

# IB IL 24 SEG/F-XC-PAC - Segmentation module



2701163

<https://www.phoenixcontact.com/us/products/2701163>

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Inline segment terminal, version for extreme conditions, complete with accessories (connector and labeling field), 24 V DC, with fuse

The figure shows the standard item

## Product description

The terminal is designed for use within an Inline station. This terminal can be used to create a protected partial circuit (segment circuit) within a main circuit. The internal fuse protects the segment circuit. The terminal is not used for voltage supply. It therefore does not have any elements for protection against polarity reversal and surge voltage. Thanks to special engineering measures and tests, the terminal can be used under extreme ambient conditions.

## Your advantages

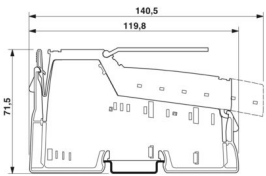
- Automatic creation of a segment circuit in the main circuit
- Segment circuit protected by an internal fuse
- Diagnostic and status indicators
- Can be used under extreme ambient conditions
- Extended temperature range of -40 °C ... +70 °C (see "Tested successfully: use under extreme ambient conditions" in the data sheet)
- Coated PCBs

## Commercial data

Item number	2701163
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	NULL
Product key	DRI122
GTIN	4046356713764
Weight per piece (including packing)	87.4 g
Weight per piece (excluding packing)	59 g
Customs tariff number	85389091
Country of origin	DE

## Technical data

### Dimensions

Dimensional drawing	
Width	12.2 mm
Height	119.8 mm
Depth	71.5 mm

### Notes

#### Note on application

Note on application	Only for industrial use
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### Interfaces

#### Inline local bus

Number of interfaces	2
Connection method	Inline data jumper
Transmission speed	500 kbps / 2 Mbps (Can be used in Inline stations with these transmission speeds)

### System properties

#### Module

ID code (dec.)	none
ID code (hex)	none
Register length	0 bit
Required parameter data	0 Byte
Required configuration data	0 Byte

### Product properties

Product type	I/O component
Product family	Inline
Type	modular

#### Insulation characteristics

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

Maximum power dissipation for nominal condition	0 W
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Test section	5 V supply, incoming remote bus/7.5 V supply (bus logics) 500 V AC 50 Hz 1 min
	5 V supply, outgoing remote bus/7.5 V supply (bus logics) 500 V AC 50 Hz 1 min
	7.5 V supply (bus logics)/24 V supply (I/O) 500 V AC 50 Hz 1 min
	24 V supply (I/O) / functional ground 500 V AC 50 Hz 1 min
Protective circuit	Overload protection, short-circuit protection in the segment circuit; Fuse 5 x 20 with 6.3 A, slow-blow Fuses with other values can also be used. The maximum fuse value is 8 A. For fuses with a value greater than 2 A, only slow-blow fuses may be used.
	Surge protection; Protective elements in the power terminal or the bus coupler
	Reverse polarity protection; Protective elements in the power terminal or the bus coupler
Fuse	SI 5 x 20 6, 300 AT (in scope of delivery)

## Supply

Communications power $U_L$	7.5 V DC
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## Potentials: Main circuit supply ( $U_M$ )

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current draw	max. 8 A (nominal value)
	typ. 6 A (The terminal is supplied with a 6.3 A slow-blow fuse. In the event of an increased total current in the potential jumpers $U_M$ and $U_S$ , the circuit must be protected through the use of higher rated fuses (max. 8 A, slow-blow).)

