	50 x 117 x 35	50 x 170 x 35	50 x 117 x 35

For order details on GoTo products, see page 96

IndraControl S67
Analog input module
S67-AI4-U/I-M12

- IP67 rating
- M12 plug for connection technology
- Diagnostic and status indicators
- Accessories included (module and channel labeling, M8 or M12 protective caps)

Features

- 4 analog inputs
- 4x M12 plugs
- 2-, 3- and 4-wire sensor connection
- Optional carrier rail and profile assembly

Product description

This IndraControl S67 module reads analog voltage or current signals. It is connected remotely using an IndraControl S67 fieldbus coupler. Parameters are set through the fieldbus coupler and offer a broad range of diagnostic options. The maximum distance between two modules in an IndraControl S67 station is 50 m, with a maximum total extension of 500 m.

More detailed information:	www.boschrexroth.com/mediadirectory
Application description	DOC-CONTRL-S67AI4UI***-AP

Technical data

Analog inputs		4
No. wires in sensor connection		2, 3 and 4
Power	VDC	24
Power range	VDC	18 ... 31.2
Input voltage range	VDC	0 ... 10, ±10
Input current range	mA	0 ... 20, ±20, 4 ...20
Max. temperature	°C	–25 ... +60
Weight	g	282
Dimensions (W x H x D)	mm	50 x 117 x 35

IndraControl S67
Analog module with 4 voltage/current outputs (4x M12)
S67-AO4-U/I-M12

- IP67 rating
- M12 plug for connection technology
- Diagnostic and status indicators
- Accessories included (module and channel labeling, M8 or M12 protective caps)

Features
- 4 analog outputs
- 4x M12 plugs
- 2-, 3- and 4-wire actuator connection
- Optional carrier rail and profile assembly

Product description
This IndraControl S67 module is used for the output of analog voltage or current signals. It is connected remotely using an IndraControl S67 fieldbus coupler. Parameters are set through the fieldbus coupler and offer a broad range of diagnostic options. The maximum distance between two modules in an IndraControl S67 station is 50 m, with a maximum total extension of 500 m.

More detailed information:	www.boschrexroth.com/mediadirectory
Application description	DOC-CONTRL-S67AO4UI***-AP

Technical data

Analog outputs		4
No. wires in actuator connection		2, 3 and 4
Power	VDC	24
Power range	VDC	18 ... 31.2
Output voltage range	VDC	0 ... 10, ±10
Output current range	mA	0 ... 20, ±20, 4 ... 20
Max. temperature	°C	–25 ... +60
Weight	g	282
Dimensions (W x H x D)	mm	50 x 117 x 35

For order details on GoTo products, see page 96

IndraControl S67
Temperature module with 4 resistive temperature sensor inputs S67-AI4-RTD-M12

- IP67 rating
- Resistive temperature sensor ports
- Diagnostic and status indicators
- Accessories included (module and channel labeling, M12 protective caps)

Features

- 4 analog inputs
- 4x M12 plugs
- Supported sensor types: Pt, Ni
- 2-, 3- and 4-wire sensor connection
- Optional carrier rail and profile assembly

Product description

This IndraControl S67 module reads resistive temperature sensors. It is connected remotely using an IndraControl S67 fieldbus coupler. Parameters are set through the fieldbus coupler and offer a broad range of diagnostic options. The maximum distance between two modules in an IndraControl S67 station is 50 m, with a maximum total extension of 500 m.

More detailed information:	www.boschrexroth.com/mediadirectory
Application description	DOC-CONTRL-S67AI4RTD**-AP

Technical data

Analog inputs		4
Connection type		A-coded 5-pin M12 plug
Supported sensor types		Pt, Ni
Accuracy	°C	±0.05
No. wires in sensor connection		2, 3 and 4
Measurement resolution	Bit	16
Process data update	ms	2 ... 120
Local bus connection type		B-coded 5-pin shielded M12 plug
Max. temperature	°C	–25 ... +60
Weight	g	230
Dimensions (W x H x D)	mm	50 x 117 x 35

IndraControl S67
Temperature module with 4 thermo element inputs
S67-AI4-UTH-M12

- IP67 rating
- M12 plug for connection technology
- Diagnostic and status indicators
- Accessories included (module and channel labeling, M8 or M12 protective caps)

Features
- 4 analog inputs
- 4x M12 plugs
- Supported thermo elements: (TC) B, C, E, J, K, L, N, R, S, T
- 2-wire sensor connection
- Optional carrier rail and profile assembly

Product description
This IndraControl S67 module reads TC temperature sensors. It is connected remotely using an IndraControl S67 fieldbus coupler. Parameters are set through the fieldbus coupler and offer a broad range of diagnostic options. The maximum distance between two modules in an IndraControl S67 station is 50 m, with a maximum total extension of 500 m.

More detailed information:	www.boschrexroth.com/mediadirectory
Application description	DOC-CONTRL-S67AI4TC***-AP

Technical data

Analog inputs		4
Fieldbus system connection type		A-coded 5-pin M12 plug
Supported sensor types		B, C, E, J, K, L, N, R, S, T, optional as PT1000 resistor (cold-junction)
No. wires in sensor connection		2
Measurement resolution	Bit	16
Process data update	ms	< 480
Local bus connection type		B-coded 5-pin shielded M12 plug
Max. temperature	°C	–25 ... +60
Weight	g	255
Dimensions (W x H x D)	mm	50 x 117 x 35

IndraControl S67
Power module
S67-PWR-IN-M12

- IP67 rating
- Power for U_{LS}
- Power for U_A
- Diagnosis indicators
- Accessories included (module and channel labeling, M12 protective caps)

Features

- 1 power input (24 VDC, 16 A, M23 plug for connection technology)
- 6 power outputs (8 A, M12 plugs)
- 19.2 ... 30 VDC power range
- Optional carrier rail and profile assembly

Product description

This passive supply module is used to supply power to IndraControl S67 components. Its ability to supply individual components or form power groups allows it to power I/O nodes with long extensions. The maximum distance between two modules in an IndraControl S67 station is 50 m, with a maximum total extension of 500 m.

More detailed information:	www.boschrexroth.com/mediadirectory
Application description	DOC-CONTRL-S67PWRINM12-AP

Technical data

Inputs		1
Connection type		6-pin M23 plug
Outputs		6
Connection type		A-coded 4-pin M12 plug
Logic and sensor power U_{LS}	VDC	24
Actuator power for U_A	VDC	24
Connection current carrying capacity	A	Max. 8 (U_{LS}: 4; U_A: 4)
Module current carrying capacity	A	Max. 24 (U_{LS}: 8; U_A: 16)
Max. temperature	°C	–25 ... +60
Weight	g	276
Dimensions (W x H x D)	mm	50 x 117 x 43.3

IndraControl S67
HTL encoder and counter module
S67-HTL-INC-M12

- IP67 rating
- M12 plug for connection technology
- Diagnostic and status indicators
- Accessories included (module and channel labeling, M12 protective caps)

Features

- 2 HTL encoder/counter interfaces
- 4 digital inputs/outputs
- 2- and 3-wire sensor and actuator connection
- Optional carrier rail and profile assembly

Product description

This IndraControl S67 module is used to read incremental value encoders or counters. It is connected remotely using an IndraControl S67 fieldbus coupler. Parameters are set through the fieldbus coupler and offer a broad range of diagnostic options. The maximum distance between two modules in an IndraControl S67 station is 50 m, with a maximum total extension of 500 m.

More detailed information:	www.boschrexroth.com/mediadirectory
Application description	DOC-CONTRL-S67HTLM12**-AP

Technical data

Digital inputs/outputs		4
Fieldbus system connection type		A-coded 5-pin M12 plug
Rated input voltage U_{INenn}	VDC	24
Design		Type 3 in accordance with EN 61131-2
Rated output voltage U_{Out}	VDC	24
No. wires in sensor connection		2 and 3
Front-end processing time (hardware)	µs	< 3
Counter inputs		2
Incremental value encoder input		2
Connection type		A-coded 8-pin shielded M12 plug
Cutoff frequency	kHz	250
Encoder power	VDC	5/24
Weight	g	270
Dimensions (W x H x D)	mm	50 × 117 × 35

For order details on GoTo products, see page 96

IndraControl S67
TTL and SSI encoder module
S67-SSI-INC-M12

- IP67 rating
- M12 plug for connection technology
- Diagnostic and status indicators
- Accessories included (module and channel labeling, M12 protective caps)

Features

- 2 TTL/SSI encoder interfaces
- 4 digital inputs/outputs
- 2- and 3-wire sensor and actuator connection
- Optional carrier rail and profile assembly

Product description

This IndraControl S67 module is used to read SSI and incremental value encoders. It is connected remotely using an IndraControl S67 fieldbus coupler. Parameters are set through the fieldbus coupler and offer a broad range of diagnostic options. The maximum distance between two modules in an IndraControl S67 station is 50 m, with a maximum total extension of 500 m.

