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

2861603

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Inline, Digital output terminal, Digital outputs: 8, 24 V DC, 2 A, connection technology: 4-conductor, 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 output digital signals.

Your advantages

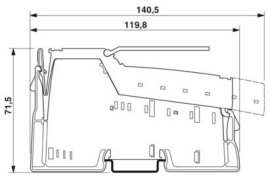
- 8 digital outputs
- Connection of actuators in 2-, 3-, and 4-conductor technology
- Nominal current per output: 2 A
- Total current of the terminal: 8 A
- Short-circuit and overload-protected outputs
- Diagnostic and status indicators
- Approved for use in a safety-related segment circuit (refer to the information in the data sheet)

Commercial data

Item number	2861603
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR01
Product key	DRI132
Catalog page	Page 131 (C-6-2019)
GTIN	4017918894450
Weight per piece (including packing)	205.7 g
Weight per piece (excluding packing)	130 g
Customs tariff number	85389099
Country of origin	DE

Technical data

Dimensions

Dimensional drawing	
Width	48.8 mm
Height	119.8 mm
Depth	71.5 mm
Note on dimensions	Housing dimensions

Interfaces

Inline local bus

Number of interfaces	2
Connection method	Inline data jumper
Transmission speed	500 kbps

System properties

Module

ID code (dec.)	189
ID code (hex)	BD
Length code (hex)	81
Length code (dec)	129
Process data channel	8 bit
Input address area	0 Byte
Output address area	1 Byte
Register length	8 bit
Required parameter data	3 Byte
Required configuration data	4 Byte

Output data

Digital

Output name	Digital outputs
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)

Output current	max. 2 A (per channel)
	max. 8 A (per device, at 50% simultaneity)
Maximum output current per channel	2 A
Maximum output current per module	8 A (with 50% simultaneity)
Nominal output voltage	24 V DC
Output voltage when switched off	max. 1 V (at 1 MΩ)
Output current when switched off	max. 1 µA
Nominal load, inductive	48 VA (1,2 H, 12 Ω)
Nominal load, lamp	48 W
Nominal load, ohmic	48 W
Maximum operating frequency with ohmic nominal load	500 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)
Reverse voltage resistance to short pulses	Reverse voltage proof
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. 3 A
Output current with ground connection interrupt when switched off	max. 1 µA

Product properties

Type	modular
Product type	I/O component
Product family	Inline
Scope of delivery	including Inline connectors and marking fields
No. of channels	8
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	2.7 W

Potentials: Communications power (U_L)

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 60 mA
Power consumption	max. 0.45 W

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.
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

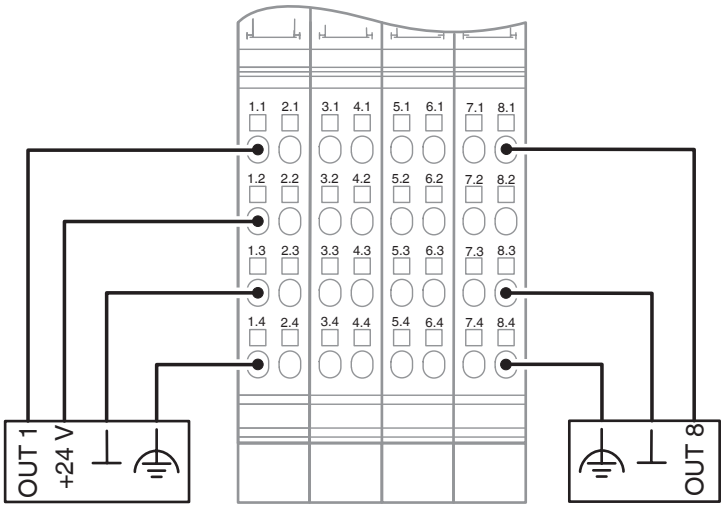
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)

