

# IB ST 24 INC/2 - Function module



2751975

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INTERBUS-ST positioning module, 2 incremental encoder inputs, 8 digital inputs, 8 digital outputs, 24 V DC, 0.5 A, IP20 protection, consisting of: Terminal part with screw connection and module electronics

## Product description

The IB ST 24 INC/2 positioning module enables two incremental encoders to be connected using D-SUB connectors. The module has 2 channels which can be operated independently of one another. Each channel consists of 4 digital inputs with 24 V DC and 4 digital outputs with 24 V DC, 500 mA. For each of the three operating modes, counting, position detecting and positioning of objects, the inputs/outputs have a different meaning. The module has 2 channels, which can be operated independently of one another. Each channel consists of 4 digital inputs (24 V DC) and 4 digital outputs (24 V DC, 500 mA). The I/Os have different meanings in the three operating modes: counting, position detection, and positioning. Counting: In this operating mode, the module is able to count pulses gate-controlled and independent of the direction (up or down). The possibility of assigning a time basis (timer) to the count permits speeds to be measured simply with incremental encoders. According to the event, one output per channel can be addressed. The option of assigning a time base to counting (timer) enables you to easily measure speed using incremental encoders. An output can be controlled at each channel in response to specific events Position detection: If the measured value is in the defined range, the corresponding output is set by the module. In position detection, ranges within which outputs are set are defined by set values. Four outputs are available per channel. Positioning: In this application, the desired position of the object is specified via the control program. If permitted by the application, position values can also be stored individually (254 per channel), which the module approaches automatically once called. Control data such as the traversing direction and traversing speed is specified directly by the digital outputs. Limit and reference mark switches are connected directly to the digital inputs. The module is available with screw or spring-cage connection.

## Your advantages

- Position detection with incremental encoder
- Connection of actuators in 2-conductor technology
- Connection of actuators in 2- and 3-conductor technology

## Commercial data

Item number	2751975
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	DR03
Product key	DRI362
GTIN	4017918139650
Weight per piece (including packing)	731.9 g
Weight per piece (excluding packing)	731.9 g
Customs tariff number	85389091
Country of origin	DE

## Technical data

### Interfaces

#### ST local bus

Connection method	ST local bus connector
Transmission speed	500 kbps

### Input data

#### Digital

Number of inputs	8
Input voltage range "0" signal	-30 V DC ... 5 V DC
Input voltage range "1" signal	13 V DC ... 30 V DC
Connection technology	3-conductor (signal, Us, GND)
Typical input current per channel	5 mA

#### Counter:

Number of inputs	2
Operating mode	Counting, position detection, controlled positioning
Input frequency	0 Hz (500 kHz; 5 V) 0 Hz (25 kHz; 24 V)

### Output data

#### Digital

Number of outputs	8
Output voltage	Us - 0.5 V DC
Protective circuit	Reverse polarity protection

#### Digital

Protective circuit	Short-circuit protection of outputs; electronic
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### Product properties

Product type	I/O component
Product family	Smart Terminal ST
Type	modular

### Electrical properties

Test section	Bus/Outputs 500 V AC 50 Hz 1 min
	Channel 1/Channel 2 500 V AC 50 Hz 1 min
	Bus/Ground conductor 500 V AC 50 Hz 1 min
	I/O voltage/Ground conductor 500 V AC 50 Hz 1 min

#### Supply

Communications power $U_L$	9 V DC (from the ST local bus)
I/O voltage	$\pm 24$ V DC 5 % (ripple)

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I/O voltage range	20 V DC ... 30 V DC
Typical current consumption	200 mA (from the local bus)
	80 mA (to Us1 / Us2)

## Connection data

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

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
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## Mounting