More detailed information:	www.boschrexroth.com/mediadirectory
Application description	DOC-CONTRL-S67TTLM12**-AP

Technical data

Digital inputs/outputs		4
Fieldbus system connection type		A-coded 5-pin M12 plug
Rated input voltage U_{INenn}	VDC	24
Design		Type 3 in accordance with EN 61131-2
Rated output voltage U_{Out}	VDC	24
No. wires in sensor connection		2 and 3
Front-end processing time (hardware)	µs	< 3
Counter inputs		2
Incremental value encoder inputs		2
Connection type		A-coded 8-pin shielded M12 plug
Cutoff frequency	kHz	1000
Encoder power	VDC	5/24
Weight	g	270
Dimensions (W x H x D)	mm	50 × 117 × 35

For order details on GoTo products, see page 96

IndraControl S67
Communication module for serial data transfer (RS232/485/422)
S67-RS-UNI-M12

- IP67 rating
- M8 or M12 plug for connection technology
- Diagnostic and status indicators
- Accessories included (module and channel labeling, M8 or M12 protective caps)

Features

- 2 serial channels
- RS232, RS485/422
- 3 ... 115.2 kBaud
- 4 digital inputs/outputs
- 2- and 3-wire sensor and actuator connection
- Optional carrier rail and profile assembly

Product description

This IndraControl S67 module is used to connect devices with RS232 and RS485/422 interfaces. It is connected remotely using an IndraControl S67 fieldbus coupler. Parameters are set through the fieldbus coupler and offer a broad range of diagnostic options. The maximum distance between two modules in an IndraControl S67 station is 50 m, with a maximum total extension of 500 m.

More detailed information:	www.boschrexroth.com/mediadirectory
Application description	DOC-CONTRL-S67RSUNIM12-AP

Technical data

Serial interface		2 (RS232, RS485, RS422)
Max. configurable transfer rate	kBaud	3 ... 115.2
Fieldbus system connection type		A-coded 5-pin M12 plug
Digital inputs/outputs		4
Connection type		5-pin M12 plug
Rated input voltage U_{INenn}	VDC	24
Rated input current at U_{INenn}	mA	7.3
Input design		Type 2 in accordance with IEC 61131-2
Rated output voltage U_{Out}	VDC	24
Rated current I_{Nenn} per channel	A	0.5
No. wires in sensor/actuator connection		2 and 3
Max. temperature	°C	–25 ... +60
Weight	g	255
Dimensions (W x H x D)	mm	50 x 170 x 35

For order details on GoTo products, see page 96

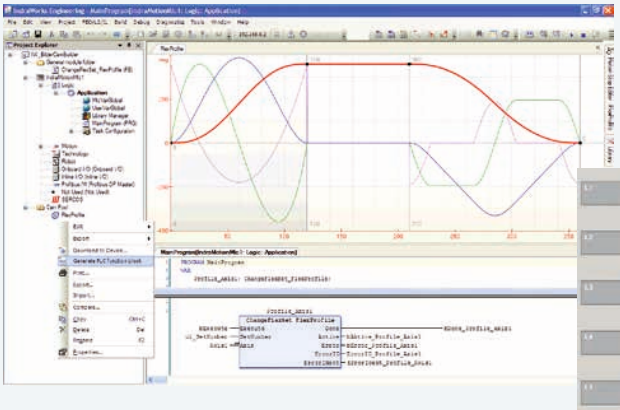
Engineering tools

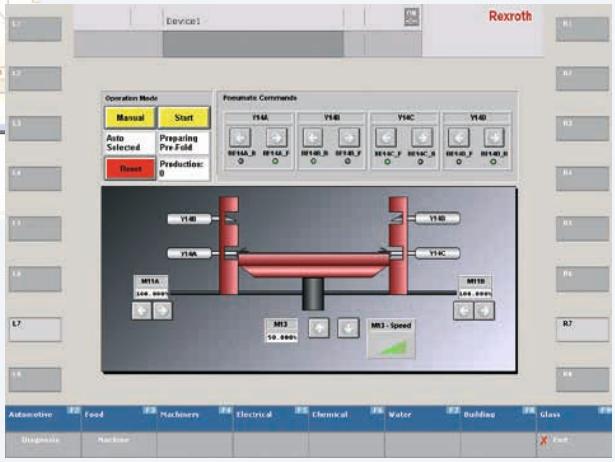
The IndraWorks engineering framework has all the engineering tools you need.

With all languages needed for PLC programming in accordance with IEC 61131-3 3rd edition, PLCopen-compliant motion blocks and technology blocks, you are able to implement your automation solutions quickly and transparently.

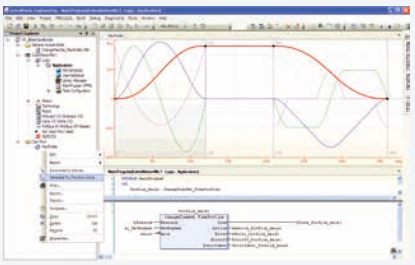
Intuitive wizards guide you through every engineering step. This allows you to set parameters for controllers and motion axes clearly and easily, even offline. Configure I/O peripherals using integrated configurators. A comprehensive range of tools for commissioning or service, such as a four-channel oscilloscope, logic analyzer and debugging functions for PLC logic, offers a variety of status messages and system diagnostics at the push of a button.

Solution-oriented function packages, such as CamBuilder for creating cams or WinStudio for creating visualization interfaces, are universally available in IndraWorks.
The Generic Application Template (GAT) provides the ideal requirements for developing modular machine software. Based on templates, GAT uses wizards to automatically create an executable machine program according to the project engineer's specifications, substantially increasing engineering speed.
The Team Engineering function package connects version control systems to allow multiple engineers to efficiently work on the same machines and systems at the same time.





IndraWorks Engineering
Universal tool for software engineering



- All tools integrated with standardized, central data management
- Standardized programming in accordance with PLC standard IEC 61131-3 3rd edition
- Solution-oriented function packages
- Intelligent, wizard-supported operation

Features

- Standardized engineering tool for PLC programming, HMI creation, drive parameterization, and much more
- Powerful cam editor
- WinStudio visualization toolbox
- Version management
- Open integration interfaces
- Comprehensive online help and diagnostic tools
- Supports standardized interfaces, such as OPC UA
- Consistent data storage – PLC, motion and HMI in one project

Product description

IndraWorks Engineering is a standardized and intuitive software environment for everything related to PLC-based automation and drive commissioning. All of the basic tools, including CODESYS V3, are universally available. Users benefit from quick and transparent access to all functions and system data for automation components. The software offers universal operation based on current Windows technologies and extensive wizards for controller, drive, and peripheral project planning.

More detailed information:	www.boschrexroth.com/mediadirectory	
Application description	DOC-IWORKS-ENGINEE*V12-AP	DOC-IWORKS-ENGINEE*V13-AP

Technical data

Supported systems	**IndraLogic XLC**	**IndraMotion MLC**	**IndraMotion MTX**
IndraWorks ML* install medium	●	●	–
IndraWorks MTX install medium	o	–	●
Basic functions			
Operating system support (Win XP, Win 7, Win 8)	●	●	●
PLC programming	●	●	●
Drive parameterization	●	●	●
Robotics	●	●	–
Multi-axis interpolation	●	●	●
HMI project planning (WinStudio Lite, 500 variables)	●	●	●
Cam editor	o	o	–
Diagnostics/oscilloscope	●	●	●
NC programming	–	–	●
Version management	o	o	o

● standard – not available o optional

For order details on GoTo products, see page 98

IndraWorks Operation
Universal tool for creating standard user interfaces

- Standardized, preconfigured visualization software
- User-friendly image creation with comprehensive libraries
- Supports web client applications
- Convenient project planning without the need for high-level languages

Features

- Ready-made user interface, including header, user areas, user management and more
- Application-specific upgrading via dialog box-supported project planning in IndraWorks Engineering
- Integration of customer-specific applications such as ActiveX or .NET Controls
- Integrated diagnostics for controller and drive messages
- HMI user interface localization using language modules

Product description

IndraWorks Operation is a standardized HMI interface for operating systems. The ready-made operating concept allows machine visualization to be implemented efficiently. The basic functions included, such as diagnostics, user areas, header and user management, can be easily extended for specific applications. IndraWorks Operation provides easy handling and optimal support using dialog boxes and powerful editors, such as WinStudio. Its modular design reduces commissioning costs, avoids project planning errors, and lowers development costs.

