

IB IL 24 DO 8/HD-ECO - Digital module

2702793

<https://www.phoenixcontact.com/us/products/2702793>



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 documentation. Our general terms of use for downloads are valid.

Inline, Digital output terminal, Digital outputs: 8, 24 V DC, connection technology: 1-conductor, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connector



Product description

The terminal is designed for use within an Inline station. It is used to output digital signals. Inline ECO terminals are approved for the temperature range from 0°C to +55°C. The electronics base and Inline connector are supplied as standard.

Your advantages

- 8 digital outputs
- Connection of actuators in 1-conductor technology
- Nominal current per output: 500 mA
- Total current of the terminal: 4 A
- Short-circuit and overload-protected outputs

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 2702793 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | DR01 |
| Product key | DRI132 |
| GTIN | 4055626355030 |
| Weight per piece (including packing) | 74 g |
| Weight per piece (excluding packing) | 84 g |
| Customs tariff number | 85389099 |
| Country of origin | DE |

IB IL 24 DO 8/HD-ECO - Digital module

2702793

<https://www.phoenixcontact.com/us/products/2702793>



Technical data

Dimensions

| Dimensional drawing | |
|---------------------|--------------------|
| | |
| Width | 12.2 mm |
| Height | 119.8 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 | 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 |

IB IL 24 DO 8/HD-ECO - Digital module

2702793

<https://www.phoenixcontact.com/us/products/2702793>



| | |
|---|---|
| Connection technology | 1-conductor |
| Number of outputs | 8 |
| Protective circuit | Overload protection, short-circuit protection of outputs; electronic |
| Output voltage | 24 V DC (U_S - 1 V) |
| Limitation of the voltage induced on circuit interruption | -45.8 V ... -15 V |
| Maximum output current per channel | 500 mA |
| Maximum output current per module | 4 A |
| Nominal output voltage | 24 V DC |
| Load min. | 10 kΩ |
| Output voltage when switched off | max. 1 V |
| 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) |
| 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. 0.7 A |

Product properties

| | |
|----------------------|--|
| Product type | I/O component |
| Product family | Inline |
| Type | modular |
| Scope of supply | including Inline connector |
| 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 |

Electrical properties

| | |
|---|---|
| Maximum power dissipation for nominal condition | 0.85 W |
| Protective circuit | Short-circuit protection, overload protection in the segment circuit; Electronic, for each module |

Potentials: Communications power (U_L)

| | |
|----------------|-------------------------------|
| Supply voltage | 7.5 V DC (via voltage jumper) |
| Current draw | max. 30 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) |

IB IL 24 DO 8/HD-ECO - Digital module



2702793

<https://www.phoenixcontact.com/us/products/2702793>

| | |
|---|------------------------|
| 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 |
| 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) | 0 °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) |

Standards and regulations

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

Mounting

| | |
|---------------|-------------------|
| Mounting type | DIN rail mounting |
|---------------|-------------------|

