



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

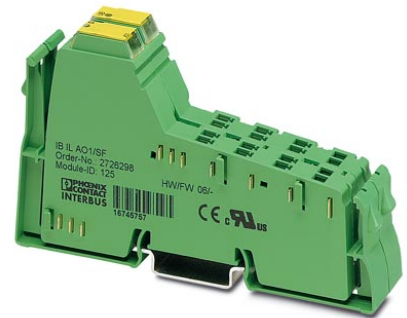
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



IB IL AO 1/SF

Order No.: 2726298




<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2726298>

Inline analog output terminal, without accessories, 1 output, 0-20 mA, 4-20 mA, 0-10 V, 2-wire connection method



Commercial data

| | |
|--------------------------|--|
| GTIN (EAN) |  4 017918 168131 |
| sales group | K412 |
| Pack | 1 pcs. |
| Customs tariff | 85389091 |
| Catalog page information | Page 80 (AX-2007) |

Product notes

WEEE/RoHS-compliant since:
07/09/2007



<http://www.download.phoenixcontact.com>
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

Product description

The analog Inline output terminals are used in applications in which analog actuators are to be addressed.

With these terminals, common current and voltage output ranges can be configured individually. The analog signals are made available with a resolution of 16 bits.

It goes without saying that you also have advantages in handling with the analog Inline output terminals, such as multi-wire connection or the automatic contact with the grounding conductor when the terminal is snapped onto the DIN rail.

The Inline terminals can be labeled using hinged labeling fields. The fields have insert cards that can be labeled individually to suit the application. Additionally, there is the proven ZBFM-6... Zack strip for labeling the terminal points.

Technical data

General data

| | |
|--|---|
| Width | 24.4 mm |
| Height | 119.8 mm |
| Depth | 71.5 mm |
| Weight | 46 g |
| Mounting type | DIN rail |
| Ambient temperature (operation) | -25 °C ... 55 °C |
| 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) |
| 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) |
| Degree of protection | IP20 |
| Protection class | III, IEC 61140, EN 61140, VDE 0140-1 |
| Test section | 7.5 V supply (bus logic), 24 V supply U_{ANA} / I/O 500 V AC 50 Hz 1 min |
| | 7.5 V supply (bus logic), 24 V supply U_{ANA} /functional earth ground 500 V AC 50 Hz 1 min |
| | 24 V supply (I/O) / functional earth ground 500 V AC 50 Hz 1 min |

Interface

| | |
|----------------------|--------------------|
| Name | Inline local bus |
| Type of connection | Inline data jumper |
| Transmission speed | 500 kbps |
| | 500 kBit/s |
| Transmission physics | Copper |

Inline potential routing

| | |
|------------------------------------|-------------------------------|
| Communications power U_L | 7.5 V DC (via voltage jumper) |
| Current consumption from U_L | max. 40 mA |
| | Typ. 30 mA |
| I/O supply voltage U_{ANA} | 24 V DC |
| Current consumption from U_{ANA} | max. 65 mA |
| | Typ. 50 mA |

Analog outputs

| | |
|---------------------------------|--|
| Number of outputs | 1 |
| Connection method | 2-wire (shielded) |
| Output name | Analog outputs |
| D/A conversion time | < 100 µs |
| D/A resolution | 16 Bit |
| Type of protection | Transient protection of outputs |
| Measured value representation | 16 bits (15 bits + sign bit) |
| DAC resolution | 16 Bit |
| Process data update | < 1 ms |
| Current output signal | 0 mA ... 20 mA 4 mA ... 20 mA |
| Load/output load current output | > 500 Ω |
| Voltage output signal | 0 V ... 10 V |
| Load/output load voltage output | > 2 kΩ 0.05 % |
| Precision | Typ. 0.8 % (of output range final value) Typ. 0.5 % (of output range final value) |

Certificates / Approvals



Certification CUL, GOST, UL
 Certification Ex: CUL-EX, PxC-EX, UL-EX LIS

Accessories

| Item | Designation | Description |
|------|-------------|-------------|
|------|-------------|-------------|

Marking

| | | |
|---------|---------------|---|
| 1051993 | B-STIFT | Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm |
| 0809492 | ESL 62X10 | Insert strip for laser printer, lettering field: 62 x 10 mm |
| 2727501 | IB IL FIELD 2 | Labeling field, width: 12.2 mm |