More detailed information:	www.boschrexroth.com/mediadirectory	
Application description	DOC-IWORKS-HMI*****V12-AP	DOC-IWORKS-HMI*****V13-AP

Technical data

Supported systems		**IndraLogic XLC**	**IndraMotion MLC**	**IndraMotion MTX**
IndraWorks ML* install medium		●	●	–
IndraWorks MTX install medium		o	–	●
Basic functions				
Supported operating system	Windows XP/XPe (32-bit)	●	●	●
	Windows 7 (32/64-bit)	●	●	●
WinStudio Runtime	Features of Lite license for 500 variables	●	●	●
General user area concept	Ready-made navigation bars (OP/F/M panels)	●	●	●
	Maintenance and diagnostics	●	●	●
WinStudio license packages	Function and variable expansion from 1,500 to 512,000 tags	o	o	o

● standard – not available o optional

For order details on GoTo products, see page 98

Tightening systems

Hand-held nutrunners
The ErgoSpin features the latest in ergonomic design to fit in your hand as if it were custom-made. The grip ergonomics, light weight and optimal control and display layout increase performance.

Control and power electronics
The hardware platform is based on trendsetting technologies and pays for itself. It has been specially developed for industrial use. System box and compact system come with an unrestricted IP54 rating.

Cables
Rexroth tightening systems feature precise control and consistently reliable measured values for monitoring tightening results. This precision requires a means of transporting data that always works. This is why all Rexroth tightening systems come with integrated digital data communication.

CC-ErgoSpin pistol grip nutrunner
Hand-held nutrunner for function-critical fittings
CC-ESM

- Torque range: 2.4 ... 12 Nm
- Max. output speed: 1090 rpm
- 1/4" quick-change chuck tool holder
- Complies with VDI/VDE2862 for function-critical fittings

Features

- Integrated bright LED
- Standard socket heads
- Tested under full load for 1 million cycles without maintenance

Product description

Pistol grip nutrunner for hard-to-reach fittings. With integrated bright LED for optimal illumination of fittings.

More detailed information:	www.boschrexroth.com/mediadirectory
Catalog	R999000048 (DE) / R999000049 (EN)

Technical data

Type		**CC-ESM012QD**
Torque range	Nm	2.4 ... 12
Max. output speed	rpm	1090
Tool holder	in	1/4 (quick-change chuck)
Weight	kg	1
Length	mm	201

For order details on GoTo products, see page 99

CC-ErgoSpin SlimLine
Hand-held nutrunner for function-critical fittings
CC-ESA

- Torque range: 6 ... 40 Nm
- Max. output speed: 1000 rpm
- 3/8" square tool holder
- Complies with VDI/VDE2862 for function-critical fittings

Features

- Angled head with confusion-free coding and 15° rotating increments
- Integrated, always visible status LEDs
- Tested under full load for 1 million cycles without maintenance

Product description

Right-angle nutrunner with slim angled head for good accessibility to fittings.

More detailed information:	www.boschrexroth.com/mediadirectory
Catalog	R999000048 (DE) / R999000049 (EN)

Technical data

Type		**CC-ESA030S**	**CC-ESA040S**
Torque range	Nm	6 ... 30	8 ... 40
Max. output speed	rpm	800	1000
Tool holder	in	3/8 (square)	3/8 (square)
Weight	kg	1.6	1.7
Length	mm	416	434

Compact system
Control and power electronics for CC-ErgoSpin
CC-CS351

- For controlling CC-ErgoSpin hand-held nutrunners
- For use with function-critical fittings
- Safe and quick start-up
- Tightening results in view

Features

- Robust: IP54, EMC grade IV
- USB and Ethernet interface
- Clear system set-up
- Adjusts easily to new tasks
- Clear view of control and display elements

Product description

A modern and compelling design that consistently arranges the control and display units as well as ports with user-friendliness in mind. The clear layout of the CC-CS351 allows for intuitive operation without complicated configuration. The housing, no larger than a mini tower, comes with an unrestricted IP54 rating.
The CC-CS351 compact system is designed exclusively for operating CC-ErgoSpin hand-held nutrunners.

More detailed information:	www.boschrexroth.com/mediadirectory
Catalog	R999000048 (DE) / R999000049 (EN)

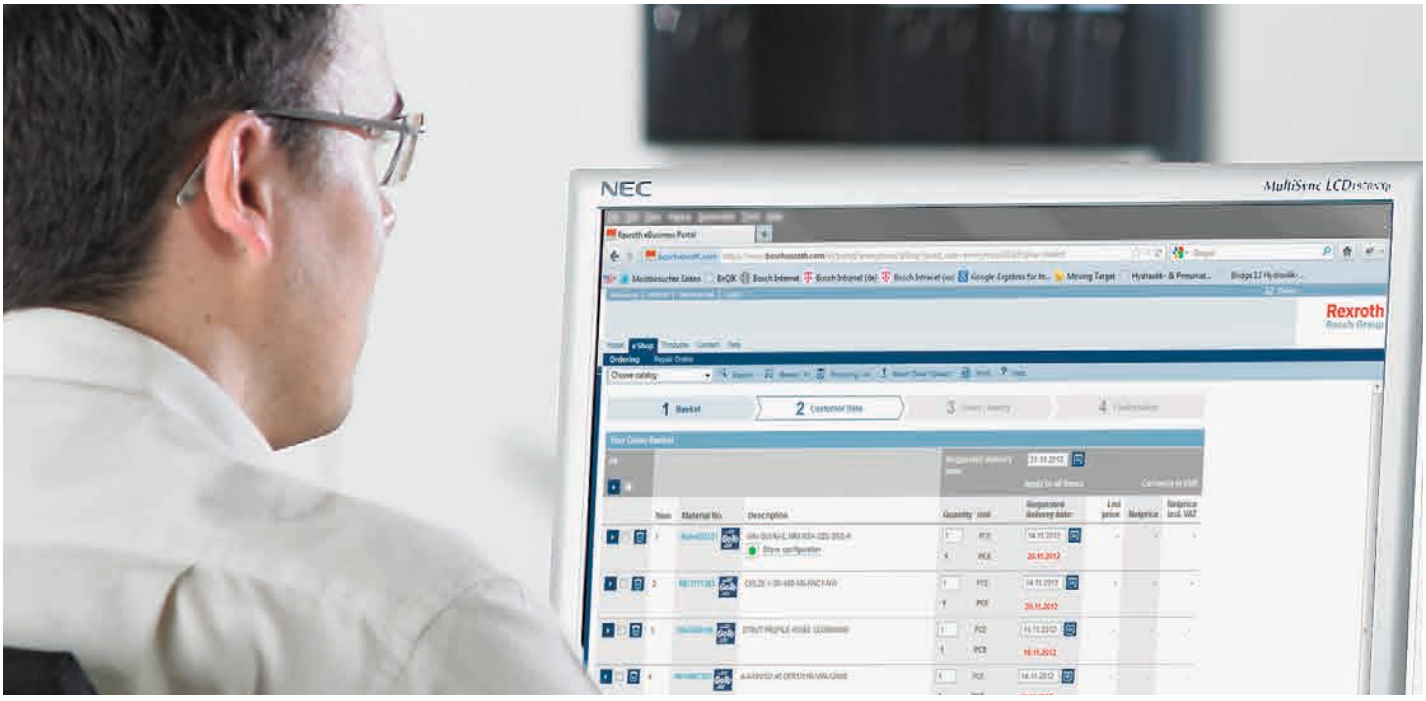
Technical data

Type		**CC-CS351E-D**
Weight	kg	9.5
Dimensions (W x H x D)	mm	210 x 358 x 253

For order details on GoTo products, see page 99

Order details

On the following pages you will find a description and material number for all available GoTo products. You can also find the maximum order quantity and delivery time.