## Potentials: Segment circuit supply ( $U_S$ )

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Power supply	max. 6 A (sum of $U_M$ + $U_S$ )

## Connection data

### Connection technology

Connection name	Inline connector
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### Inline connector

Connection method	Spring-cage connection
Conductor cross-section, rigid	0.08 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section, flexible	0.08 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section AWG	28 ... 16
Stripping length	8 mm

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 55 °C (Standard)

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<https://www.phoenixcontact.com/us/products/2701163>

	-40 °C ... 70 °C (Extended, see section "Tested successfully: use under extreme ambient conditions" in the data sheet.)
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (according to DIN EN 61131-2)
Permissible humidity (storage/transport)	10 % ... 95 % (according to DIN EN 61131-2)
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)
GRP_Temperature class	T2 (-40 °C ... 55 °C, EN 50155)

## Mounting

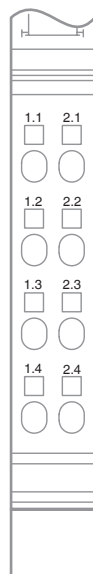
Mounting type	DIN rail mounting
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## Drawings

Dimensional drawing



Connection diagram



**$U_M$  and  $U_S$  connected internally via fuse**

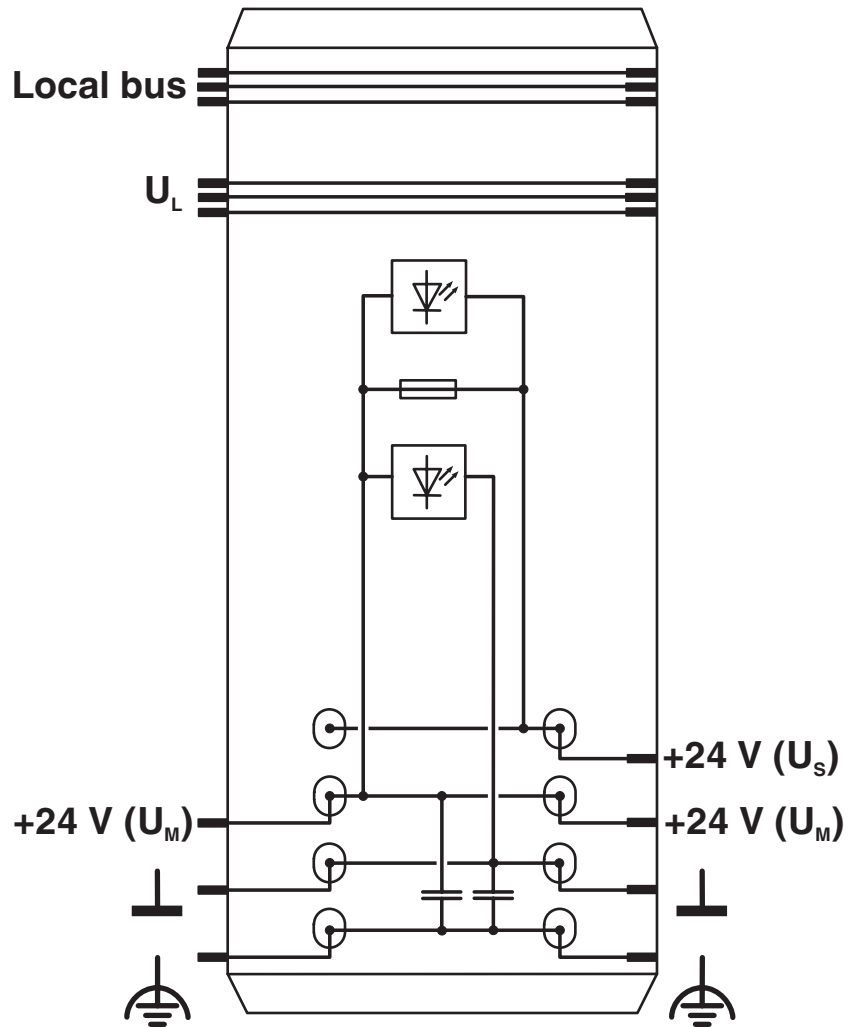
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Block diagram



# IB IL 24 SEG/F-XC-PAC - Segmentation module



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## Approvals

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**cULus Recognized**

Approval ID: E140324

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## Classifications

### ECLASS

ECLASS-13.0	27242610
ECLASS-15.0	27242610

### ETIM

ETIM 9.0	EC001600
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### UNSPSC

UNSPSC 21.0	32151600
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

### 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.)	Lead(CAS: 7439-92-1)
SCIP	d043461a-fac4-426d-82ea-009b730c0d13

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