IB IL 24 DO 8/HD-ECO - Digital module

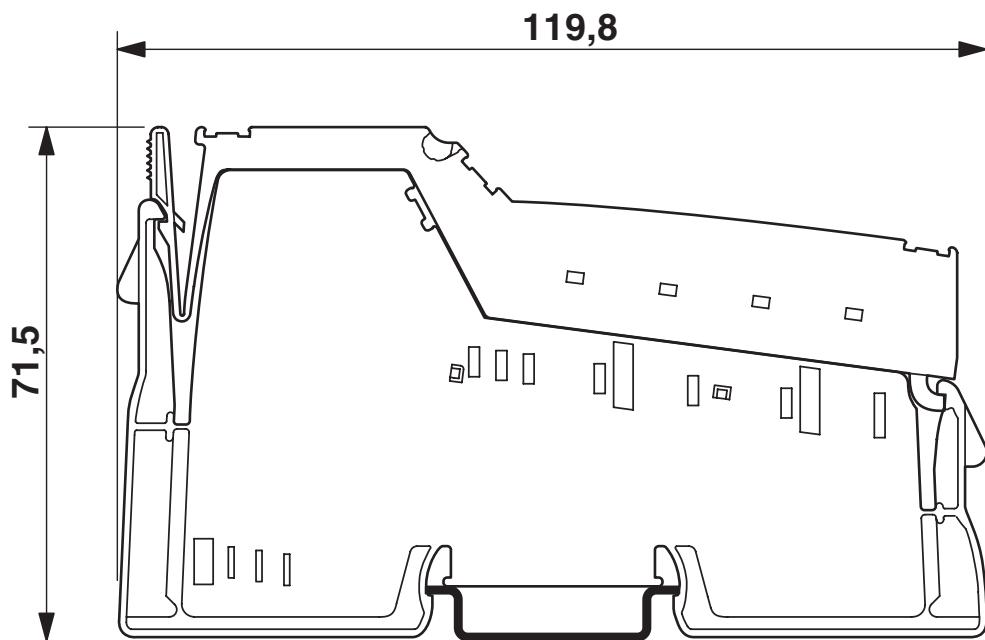


2702793

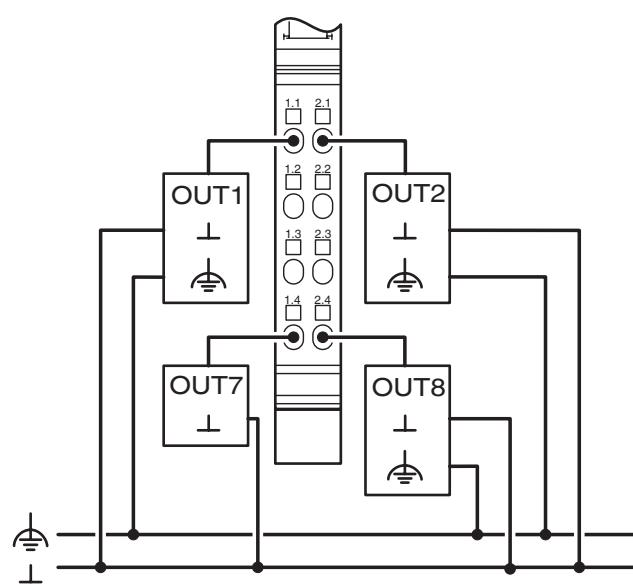
<https://www.phoenixcontact.com/us/products/2702793>

Drawings

Dimensional drawing



Connection diagram



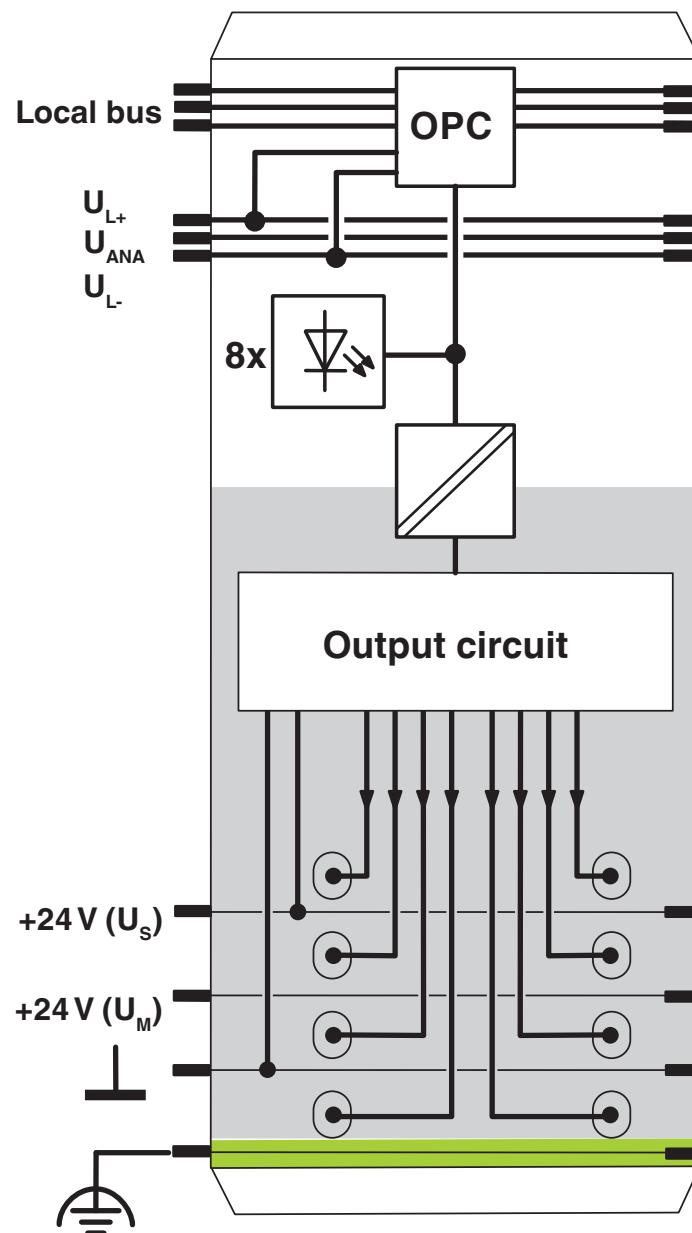
IB IL 24 DO 8/HD-ECO - Digital module



2702793

<https://www.phoenixcontact.com/us/products/2702793>

Block diagram



Internal wiring of the terminal points

IB IL 24 DO 8/HD-ECO - Digital module

2702793

<https://www.phoenixcontact.com/us/products/2702793>



Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2702793>



cULus Listed

Approval ID: E140324

IB IL 24 DO 8/HD-ECO - Digital module

2702793

<https://www.phoenixcontact.com/us/products/2702793>



Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27242604 |
| ECLASS-15.0 | 27242604 |

ETIM

| | |
|----------|----------|
| ETIM 9.0 | EC001599 |
|----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 32151600 |
|-------------|----------|

IB IL 24 DO 8/HD-ECO - Digital module

2702793

<https://www.phoenixcontact.com/us/products/2702793>



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: n/a) |
| SCIP | e3276f2b-425b-4719-876b-6a360e3ec2c9 |

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA

586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com