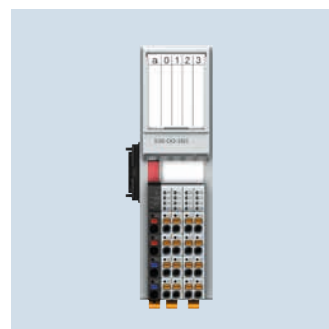
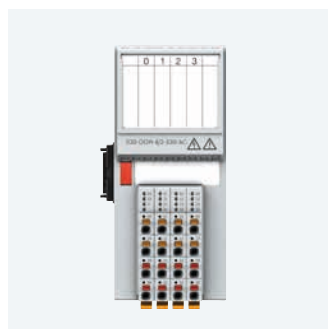
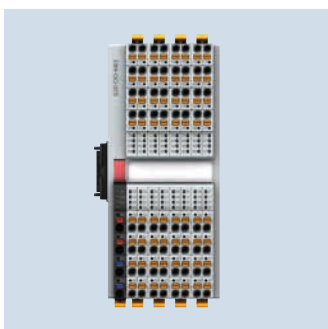


IndraControl S20 and S67

I/O systems for flexible automation

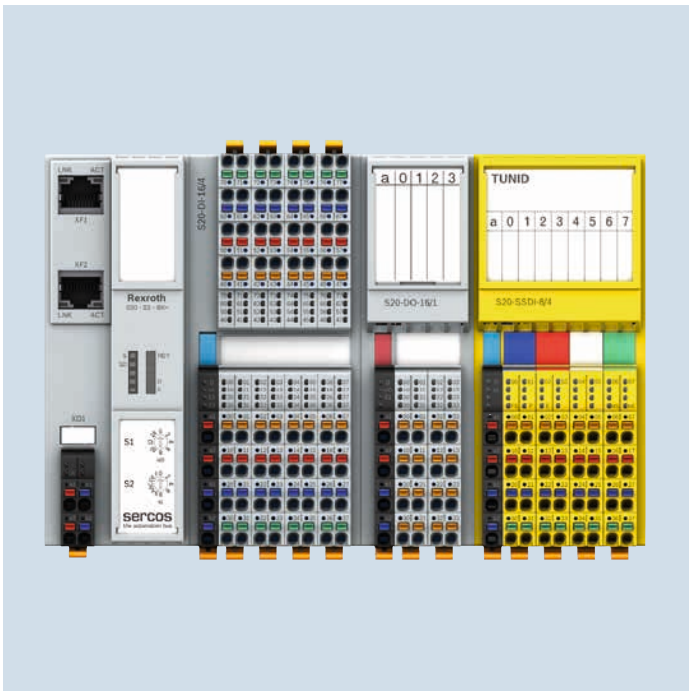
robust | easy | fast



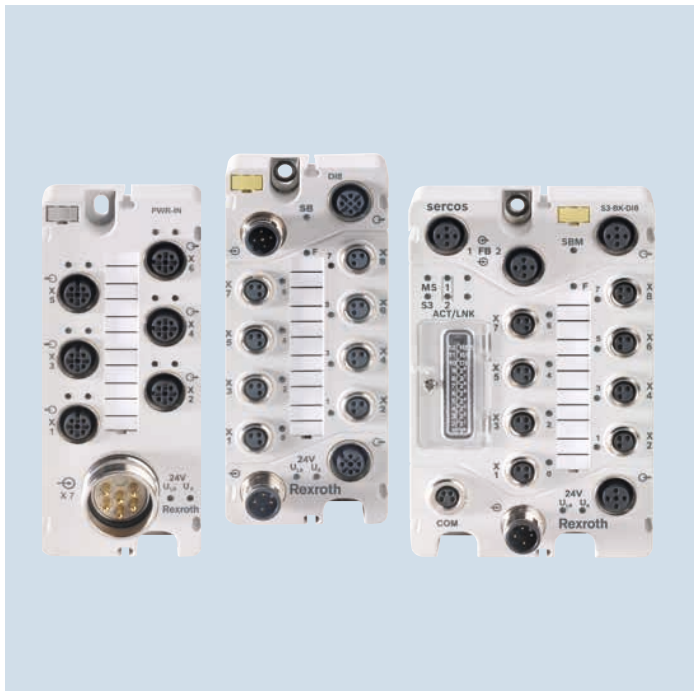
IndraControl S20 and S67: Modular I/O systems

The fully modular design of IndraControl S20 and S67 I/O systems from Rexroth provides you with maximum flexibility for the economical realization of your customized machine concepts.

