

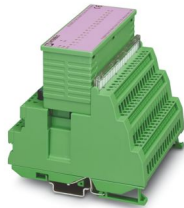
# IB ST 24 DIO 8/8R/3 - I/O module



2751849

<https://www.phoenixcontact.com/us/products/2751849>

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INTERBUS-ST digital input/output module, 8 inputs, 24 V DC, 8 relay changeover contact outputs, IP20 degree of protection, consisting of: terminal part with screw connection and module electronics

## Product description

INTERBUS-ST digital input and output modules

The digital INTERBUS input/output modules provide connection options for 8 sensors and 8 actuators in 3-conductor technology.

The module electronics have a plug-in design. In the event of an error, the passive basic terminal block remains on the DIN rail and the active electronics are replaced in just a few steps.

The modules are protected against polarity reversal and the outputs are additionally protected against short circuits with fuses. The state of the fuses is monitored; any errors that occur are reported to the controller.

Contact with the protective grounding is established directly when the modules are snapped onto the DIN rail.

The input/output status LED and bus diagnostics indicators on the top of the module electronics provide information about the module state at all times.

All modules can be marked individually via the large pull-out marking field. The insert cards can be marked by hand or using a plotter or printer. In addition, the terminal points can be marked individually with zack marker strips.

## Your advantages

- 8 digital inputs
- 8 relay outputs
- Connection of sensors in 3-conductor technology

## Commercial data

Item number	2751849
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	DR03
Product key	DRI334
GTIN	4017918139599
Weight per piece (including packing)	734.1 g
Weight per piece (excluding packing)	710 g
Customs tariff number	85389091
Country of origin	DE

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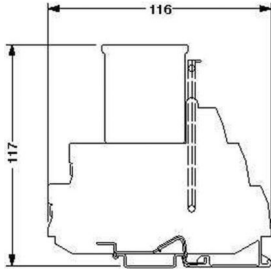


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## Technical data

### Dimensions

Dimensional drawing	
Width	118 mm
Height	117 mm
Depth	116 mm

### Notes

#### Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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### Interfaces

#### ST local bus

Connection method	ST local bus connector
Transmission speed	500 kbps

### Input data

#### Digital:

Input name	Digital inputs
Number of inputs	8
Connection method	Screw connection
Connection technology	3-conductor
Input voltage	24 V DC
Input voltage range "0" signal	-30 V DC ... 5 V DC
Input voltage range "1" signal	13 V DC ... 30 V DC
Nominal input current at $U_{IN}$	typ. 5 mA (per channel)
Typical response time	3 ms (typ.)
Protective circuit	Overload protection; Fuse in header Short-circuit protection; Fuse in header

### Output data

#### Digital:

Output name	Relay output
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Connection method	Screw connection
Connection technology	3-conductor
Number of outputs	8
Protective circuit	Short-circuit protection; electronic
Maximum output current per channel	3 A
Nominal output voltage	250 V AC
Nominal load, inductive	48 VA
Nominal load, lamp	24 W
Nominal load, ohmic	48 W

## Product properties

Product type	I/O component
Product family	Smart Terminal ST
Type	modular INTERBUS Smart Terminal
Mounting position	Horizontal DIN rail
No. of channels	16

## Electrical properties

Supply: Module electronics

Supply voltage	24 V DC
Supply voltage range	20 V DC ... 30 V DC (including ripple)
Current consumption	0.2 A
Ripple	3.6 V <sub>pp</sub> within the allowable voltage range

Electrical isolation/isolation of the voltage ranges

Test voltage: Bus logic / I/O	500 V AC, 50 Hz, 1 min
Test voltage: I/O / Ground conductor	500 V AC, 50 Hz, 1 min
Test voltage: Relay contacts / I/O	1500 V AC, 50 Hz, 1 min
Test voltage: Relay contacts / Ground conductors	1500 V AC, 50 Hz, 1 min
Test voltage: Relay contact / Bus logics	1500 V AC, 50 Hz, 1 min
Test voltage: Relay contacts one below the other	1000 V AC, 50 Hz, 1 min

## Connection data

Connection technology

Connection name	Terminal block
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Terminal block

Connection method	Screw connection
Conductor cross-section, rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section, flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section AWG	24 ... 12
Stripping length	8 mm

## Environmental and real-life conditions

### Ambient conditions

Ambient temperature (operation)	0 °C ... 55 °C
Degree of protection	IP20
Air pressure (operation)	86 kPa ... 108 kPa (1500 m above sea level)
Air pressure (storage/transport)	66 kPa ... 108 kPa (3500 m above sea level)
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Permissible humidity (operation)	30 % ... 75 % (non-condensing)
Permissible humidity (storage/transport)	30 % ... 95 % (non-condensing)