Page	Material number	Type code	Description	Max. GoTo quantity (unit)	Delivery time ex works in Germany (working days)
Frequency converters					
EFC 3610					
8	R912005713	EFC3610-0K40-1P2-MDA-7P-NNNNN-NNNN	0.40 kW, 1 AC 200 ... 240 V, 50/60 Hz, 2.3 A	10	5
	R912005714	EFC3610-0K75-1P2-MDA-7P-NNNNN-NNNN	0.75 kW, 1 AC 200 ... 240 V, 50/60 Hz, 3.9 A	10	5
	R912005715	EFC3610-1K50-1P2-MDA-7P-NNNNN-NNNN	1.50 kW, 1 AC 200 ... 240 V, 50/60 Hz, 7.0 A	10	5
	R912005716	EFC3610-2K20-1P2-MDA-7P-NNNNN-NNNN	2.20 kW, 1 AC 200 ... 240 V, 50/60 Hz, 9.7 A	10	5
	R912005717	EFC3610-0K40-3P4-MDA-7P-NNNNN-NNNN	0.40 kW, 3 AC 380 ... 480 V, 50/60 Hz, 1.2 A	10	5
	R912005718	EFC3610-0K75-3P4-MDA-7P-NNNNN-NNNN	0.75 kW, 3 AC 380 ... 480 V, 50/60 Hz, 2.1 A	10	5
	R912005719	EFC3610-1K50-3P4-MDA-7P-NNNNN-NNNN	1.50 kW, 3 AC 380 ... 480 V, 50/60 Hz, 3.7 A	10	5
	R912005720	EFC3610-2K20-3P4-MDA-7P-NNNNN-NNNN	2.20 kW, 3 AC 380 ... 480 V, 50/60 Hz, 5.1 A	10	5
	R912005721	EFC3610-3K00-3P4-MDA-7P-NNNNN-NNNN	3.00 kW, 3 AC 380 ... 480 V, 50/60 Hz, 7.6 A	10	5
	R912005722	EFC3610-4K00-3P4-MDA-7P-NNNNN-NNNN	4.00 kW, 3 AC 380 ... 480 V, 50/60 Hz, 8.8 A	10	5
	R912005091	EFC3610-5K50-3P4-MDA-7P-NNNNN-NNNN	5.5 kW, 3 AC 380 ... 480 V, 50/60 Hz, 12.7 A	5	5
	R912005092	EFC3610-7K50-3P4-MDA-7P-NNNNN-NNNN	7.5 kW, 3 AC 380 ... 480 V, 50/60 Hz, 16.8 A	5	5
	R912005093	EFC3610-11K0-3P4-MDA-7P-NNNNN-NNNN	11 kW, 3 AC 380 ... 480 V, 50/60 Hz, 24.3 A	5	5
	R912005094	EFC3610-15K0-3P4-MDA-7P-NNNNN-NNNN	15 kW, 3 AC 380 ... 480 V, 50/60 Hz, 32.4 A	5	5
	R912005723	EFC3610-18K5-3P4-MDA-7P-NNNNN-NNNN	18.5 kW, 3 AC 380 ... 480 V, 50/60 Hz, 39.2 A	5	5
EFC 5610					
8	R912005739	EFC5610-0K40-1P2-MDA-7P-NNNNN-NNNN	0.40 kW, 1 AC 200 ... 240 V, 50/60 Hz, 2.3 A	10	5
	R912005740	EFC5610-0K75-1P2-MDA-7P-NNNNN-NNNN	0.75 kW, 1 AC 200 ... 240 V, 50/60 Hz, 3.9 A	10	5
	R912005741	EFC5610-1K50-1P2-MDA-7P-NNNNN-NNNN	1.50 kW, 1 AC 200 ... 240 V, 50/60 Hz, 7.0 A	10	5
	R912005742	EFC5610-2K20-1P2-MDA-7P-NNNNN-NNNN	2.20 kW, 1 AC 200 ... 240 V, 50/60 Hz, 9.7 A	10	5
	R912005743	EFC5610-0K40-3P4-MDA-7P-NNNNN-NNNN	0.40 kW, 3 AC 380 ... 480 V, 50/60 Hz, 1.2 A	10	5
	R912005744	EFC5610-0K75-3P4-MDA-7P-NNNNN-NNNN	0.75 kW, 3 AC 380 ... 480 V, 50/60 Hz, 2.1 A	10	5
	R912005745	EFC5610-1K50-3P4-MDA-7P-NNNNN-NNNN	1.50 kW, 3 AC 380 ... 480 V, 50/60 Hz, 3.7 A	10	5
	R912005746	EFC5610-2K20-3P4-MDA-7P-NNNNN-NNNN	2.20 kW, 3 AC 380 ... 480 V, 50/60 Hz, 5.1 A	10	5
	R912005747	EFC5610-3K00-3P4-MDA-7P-NNNNN-NNNN	3.00 kW, 3 AC 380 ... 480 V, 50/60 Hz, 7.6 A	10	5
	R912005748	EFC5610-4K00-3P4-MDA-7P-NNNNN-NNNN	4.00 kW, 3 AC 380 ... 480 V, 50/60 Hz, 8.8 A	10	5
	R912005099	EFC5610-5K50-3P4-MDA-7P-NNNNN-NNNN	5.5 kW, 3 AC 380 ... 480 V, 50/60 Hz, 12.7 A	5	5
	R912005100	EFC5610-7K50-3P4-MDA-7P-NNNNN-NNNN	7.5 kW, 3 AC 380 ... 480 V, 50/60 Hz, 16.8 A	5	5
	R912005101	EFC5610-11K0-3P4-MDA-7P-NNNNN-NNNN	11 kW, 3 AC 380 ... 480 V, 50/60 Hz, 24.3 A	5	5
	R912005102	EFC5610-15K0-3P4-MDA-7P-NNNNN-NNNN	15 kW, 3 AC 380 ... 480 V, 50/60 Hz, 32.4 A	5	5
	R912005749	EFC5610-18K5-3P4-MDA-7P-NNNNN-NNNN	18.5 kW, 3 AC 380 ... 480 V, 50/60 Hz, 39.2 A	5	5
EFC x610 accessories					
9	R912004657	FRKS0006/002.0	2 m connection cable for user panel	10	5
	R912004410	FRKS0004/003.0	3 m connection cable for user panel	10	5
	R912005783	FPCC02.1-EANN-7P-NNNN	EFCx610 LED control panel, IP20	10	5
	R912005785	FPCC02.1-EANN-NN-NNNN	EFCx610 dust cover, IP20	10	5
	R912005787	FEAM02.1-EANN-NN-NNNN	EFCx610 control panel mounting plate, IP20	10	5
	R912006012	FEAM03.1-001-NN-NNNN	Shielded connection plate for 0.4 ... 4 kW EFCx610	10	5
	R912006013	FEAM03.1-002-NN-NNNN	Shielded connection plate for 5.5 ... 18.5 kW EFCx610	10	5

Page	Material number	Type code	Description	Max. GoTo quantity (unit)	Delivery time ex works in Germany (working days)
	R912006052	FEAE02.1-EA-NNNN	Option module for housing two option cards	10	5
EFC x610 accessories					
9	R912006133	FEAE03.1-CO-NNNN	CANopen card for connecting to a CANopen interface	5	5
	R912006132	FEAE03.1-PB-NNNN	PROFIBUS card for connecting to a PROFIBUS master	5	5
	R912006050	FEAE04.1-IO1-NNNN	I/O extension card for integrating analog and digital I/O	5	5
	R912006051	FEAE04.1-IO2-NNNN	Relay card	5	5
	R912006054	FEAE05.1-B2-NNNN	Replacement plug set for EFC x610	10	5
Brake resistors EFC x610					
9	R911370664	FCAR01.1W0060-N400R0-B-03-NNNN	Brake resistor 60 W 400 Ω for EFC with 230 V, 0.4 kW, at 10 % on-time	5	5
	R911370666	FCAR01.1W0100-N190R0-B-03-NNNN	Brake resistor 100 W 190 Ω for EFC with 230 V, 0.75 kW, at 10 % on-time	5	5
	R911370669	FCAR01.1W0200-N095R0-B-03-NNNN	Brake resistor 200 W 95 Ω for EFC with 230 V, 1.5 kW, at 10 % on-time	5	5
	R911370674	FCAR01.1W0300-N065R0-B-03-NNNN	Brake resistor 300 W 65 Ω for EFC with 230 V, 2.2 kW, at 10 % on-time	5	5
	R911370665	FCAR01.1W0080-N750R0-B-05-NNNN	Brake resistor 80 W 750 Ω for EFC with 400 V, 0.4 ... 0.75 kW, at 10 % on-time	5	5
	R911370671	FCAR01.1W0260-N400R0-B-05-NNNN	Brake resistor 260 W 400 Ω for EFC with 400 V, 1.5 kW, at 10 % on-time	5	5
	R911370673	FCAR01.1W0260-N250R0-B-05-NNNN	Brake resistor 260 W 250 Ω for EFC with 400 V, 2.2 kW, at 10 % on-time	5	5
	R911370675	FCAR01.1W0390-N150R0-B-05-NNNN	Brake resistor 390 W 150 Ω for EFC with 400 V, 3.0 ... 4.0 kW, at 10 % on-time	5	5
	R911370680	FCAR01.1W0780-N075R0-A-05-NNNN	Brake resistor 780 W 75 Ω for EFC with 400 V, 5.5 ... 7.5 kW, at 10 % on-time	5	5
	R911370682	FCAR01.1W1K56-N040R0-A-05-NNNN	Brake resistor 1560 W 40 Ω for EFC with 400 V, 11 ... 15 kW, at 10 % on-time	5	5
	R911370686	FCAR01.1W04K8-N032R0-A-05-NNNN	Brake resistor 4800 W 32 Ω for EFC with 400 V, 18.5 kW, at 10 % on-time	5	5
Mains filter EFC x610					
9	R911370804	FCAF01.1A-A050-E-0010-N-03-NNNN	Mains filter EFC x610 230 V 0.4 ... 0.75 kW	5	5
	R911370805	FCAF01.1A-A050-E-0020-N-03-NNNN	Mains filter, EFC x610 230 V 1.5 kW	5	5
	R911370806	FCAF01.1A-A050-E-0025-N-03-NNNN	Mains filter, EFC x610 230 V 2.2 kW	5	5
	R911370807	FCAF01.1A-A050-E-0025-A-05-NNNN	Mains filter EFC x610 400 V 0.4 ... 4.0 kW	5	5
	R911370811	FCAF01.1A-A050-E-0036-A-05-NNNN	Mains filter EFC x610 400 V 5.5 ... 7.5 kW	5	5
	R911370813	FCAF01.1A-A050-E-0050-A-05-NNNN	Mains filter EFC x610 400 V 11 ... 15 kW	5	5
	R911371977	FCAF01.1A-A050-E-0066-A-05-NNNN	Mains filter, EFC x610 400 V 18.5 kW	5	5

