

IB IL 24 PWR IN/R-XC-PAC - Inline terminal



2701298

<https://www.phoenixcontact.com/us/products/2701298>

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Inline power terminal or boost terminal, version for extreme conditions, complete with accessories (connector connector and labeling field), 24 V DC, without fuse

The figure shows the standard item

Product description

The terminal is designed for use within an Inline station. If the maximum current carrying capacity of potential jumper U_L is reached, this terminal can be used to feed in the communications power again. To do this, apply a 24 V DC voltage (U_{24V}) to the terminal. The communications power (U_L) and the supply voltage for the analog terminals (U_{ANA}) are generated from this voltage. In addition, the terminal enables the feed-in of the 24 V DC main voltage (U_M) and the 24 V DC segment voltage (U_S). Features - Feed-in of all 24 V DC voltages required for the low-level signal of an Inline station - Diagnostic indicators

Your advantages

- Supply of all 24 V voltages required for the low-level signal of an Inline station
- 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	2701298
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	DR01
Product key	DRI123
GTIN	4046356735704
Weight per piece (including packing)	234.7 g
Weight per piece (excluding packing)	192 g
Customs tariff number	85389091
Country of origin	DE

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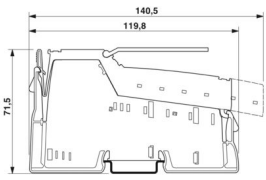


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Technical data

Dimensions

Dimensional drawing	
Width	48.8 mm
Height	119.8 mm
Depth	71.5 mm

Material specifications

Color	green
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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 Inline

Insulation characteristics

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

Maximum power dissipation for nominal condition	3 W
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Test section	7.5 V communications power, 24 V analog supply/functional ground 500 V AC 50 Hz 1 min
	7.5 V logics supply, 24 V analog supply / 24 V main supply, 24 V segment supply 500 V AC 50 Hz 1 min
	24 V main supply, 24 V segment supply/functional ground 500 V AC 50 Hz 1 min
Protective circuit	Surge protection (segment supply, main supply, 24 V supply); Input protective diodes (can be destroyed by permanent overload)Pulse loads up to 1500 W are short circuited by the input protective diode.
	Protection against polarity reversal (segment supply/main supply); Parallel diodes for protection against polarity reversal; in the event of an error the high current flowing through the diodes causes the fuse connected upstream to blow.
	Polarity reversal (24 V supply); Serial diode in the lead path of the power supply unit; in the event of an error only a low current flows. In the event of an error, no fuse trips within the external power supply unit.
Fuse	electrical/thermal overload protection, included in scope of delivery

Potentials: 24 V supply (U_{24V}) for generating U_L and U_{ANA}

Supply voltage	24 V DC (via Inline connector)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current draw	max. 1.25 A DC (at nominal voltage; consisting of: 0.75 A DC for the communications power and 0.5 A DC for the analog voltage supply)
	min. 12 mA DC (at nominal voltage)

Potentials: Communications power (U_L)

Supply voltage	7.5 V DC (via voltage jumper)
Power supply	max. 2 A DC

Potentials: Supply of analog modules (U_{ANA})

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Power supply	max. 0.5 A DC

Potentials: Main circuit supply (U_M)

Supply voltage	24 V DC (nominal value)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Power supply	max. 8 A (sum of $U_M + U_S$)

Potentials: Segment circuit supply (U_S)

Supply voltage	24 V DC (nominal value)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Power supply	max. 8 A DC (sum of $U_M + U_S$)

Connection data

Connection technology

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Connection name	Inline connector
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Inline connector

Connection method	Spring-cage connection
Conductor cross-section, rigid	0.08 mm ² ... 1.5 mm ²
Conductor cross-section, flexible	0.08 mm ² ... 1.5 mm ²
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 -40 °C ... 70 °C (Extended, see section "Tested successfully: use under extreme ambient conditions" in the data sheet.)
Ambient temperature (storage/transport)	-40 °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)

Mounting

Mounting type	DIN rail mounting
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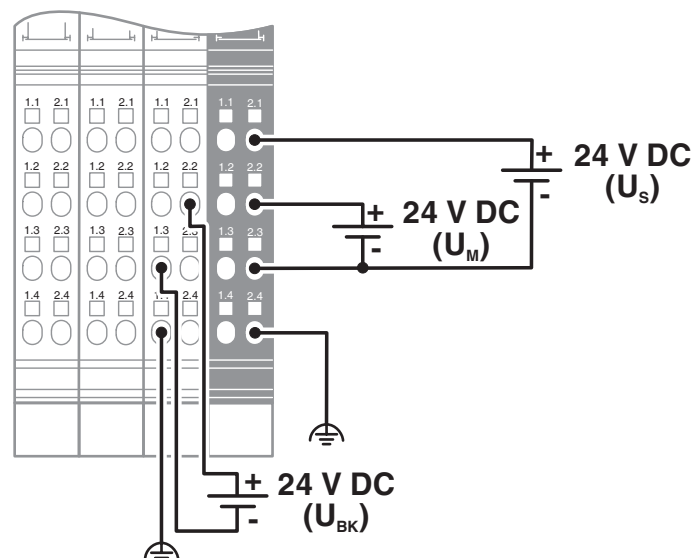
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Drawings

Dimensional drawing



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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