## Standards and regulations

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

Mounting type	DIN rail mounting
Mounting position	Horizontal DIN rail

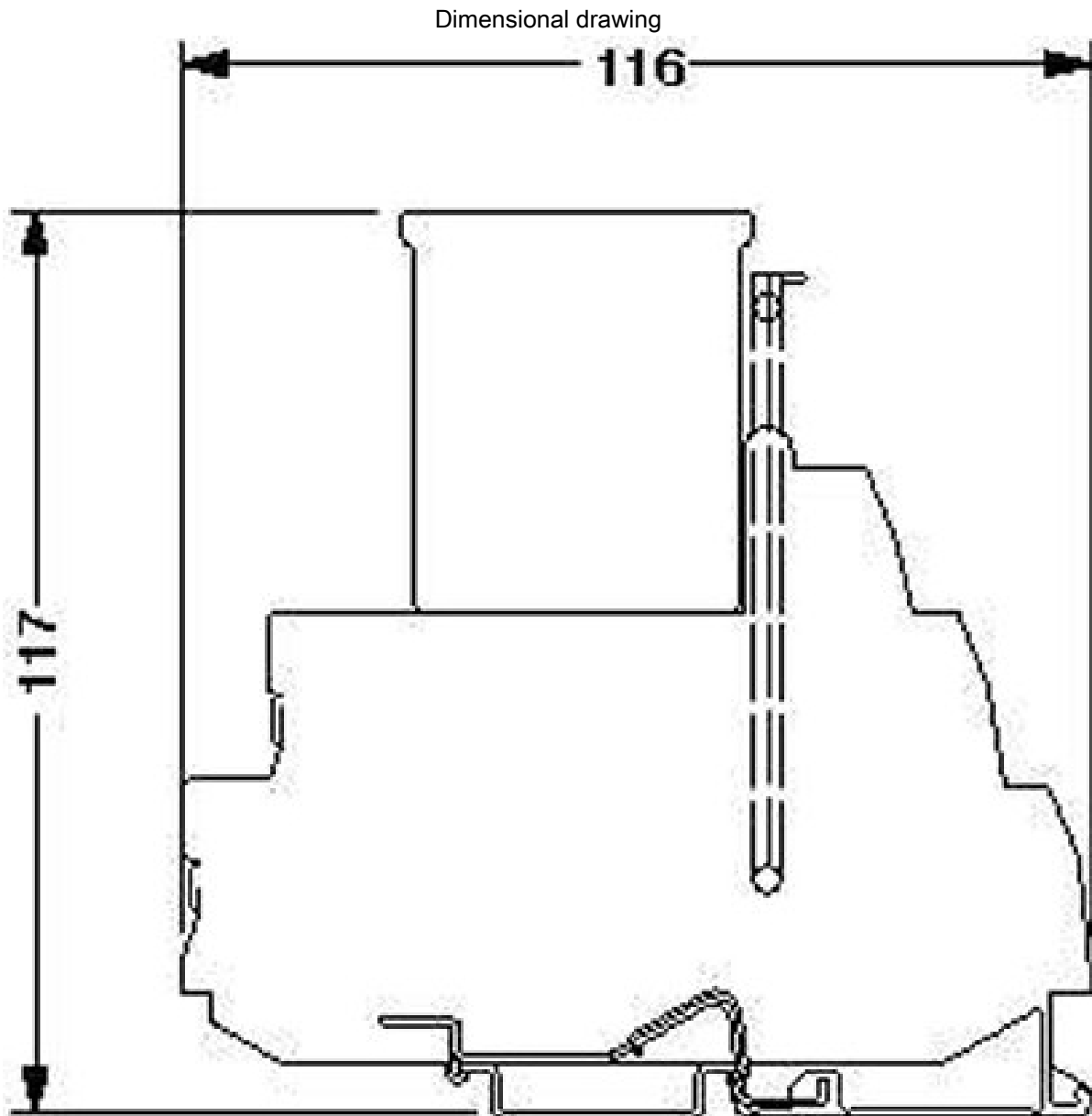
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## Drawings



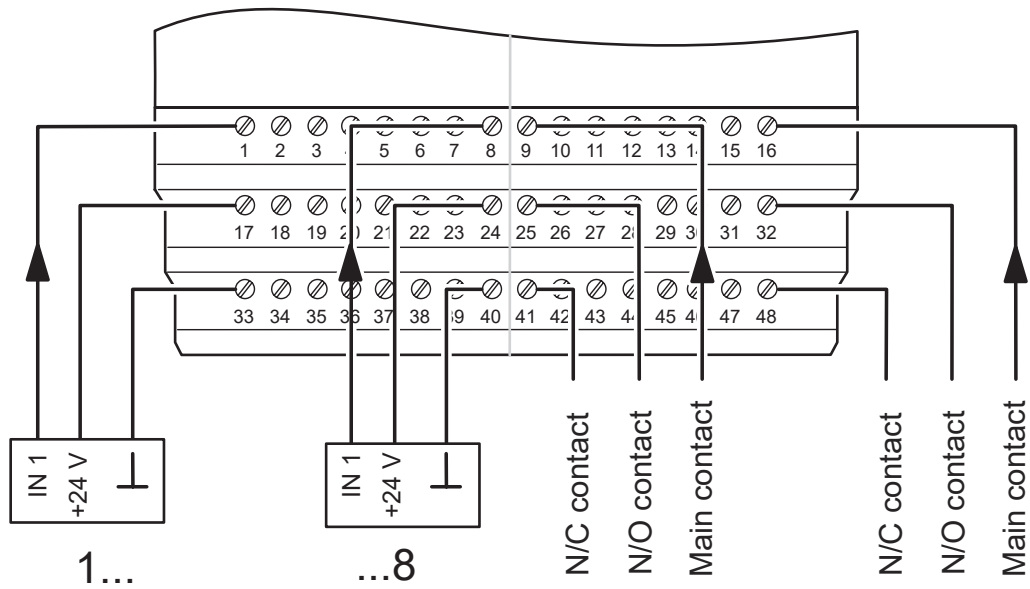
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Connection diagram

