

## Inline function terminal - IB IL 24 IOL 4 DI 12-PAC - 2692717

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Inline IO-Link master, complete with accessories (connector and labeling field), 4 IO-Link ports, 12 digital inputs, 24 V DC, 2, 3-wire connection method

### Product Description

The terminal is designed for use within an Inline station.

The terminal is used to operate IO-Link-compatible sensors and actuators (devices). It is also used to acquire digital signals.

IO-Link is the standard for consistent communication from the controller to the lowest field level. In IO-Link communication, the process data is forwarded during parallel service data transmission.

IO-Link is a point-to-point connection between an IO-Link port and the sensor or actuator. IO-Link technology uses the familiar signal technology of the 0 V and 24 V binary interface in order to transmit data using pulse modulation. IO-Link offers full backward compatibility with standard sensors/actuators.

Using this terminal, IO-Link-compatible devices from any manufacturer can be operated on INTERBUS, PROFIBUS, and PROFINET.


### Your advantages

- ✓ 4 type A IO-Link ports
- ✓ Optional use of the IO-Link ports in SIO mode as standard inputs or standard outputs
- ✓ Connections for 12 digital sensors
- ✓ Connection of sensors in 2 or 3-wire technology
- ✓ IO-Link specification V1.0

RoHS



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 412902
GTIN	4046356412902
Weight per Piece (excluding packing)	240.000 g
Custom tariff number	85389091
Country of origin	Germany

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## Technical data

### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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### Dimensions

Width	48.8 mm
Height	119.8 mm
Depth	71.5 mm

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)
Air pressure (operation)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Degree of protection	IP20

### General

Mounting type	DIN rail
Net weight	200 g
Note on weight specifications	with connectors
Diagnostics messages	Short-circuit of a digital output in the SIO mode Yes
	Sensor supply short-circuit No
	Sensor supply overload No

### Interfaces

Designation	Inline local bus
No. of channels	2
Connection method	Inline data jumper
Transmission speed	500 kbps

### Inline potentials

Designation	Communications power ( $U_L$ )
Supply voltage	7.5 V (via voltage jumper)
Current consumption	max. 100 mA
Designation	Segment circuit supply ( $U_S$ )
Supply voltage	24 V DC (via voltage jumper)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current consumption	max. 2 A (with load and port supply)
	max. 52 mA (without load)

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## Technical data

### Digital inputs

Input name	Digital inputs
Description of the input	IEC 61131-2 type 1
Connection method	Inline connector
Connection technology	3-wire
Number of inputs	12
Input voltage range "0" signal	< 5 V (typ.)
Input voltage range "1" signal	> 11 V DC (typ.)
Input voltage range	0 V DC ... 30 V DC
Nominal input current at $U_{IN}$	2.2 mA
Delay at signal change from 0 to 1	3 ms
Delay at signal change from 1 to 0	3 ms
Input name	Digital inputs
Connection method	Inline connector
Number of inputs	max. 4
Nominal input current	5.5 mA (at 24 V DC)
Signal delay	3 ms
	3 ms
Permissible cable length	20 m

### Digital outputs

Number of outputs	max. 4
Nominal current per channel	max. 200 mA ( $I_{Nominal}$ )
Maximum total current consumption	max. 800 mA
Limitation of the voltage induced on circuit interruption	approx. -1 V
Type of protection	Short-circuit protection
Behavior with overload	Output may be damaged
Behavior in case of short-circuit	Short-circuit protection

### Electrical isolation

Test section	24 V supply $U_S$ (IO-Link and digital inputs) / functional earth ground 500 V DC 50 Hz 1 min.
	24 V supply $U_S$ (IO-Link and digital inputs) / 7.5 V supply (bus logic) 500 V DC 50 Hz 1 min.
	7.5 V supply (bus logics) / functional earth ground 500 V DC 50 Hz 1 min.