Mounting

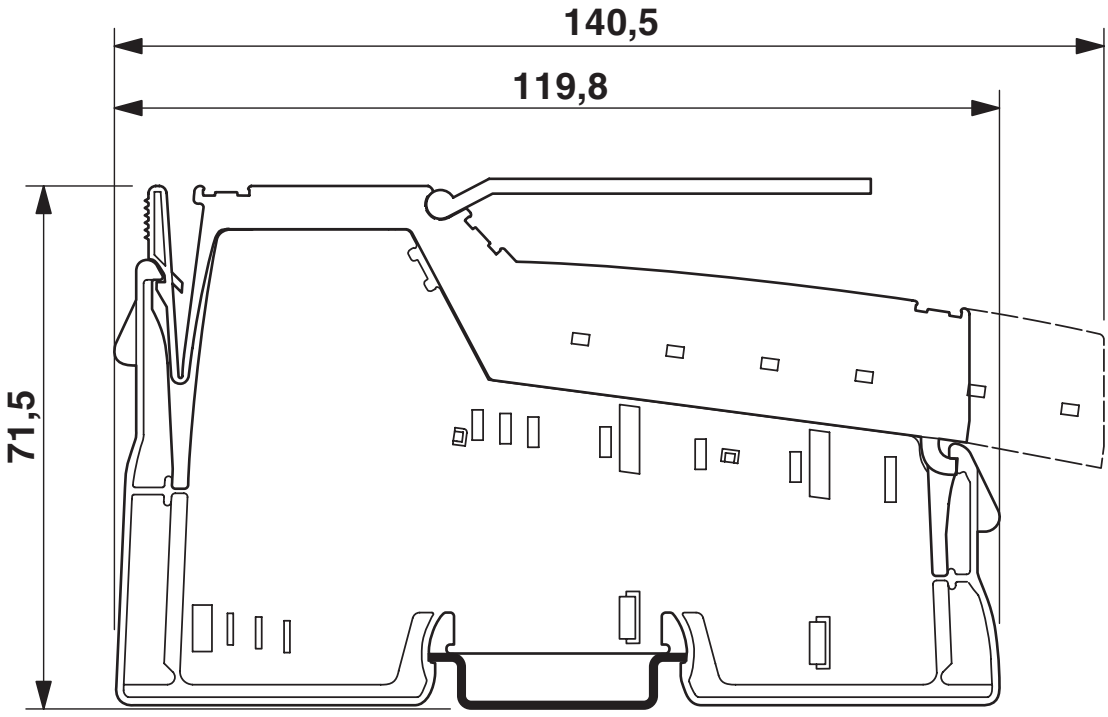
Mounting type	DIN rail mounting

Drawings

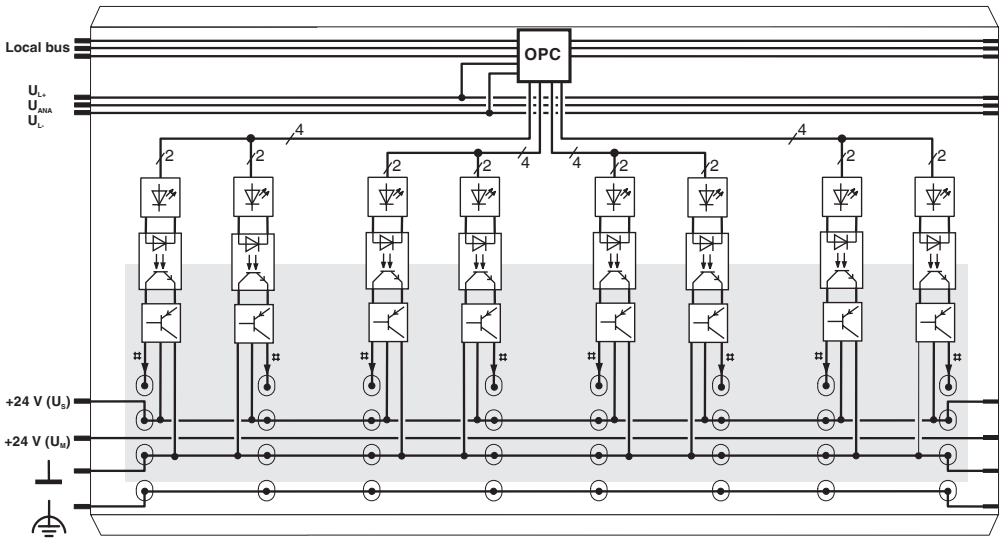
Connection diagram



Dimensional drawing



Block diagram



Approvals

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UL Recognized
Approval ID: FILE E 140324

EAC
Approval ID: TR TS_D_01921-19

Functional Safety
Approval ID: 968/EL 711.05/16

Classifications

ECLASS

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

ETIM

ETIM 9.0	EC001599

UNSPSC

UNSPSC 21.0	32151600

Environmental product compliance

REACh SVHC	Lead 7439-92-1

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