* on -time

Page	Material number	Type code	Description	Max. GoTo quantity (unit)	Delivery time ex works in Germany (working days)
Automation systems					
IndraLogic XLC based on the IndraControl L control					
12	R911334606	FWA-CML25*-XLC-12VRS-D0	PLC firmware, IndraControl L25, Version 12	5	5
	R911334608	FWA-CML45*-XLC-12VRS-D0	PLC firmware, IndraControl L45, Version 12	5	5
	R911334610	FWA-CML65*-XLC-12VRS-D0	PLC firmware, IndraControl L65, Version 12	5	5
	R911337428	FWA-CML25*-XLC-13VRS-D0	PLC firmware, IndraControl L25, Version 13	5	5
	R911337430	FWA-CML45*-XLC-13VRS-D0	PLC firmware, IndraControl L45, Version 13	5	5
	R911337432	FWA-CML65*-XLC-13VRS-D0	PLC firmware, IndraControl L65, Version 13	5	5
	R911342981	FWA-CML25*-XLC-14VRS-D0	PLC firmware, IndraControl L25, Version 14	5	5
	R911342983	FWA-CML45*-XLC-14VRS-D0	PLC firmware, IndraControl L45, Version 14	5	5
	R911371274	FWA-CML75*-XLC-14VRS-D0	PLC firmware, IndraControl L75, Version 14	5	5
IndraLogic XLC based on the IndraControl XM control					
12	R911345727	XM2100.01-01-31-31-001-NN-100N3NN	PLC firmware IndraControl XM21 (Sercos III)	5	5
	R911345644	XM2100.01-01-31-31-301-NN-100N3NN	PLC firmware IndraControl XM21 (Sercos III, PLC, extension module interface)	5	5
	R911346785	XM2200.01-01-31-31-001-NN-100N3NN	PLC firmware IndraControl XM22 (Sercos III)	5	5
	R911346978	XM2200.01-01-31-31-301-NN-100N3NN	PLC firmware IndraControl XM22 (Sercos III, PLC, extension module interface)	5	5
IndraMotion MLC based on the IndraControl L control					
13	R911334607	FWA-CML25*-MLC-12VRS-D0	Motion-Logic firmware, IndraControl L25, Version 12	5	5
	R911334609	FWA-CML45*-MLC-12VRS-D0	Motion-Logic firmware, IndraControl L45, Version 12	5	5
	R911334611	FWA-CML65*-MLC-12VRS-D0	Motion-Logic firmware, IndraControl L65, Version 12	5	5
	R911337429	FWA-CML25*-MLC-13VRS-D0	Motion-Logic firmware, IndraControl L25, Version 13	5	5
	R911337431	FWA-CML45*-MLC-13VRS-D0	Motion-Logic firmware, IndraControl L45, Version 13	5	5
	R911337433	FWA-CML65*-MLC-13VRS-D0	Motion-Logic firmware, IndraControl L65, Version 13	5	5
	R911342982	FWA-CML25*-MLC-14VRS-D0	Motion-Logic firmware, IndraControl L25, Version 14	5	5
	R911342984	FWA-CML45*-MLC-14VRS-D0	Motion-Logic firmware, IndraControl L45, Version 14	5	5
	R911371275	FWA-CML75*-MLC-14VRS-D0	Motion-Logic firmware, IndraControl L75, Version 14	5	5

Page	Material number	Type code	Description	Max. GoTo quantity (unit)	Delivery time ex works in Germany (working days)
IndraMotion MLC based on the IndraControl XM control					
13	R911345728	XM2100.01-01-31-31-001-NN-108N3NN	Motion-Logic firmware IndraControl XM21 (Sercos III, PLC, Motion Control, technology functions, Robot Control, hydraulics)	5	5
	R911346976	XM2100.01-01-31-31-301-NN-108N3NN	Motion-Logic firmware IndraControl XM21 (Sercos III, PLC, extension module interface, Motion Control, technology functions, Robot Control, hydraulics)	5	5
	R911345767	XM2200.01-01-31-31-001-NN-108N3NN	Motion-Logic firmware IndraControl XM22 (Sercos III, PLC, Motion Control, technology functions, Robot Control, hydraulics)	5	5
	R911346977	XM2200.01-01-31-31-301-NN-108N3NN	Motion-Logic firmware IndraControl XM22 (Sercos III, PLC, extension module interface, Motion Control, technology functions, Robot Control, hydraulics)	5	5
IndraMotion MTX based on the IndraControl L control					
14	R911342875	FWA-CML45*-MTX-14VRS-NN	CNC firmware, IndraControl L45, Version 14	5	5
	R911372430	FWA-CML75*-MTX-14VRS-NN	CNC firmware, IndraControl L75, Version 14	5	5
	R911342877	FWA-CML85*-MTX-14VRS-NN	CNC firmware, IndraControl L85, Version 14	5	5

Control hardware

IndraControl L, controllers					
15	R911171363	CML25.1-3N-400-NN-NNC1-NW	Controller IndraControl L25, Sercos III	5	5
	R911170828	CML45.1-3P-500-NA-NNNN-NW	Controller IndraControl L45, Sercos III, configurable fieldbus interface	5	5
	R911170900	CML65.1-3P-500-NA-NNNN-NW	Controller IndraControl L65, Sercos III, configurable fieldbus interface	5	5
	R911171674	CML85.1-3P-705-FA-NNNN-NW	Controller IndraControl L85, Sercos III, configurable fieldbus interface	5	5
IndraControl L, function modules					
16	R911170009	CFL01.1-Q2	Function module for IndraControl L, Sercos II cross-communication	5	5
	R911170008	CFL01.1-R3	Function module for IndraControl L, Sercos III	5	5
	R911170832	CFL01.1-TP	Function module for IndraControl L, RT Ethernet/PROFIBUS	5	5
IndraControl L, accessories					
–	R911171153	CAL01.1-F2	Fan module for IndraControl Lx5	5	5
	R911299856	R-IB IL CML S01-PLSET	Plug set for IndraControl Lxx	5	5

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Control hardware					
IndraControl XM, controllers					
17	R911345727	XM2100.01-01-31-31-001-NN-100N3NN	Controller IndraControl XM21 (Sercos III, PLC)	5	5
	R911345644	XM2100.01-01-31-31-301-NN-100N3NN	Controller IndraControl XM21 (Sercos III, PLC, extension module interface)	5	5
	R911345728	XM2100.01-01-31-31-001-NN-108N3NN	Controller IndraControl XM21 (Sercos III, PLC, Motion Control, technology functions, Robot Control, hydraulics)	5	5
	R911346976	XM2100.01-01-31-31-301-NN-108N3NN	Controller IndraControl XM21 (Sercos III, PLC, extension module interface, Motion Control, technology functions, Robot Control, hydraulics)	5	5
	R911346785	XM2200.01-01-31-31-001-NN-100N3NN	Controller IndraControl XM22 (Sercos III, PLC)	5	5
	R911346978	XM2200.01-01-31-31-301-NN-100N3NN	Controller IndraControl XM22 (Sercos III, PLC, extension module interface)	5	5
	R911345767	XM2200.01-01-31-31-001-NN-108N3NN	Controller IndraControl XM22 (Sercos III, PLC, Motion Control, technology functions, Robot Control, hydraulics)	5	5
	R911346977	XM2200.01-01-31-31-301-NN-108N3NN	Controller IndraControl XM22 (Sercos III, PLC, extension module interface, Motion Control, technology functions, Robot Control, hydraulics)	5	5
IndraControl XM, extension module					
18	R911173397	XFE01.1-FB-03	Extension module for IndraControl XM (RT-Ethernet-Master)	5	5
	R911173398	XFE01.1-FB-10	Extension module for IndraControl XM (PROFIBUS Master)	5	5

