

<https://www.phoenixcontact.com/gb/products/2861250>



## Inline terminal - IB IL 24 DI 16-PAC - 2861250

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Inline, Digital input terminal, Digital inputs: 16 , 24 V DC, connection method: 3-wire, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connectors and marking fields

### Product Description


The terminal is designed for use within an Inline station. It is used to acquire digital signals.

### Your advantages

- 16 digital inputs
- Connection of sensors in 2 and 3-wire technology
- Maximum permissible load current per sensor: 250 mA
- Maximum permissible load current from the terminal: 4 A



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 894191
GTIN	4017918894191
Weight per Piece (excluding packing)	210.000 g
Custom tariff number	85389099
Country of origin	Germany

### Technical data

#### Note

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

#### Dimensions

Width	48.8 mm
Height	140.5 mm
Depth	71.5 mm
Note on dimensions	Housing dimensions

11/25/2019 Page 1 / 7

## Inline terminal - IB IL 24 DI 16-PAC - 2861250

### Technical data

#### 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)
	80 kPa ... 106 kPa (up to 3000 m above sea level, in ATEX Zone 2)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Degree of protection	IP20

#### General

Mounting type	DIN rail
Color	green
Net weight	210 g
Note on weight specifications	with connectors
Operating mode	Process data mode with one word

#### 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 DC (via voltage jumper)
Current consumption	max. 60 mA
Power consumption	max. 0.45 W
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. 4 A
	0 A

#### Digital inputs

Input name	Digital inputs
Description of the input	EN 61131-2 type 1
Connection method	Spring-cage connection
Connection technology	3-wire
Number of inputs	16
Typical response time	< 1 ms
Nominal input voltage $U_{IN}$	24 V DC
Nominal input current at $U_{IN}$	min. 3 mA (at nominal voltage)
Input voltage	24 V DC

## Inline terminal - IB IL 24 DI 16-PAC - 2861250

### Technical data

#### Digital inputs

Input voltage range "0" signal	-3 V DC ... 5 V DC
Input voltage range "1" signal	15 V DC ... 30 V DC
Delay at signal change from 0 to 1	1 ms
Delay at signal change from 1 to 0	1 ms

#### Electrical isolation

Test section	7.5 V supply (bus logics)/24 V supply (I/O) 500 V AC 50 Hz 1 min.
	24 V supply (I/O) / functional earth ground 500 V AC 50 Hz 1 min.
	7.5 V supply (bus logics) / functional earth ground 500 V AC 50 Hz 1 min.

#### Standards and Regulations

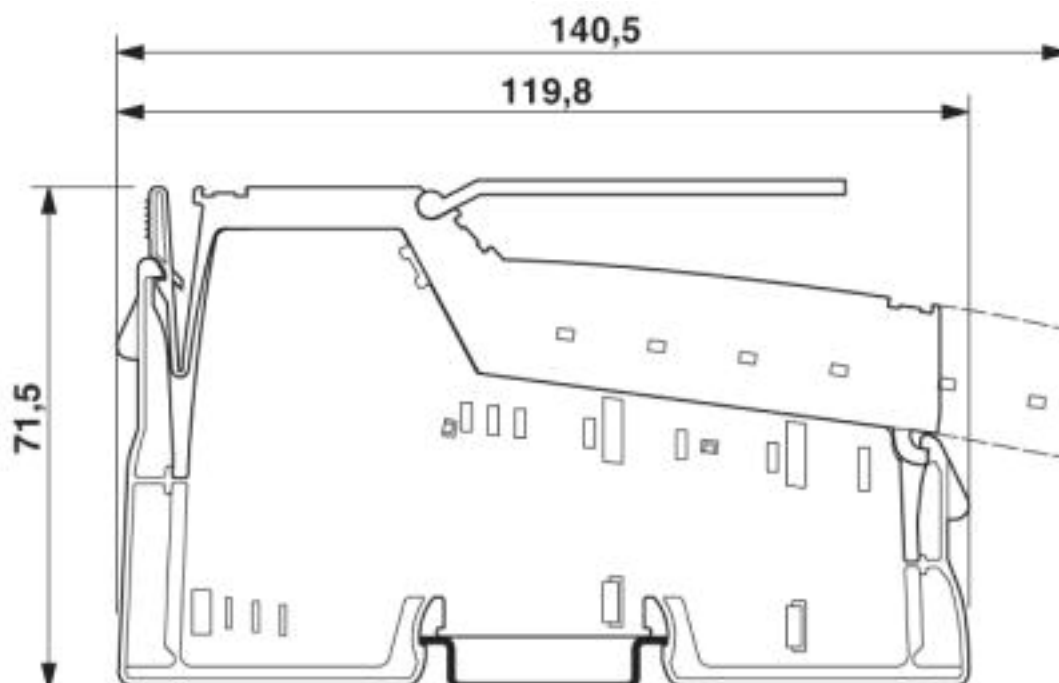
Connection in acc. with standard	CUL
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)