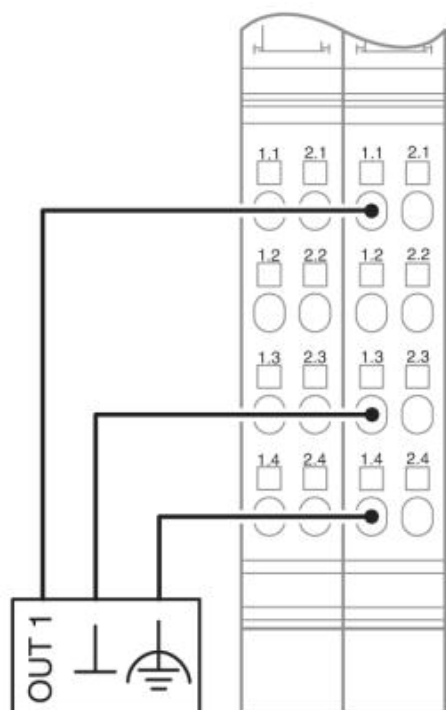
| | | |
|---------|----------------------|---|
| 0811228 | X-PEN 0,35 | Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm |
| 0808778 | ZBF 6:SO/CMS | Zack strip, flat, 10-section, divisible, special printing, marking according to customer requirements |
| 0808710 | ZBF 6:UNBEDRUCKT | Zack strip, flat, unprinted: 10-section, for individual labeling with M-PEN or ZBF-T, sufficient for 100 terminal blocks, color: white |
| 0803618 | ZBFM 6/WH:UNBEDRUCKT | Zack marker sheet, flat, unprinted: 100-section, 10 strips à 10 markers, sufficient for 100 terminal blocks, for all terminal blocks, pitch 6.2 mm, labeling with M-PEN or CMS system, color: white |
| 0803650 | ZBFM 6:SO/CMS | Special printing, Zack marker sheet, flat, 100-section, divisible, marking according to customer requirements |

Plug/Adapter

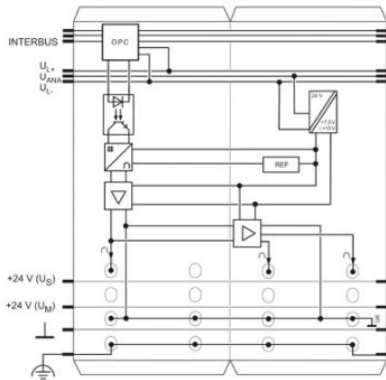
| | | |
|---------|--------------------|---|
| 2732664 | IB IL AO/CNT-PLSET | Connector set |
| 2726353 | IB IL SCN-6 SHIELD | Inline shield connector |
| 2726337 | IB IL SCN-8 | Connector, for digital 1, 2 or 8-channel Inline terminals |
| 2727608 | IB IL SCN-8-CP | Inline connector, colored |

Diagrams/Drawings

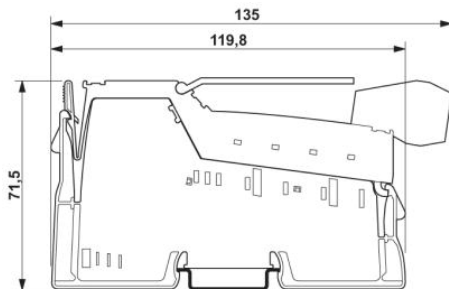
Connection diagram



Block diagram



Dimensioned drawing



FAQs

- **How many and which I/O connectors have to be used to connect the analog conductor for the Inline terminal IB IL AO 1/SF?**

Two connectors must be used, since this terminal is a double terminal (24.4 mm wide). The available channel can be used as either voltage or current output. In order to connect an analog conductor, an Inline shield connector (IB IL SCN-6-SHIELD, Order no. 2726353) must be used and snapped into the left (voltage output) or right slot (current output) to suit the application. One free slot is always left over and this must be occupied by another connector. We recommend using a standard Inline connector without shield (IB IL SCN-8, Order no. 2726337). The connector versions necessary are in the connector set IB IL AO/CNT-PLSET (Order no. 2732664).

- **Output behavior of the analog output terminals after a bus error**

The output behavior of the Inline analog terminals after a bus error is different from the standard behavior of familiar INTERBUS analog modules. An interruption in the bus within a particular time window can lead to an undefined output behavior. In this case, it is not possible to clearly determine whether the outputs return to zero, or whether the old value is retained.

Address

PHOENIX CONTACT Inc., USA
586 Fulling Mill Road
Middletown, PA 17057, USA
Phone (800) 888-7388
Fax (717) 944-1625
<http://www.phoenixcon.com>



© 2011 Phoenix Contact
Technical modifications reserved;