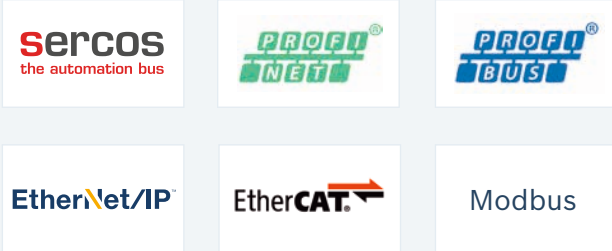
All I/O modules have an extremely robust design and mechanics, are easy to handle, have a fast reaction time and are quick to install – both in the control cabinet as well as in the field.



IndraControl S20 with protection class IP67 is the freely scalable I/O system for fast cycle times and maximum precision, whether installed locally in the embedded control hardware IndraControl XM from Rexroth or as a decentralized I/O station.



IndraControl S67 with protection class IP67 allows for a reliable, machine-oriented and complete cabinet-free installation – even in extreme environmental conditions.



Flexible communication

Open communication standards allow you to perfectly integrate the IndraControl S20 and S67 I/O modules with maximum availability. The modules can be flexibly integrated with the Sercos automation bus, PROFIBUS, EtherNet/IP, EtherCAT, Modbus or PROFIBUS.



◀ **IndraControl S20 and S67 are used in virtually all industries around the world**

Easy integration

The I/O components can be easily integrated into the Rexroth control hardware: By means of the direct side-by-side arrangement of the IndraControl S20 I/O modules or the integration of the decentralized IndraControl S67 I/O stations via a variety of fieldbus couplers, I/O integration in the IndraControl XM embedded control hardware is very easy. With the IndraWorks engineering framework, all I/O modules can be conveniently parameterized – by standardized description files simply integrate into the control solutions.

**Embedded control hardware
IndraControl XM**



**I/O system
IndraControl S20**



**I/O system
IndraControl S67**



More detailed information:
www.boschrexroth.com/dcc



IndraControl S20 for the control cabinet

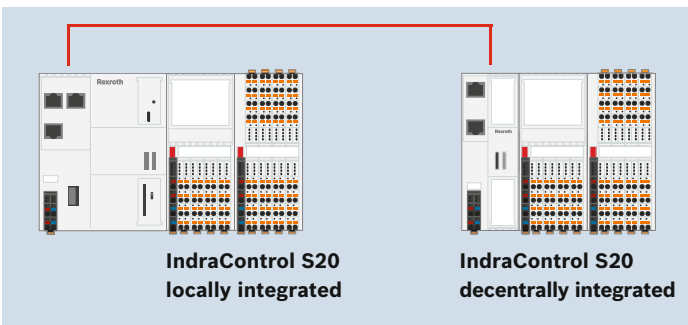
Fast automation

The IndraControl S20 I/O range with protection class IP20 allows for real-time applications with the shortest cycle times. The fastest I/O technology available on the market is easy to install thanks to toolless wiring, and convenient to parameterize via the IndraWorks engineering framework from Rexroth. For constantly rapid and safe signal processing. For maximum availability and time-saving, safe automation.