#### Environmental Product Compliance

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

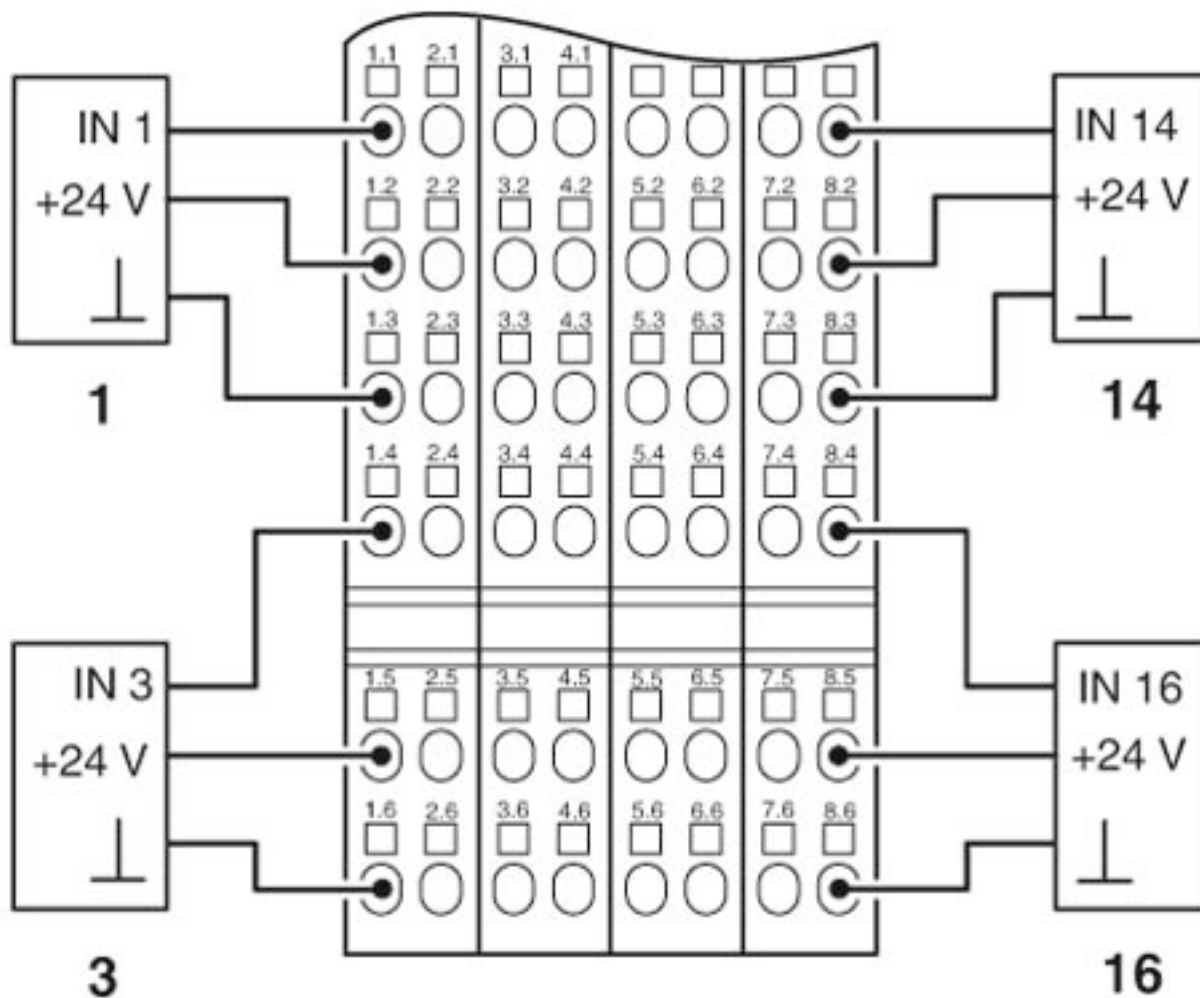
### Drawings

Dimensional drawing



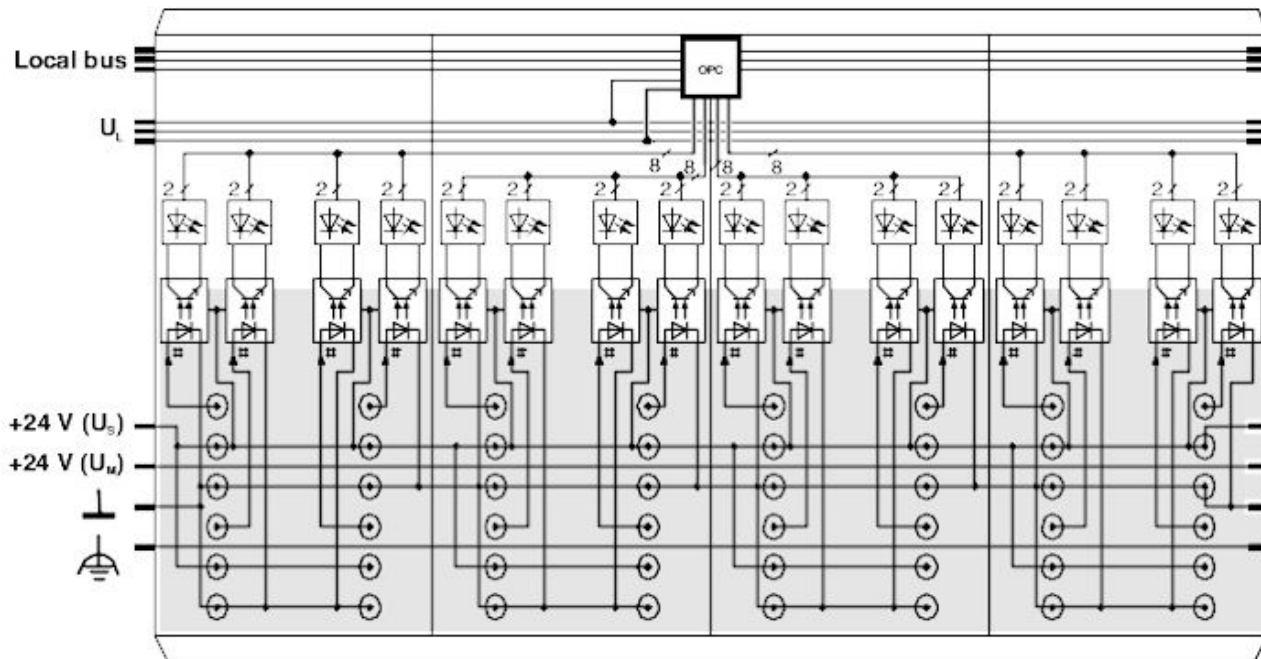
# Inline terminal - IB IL 24 DI 16-PAC - 2861250

Connection diagram



# Inline terminal - IB IL 24 DI 16-PAC - 2861250

Block diagram



## 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

<https://www.phoenixcontact.com/gb/products/2861250>



## Inline terminal - IB IL 24 DI 16-PAC - 2861250

### Classifications

#### ETIM

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

### Approvals

#### Approvals


#### Approvals

LR / BSH / BV / LR / ABS / BSH / RINA / UL Recognized / EAC / DNV GL

#### Ex Approvals


UL Listed / cUL Listed / ATEX / cULus Listed

#### Approval details

LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	08/20033
----	---	---	----------

BSH		<a href="http://www.bsh.de/de/index.jsp">http://www.bsh.de/de/index.jsp</a>	Anwenderhinweis
-----	--	---	-----------------

BV		<a href="http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials">http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials</a>	20989/B2_BV
----	---	---	-------------

LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	08/20033
----	---	---	----------

ABS		<a href="http://www.eagle.org/eagleExternalPortalWEB/">http://www.eagle.org/eagleExternalPortalWEB/</a>	17-HG1621871-PDA
-----	--	---	------------------

