

IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device

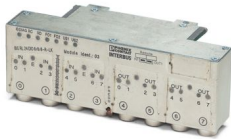


2734510

<https://www.phoenixcontact.com/us/products/2734510>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.

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



Product description

INTERBUS Ruggedline modules are provided for harsh ambient conditions or in the case of high requirements regarding system diagnostics. To ensure maximum availability, these modules are equipped with a zinc die-cast housing (IP67). This means they can even be mounted in the immediate vicinity of welding tongs, for example. Each Ruggedline module consists of a mounting panel and electronics module. The electronics module is snapped onto the mounting panel and fastened with two screws, if necessary. Peripheral faults can be clearly localized using the extended diagnostics. Short circuits in the sensor supply are signaled in groups of four inputs each, for example. And, in the case of a short circuit at an output, the respective output is even displayed directly. This information is made available to the controller as well as displayed on the module. For the modules with a fiber-optic connection, the diagnostic capability goes one step further. D

Your advantages

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

Commercial data

Item number	2734510
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR03
Product key	DRI513
Catalog page	Page 329 (C-8-2013)
GTIN	4017918890346
Weight per piece (including packing)	820.5 g
Weight per piece (excluding packing)	790 g
Customs tariff number	85176200
Country of origin	DE

IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device



2734510

<https://www.phoenixcontact.com/us/products/2734510>

Technical data

Dimensions

Width	179 mm
Height	67 mm
Depth	71 mm
Note on dimensions	with bus connection plugs and mounting panel

Interfaces

INTERBUS

Connection method	Optic fiber (polymer fiber 980/1000 µm)
Transmission speed	2 Mbps
Transmission physics	FO

Input data

Digital:

Input name	Digital inputs
Number of inputs	8
Connection technology	2-, 3-, 4-conductor
Input voltage range "0" signal	-30 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	1.5 ms
Delay at signal change from 1 to 0	3.5 ms
Protective circuit	Electronic short-circuit/overload protection for each group

Output data

Digital:

Output name	Digital outputs
Connection technology	2-, 3-conductor
Number of outputs	8
Protective circuit	Electronic short-circuit/overload protection for each group
Output voltage	24 V
Maximum output current per group	2 A
Maximum output current per channel	500 mA
Nominal output voltage	24 V
Output voltage when switched off	max. 0.5 V
Output current when switched off	0 A
Nominal load, inductive	12 VA (1.2 H, 48 Ω)
Nominal load, lamp	12 W
Nominal load, ohmic	12 W
Maximum operating frequency with ohmic nominal load	max. 1 kHz

IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device



2734510

<https://www.phoenixcontact.com/us/products/2734510>

Behavior with overload	Auto restart
Behavior with inductive overload	Output can be destroyed
Overcurrent shut-down	min. 0.7 A
Output current with ground connection interrupt when switched off	0 mA

Product properties

Product type	I/O component
Product family	Ruggedline
Type	Block design
No. of channels	16

Electrical properties

Supply: Module electronics

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

Electrical isolation/isolation of the voltage ranges

Test voltage: Between bus logic and outputs	500 V AC, 50 Hz, 1 min.
---	-------------------------

Connection data

Connection method	Fiber optic
-------------------	-------------

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-20 °C ... 55 °C
Degree of protection	IP65/IP67
Note	Seal unused slots/connections to ensure the degree of protection.
Air pressure (operation)	860 hPa ... 1080 hPa (up to 1500 m above sea level)
Air pressure (storage/transport)	660 hPa ... 1080 hPa (up to 3500 m above sea level)
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Permissible humidity (operation)	100 %
Permissible humidity (storage/transport)	95 % (non-condensing)

Standards and regulations

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
------------------	---------------------------------------

