IB IL 24 DO 8-2MBD-PAC - Digital module

2861687

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Inline, Digital output terminal, Digital outputs: 8, 24 V DC, connection technology: 4-conductor, transmission speed in the local bus: 2 Mbps, degree of protection: IP20, including Inline connectors and marking fields

Product description

Inline terminals with “2 MBD” added to their item designation work with a transmission speed of 2 Mbps. These terminal blocks are discontinued or no longer in the range. If you require this transmission speed, please ask your local Phoenix Contact representative. If you can work with a transmission speed of 500 kbps, select as a replacement the corresponding variant that does not have “2MBD” added to its item designation. Please note that a uniform transmission speed must always be used within one inline station. The terminal is designed for use within an Inline station. It is used to output digital signals.

Your advantages

- 8 digital outputs
- Connection of actuators in 2-, 3-, and 4-conductor technology
- Nominal current per output: 500 mA
- Total current of the terminal: 4 A
- Short-circuit and overload-protected outputs
- Diagnostic and status indicators

ELEKTROGERÄTE RÜCKNAHME

Commercial data

Item number	2861687
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR01
Product key	DRI132

GTIN	4017918974589
Weight per piece (including packing)	204.4 g
Weight per piece (excluding packing)	130 g
Customs tariff number	85389091
Country of origin	DE

Technical data

Dimensions

Width	48.8 mm
Height	119.5 mm
Depth	71.5 mm
Note on dimensions	Housing dimensions

Notes

Note on application	Only for industrial use

Mounting

Mounting type	DIN rail mounting

Material specifications

Color (Housing)	green (RAL 6021)

Interfaces

Inline local bus

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

System properties

Programming data

Length code (hex)	81
ID code (dec.)	189
Length code (dec)	129
Process data channel	8 bit
Input address area	0 Byte
Output address area	1 Byte
Parameter channel (PCP)	0 bit
Register length (bus)	8 bit

Fieldbus data telegram (PROFIBUS)

Required parameter data	3 Byte
Required configuration data	4 Byte

Output data

Digital:

Output name	Digital outputs
Design of digital output	Semiconductor
Connection method	Spring-cage connection

Connection technology	4-conductor
Number of outputs	8
Protective circuit	Overload protection, short-circuit protection of outputs
Output voltage	24 V DC (U_S - 1 V)
Maximum output current per channel	500 mA
Maximum output current per module	4 A
Nominal output voltage	24 V DC (voltage difference at I_{nom} ≤ 1 V)
Nominal load, inductive	12 W
Nominal load, lamp	12 W
Nominal load, ohmic	12 W
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

Product properties

Product type	I/O component
Product family	Inline
Type	modular
Scope of supply	including Inline connectors and marking fields
Operating mode	Process data mode with one byte
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	2.05 W

Potentials: Communications power (U_L)

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 85 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. 4 A

Electrical isolation/isolation of the voltage ranges

Test voltage: 7.5 V supply (bus logics)/24 V supply (I/O)	500 V AC, 50 Hz, 1 min
Test voltage: 7.5 V supply (bus logic)/functional ground	500 V AC, 50 Hz, 1 min
Test voltage: 24 V supply (I/O) / functional ground	500 V AC, 50 Hz, 1 min

Connection data

Connection technology

Connection name	Inline connector

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 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)

Mechanical test

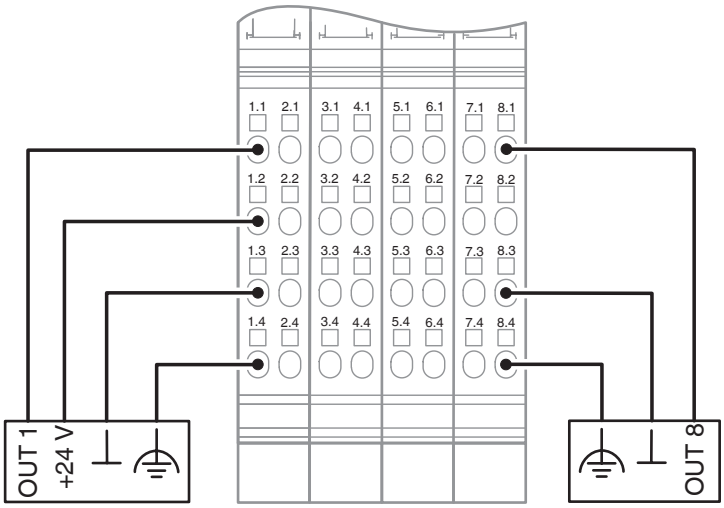
Vibration resistance in accordance with EN 60068-2-6/IEC 60068-2-6	5g
Shock in accordance with EN 60068-2-27/IEC 60068-2-27	25g

Standards and regulations

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

Drawings

Connection diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2861687

cULus Listed
Approval ID: E140324

Functional Safety
Approval ID: 968/EL 711.08/23

Classifications

ECLASS

ECLASS-13.0	27242604
ECLASS-15.0	27242604

ETIM

ETIM 10.0	EC001599

UNSPSC

UNSPSC 21.0	32151600

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	641c70dc-4425-41fc-8f84-97446c334dcb

EF3.1 Climate Change

CO2e kg	3.321 kg CO2e

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