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HMI components					
IndraControl VR					
20	R911340500	VR2104.01-00-01-N2-NNN-AA	Control panel IndraControl VR2104, 4.3"/10.9 cm, resistive touchscreen, Ethernet, 800 MHz, 512 MB RAM	5	5
	R911340503	VR2107.01-00-01-N2-NNN-AA	Control panel IndraControl VR2107, 7"/17.8 cm, resistive touchscreen, Ethernet, 800 MHz, 512 MB RAM	5	5
	R911340505	VR2107.01-00-01-N2-NNN-CA	Control panel IndraControl VR2107, 7"/17.8 cm, capacitive touchscreen, Ethernet, 800 MHz, 512 MB RAM	5	5
	R911340051	VR2109.01-00-01-N2-NNN-AA	Control panel IndraControl VR2109, 9"/22.8 cm, resistive touchscreen, Ethernet, 800 MHz, 512 MB RAM	5	5
	R911340506	VR2109.01-00-01-N2-NNN-CA	Control panel IndraControl VR2109, 9"/22.8 cm, capacitive touchscreen, Ethernet, 800 MHz, 512 MB RAM	5	5
IndraControl VH					
21	R911173736	VH2110.01-00-02-N3-111-CA	Handheld terminal IndraControl VH2110, 10.1"/25.6 cm, Multi-Touch, 1 GHz, 512 MB RAM, enable / stop / emergency stop button	5	5
Inline (IP20)					
24	R911170875	R-IL S3 BK DI8 DO4-PAC	Fieldbus coupler, Sercos III, 8 dig. Inputs, 4 dig. Outputs	10	5
25	R911171944	R-IL PN BK DI8 DO4-PAC	Fieldbus coupler, PROFINET, 8 dig. Inputs, 4 dig. Outputs	10	5
26	R911172194	R-IL PB BK DI8 DO4/CN-PAC	Fieldbus coupler, PROFIBUS, 8 dig. Inputs, 4 dig. Outputs	10	5
27	R911170971	R-IL PB BK DP/V1-PAC	Fieldbus coupler, PROFIBUS	10	5
28	R911170750	R-IB IL 24 DI 4-PAC	Digital inputs, 4 channels, 24 VDC	10	5
28	R911170751	R-IB IL 24 DI 8-PAC	Digital inputs, 8 channels, 24 VDC	10	5
28	R911170752	R-IB IL 24 DI 16-PAC	Digital inputs, 16 channels, 24 VDC	10	5
28	R911170753	R-IB IL 24 DI 32/HD-PAC	Digital inputs, 32 channels, 24 VDC, high-density	10	5
29	R911170754	R-IB IL 24 DO 2-2A-PAC	Digital outputs, 2 channels, 24 VDC, 2 A	10	5
29	R911170755	R-IB IL 24 DO 4-PAC	Digital outputs, 4 channels, 24 VDC, 0.5 A	10	5
29	R911170756	R-IB IL 24 DO 8-PAC	Digital outputs, 8 channels, 24 VDC, 0.5 A	10	5
29	R911171973	R-IB IL 24 DO 8/HD-PAC	Digital outputs, 8 channels, 24 VDC, 0.5 A, high-density	10	5
29	R911170759	R-IB IL 24 DO 8-2A-PAC	Digital outputs, 8 channels, 24 VDC, 2 A	10	5
29	R911170757	R-IB IL 24 DO 16-PAC	Digital outputs, 16 channels, 24 VDC, 0.5 A	10	5
29	R911170768	R-IB IL 24 DO 32/HD-PAC	Digital outputs, 32 channels, 24 VDC, 0.5 A, high-density	10	5
30	R911170784	R-IB IL AI 2/SF-PAC	Analog inputs, 2 channels 0 ... 20 mA, 4 ... 20 mA, ±20 mA, 0 ... 10 V, ±10 V	10	5
30	R911308493	R-IB IL AI 8/SF-PAC	Analog inputs, 8 channels 0...20 mA, 4 ... 20 mA, ±20 mA, 0 ... 10 V, ±10 V	10	5
31	R911170787	R-IB IL AO 1/SF-PAC	Ana. outputs, 1 channel, 0 ... 20 mA, 4 ... 20 mA, 0 ... 10 V	10	5
31	R911170436	R-IB IL AO 2/SF-PAC	Ana. outputs, 2 channels, 0 ... 20 mA, 4 ... 20 mA, 0 ... 10 V	10	5

Page	Material number	Type code	Description	Max. GoTo quantity (unit)	Delivery time ex works in Germany (working days)
I/O components					
Inline (IP20)					
31	R911170786	R-IB IL AO 2/U/BP-PAC	Analog outputs, 2 channels, 0 ... 10 V/±10 V	10	5
32	R911170785	R-IB IL TEMP 2 RTD-PAC	Temperature module, 2 channels, RTD (resistance sensor)	10	5
33	R911173029	R-IB IL TEMP 4/8 RTD-EF-PAC	Temperature module, 8 channels, RTD (resistance sensor)	10	5
34	R911170431	R-IB IL TEMP 2 UTH-PAC	Temperature module, 2 channels, TC (thermo element)	10	5
35	R911170789	R-IB IL 24 PWR IN-PAC	Power module, 24 VDC	10	5
36	R911170446	R-IB IL 24 PWR IN/R-PAC	Power/backup module, 24 VDC, no fuse	10	5
37	R911170790	R-IB IL 24 SEG/F-PAC	Section module, 24 VDC, with fuse	10	5
38	R911297189	R-IB IL PD 24V-PAC	Potential distributor module, 24 VDC	10	5
39	R911170948	R-IB IL 24 LSKIP-PAC	Line skip module	10	5
40	R911170445	R-IB IL 24 FLM-PAC	Branch module to Fieldline Modular	10	5
41	R911170788	R-IB IL CNT-PAC	Counter module, 1 counter, 1 control, 1 dig. input channel, 24 VDC	10	5
42	R911308491	R-IB IL INC-IN-PAC	Detection module, incremental value encoders	10	5
43	R911171514	R-IB IL SSI-IN-PAC	Detection module, SSI absolute value encoders	10	5
44	R911170440	R-IB IL RS232-PRO-PAC	Communication module, RS232	10	5
45	R911170442	R-IB IL RS485/422-PRO-PAC	Communication module, RS485/422	10	5
46	R911171971	R-IB IL 24 IOL 4 DI 12-PAC	IO-Link master module, 4 IO-Link ports, 12 dig. input channels, 24 VDC	10	5
47	R911170826	R-ILB S3 24 DI16 DIO16	Block I/O module, Sercos III, 16/32 dig. input, 16 dig. output channels, 24 VDC, 0.5 A	10	5
48	R911307402	R-ILB PB 24 DI16 DO16	Block I/O module, PROFIBUS, 16/32 dig. input, 16 dig. output channels, 24 VDC, 0.5 A	10	5
49	R911170874	R-ILB S3 AI4 A02	Block-IO module, Sercos III, 4 ana. input-, 2 ana. output channels	10	5
50	R911171949	R-ILB S3 AI12 AO4 SSI-IN4	Block-IO module, Sercos III, 4 SSI-, 12 ana. input-, 4 ana. output channels	10	5
IndraControl S20 (IP20)					
51	R911173318	S20-S3-BK+	Fieldbus coupler, Sercos III	5	5
51	R911173359	S20-PN-BK+	Fieldbus coupler, PROFINET	5	5
51	R911173247	S20-PB-BK	Fieldbus coupler, PROFIBUS	5	5
52	R911172543	S20-DI-16/1	Digital input module, 16 dig. inputs, 24 VDC	5	5
52	R911172532	S20-DI-16/4	Digital input module, 16 dig. inputs, 24 VDC	5	5
52	R911173344	S20-DI-16/1-HS	Digital input module, 16 dig. inputs, 24 VDC, highspeed	5	5
52	R911172533	S20-DI-32/1	Digital input module, 32 dig. inputs, 24 VDC	5	5
52	R911173340	S20-DI-64/1	Digital input module, 64 dig. inputs, 24 VDC	5	5
53	R911172541	S20-DO-8/2-2A	Digital output module, 8 dig. outputs, 24 VDC, 2 A	5	5
53	R911172542	S20-DO-16/1	Digital output module, 16 dig. outputs, 24 VDC	5	5
53	R911172534	S20-DO-16/3	Digital output module, 16 dig. outputs, 24 VDC	5	5
53	R911172535	S20-DO-32/1	Digital output module, 32 dig. outputs, 24 VDC	5	5
53	R911173742	S20-DO-64/1	Digital output module, 64 dig. outputs, 24 VDC	5	5
54	R911173749	S20-DOR-4/2-220-AC	Digital relay output module, 4 dig. outputs, 220 VAC	5	5
55	R911173745	S20-DIDO-8/1	Digital I/O-module, 8 dig. inputs, 8 dig. outputs, 24 VDC	5	5
56	R911172536	S20-AI-8	Analog input module, 8 ana. inputs, 0 ... 20 mA, 4 ... 20 mA, ±20 mA, 0 ... 10 V, ±10 V	5	5
56	R911173249	S20-AI-4-I	Analog input module, 4 ana. inputs, 0 ... 20 mA, 4 ...20 mA, ±20 mA	5	5
56	R911173256	S20-AI-4-U	Analog input module, 4 ana. inputs, 0 ... 5 V, ±5 V, 0 ... 10 V, ±10 V	5	5