### Standards and Regulations

Protection class	III, IEC 61140, EN 61140, VDE 0140-1
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### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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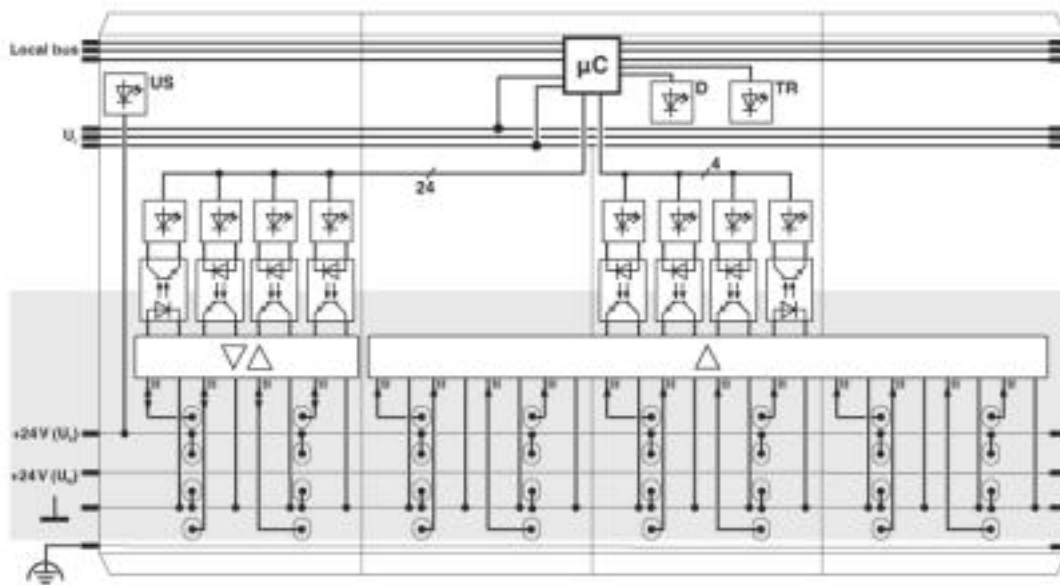
### Technical data

#### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

### Drawings

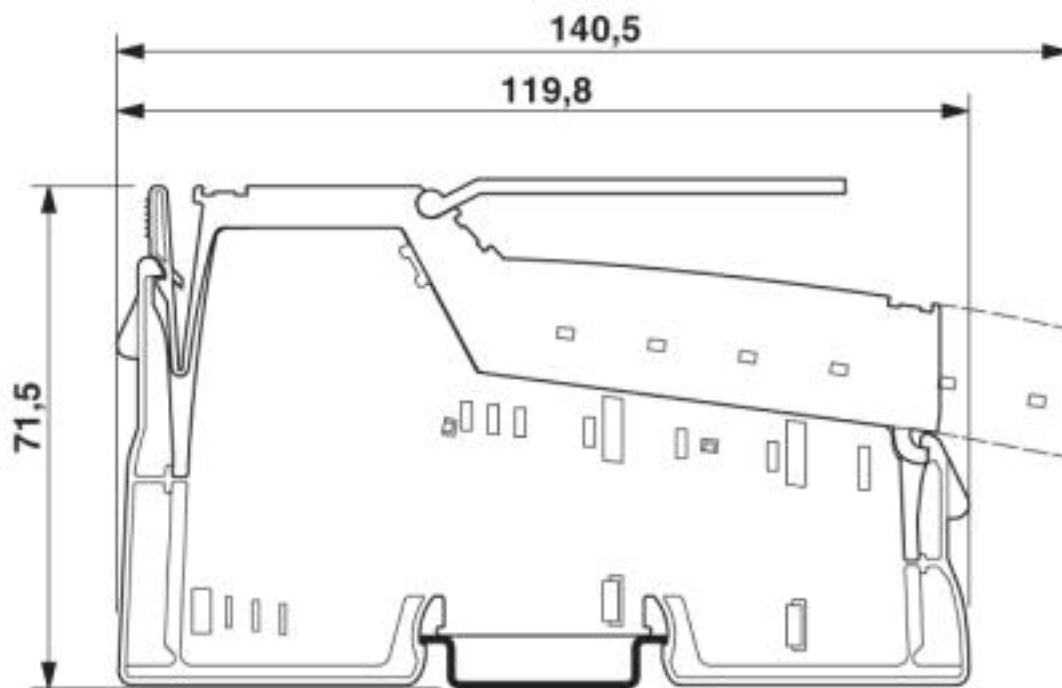
Block diagram



Internal wiring of the terminal points

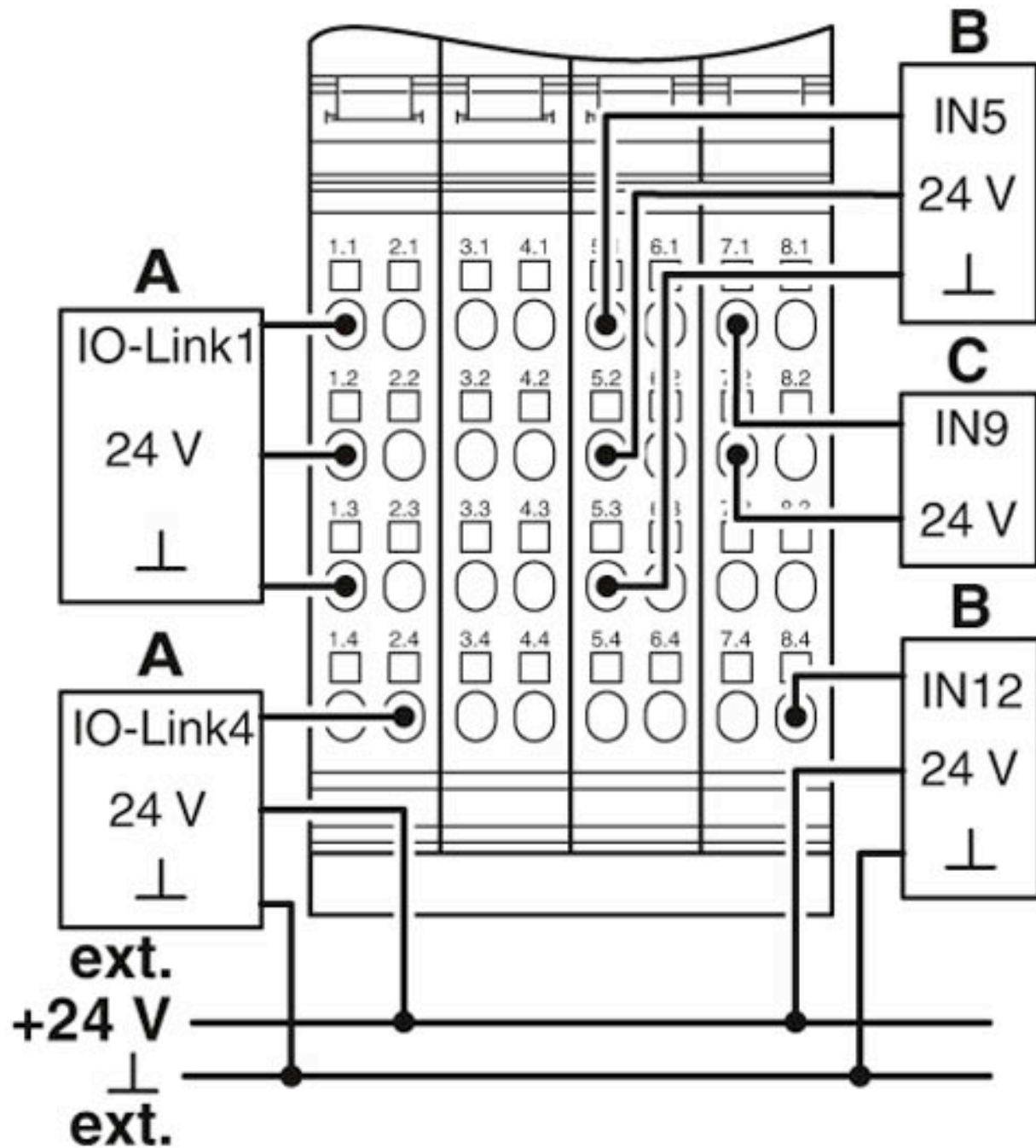
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Dimensional drawing



## Inline function terminal - IB IL 24 IOL 4 DI 12-PAC - 2692717

Connection diagram



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### Classifications

#### eCl@ss

eCl@ss 4.0	27250300
eCl@ss 4.1	27250300
eCl@ss 5.0	27250300
eCl@ss 5.1	27242600
eCl@ss 6.0	27242600
eCl@ss 7.0	27242604
eCl@ss 8.0	27242604
eCl@ss 9.0	27242604

#### ETIM

ETIM 2.0	EC001430
ETIM 3.0	EC001599
ETIM 4.0	EC001599
ETIM 5.0	EC001599
ETIM 6.0	EC001599
ETIM 7.0	EC001599

#### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	32151602

### Accessories

#### Accessories

##### Connector set

Connector set - IB IL DI/DO 8-PLSET/CP - 2860963



Connector set, for IB IL DI/DO 8, copper, with color print.

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#### I/O component

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### Accessories

#### Inline terminal - IB IL PD 24V-PAC - 2862987



Inline terminal for power distribution (24 V), complete with accessories, (connector and labeling field) 24 V supply voltage is fed out from the segment circuit (US)

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#### Inline terminal - IB IL PD GND-PAC - 2862990



Inline terminal for power distribution (GND), complete with accessories, (connector and labeling field) connections for GND

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### Labeling panel

#### Labeling field - IB IL FIELD 8 - 2727515

Labeling field, width: 48.8 mm



#### Labeling field - IB IL FIELD 2 - 2727501

Labeling field, width: 12.2 mm



### Terminal marking

#### Insert strip - ESL 62X10 - 0809492



Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems: Laser printer, mounting type: insert, lettering field size: 62 x 10 mm



## Inline function terminal - IB IL 24 IOL 4 DI 12-PAC - 2692717

### Accessories

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Insert strip - ESL 62X46 - 0809502



Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems: Laser printer, mounting type: insert, lettering field size: 62 x 46 mm

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