Mounting type	DIN rail mounting
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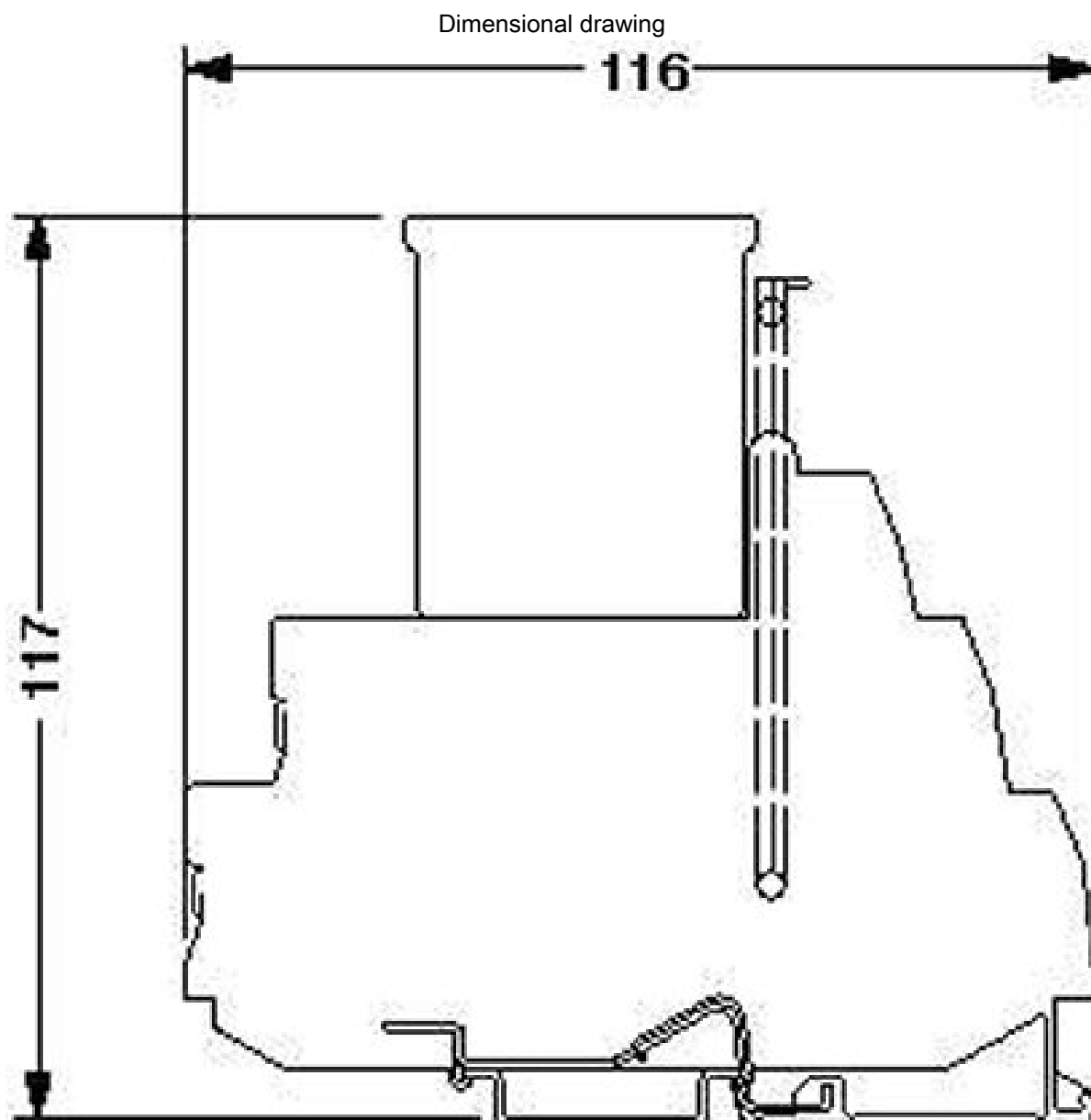
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## Drawings

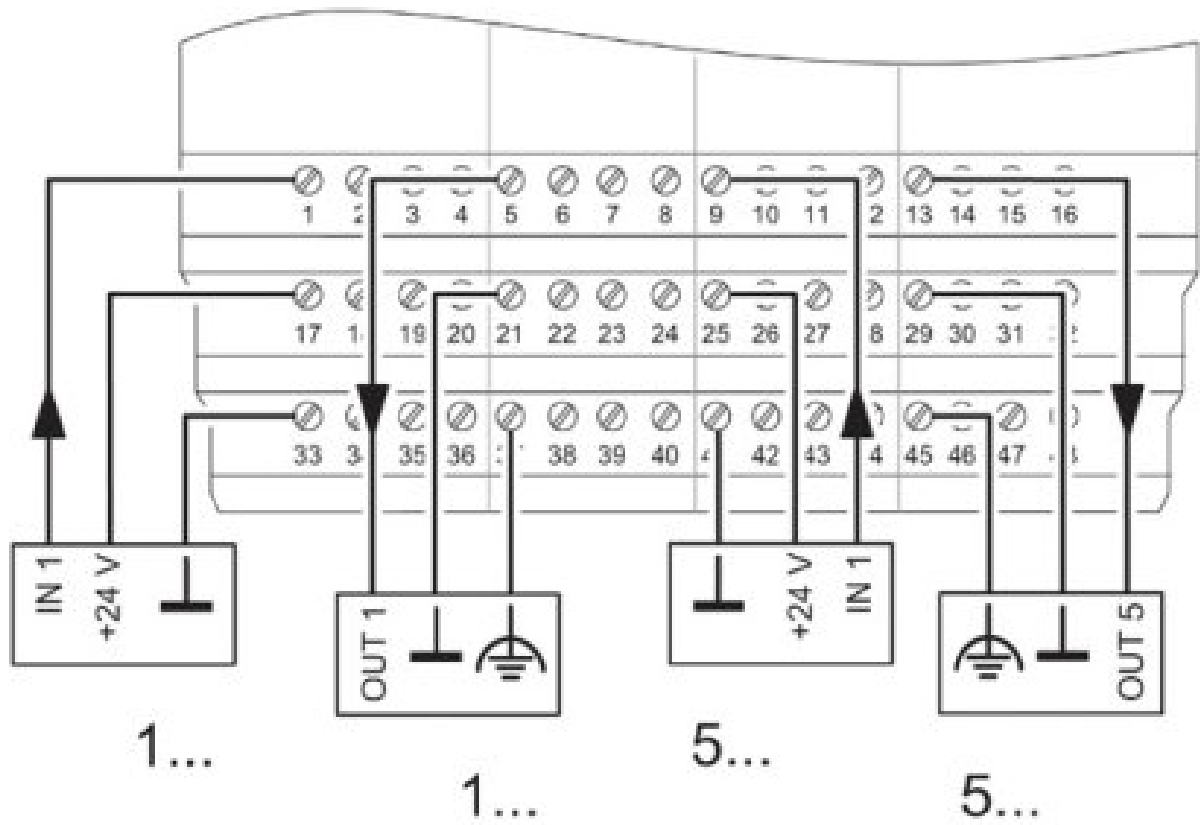


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Connection diagram



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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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