

# IBS RL 24 DIO 4/2/4-LK-2MBD

Order No.: 2732486

The illustration shows version IBS RL 24 DIO 4/2/4-LK



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2732486>

Digital I/O device for INTERBUS; fiber optic technology with 2 Mbaud, four inputs (24 V DC), two outputs (24 V DC, 0.5 A), sensor/actuator connection via 5-pos. M12 female connectors, rugged metal housing, IP67 protection



Commercial data	
GTIN (EAN)	
sales group	K521
Pack	1 pcs.
Customs tariff	85176200
Catalog page information	Page 287 (AX-2011)

**Product notes**

WEEE/RoHS-compliant since: 12/17/2007

<http://www.download.phoenixcontact.com>  
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

## Technical data

General data	
Width	127 mm
Height	67 mm
Depth	71 mm

Note on dimensions	With bus connectors and mounting plate
Weight	650 g
Note on weight specifications	Without connector or mounting plate
Mounting type	Wall mounting
Ambient temperature (operation)	0 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Permissible humidity (operation)	100 %
Permissible humidity (storage/transport)	95 % (no condensation)
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	IP67, when screwed together
Note	Seal unused slots/connections to ensure the degree of protection.
Test section	Between bus logic and outputs 500 V AC 50 Hz 1 min

#### Interface

Fieldbus system	INTERBUS
Name	Remote bus
Connection method	Optic fiber (polymer fiber 980/1000 µm)
Transmission speed	2 MBaud
Transmission physics	FO

#### 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 <sub>pk-pk</sub> within the permissible voltage range
Supply current	Typ. 80 mA (plus sensor current)

#### Digital inputs

Input name	Digital inputs
Connection method	2, 3, 4-wire
Number of inputs	4
Protective circuit	Electronic short-circuit/overload protection for each group
Input voltage range "0" signal	0 V DC ... 5 V DC
Input voltage range "1" signal	11 V DC ... 30 V DC
Typical input current per channel	3 mA
Delay at signal change from 0 to 1	3 ms
Delay at signal change from 1 to 0	3 ms

### Digital outputs

Output name	Digital outputs
Connection method	2, 3-wire
Number of outputs	2
Protective circuit	Electronic short-circuit/overload protection for each channel Damping diode
Output voltage	24 V DC
Nominal output voltage	24 V
Maximum output current per channel	500 mA
Nominal load, inductive	12 VA (1.2 H; 48 Ω)
Nominal load, lamp	12 W
Nominal load, ohmic	12 W

### Certificates / Approvals



Certification CUL, UL

### Accessories

Item	Designation	Description
<b>Assembly</b>		
2731128	IBS RL AP	Mounting plate for Ruggedline devices
2819969	IBS RL PROT-LK	Transport protection for optic fiber bus connection
<b>Cable/conductor</b>		
2820000	IBS PWR/5	Power supply cable, gray, welding-splash-resistant in standard applications, 5 x 1.5 mm <sup>2</sup> , sold by the meter
2731775	IBS PWR/5HD/F	Power supply cable, gray, welding-splash-resistant in standard applications, 5 x 1.5 mm <sup>2</sup> , highly stranded, sold by the meter
2819956	IBS RL CABLE POF/	Assembled cable sets with fiber optic bus connectors, sold by the meter
2733029	IBS RL CONNECTION-LK	Assembled cable jumper as a short connection between two INTERBUS Rugged Line devices with fiber optic bus connectors and power supply, approximately 30 cm

2744319	PSM-LWL-KDHEAVY-980/1000	Polymer fiber cable, duplex 980/1000 µm, medium-weight version for permanent indoor installation, by the meter, without connector
2744322	PSM-LWL-RUGGED-980/1000	Polymer fiber cable, duplex, 980 µm/1000 µm, heavy version for permanent indoor installation, sold by the meter without connectors
2744335	PSM-LWL-RUGGED-FLEX-980/1000	Polymer fiber cable, duplex 980/1000 µm, heavy-weight, highly flexible version for flexible conduit applications, by the meter, without connector

#### General

2743705	IBS RL SYS PRO UM	User manual, German, for configuring and installing the Rugged Line product range, only available as a download.
1641769	SACC-M12MS-4QO-0,75	Sensor/actuator connector, plug, straight, 4-pos., M12, A-coded, QUICKON-ONE, plastic knurl, cable diameter max. 8 mm

#### Marking

2734727	IBS RL MARKER-G-SET	100 large metal marking labels
2734730	IBS RL MARKER-K-SET	100 small metal marking labels
2732729	IBS RL MARKER-SET	Set of 50 small and 50 large metal marking labels

#### Plug/Adapter

2780878	IBS CCO-PSF/L	M23 power supply connector, female connector, 6-pos.
2759906	IBS CCO-PSM/L	M23 power supply connector, male connector, 6-pos.
2759883	IBS CCO-R/L	M23 solder connection for bus connector set, male/female connector, 9-pos. (8+1)
2732635	IBS OPTOSUB-MA/M/R-LK-OPC	INTERBUS fiber optic converter for converting the remote OUT interface to fiber optics, correction of the optical transmission capacity, FO output right
2725040	IBS RL 24 ADAP-LK/T	INTERBUS Rugged Line adapter for converting the fiber optic remote bus to a copper wire remote bus
2725037	IBS RL 24 ADAP-T/LK	INTERBUS Rugged Line adapter for converting the copper wire remote bus to a fiber optic remote bus
2731076	IBS RL PLUG-LK/POF	Connector for the fiber optic bus with polymer fiber cable and for the power supply with screw connection method
2734183	IBS RL PLUG-LK/POF-F	Connector for the fiber optic bus with polymer fiber cable and for the power supply with spring-cage connection method
1683455	SAC-3P-M12Y/2XM12FS PE	Y-distributor, 3-pos. +PE, straight connector M12 on 2 x straight socket M12

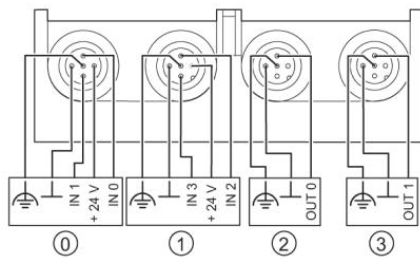
#### Tools

2725121	IBS RL ADAP FO	Measuring device adapter for INTERBUS Rugged Line devices
2725147	IBS RL FOC	Fiber cutter for assembling polymer fiber cables for connecting INTERBUS Rugged Line devices

1206146	KAMES LWL	Cable knife for polymer fiber, for external sheath
2799539	PSM-FO-POWERMETER	Fiber optic measuring case, consisting of an optical power meter, F-SMA, B-FOC adapters, reference fibers and operating instructions
2744131	PSM-POF-KONFTOOL	Polymer fiber DIY case, consisting of: Stripping knife, stripping pliers, polishing wheels for F-SMA and SCRJ quick mounting connectors, polishing pad and emery paper

### Diagrams/Drawings

#### Connection diagram



**Address**

PHOENIX CONTACT Inc., USA  
586 Fulling Mill Road  
Middletown, PA 17057, USA  
Phone (800) 888-7388  
Fax (717) 944-1625  
<http://www.phoenixcon.com>



© 2011 Phoenix Contact  
Technical modifications reserved;