▲ Easy installation thanks to toolless wiring

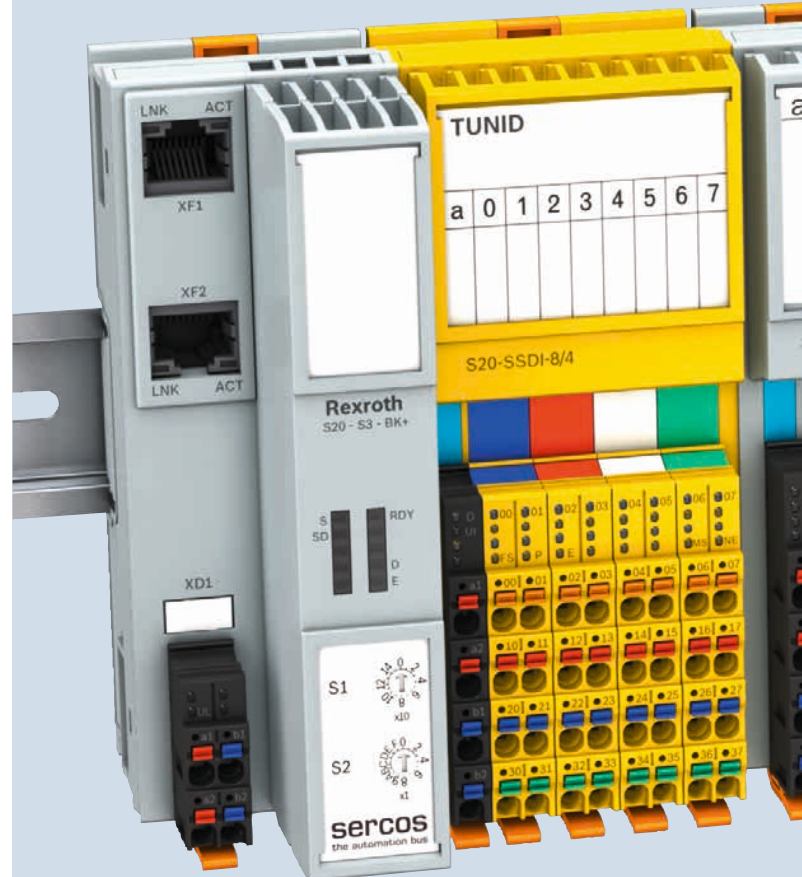
▼ The IndraControl S20 I/O modules can be easily connected directly to the embedded control hardware IndraControl XM from Rexroth or decentrally integrated via a bus coupler.



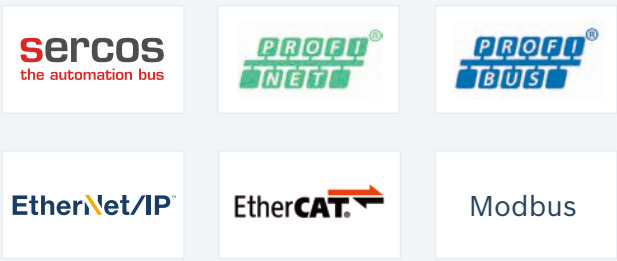
IndraControl S20
locally integrated

IndraControl S20
decentrally integrated

On the safe side:
Safety modules for
CIP Safety on Sercos and
PROFIsafe on PROFINET
or PROFIBUS



Flexible integration with the Sercos automation bus, PROFINET, EtherNet/IP, EtherCAT, Modbus or PROFIBUS



