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IB IL 24 DO16-2MBD-PAC - Digital module

2862013

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Inline, Digital output terminal, Digital outputs: 16, 24 V DC, 500 mA, connection technology: 3-conductor, transmission speed in the local bus: 2 Mbps, 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 output digital signals.

Your advantages

- 16 digital outputs
- Connection of actuators in 2- and 3-conductor technology
- Nominal current per output: 500 mA
- Total current of the terminal: 8 A
- Short-circuit and overload-protected outputs
- Diagnostic and status indicators

Commercial data

Item number	2862013
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	DRI132
Catalog page	Page 275 (AX-2009)
GTIN	4017918974657
Weight per piece (including packing)	231.7 g
Weight per piece (excluding packing)	202.6 g
Customs tariff number	85389091
Country of origin	DE

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Technical data

Dimensions

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

Notes

Note on application

Note on application	Only for industrial use

Interfaces

Inline local bus

Number of interfaces	2
Connection method	Inline data jumper
Transmission speed	2 Mbps

System properties

Module

ID code (dec.)	189
ID code (hex)	BD
Length code (hex)	01
Length code (dec)	01
Process data channel	16 bit
Input address area	0 Byte
Output address area	2 Byte
Register length	16 bit
Required parameter data	4 Byte
Required configuration data	4 Byte

Output data

Digital:

Output name	Digital outputs
Connection method	Spring-cage connection
Connection technology	3-conductor
Number of outputs	16
Protective circuit	Overload protection, short-circuit protection of outputs
Output voltage	24 V DC (U_S - 1 V)
Output current	max. 500 mA (per channel)
	max. 8 A (Device)
Nominal output voltage	24 V DC

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Output voltage when switched off	max. 2 V
Output current when switched off	max. 300 µA
Nominal load, inductive	12 W (1.2 H, 48 Ω)
Nominal load, lamp	12 W
Nominal load, ohmic	12 VA (48 Ω)
Maximum operating frequency with ohmic nominal load	max. 300 Hz (this switching frequency is limited by the data rate selected, the number of bus devices, the structure of the bus, the software used and the control or computer system used)
Behavior with overload	Auto restart
Behavior with inductive overload	Output can be destroyed
Behavior at voltage switch-off	The output follows the power supply without delay
Overcurrent shut-down	min. 0.7 A
Output current with ground connection interrupt when switched off	max. 25 mA

Product properties

Product type	I/O component
Product family	Inline
Type	modular
Scope of delivery	including Inline connectors and marking fields
No. of channels	16
Operating mode	Process data mode with one word
Diagnostics messages	Short-circuit or overload of the digital outputs Error message in the diagnostic code (bus) and display (2 Hz) via the LED (D) on the module

Insulation characteristics

Overvoltage category	II (IEC 60664-1, EN 60664-1)
Pollution degree	2 (IEC 60664-1, EN 60664-1)

Electrical properties

Maximum power dissipation for nominal condition	3.6 W

Potentials: Communications power (U_L)

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 105 mA

Potentials: 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 draw	max. 8 A

Electrical isolation/isolation of the voltage ranges

Test voltage: 5 V supply, incoming remote bus/7.5 V supply (bus logics)	500 V AC, 50 Hz, 1 min
Test voltage: 5 V supply, outgoing remote bus/7.5 V supply (bus logics)	500 V AC, 50 Hz, 1 min
Test voltage: 7.5 V supply (bus logics)/24 V supply (I/O)	500 V AC, 50 Hz, 1 min

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Test voltage: 24 V supply (I/O) / functional ground	500 V AC, 50 Hz, 1 min

Connection data

Connection technology

Connection name	Inline connector

Conductor connection

Connection method	Spring-cage connection
Conductor cross section rigid	0.08 mm² ... 1.5 mm²
Conductor cross section flexible	0.08 mm² ... 1.5 mm²
Conductor cross section AWG	28 ... 16
Stripping length	8 mm

Inline connector

Connection method	Spring-cage connection
Conductor cross section, rigid	0.08 mm² ... 1.5 mm²
Conductor cross section, flexible	0.08 mm² ... 1.5 mm²
Conductor cross section AWG	28 ... 16
Stripping length	8 mm

Environmental and real-life conditions

Ambient conditions

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

Standards and regulations

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

Mounting

Mounting type	DIN rail mounting

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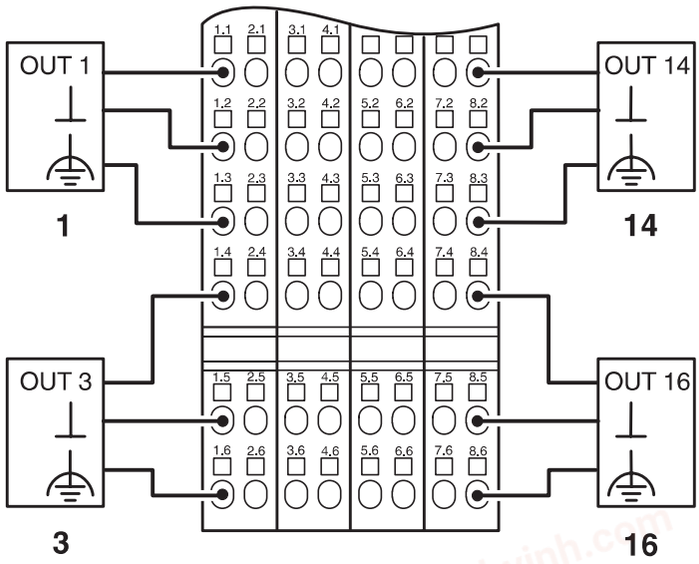
Drawings

Connection diagram



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/pc/products/2862013

cULus Listed
Approval ID: E140324

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Classifications

ECLASS

ECLASS-11.0	27242604
ECLASS-12.0	27242604
ECLASS-13.0	27242604

ETIM

ETIM 9.0	EC001599

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-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	9d44b3f1-af72-4512-8c8a-78dbf6b4897b

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PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstraße 8
D-32825 Blomberg
+49 (0) 5235-3 00
info@phoenixcontact.com