Mounting

Mounting type	Wall mounting
---------------	---------------

IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device

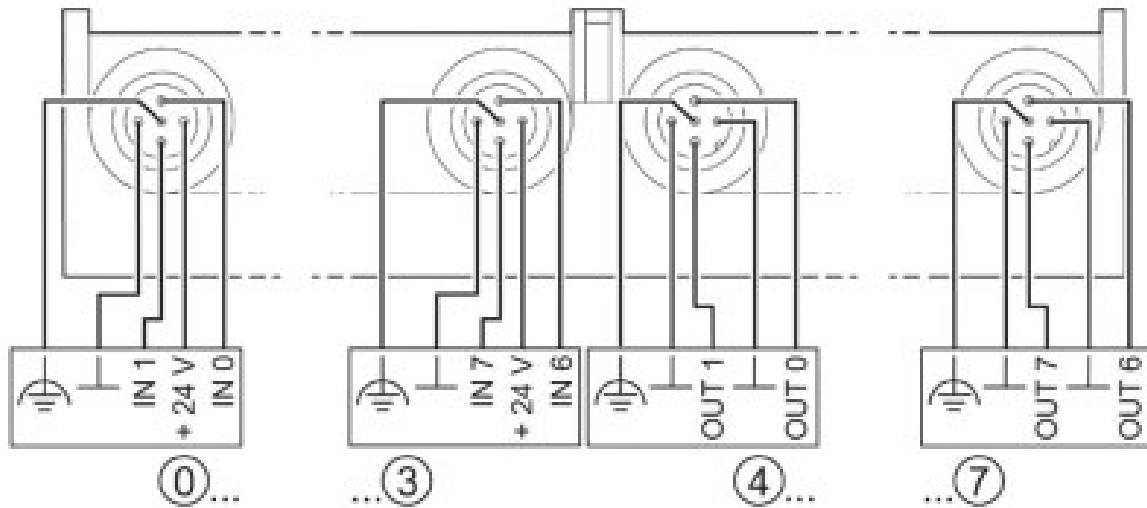


2734510

<https://www.phoenixcontact.com/us/products/2734510>

Drawings

Connection diagram



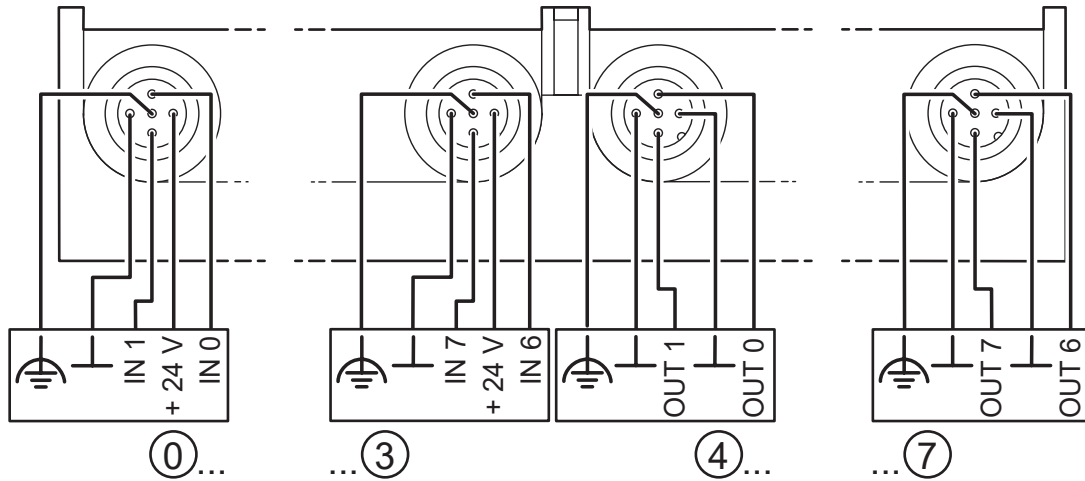
IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device



2734510

<https://www.phoenixcontact.com/us/products/2734510>

Connection diagram



IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device



2734510

<https://www.phoenixcontact.com/us/products/2734510>

Classifications

ECLASS

ECLASS-11.0

27242604

ETIM

ETIM 8.0

EC001599

UNSPSC

UNSPSC 21.0

32151600

IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device



2734510

<https://www.phoenixcontact.com/us/products/2734510>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(a), 6(a)-I, 7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
-------------------------------------	----------------------

IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device



2734510

<https://www.phoenixcontact.com/us/products/2734510>

Accessories

IBS RL PLUG-LK/POF - Bus connector

2731076

<https://www.phoenixcontact.com/us/products/2731076>

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

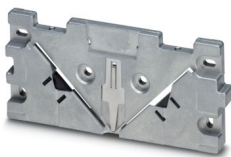


IBS RL AP - Lower mounting part

2731128

<https://www.phoenixcontact.com/us/products/2731128>

Mounting panel for Ruggedline devices



IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device



2734510

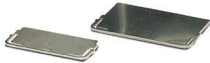
<https://www.phoenixcontact.com/us/products/2734510>