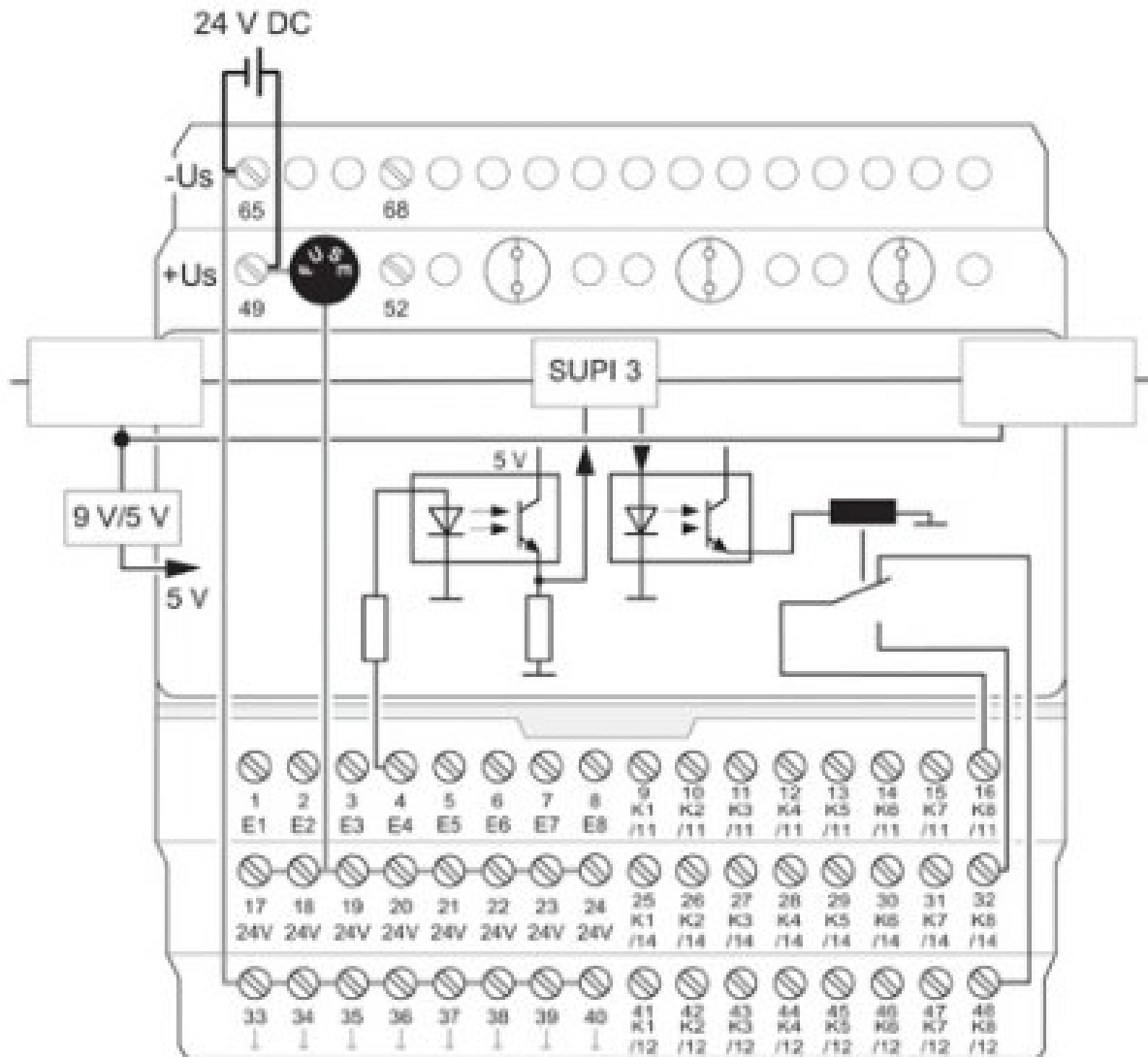


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Block diagram



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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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