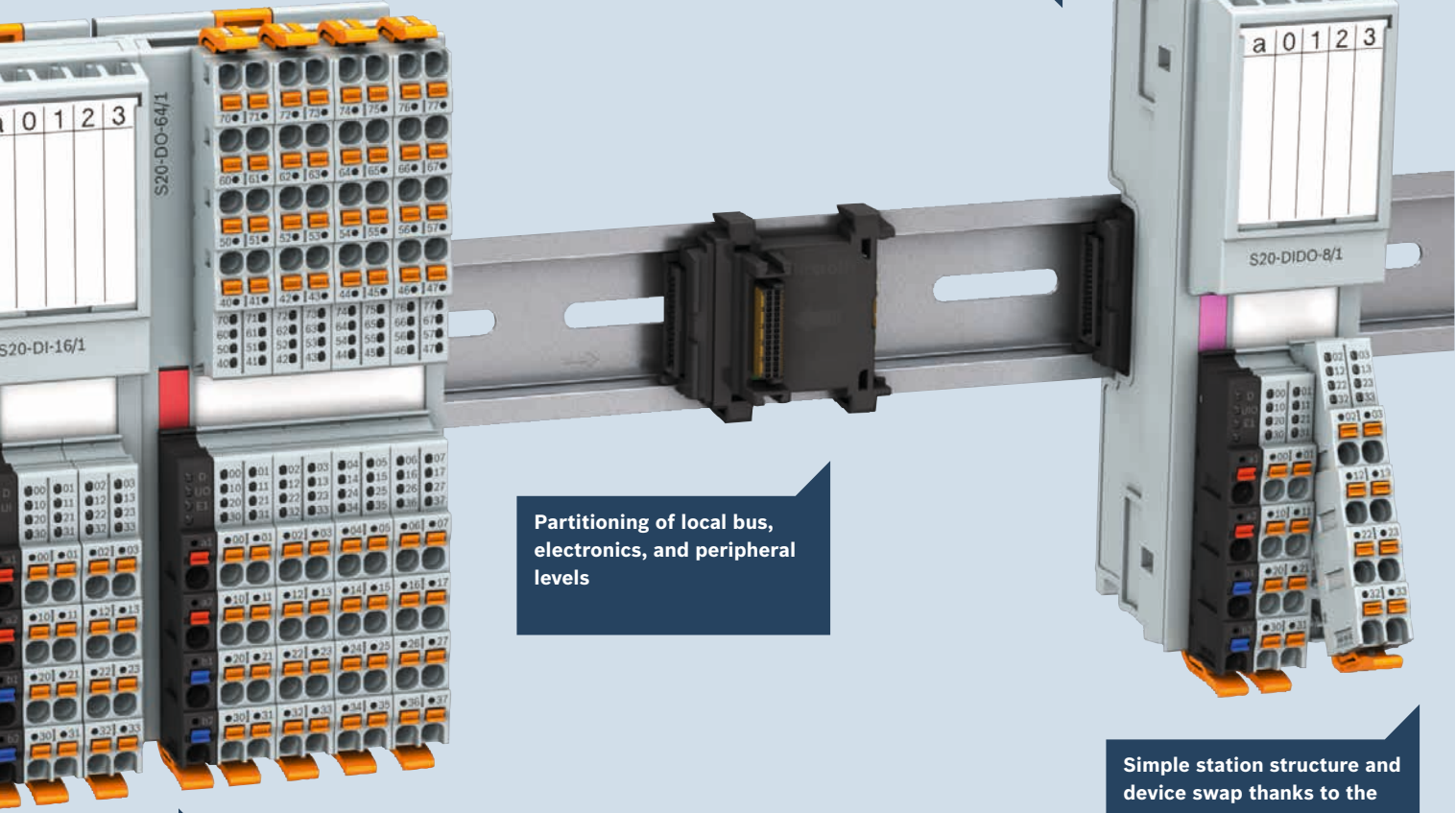
SAFETY ON BOARD



With the IndraControl S20 safety modules, safe communication is also possible – with CIP Safety on Sercos, or PROFIsafe on PROFINET and PROFIBUS

Reduced reaction times and synchronous process data processing for increased measurement accuracy, control quality, and cycle speeds

Individually combinable modules with extensive functionality. Channel-wise diagnostics via LED or in the PLC.



Partitioning of local bus, electronics, and peripheral levels





Simple station structure and device swap thanks to the toolless installation

Robust design with a standard, expanded temperature range, minimal EMC emission and high vibration resistance









IndraControl S20 Overview

Technical specifications

Supply voltage	VDC	24
Permissible temperature (in operation)	°C	-25 ... +60
Permissible humidity (in operation)	%	5 ... 95, no condensation
Protection class		IP20
Emitted interference		EN 55022 class B (residential areas)
Shock	g	30
Vibration	g	10

