

IBS RL 24 DO 8/8-2A-T - Distributed I/O device



2731856

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Digital output device for INTERBUS; twisted pair with 500 kbaud, 8 outputs (24 V DC, 2 A), actuator connection via 5-pos. M12 female connectors, rugged metal housing, IP67 protection



The figure shows version IBS RL 24 DO 8/8-2A-LK-2MBD

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

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

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 2731856 |
| Packing unit | 1 pc |
| Note | Made to order (non-returnable) |
| Sales key | DR03 |
| Product key | DRI513 |
| GTIN | 4017918187088 |
| Weight per piece (including packing) | 834.7 g |
| Weight per piece (excluding packing) | 720 g |
| Customs tariff number | 85176200 |
| Country of origin | DE |

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 | Twisted pair |
| Transmission speed | 500 kbps |
| Transmission physics | Copper |

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 channel |
| Output voltage | 24 V DC |
| Maximum output current per channel | 2 A |
| Maximum output current per module | 8 A |
| Nominal output voltage | 24 V |
| Output voltage when switched off | max. 1 V |
| Output current when switched off | max. 100 µA |
| Nominal load, inductive | 48 VA (1,2 H, 12 Ω) |
| Nominal load, lamp | 48 W |
| Nominal load, ohmic | 48 W |
| Maximum operating frequency with ohmic nominal load | max. 300 Hz |
| Reverse voltage resistance to short pulses | Limited protection against reverse voltages up to 2 A DC |
| Behavior with overload | Auto restart |
| Behavior with inductive overload | Output can be destroyed |
| Overcurrent shut-down | min. 2.3 A |
| Output current with ground connection interrupt when switched off | max. 25 mA |

Product properties

| | |
|-----------------|---------------|
| Product type | I/O component |
| Product family | Ruggedline |
| Type | Block design |
| No. of channels | 8 |

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 |
| 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 | QUICKON fast connection |
|-------------------|-------------------------|

Environmental and real-life conditions

Ambient conditions

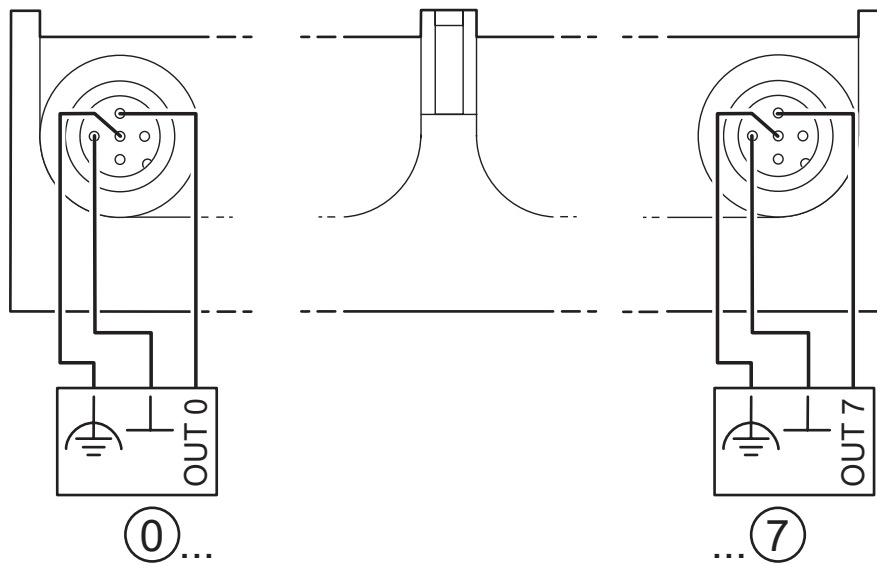
| | |
|--|---|
| Ambient temperature (operation) | -20 °C ... 55 °C |
| Degree of protection | IP65/IP67 |
| Note | Seal unused slots/connections to ensure the degree of protection. |
| Air pressure (operation) | 860 hPa ... 1080 hPa (up to 1500 m above sea level) |
| Air pressure (storage/transport) | 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) |

Mounting

| | |
|---------------|----------------|
| Mounting type | Panel mounting |
|---------------|----------------|

Drawings

Connection diagram



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Environmental product compliance

China RoHS

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

EU REACH SVHC

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

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