

2878340

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Inline, Digital output terminal, Digital outputs: 32 (NPN), 24 V DC, connection technology: 1-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

- 32 digital outputs, NPN-wired
- Connection of actuators in 1-conductor technology
- Nominal current per output: 500 mA
- Total current of the terminal: 8 A
- Short-circuit and overload-protected outputs

Commercial data

Item number	2878340
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	DRI132
Catalog page	Page 131 (C-6-2019)
GTIN	4046356048538
Weight per piece (including packing)	216.8 g
Weight per piece (excluding packing)	135 g
Customs tariff number	85389099
Country of origin	DE

IB IL 24 DO 32/HD-NPN-PAC - Digital module

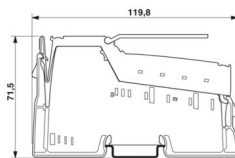


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Technical data

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)	02
Length code (dec)	02
Process data channel	32 bit
Input address area	0 Byte
Output address area	4 Byte
Register length	32 bit
Required parameter data	6 Byte
Required configuration data	4 Byte

Output data

Digital

Output name	Digital outputs
Connection method	Spring-cage connection
Connection technology	1-conductor
Number of outputs	32 (NPN)
Protective circuit	Overload protection, short-circuit protection of outputs; electronic
Output voltage	24 V ($U_S - 1\text{ V}$)

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Maximum inrush current	max. 1.5 A (at nominal lamp load for 20 ms)
Maximum output current per channel	500 mA
Maximum output current per module	8 A
Nominal output voltage	24 V DC
Output current when switched off	max. 300 µA
Nominal load, inductive	12 VA (1.2 H, 48 Ω)
Nominal load, lamp	12 W
Nominal load, ohmic	12 W (48 Ω)
Maximum operating frequency with ohmic nominal load	max. 300 Hz (this switching frequency is limited by 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 name	Digital outputs
Connection method	Spring-cage connection
Connection technology	1-conductor
Number of outputs	32 (NPN)
Protective circuit	Overload protection, short-circuit protection of outputs; electronic
Output voltage	24 V ($U_S - 1$ V)
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Overcurrent shut-down	min. 0.7 A

Product properties

Product type	I/O component
Product family	Inline
Type	modular
Scope of delivery	including Inline connectors and marking fields
No. of channels	32
Operating mode	Process data operation with 2 words

Insulation characteristics

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

Electrical properties

Protective circuit	Overload protection, short-circuit protection in the segment circuit; Electronic with 16 2-channel drivers
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Potentials

Power consumption	max. 2.8 W (Module, complete)
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Potentials: Communications power (U_L)

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 140 mA
Power consumption	max. 1.05 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: 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.
Test voltage: 7.5 V supply (bus logic)/functional ground	500 V AC, 50 Hz, 1 min.

Connection data

Connection technology

Connection name	Inline connector
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Conductor connection

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

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

Ambient temperature (operation)	-25 °C ... 55 °C
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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)

