

IBS RL 24 DO 16/8-R-LK-2MBD - Distributed I/O device

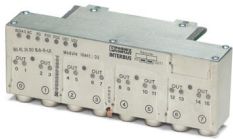


2734507

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Digital input device for INTERBUS; fiber optic technology with 2 Mbaud, 16 inputs that can be read (24 V DC), sensor connection via 5-pos. M12 female connectors, rugged metal housing, IP67 protection



The figure shows version IBS RL 24 DO 16/8-R-LK

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. By using the latest fiber-optic technology, the quality of the transmission path is permanently determined and optimally adjusted. This information is also available to the controller as well as on the module. These additional features make it possible to detect gradual deterioration of the transmission path before transmission errors occur or transmission is interrupted.

In the case of Ruggedline modules, the bus medium can be selected. In addition to versions with a fiber-optic connection (polymer fiber), modules are also available for use with twisted pair cables. The bus medium can be changed from a fiber-optic installation to a copper medium at any time using corresponding plug-in adapters.

The bus is connected via IP67 connectors, which transport both the bus signal and the power supply to the modules. For easy assembly, the supply cable is connected to the connector using the QUICKON fast connection technology and the fiber-optic cable is connected to the connector using a simple cutting and assembly tool without the need for additional polishing.

Your advantages

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

Commercial data

Item number	2734507
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	DR03
Product key	DRI513
GTIN	4017918823535
Weight per piece (including packing)	832.7 g

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Weight per piece (excluding packing)	810 g
Customs tariff number	85176200
Country of origin	DE

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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

Output data

Digital:

Output name	Digital outputs
Connection technology	2-, 3-conductor
Number of outputs	16
Protective circuit	Electronic short-circuit/overload protection for each channel
Output voltage	24 V DC
Maximum output current per channel	500 mA
Maximum output current per module	4 A
Nominal output voltage	24 V DC
Output voltage when switched off	max. 500 mV
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
Reverse voltage resistance to short pulses	Limited protection against reverse voltages up to 3 A DC
Behavior with overload	Auto restart
Behavior with inductive overload	Output can be destroyed
Overcurrent shut-down	min. 2.6 A
Output current with ground connection interrupt when switched off	0 A

Product properties

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

Electrical properties

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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
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
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Connection data

Connection method	Fiber optic
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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)	800 hPa ... 1060 hPa (up to 2000 m above sea level)
Air pressure (storage/transport)	700 hPa ... 1060 hPa (up to 3000 m above sea level)
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Permissible humidity (operation)	100 %
Permissible humidity (storage/transport)	95 % (non-condensing)

Mounting

Mounting type	Panel mounting
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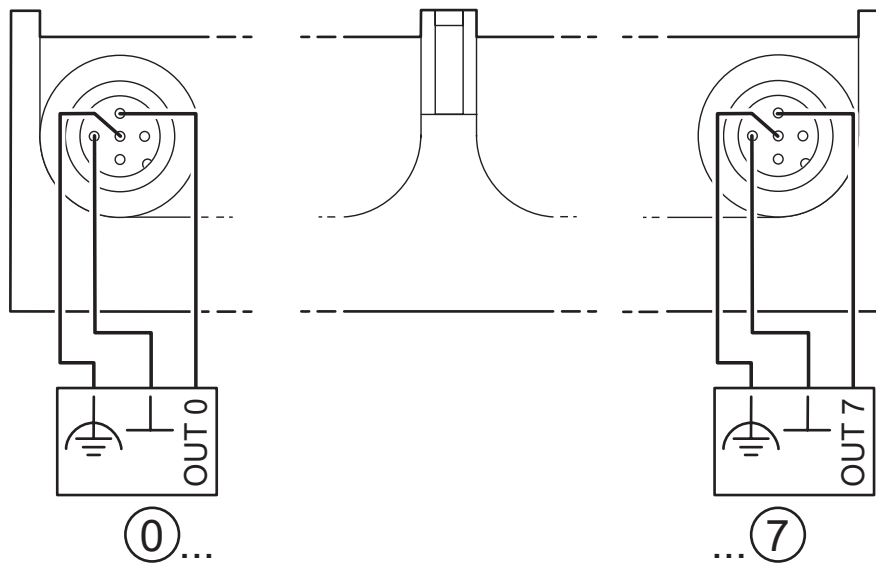


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Drawings

Connection diagram



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Environmental product compliance

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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