IndraControl S20	Type key	Description	Mat. No.
Bus coupler			
	S20-S3-BK+	Fieldbus coupler, Sercos III	R911173318
	S20-PN-BK+	Fieldbus coupler, PROFINET	R911173359
	S20-ETH-BK	Fieldbus coupler, EtherNet	R911173905
	S20-EIP-BK	Fieldbus coupler, EtherNet/IP	R911173904
	S20-EC-BK	Fieldbus coupler, EtherCAT	R911173906
	S20-PB-BK	Fieldbus coupler, PROFIBUS	R911173247
Digital input modules			
	S20-DI-16/1	Digital input module, 16 channels, 24 VDC	R911172543
	S20-DI-16/4	Digital input module, 16 channels, 24 VDC	R911172532
	S20-DI-16/1-HS	Digital input module, 16 channels, 24 VDC, high-speed	R911173344
	S20-DI-32/1	Digital input module, 32 channels, 24 VDC	R911172533
	S20-DI-64/1	Digital input module, 64 channels, 24 VDC	R911173340
Digital output modules			
	S20-DO-8/2-2A	Digital output module, 8 channels, 24 VDC, 2 A	R911172541
	S20-DO-16/1	Digital output module, 16 channels, 24 VDC, 0.5 A	R911172542
	S20-DO-16/3	Digital output module, 16 channels, 24 VDC, 0.5 A	R911172534
	S20-DO-32/1	Digital output module, 32 channels, 24 VDC, 0.5 A	R911172535
	S20-DO-64/1	Digital output module, 64 channels, 24 VDC, 0.5 A	R911173742
	S20-DOR-4/2-220-AC	Digital relay output module, 4 channels, 220 VAC	R911173749
Digital input/output module			
	S20-DIDO-8/1	Digital I/O module, 8 digital inputs, 8 digital outputs, 24 VDC	R911173745

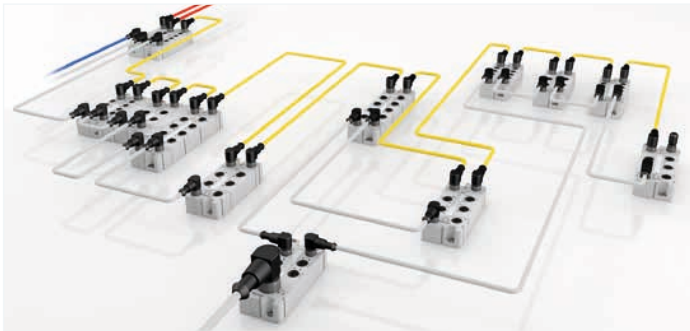
You can find the bus socket modules and accessories in our online product catalog: www.boschrexroth.de/dcc

IndraControl S20	Type key	Description	Mat. No.
Analog input modules			
	S20-AI-8	Analog input module, 8 channels, 0 ... 20 mA, 4 ... 20 mA, ±20 mA, 0 ... 10 V, ±10 V	R911172536
	S20-AI-4-I	Analog input module, 4 channels, 0 ... 20 mA, 4 ... 20 mA, ±20 mA	R911173249
	S20-AI-4-U	Analog input module, 4 channels, 0 ... 5 V, ±5 V, 0 ... 10 V, ±10 V	R911173256
Analog output modules			
	S20-AO-4	Analog output module, 4 channels, 0 ... 20 mA, 4 ... 20 mA, ±20 mA, 0 ... 10 V, ±10 V	R911173248
	S20-AO-8	Analog output module, 8 channels, 0 ... 20 mA, 4 ... 20 mA, ±20 mA, 0 ... 10 V, ±10 V	R911172538
Analog input/output module			
	S20-AIAO-2	Analog I/O module, 2 analog inputs, 2 analog outputs, 0 ... 20 mA, 4 ... 20 mA, ±20 mA, 0 ... 10 V, 0 ... 5 V, ±10 V	R911173743
Temperature modules			
	S20-AI-4-RTD	Analog temperature module, 4 inputs, RTD (resistance sensor)	R911173341
	S20-AI-8-RTD	Analog temperature module, 8 inputs, RTD (resistance sensor)	R911172537
	S20-AI-4-UTH	Analog temperature module, 4 inputs, TC (thermocouple)	R911173342
	S20-AI-8-UTH	Analog temperature module, 8 inputs, TC (thermocouple)	R911172545
Technology modules			
	S20-CNT-INC-2/2	Counter/incremental value encoder module, 2 counter/2 incremental value encoder inputs	R911172539
	S20-INC-2	Incremental value encoder module, 2 incremental value encoder inputs	R911173559
	S20-PWM-2-T	Pulse width modulation, 2 channels, 2.7 A per channel	R911173460
	S20-PWM-4-T	Pulse width modulation, 4 channels, 2.7 A per channel	R911173461
	S20-SSI-AO-1/1	Detection module, 1 SSI absolute value encoder, 1 analog input	R911172544
	S20-AI6-AO2-SSI2	Function module, 6 analog inputs, 2 analog outputs, 2 SSI absolute value encoders	R911173120
Communication module			
	S20-RS-UNI	Communication module, RS232, RS485/422	R911173343
Safety module			
	S20-SSDI-8/4	Digital safety input module, CIP Safety on Sercos, 8 digital inputs, 24 VDC	R911173191
	S20-SSDO-8/3	Digital safety output module, CIP Safety on Sercos, 8 digital outputs, 24 VDC, 2 A	R911173192
	S20-PSDI-8/4	Digital safety input module, PROFIsafe on PROFINET, 8 digital inputs, 24 VDC	R911173254
	S20-PSDO-8/3	Digital safety output module, PROFIsafe on PROFINET, 8 digital outputs, 24 VDC, 2 A	R911173255
Backup module			
	S20-PWR	Supply module U _{BUS} , 24 VDC	R911173345