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IndraControl S20 (IP20)					
57	R911173248	S20-AO-4	Analog output module, 4 ana. outputs, 0 ... 20 mA, 4 ... 20 mA, ±20 mA, 0 ... 10 V, ±10 V	5	5
57	R911172538	S20-AO-8	Analog output module, 8 ana. outputs, 0 ... 20 mA, 4 ... 20 mA, ±20 mA, 0 ... 10 V, ±10 V	5	5
58	R911173743	S20-AIAO-2	Analog I/O module, 2 ana. inputs, 2 ana. outputs, 0 ... 20 mA, 4 ... 20 mA, ±20 mA, 0 ... 10 V, 0 ... 5 V, ±10 V	5	5
59	R911173341	S20-AI-4-RTD	Analog temperature module, 4 inputs, RTD (resistance sensor)	5	5
59	R911172537	S20-AI-8-RTD	Analog temperature module, 8 inputs, RTD (resistance sensor)	5	5
59	R911173342	S20-AI-4-UTH	Analog temperature module, 4 inputs, TC (thermo element)	5	5
59	R911172545	S20-AI-8-UTH	Analog temperature module, 8 inputs, TC (thermo element)	5	5
60	R911172539	S20-CNT-INC-2/2	Counter/incremental value encoder module, 2 counter/ 2 incremental value encoder inputs	5	5
60	R911173559	S20-INC-2	Incremental value encoder module, 2 incremental value encoder inputs	5	5
61	R911172544	S20-SSI-AO-1/1	Detection module, 1 SSI absolute value encoder, 1 ana input	5	5
62	R911173120	S20-AI6-AO2-SSI2	Function module, 6 ana. inputs, 2 ana. outputs, 2 SSI absolute value encoders	5	5
63	R911173343	S20-RS-UNI	Communication module, RS232, RS485/422	5	5
64	R911173254	S20-PSDI-8/4	Digital safety I-module, PROFIsafe, 8 dig. inputs, 24 VDC	5	5
65	R911173255	S20-PSDO-8/3	Digital safety O-module, PROFIsafe, 8 dig. outputs, 24 VDC, 2 A	5	5
66	R911173345	S20-PWR	Power module U_{BUS}, 24 VDC	5	5
IndraControl S20, bus socket modules					
–	R911173392	S20-BS-BK	Bus socket module for fieldbus coupler	5	5
	R911172540	S20-BS	Bus socket module (standard) for 53.6 mm modules	5	5
	R911173203	S20-BS-S	Bus socket module (short) for 35 mm modules	5	5
IndraControl S20, accessories					
–	R911173283	S20-SHIELD-NLS	Neutral conductor busbar	5	5
	R911173030	S20-SHIELD-SET	Shield connection set (2 shield strip brackets, 2 shield clamps)	5	5
	R911173282	S20-SHIELD-SK5	Shield clamps SK5 (cable diameter 2 mm ... 5 mm)	5	5
	R911173286	S20-SHIELD-SK14	Shield clamps SK14 (cable diameter 3 mm ... 14 mm)	5	5
	R911173804	S20-CNS-2S-O/D/UI/E1/E2	Plug set S20, e.g. for S20-SSI-AO-1/1	5	5
	R911173857	S20-CN-L/UL	Plug set S20 bus coupler	5	5
	R911173858	S20-CNS-8L-ORBG/D/UI/E1/E2	Plug set S20, e.g. for S20-DI-16/4	5	5
	R911173859	S20-CNS-2L-O/D/UI/E1/E2	Plug set S20, e.g. for S20-DI-16/1	5	5
	R911173860	S20-CNS-2L-OBOB/D/UO/E1	Plug set S20, e.g. for S20-DO-8/2-2A	5	5
	R911173861	S20-CNS-8L-OBBG/D/UO/E1	Plug set S20, e.g. for S20-DO-16/3	5	5
	R911173862	S20-CNS-2L-O/D/UO/E1	Plug set S20, e.g. for S20-DO-16/1	5	5
	R911173863	S20-CNS-4L-O/D/UO1/UO2/E1	Plug set S20, e.g. for S20-DO-32/1	5	5
	R911173864	S20-CNS-4L-O/D/UA/E1/E2	Plug set S20, e.g. for S20-AI-8	5	5

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I/O components					
IndraControl S67 (IP67)					
67	R911172899	S67-S3-BK-DI8-M8	Fieldbus coupler, Sercos III, 8 digital input channels, 24 VDC, M8	5	5
67	R911171784	S67-PN-BK-DI8-M8	Fieldbus coupler, PROFINET, 8 digital input channels, 24 VDC, M8	5	5
67	R911171782	S67-PB-BK-DI8-M8	Fieldbus coupler, PROFIBUS, 8 digital input channels, 24 VDC, M8	5	5
67	R911171783	S67-ET-BK-DI8-M8	Fieldbus coupler, Ethernet, 8 digital input channels, 24 VDC, M8	5	5
68	R911171787	S67-DI8-M8	Digital inputs, 8 channels, 24 VDC, M8	5	5
68	R911171788	S67-DI8-M12	Digital inputs, 8 channels, 24 VDC, M12 (4 x M12, double assigned)	5	5
68	R911173208	S67-DI8-HS-M12	Digital inputs, 8 channels, 24 VDC, M12 (4 x M12, double assigned), high-speed	5	5
68	R911173104	S67-DI8-M12X8	Digital inputs, 8 channels, 24 VDC, M12 (8 x M12)	5	5
69	R911171789	S67-DO8-M8	Digital outputs, 8 channels, 24 VDC, 0.5 A, M8	5	5
69	R911171791	S67-DO8-M8-2A	Digital outputs, 8 channels, 24 VDC, 2 A, M8	5	5
69	R911171790	S67-DO8-M12	Digital outputs, 8 channels, 24 VDC, 0.5 A, M12 (4 x M12, double assigned)	5	5
69	R911173209	S67-DO8-HS-M12	Digital outputs, 8 channels, 24 VDC, 0.5 A, M12 (4 x M12, double assigned), high-speed	5	5
69	R911171792	S67-DO8-M12-2A	Digital outputs, 8 channels, 24 VDC, 2 A, M12 (4 x M12, double assigned)	5	5
69	R911173105	S67-DO8-M12X8	Digital outputs, 8 channels, 24 VDC, 0.5 A, M12 (8 x M12)	5	5
70	R911172409	S67-DIO8-M8	Digital inputs/outputs, 8 channels, 24 VDC, 0.5 A, M8	5	5
70	R911172900	S67-DIO8-M12X8	Digital inputs/outputs, 8 channels, 24 VDC, 0.5 A, M12 (8 x M12)	5	5
70	R911173210	S67-DIO4-HS-M12	Digital inputs/outputs, 4 channels, 24 VDC, 0.5 A, M12, high-speed	5	5
71	R911171793	S67-AI4-U/I-M12	Analog inputs, 4 channels, M12, 0 ... 20 mA, 4 ... 20 mA, ±20 mA, 0 ... 10 V, ±10 V	5	5
72	R911171795	S67-AO4-U/I-M12	Analog outputs, 4 channels, M12, 0 ... 20 mA, 4 ... 20 mA, ±20 mA, 0 ... 10 V, ±10 V	5	5
73	R911171794	S67-AI4-RTD-M12	Temperature module, 4 channels, M12, RTD (resistance sensor)	5	5
74	R911172411	S67-AI4-UTH-M12	Temperature module, 4 channels, M12, TC (thermo element)	5	5
75	R911171796	S67-PWR-IN-M12	Supply module (1x M23, 6 x M12)	5	5
76	R911173207	S67-HTL-INC-M12	HTL encoder and counter module, M12, 2 incremental value, 2 counter, 4 digital input channels	5	5
77	R911173206	S67-SSI-INC-M12	TTL and SSI encoder module, M12, 2 incremental value, 2 SSI, 2 counter, 4 digital input channels	5	5
78	R911173103	S67-RS-UNI-M12	Communication module, M12, RS232, RS485/422	5	5