IBS RL MARKER-SET - Marking label

2732729

<https://www.phoenixcontact.com/us/products/2732729>

Set of 50 small and 50 large metal marking labels



SACC-M12MS-4QO-0,75 - Connector

1641769

<https://www.phoenixcontact.com/us/products/1641769>



Connector, Universal, 4-position, Plug straight M12, coding: A, Insulation displacement connection, knurl material: Plastic, external cable diameter 4 mm .. . 8 mm

IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device

2734510

<https://www.phoenixcontact.com/us/products/2734510>

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

2744322

<https://www.phoenixcontact.com/us/products/2744322>



Polymer fiber cable, duplex 980 μ m/1000 μ m, heavy-weight version for installation in stationary systems and machines, by the meter without male connector

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

2744335

<https://www.phoenixcontact.com/us/products/2744335>



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

IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device



2734510

<https://www.phoenixcontact.com/us/products/2734510>

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

2744319

<https://www.phoenixcontact.com/us/products/2744319>



Polymer fiber cable, duplex 980 μm /1000 μm , medium-weight version for installation in stationary systems and machines, by the meter without male connector

IBS RL CONNECTION-LK - Cable set

2733029

<https://www.phoenixcontact.com/us/products/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

IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device



2734510

<https://www.phoenixcontact.com/us/products/2734510>

IBS PWR/5HD/F - Cable

2731775

<https://www.phoenixcontact.com/us/products/2731775>



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

IBS PWR/5 - Cable

2820000

<https://www.phoenixcontact.com/us/products/2820000>



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

IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device



2734510

<https://www.phoenixcontact.com/us/products/2734510>

IBS RL 24 ADAP-LK/T - Adapter set

2725040

<https://www.phoenixcontact.com/us/products/2725040>

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



IBS RL 24 ADAP-T/LK - Adapter set

2725037

<https://www.phoenixcontact.com/us/products/2725037>

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



IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device



2734510

<https://www.phoenixcontact.com/us/products/2734510>

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

2732635

<https://www.phoenixcontact.com/us/products/2732635>



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

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

2734183

<https://www.phoenixcontact.com/us/products/2734183>



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

IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device



2734510

<https://www.phoenixcontact.com/us/products/2734510>

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

1683455

<https://www.phoenixcontact.com/us/products/1683455>



Y distributor, 4-position, unshielded, Plug straight M12, coding: A, on Socket straight M12, coding: A and Socket straight M12, coding: A

IBS CCO-R/L - Connector set

2759883

<https://www.phoenixcontact.com/us/products/2759883>



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

IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device

2734510

<https://www.phoenixcontact.com/us/products/2734510>

IBS CCO-PSF/L - Connector set

2780878

<https://www.phoenixcontact.com/us/products/2780878>

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



IBS CCO-PSM/L - Connector set

2759906

<https://www.phoenixcontact.com/us/products/2759906>

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



IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device



2734510

<https://www.phoenixcontact.com/us/products/2734510>

IBS RL CABLE POF/ - Cable set

2819956

<https://www.phoenixcontact.com/us/products/2819956>

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



IBS RL PROT-LK - Transport protection

2819969

<https://www.phoenixcontact.com/us/products/2819969>

Transport protection for optic fiber bus connection



IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device



2734510

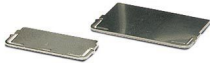
<https://www.phoenixcontact.com/us/products/2734510>

IBS RL MARKER-G-SET - Marking label

2734727

<https://www.phoenixcontact.com/us/products/2734727>

100 large metal marking labels

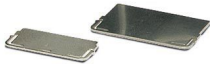


IBS RL MARKER-K-SET - Marking label

2734730

<https://www.phoenixcontact.com/us/products/2734730>

100 small metal marking labels



IBS RL FOC - Fiber cutter

2725147

<https://www.phoenixcontact.com/us/products/2725147>



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

IBS RL 24 DIO 8/8/8-R-LK-2MBD - Distributed I/O device



2734510

<https://www.phoenixcontact.com/us/products/2734510>

PSM-FO-POWERMETER - Measuring instrument

2799539

<https://www.phoenixcontact.com/us/products/2799539>



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

PSM-POF-KONFTOOL - Assembly tool

2744131

<https://www.phoenixcontact.com/us/products/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

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com