IndraControl S67 for field installation

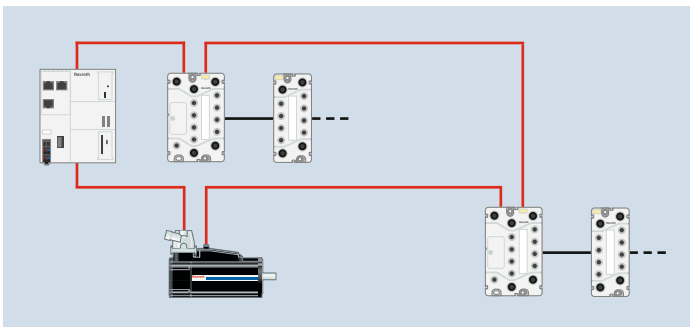
Cabinet-free installation

The IndraControl S67 I/O system with protection type IP67 affords you reliable, process-oriented, and completely cabinet-free installation – even in extreme environmental conditions. The modular system design provides you with maximum flexibility for the economical realization of your customized machine concepts.



▲ Quick and easy installation close to the machine thanks to the preassembled system cable

▼ Due to the high diversity of the modules, the decentralized IndraControl S67 I/O stations can be flexibly integrated into your machine concepts



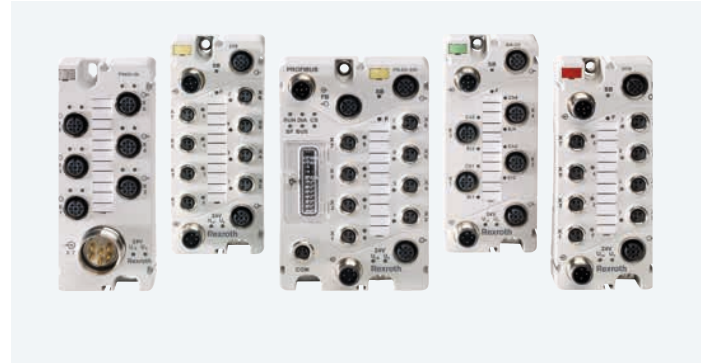
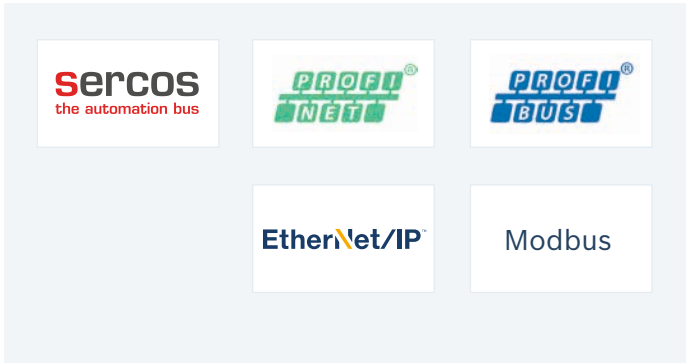
Maximum distance between two modules is 50 m

Fast and toolless installation via the M8 and M12 connectors as well as preassembled system cable

Comprehensive system portfolio with digital, analog, and technology modules

Fast and flexible processing of process signals

Easy connection to the system via intelligent fieldbus couplers



Maximum total extension
 of 500 m

Channel-wise diagnostics
 via LED or in the PLC

High protection class IP67 for
 harsh industrial environments




Robust design for extreme
 operating conditions with an
 expanded temperature range,
 minimal EMC emission and
 high vibration resistance








