

Fieldbus coupler
SERCOS III



Fieldbus coupler

SERCOS III**Documentation**

- Application description

**Technical data**

		R-IL S3 BK DI8 DO4-PAC
System data		
Interfaces		SERCOS III local bus
Number of segments per station		max. 63
Total of all I/O data per station		max. 244 Byte
Digital outputs		
Number		4
Nominal output voltage U _{Out}		24 VDC
Differential voltage at I _{Nom}	Max. [V]	1
Nominal current I _{Nom} per channel	[A]	0.5
Nominal current tolerances		+ 10 %
Protection		Short-circuit/overload
Actuator connection type		2-, 3-wire connection
Digital inputs		
Number		8 Digital inputs
Design		According to EN 61131-2 type 1
Switching thresholds max. voltage at low level U _{Lmax}		< 5 V
Switching thresholds Max. voltage at high level U _{Hmax}		> 15 V
Common potentials		Segment supply, ground
Nominal input U _{Nom}	[V DC]	24
	Permissible nominal input voltage range	-30 V DC < U _{IIN} < + 30 V DC
	[mA]	3
Permissible line length	[m]	30
Sensor connection type		2-, 3-wire connection
Electrical data		

Fieldbus coupler

SERCOS III

Voltage supply	Typ. [V]	24
Voltage Supply Range	Min. [V]	19
	Max. [V]	30
Logic voltage UL		7,5 V (from external 24 V DC voltage changed)
		max. 2 A
Segment feed U_S/U_M	[V DC]	24
	Max. [A]	8
	Tolerances	-15/+20 %
Analog supply U_{ANA}	[V DC]	24
	Tolerances	-15% ... +20 %
	Max. [mA]	0.5
Transmission speed		500 kbauds or 2 Mbauds (automatic detection)
Error message to the higher level control system		Short-circuit/overload
Protection		
Category Total		IP20
Protection		Class 3 according to VDE 0106, IEC 60536
Forces		
Vibration Resistance	[g]	5
Shock Resistance	[g]	25
Standards		
Certification		UL 508
Weight		
Weight		320 g
Ambient conditions		
Ambient temp. operation	Min. [°C]	-25
	Max. [°C]	55
Ambient temp. storage	Min. [°C]	-25
	Max. [°C]	85
Relative humidity operation	Min. [%]	5
	Max. [%]	90
Relative humidity storage	Min. [%]	5
	Max. [%]	95
Atmospheric pressure (operation)	Min. [kPa]	80
	Max. [kPa]	106
	EN 60034-1	(up to 2,000 above MSL)
Atmospheric pressure (transport/storage)	Min. [kPa]	70
	Max. [kPa]	106
	EN 60034-1	(up to 3,000 above MSL)

Dimensions

	R-IL S3 BK DI8 DO4-PAC
Dimensions	

Fieldbus coupler

SERCOS III

Height H	[mm]	121
Width B	[mm]	80
Depth T	[mm]	70

Type code

Type code	Description	Part No.:
R-IL S3 BK DI8 DO4-PAC	SERCOS III bus coupler, 8 digital inputs, 4 digital outputs, 500 mA	R911170875

Type code	Description	Part No.:
RKB0011/000,0 (RBS0016-REB0400-RBS0016)	SERCOS III cable, 100-Base-T, CAT5E, shielded, RJ45 plug on both sides, 4 pins, twisted quad, stranded, red, length free selectable	R9111316888
RKB0013/00,25 (*****_*****_*****)	SERCOS III cable, 100-Base-T, CAT5E, S/STP, RJ45 plug on both sides, 8 pins, twisted pair, black, available lengths: 0.25/0.35/0.55 m	R9111317797
RKB0013/00,35 (*****_*****_*****)	SERCOS III cable, 100-Base-T, CAT5E, S/STP, RJ45 plug on both sides, 8 pins, twisted pair, black, available lengths: 0.25/0.35/0.55 m	R9111317800
RKB0013/00,55 (*****_*****_*****)	SERCOS III cable, 100-Base-T, CAT5E, S/STP, RJ45 plug on both sides, 8 pins, twisted pair, black, available lengths: 0.25/0.35/0.55 m	R9111317801
RKB0011/005,0 (RBS0016-REB0400-RBS0016)	SERCOS III cable, 100-Base-T, CAT5E, shielded, RJ45 plug on both sides, 4 pins, twisted quad, stranded, red, length free selectable	R9111321548

Bosch Rexroth AG

Electric Drives and Controls

P.O. Box 13 57

97803 Lohr, Germany

Bgm.-Dr.-Nebel-Str. 2

97816 Lohr, Germany

Phone +49 9352-40-0

Fax +49 9352-40-4885

www.boschrexroth.com/electrics

The data specified above only serve to describe the product.

As our products are constantly being further developed, no statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.