Standards and regulations

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

Mounting type	DIN rail mounting
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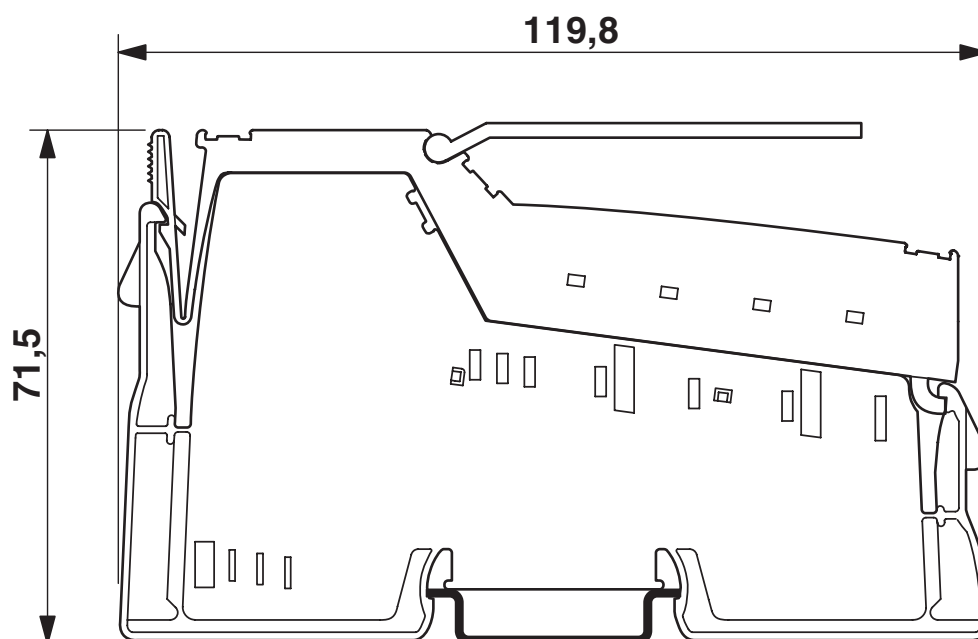
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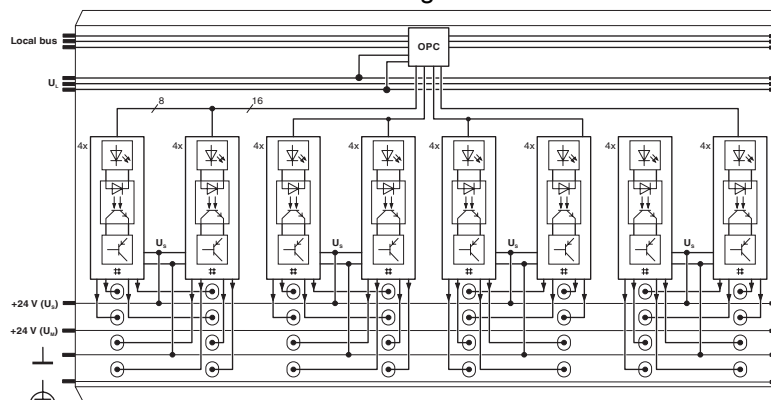


Drawings

Dimensional drawing



Block diagram



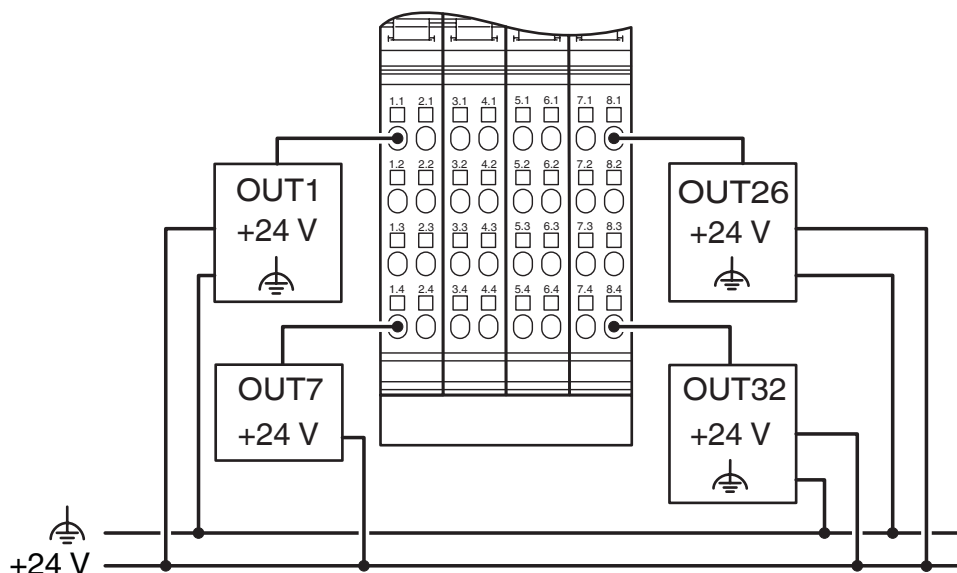
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Connection diagram



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Approvals

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cUL Recognized
Approval ID: FILE E 140324



UL Recognized
Approval ID: FILE E 140324



EAC
Approval ID: TR TS_D_01921-19



DNV GL
Approval ID: TAA00002CU



BV
Approval ID: 20989_C0 BV

ABS

Approval ID: 22-2226444-PDA

UAE-RoHS

Approval ID: 22-04-13078

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Classifications

ECLASS

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

ETIM

ETIM 9.0	EC001599
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UNSPSC

UNSPSC 21.0	32151600
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Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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