BSH		<a href="http://www.bsh.de/de/index.jsp">http://www.bsh.de/de/index.jsp</a>	658
-----	--	---	-----

<https://www.phoenixcontact.com/gb/products/2861250>



## Inline terminal - IB IL 24 DI 16-PAC - 2861250

### Approvals

RINA		<a href="http://www.rina.org/en">http://www.rina.org/en</a>	ELE183315XG
UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
EAC			EAC-Zulassung
DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAA00000BN

Phoenix Contact 2019 © - all rights reserved  
<http://www.phoenixcontact.com>



# SCATTERGOOD & JOHNSON LTD

ELECTRICAL ENGINEERING & FLUID CONTROL DISTRIBUTORS

Est.1899

At Scattergood & Johnson Ltd, we pride ourselves on being a technical distributor to specialist industries.

Working with a range of quality product suppliers across a number of specialist markets, we are not your average 'box shifter' - we are your technical and supply chain partner.

We fully support every product we sell - for free! Our internal team and external sales engineers can answer any product or application question, no matter the complexity.

Backing up this technical ability is a range of 50,000+ products available from stock for nationwide next day delivery (same day if required!), or you can collect what you need from any of our trade counters around the UK.

Select your specialist interest below to learn more about how we can help.



Online, In Branch and On the Road - Scattergood & Johnson Ltd, there when you need us.

# [www.scatts.co.uk](http://www.scatts.co.uk)