IndraControl S67

Overview

Technical specifications

Supply voltage	VDC	24
Permissible temperature (in operation)	°C	-25 ... +60
Permissible humidity (in operation)	%	5 ... 95, no condensation
Protection class		IP67
Emitted interference		According to EN 61000-6-4
Shock	g	50
Continuous shock	g	30

IndraControl S67	Type key	Description	Mat. No.
Bus coupler			
	S67-S3-BK-DI8-M8	Fieldbus coupler, Sercos III, 8 digital input channels, 24 VDC, M8	R911172899
	S67-PN-BK-DI8-M8	Fieldbus coupler, PROFINET, 8 digital input channels, 24 VDC, M8	R911171784
	S67-PB-BK-DI8-M8	Fieldbus coupler, PROFIBUS, 8 digital input channels, 24 VDC, M8	R911171782
	S67-ET-BK-DI8-M8	Fieldbus coupler, Ethernet, 8 digital input channels, 24 VDC, M8	R911171783
Digital input modules			
	S67-DI8-M8	Digital inputs, 8 channels, 24 VDC, M8	R911171787
	S67-DI8-M12	Digital inputs, 8 channels, 24 VDC, M12 (4 x M12, double assigned)	R911171788
	S67-DI8-HS-M12	Digital inputs, 8 channels, 24 VDC, M12 (4 x M12, double assigned), high-speed	R911173208
	S67-DI8-M12X8	Digital inputs, 8 channels, 24 VDC, M12 (8 x M12)	R911173104
Digital output modules			
	S67-DO8-M8	Digital outputs, 8 channels, 24 VDC, 0.5 A, M8	R911171789
	S67-DO8-M8-2A	Digital outputs, 8 channels, 24 VDC, 2 A, M8	R911171791
	S67-DO8-M12	Digital outputs, 8 channels, 24 VDC, 0.5 A, M12 (4 x M12, double assigned)	R911171790
	S67-DO8-HS-M12	Digital outputs, 8 channels, 24 VDC, 0.5 A, M12 (4 x M12, double assigned), high-speed	R911173209
	S67-DO8-M12-2A	Digital outputs, 8 channels, 24 VDC, 2 A, M12 (4 x M12, double assigned)	R911171792
	S67-DO8-M12X8	Digital outputs, 8 channels, 24 VDC, 0.5 A, M12 (8 x M12)	R911173105

IndraControl S67	Type key	Description	Mat. No.
Digital input/output modules			
	S67-DIO8-M8	Digital inputs/outputs, 8 channels, 24 VDC, 0.5 A, M8	R911172409
	S67-DIO8-M12X8	Digital inputs/outputs, 8 channels, 24 VDC, 0.5 A, M12 (8 x M12)	R911172900
	S67-DIO4-HS-M12	Digital inputs/outputs, 4 channels, 24 VDC, 0.5 A, M12, high-speed	R911173210
Analog input modules			
	S67-AI4-U/I-M12	Analog inputs, 4 channels, M12, 0 ... 20 mA/4 ... 20 mA/±20 mA/0 ... 10V/±10 V	R911171793
Analog output modules			
	S67-AO4-U/I-M12	Analog outputs, 4 channels, M12, 0 ... 20 mA/4 ... 20 mA/±20 mA/0 ... 10V/±10 V	R911171795
Temperature modules			
	S67-AI4-RTD-M12	Temperature module, 4 channels, M12, RTD (resistance sensor)	R911171794
	S67-AI4-UTH-M12	Temperature module, 4 channels, M12, TC (thermocouple)	R911172411
Technology modules			
	S67-HTL-INC-M12	HTL encoder and counter module, M12, 2 incremental value channels, 2 counter channels, 4 digital input channels	R911173207
	S67-SSI-INC-M12	TTL and SSI encoder module, M12, 2 incremental value channels, 2 SSI channels, 2 counter channels, 4 digital input channels	R911173206
Communication module			
	S67-RS-UNI-M12	Communication module, M12, RS232, RS485/422	R911173103
Supply modules			
	S67-PWR-IN-M12	Supply module (1x M23, 6 x M12)	R911171796

You can find additional accessories such as system cable and installation adapter in our online product catalog.

More detailed information:
www.boschrexroth.com/dcc



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