

Bus coupler - IBS RL 24 BK RB-LK-LK-2MBD - 2731597

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Bus coupler with remote branch for INTERBUS; fiber optic technology with 2 Mbaud, rugged metal housing with IP67 protection, tool-free mounting on a separate mounting plate, can be used directly on welding robots



The illustration shows version IBS
RL 24 BK RB-LK-LK

Product Features

- Rugged metal housing
- Comprehensive diagnostic functions
- M12 connector for I/O devices
- Rugged Line connector for INTERBUS, either with fiber optic or twisted pair, and supply voltage



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	778.1 g
Custom tariff number	85389091
Country of origin	Germany

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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Dimensions

Width	179 mm
Height	67 mm
Depth	71 mm

Ambient conditions

Bus coupler - IBS RL 24 BK RB-LK-LK-2MBD - 2731597

Technical data

Ambient conditions

Ambient temperature (operation)	0 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Permissible humidity (operation)	100 %
Permissible humidity (storage/transport)	95 % (non-condensing)
Air pressure (operation)	860 hPa ... 1080 hPa (up to 1500 m above mean sea level)
Air pressure (storage/transport)	660 hPa ... 1080 hPa (up to 3500 m above mean sea level)
Degree of protection	IP65/IP67

General

Mounting type	Wall mounting
Net weight	610 g
Mounting type	On mounting plate

Interfaces

Fieldbus system	INTERBUS
Designation	INTERBUS
Connection method	IP67-RL connector with FO connection
Transmission speed	2 MBit/s

Power supply for module electronics

Supply voltage	24 V DC
Supply voltage range	18.5 V DC ... 32 V DC (including ripple)
Ripple	Max 3.6 V _{SS} within the permissible voltage range
Current consumption	typ. 120 mA

Standards and Regulations

Air clearances and creepage distances	According to EN 50178: 1998
Connection in acc. with standard	CUL
Protection class	III, IEC 61140, EN 61140, VDE 0140-1

Classifications

eCl@ss

eCl@ss 4.0	27250203
eCl@ss 4.1	27250203
eCl@ss 5.0	27250203
eCl@ss 5.1	27242608
eCl@ss 6.0	27242608
eCl@ss 7.0	27242608

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Classifications

eCl@ss

eCl@ss 8.0	27242608
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ETIM

ETIM 2.0	EC001434
ETIM 3.0	EC001604
ETIM 4.0	EC001604
ETIM 5.0	EC001604

UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	43201404

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / INTERBUS CLUB / cULus Recognized

Ex Approvals

Approvals submitted

Approval details

UL Recognized 	
Nominal current IN	0.12 A
Nominal voltage UN	24 V

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Approvals

cUL Recognized 	
Nominal current IN	0.12 A
Nominal voltage UN	24 V

INTERBUS CLUB

cULus Recognized 
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Accessories

Accessories

Adapter cable

Cable set - IBS RL CABLE POF/ - 2819956



Assembled cable sets with fiber optic bus connectors, sold by the meter

Assembly element

Lower mounting part - IBS RL AP - 2731128



Mounting plate for Ruggedline devices

Assembly tool

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Accessories

Fiber cutter - IBS RL FOC - 2725147



Fiber cutter for assembling polymer fiber cables for connecting INTERBUS Ruggedline devices

Assembly tool - PSM-POF-KONFTOOL - 2744131



Polymer fiber DIY case, consisting of: Stripping knife, stripping pliers, polishing wheels for F-SMA and SC-RJ quick mounting connectors, polishing pad and emery paper

Bridge

Cable set - IBS RL CONNECTION-LK - 2733029



Assembled cable jumper as a short connection between two INTERBUS Rugged Line devices with fiber optic bus connectors and power supply, approximately 30 cm

Cable by the meter

Cable - IBS PWR/5HD/F - 2731775



Power supply cable, gray, welding-splash-resistant in standard applications, 5 x 1.5 mm², highly flexible, sold by the meter

Cable - IBS PWR/5 - 2820000



Power supply cable, gray, welding-splash-resistant in standard applications, 5 x 1.5 mm², sold by the meter

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Accessories

Connector set

Connector set - IBS CCO-R/L - 2759883



M23 solder connection for bus connector set, male/female connector, 9-pos. (8+1)

Data cable by the meter

FO cable - PSM-LWL-RUGGED-980/1000 - 2744322



Polymer fiber cable, duplex, 980 µm/1000 µm, heavy version for permanent indoor installation, sold by the meter without connectors

FO cable - PSM-LWL-RUGGED-FLEX-980/1000 - 2744335



Polymer fiber cable, duplex 980/1000 µm, heavy-weight, highly flexible version for flexible conduit applications, by the meter, without connector

FO cable - PSM-LWL-KDHEAVY-980/1000 - 2744319



Polymer fiber cable, duplex 980/1000 µm, medium-weight version for permanent indoor installation, by the meter, without connector

Labeling panel

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Accessories

Marking label - IBS RL MARKER-SET - 2732729



Set of 50 small and 50 large metal marking labels

Marking label - IBS RL MARKER-G-SET - 2734727



100 large metal marking labels

Marking label - IBS RL MARKER-K-SET - 2734730



100 small metal marking labels

Measuring tools

Measuring instrument - PSM-FO-POWERMETER - 2799539



Fiber optic measuring case, consisting of an optical power meter, F-SMA, B-FOC adapters, reference fibers and operating instructions

Media converter

FO converters - IBS OPTOSUB-MA/M/R-LK-OPC - 2732635



INTERBUS fiber optic converter for converting the remote OUT interface to fiber optics, correction of the optical transmission capacity, FO output right

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Accessories

Plug

Bus connector - IBS RL PLUG-LK/POF - 2731076



Connector for the fiber optic bus with polymer fiber cable and for the power supply with QUICKON connection method

Adapter set - IBS RL 24 ADAP-LK/T - 2725040



INTERBUS Rugged Line adapter for converting the fiber optic remote bus to a copper wire remote bus

Adapter set - IBS RL 24 ADAP-T/LK - 2725037



INTERBUS Rugged Line adapter for converting the copper wire remote bus to a fiber optic remote bus

Bus connector - IBS RL PLUG-LK/POF-F - 2734183



Connector for the fiber optic bus with polymer fiber cable and for the power supply with spring-cage connection method

Connector set - IBS CCO-PSF/L - 2780878



M23 power supply connector, female connector, 6-pos.

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Accessories

Connector set - IBS CCO-PSM/L - 2759906



M23 power supply connector, male connector, 6-pos.

Protective cap

Transport protection - IBS RL PROT-LK - 2819969



Transport protection for optic fiber bus connection

Y-distributor

Y distributor - SAC-3P-M12Y/2XM12FS PE - 1683455



Y distributor, 4-position, Plug straight M12, A-coded, on Socket straight M12, A-coded and Socket straight M12, A-coded

User manual - IBS RL SYS PRO UM - 2743705

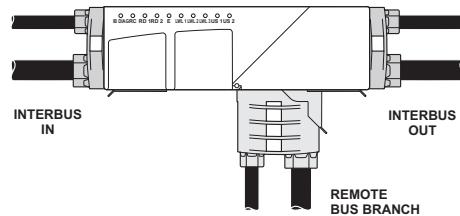


User manual, German, for configuring and installing the Rugged Line product range, only available as a download.

Drawings

Bus coupler - IBS RL 24 BK RB-LK-LK-2MBD - 2731597

Connection diagram



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