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IndraControl S67, accessories					
–	R911172110	RBS0021/L06	M23 plug, voltage supply at S67-PWR-IN module	5	5
	R911173244	SUP-E01-S67-UTH-M12	M12 compensation plug for S67-UTH-M12 module	5	5
	R911296632	INS0762/CNN	Terminating resistor for PROFIBUS DP	5	5
	R911171998	RBS0020	Terminating resistor for system bus	5	5
IndraControl S67, cables					
–	R911171990	RKB0041/000.2	System bus cable, 0.2 m, assembled on both ends, M12	5	5
	R911171991	RKB0041/000.3	System bus cable, 0.3 m, assembled on both ends, M12	5	5
	R911171992	RKB0041/000.5	System bus cable, 0.5 m, assembled on both ends, M12	5	5
	R911171993	RKB0041/001.0	System bus cable, 1.0 m, assembled on both ends, M12	5	5
	R911171994	RKB0041/002.0	System bus cable, 2.0 m, assembled on both ends, M12	5	5
	R911171995	RKB0041/005.0	System bus cable, 5.0 m, assembled on both ends, M12	5	5
	R911171996	RKB0041/010.0	System bus cable, 10.0 m, assembled on both ends, M12	5	5
	R911172102	RKB0046/000.2	Power cable, 0.2 m, assembled on both ends, M12	5	5
	R911172103	RKB0046/000.3	Power cable, 0.3 m, assembled on both ends, M12	5	5
	R911172104	RKB0046/000.5	Power cable, 0.5 m, assembled on both ends, M12	5	5
	R911172105	RKB0046/001.0	Power cable, 1.0 m, assembled on both ends, M12	5	5
	R911172106	RKB0046/002.0	Power cable, 2.0 m, assembled on both ends, M12	5	5
	R911172107	RKB0046/005.0	Power cable, 5.0 m, assembled on both ends, M12	5	5
	R911172108	RKB0046/010.0	Power cable, 10.0 m, assembled on both ends, M12	5	5
	R911172100	RKB0047/005.0	Power cable, 5.0 m, open cable end, M12	5	5
	R911172101	RKB0047/010.0	Power cable, 10.0 m, open cable end, M12	5	5
IndraControl S67, assembly materials					
–	R911172352	SUP-M01-ENDHALTER/PA	End bracket for DIN assembly rail, 35 mm	5	5
	R911172119	SUP-M01-S67-0001	DIN assembly rail adapter for fieldbus couplers	5	5
	R911172120	SUP-M01-S67-0002	DIN assembly rail adapter for I/O modules	5	5
	R911172121	SUP-M01-S67-0003	Profile assembly rail adapter for fieldbus couplers	5	5
	R911172122	SUP-M01-S67-0004	Profile assembly rail adapter for I/O modules	5	5
	R911172123	SUP-M01-S67-0005	Spacer between I/O modules	5	5
	R911172124	SUP-M01-S67-0006	Labels for fieldbus couplers and I/O modules (8 x M8)	10	5
	R911172125	SUP-M01-S67-0007	Labels for I/O modules (4 x M12)	10	5
	R911172126	SUP-M01-S67-0008	Labels for S67-PWR-IN module	10	5
	R911173271	SUP-M01-S67-0009	Labels for I/O modules (8 x M12)	5	5
	R911173303	SUP-M01-S67-0010	I/O module carrier rail adapter (8 x M12)	5	5
	R911173304	SUP-M01-S67-0011	I/O module profile assembly rail adapter (8 x M12)	5	5

Page	Material number	Type code	Description	Max. GoTo quantity (unit)	Delivery time ex works in Germany (working days)
Engineering tools					
WinStudio					
80/81	R911323595	SWS-WINSTU-RUD-07VRS-D0-4K	Single user license – WinStudio 07VRS Development and Runtime, 4000 variables	5	5
	R911323596	SWS-WINSTU-RUD-07VRS-D0-1K5	Single user license – WinStudio 07VRS Development and Runtime, 1500 variables	5	5
	R911323607	SWS-WINSTU-RUN-07VRS-D0-1K5	Single user license – WinStudio 07VRS Runtime, 1500 variables	5	5
	R911323606	SWS-WINSTU-RUN-07VRS-D0-4K	Single user license – WinStudio 07VRS Runtime, 4000 variables	5	5
IndraWorks for IndraMotion MLC and IndraLogic XLC, L/V					
80/81	R911334632	SWA-IWORKS-ML*-12VRS-D0-DVD**	Install DVD – IndraWorks 12VRS for IndraMotion MLC, IndraLogic XLC	5	5
	R911337434	SWA-IWORKS-ML*-13VRS-D0-DVD**	Install DVD – IndraWorks 12VRS for IndraMotion MLC, IndraLogic XLC	5	5
	R911342952	SWA-IWORKS-ML*-14VRS-D0-DVD**	Install DVD – IndraWorks 14VRS for IndraMotion MLC, IndraLogic XLC	5	5
	R911332861	SWL-IWORKS-ML*-NNVRS-D0-ENG	Single user license – IndraWorks Engineering ML* – cross-version for IndraMotion MLC and IndraLogic XLC	5	5
	R911332863	SWL-IWORKS-XLC-NNVRS-D0-ENG	Single user license – IndraWorks Engineering ML* – cross-version for IndraLogic XLC	5	5
	R911332867	SWL-IWORKS-ML*-NNVRS-D0-COM	Single user license – IndraWorks Communication ML* – cross-version	5	5
	R911332869	SWS-IWORKS-CAM-NNVRS-D0	Single user license – CamBuilder for IndraWorks Engineering – cross-version	5	5
	R911336031	SWS-IWORKS-VCS-NNVRS-D0	Single user license – VCS TeamClient for IndraWorks Engineering – cross-version	5	5
	R911336032	SWS-IWORKS-VCS-NNVRS-D0-M10	10 single user licenses – VCS TeamClient for IndraWorks Engineering – cross-version	5	5
	R911336033	SWS-IWORKS-VCS-NNVRS-D0-M25	25 single user licenses – VCS TeamClient for IndraWorks Engineering – cross-version	5	5
IndraWorks for IndraMotion MTX					
80/81	R911337416	SWA-IWORKS-MTX-13VRS-D0-DVD**	Install DVD – IndraWorks 13VRS for IndraMotion MTX	5	5
	R911337417	SWA-IWORKS-MTX-13VRS-D0-INST	Install file – IndraWorks 13VRS for IndraMotion MTX	5	5
	R911337570	SWL-IWORKS-MTX-NNVRS-D0-ENG	Single user license – IndraWorks Engineering MTX – cross-version for IndraMotion MTX	5	5
	R911337571	SWL-IWORKS-MTX-NNVRS-D0-ENG*M25	25 single user licenses – IndraWorks Engineering MTX – cross-version for IndraMotion MTX	5	5
	R911331692	SWL-IWORKS-MTX-NNVRS-D0-OPD	Single user license – IndraWorks Operation MTX – cross-version for IndraMotion MTX	5	5
	R911331693	SWL-IWORKS-MTX-NNVRS-D0-OPD*M25	25 single user licenses – IndraWorks Operation MTX – cross-version for IndraMotion MTX	5	5

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IndraWorks for IndraMotion MTX					
80/81	R911331690	SWL-IWORKS-MTX-NNVRS-D0-OPDENG	Single user license – IndraWorks Operation and Engineering MTX – cross-version for IndraMotion MTX	5	5
	R911331691	SWL-IWORKS-MTX-NNVRS-D0-OPDENG*M25	25 single user licenses – IndraWorks Operation and Engineering MTX – cross-version for IndraMotion MTX	5	5
	R911331696	SWL-IWORKS-MTX-NNVRS-D0-COM	Single user license – IndraWorks Communication MTX – cross-version	5	5
	R911331697	SWL-IWORKS-MTX-NNVRS-D0-COM*M25	25 single user licenses – IndraWorks Communication MTX – cross-version	5	5
	R911334886	SWL-IWORKS-MTX-NNVRS-D0-WORKSTATION	Single user license – IndraWorks Workstation MTX – cross-version	5	5
	R911334887	SWL-IWORKS-MTX-NNURS-D0-WORKSTATION	Single user license – IndraWorks Workstation MTX – cross-version (update)	5	5
	R911334888	SWL-IWORKS-MTX-NNVRS-D0-WORKSTATION*25	25 single user licenses – IndraWorks Workstation MTX – cross-version	5	5
	R911339214	SWL-IWORKS-MTX-NNVRS-D0-ENCRYPT	Single user license – IndraWorks Engineering MTX for encoding CNC user programs – cross-version	5	5
Tightening systems					
Hand-held nutrunners					
84	0.608.841.089	CC-ESM012QD	CC-ErgoSpin pistol grip hand-held nutrunner, 2.4 ... 12 Nm	10	3
85	0.608.841.087	CC-ESA030S	CC-ErgoSpin SlimLine hand-held nutrunner, 6 ... 30 Nm	10	3
85	0.608.841.088	CC-ESA040S	CC-ErgoSpin SlimLine hand-held nutrunner, 8 ... 40 Nm	10	3
Control and power electronics					
86	0.608.830.289	CC-CS351E-D	CC-ErgoSpin single-channel nutrunner controller	10	3

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