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AXL F DI16/1 DO16/1 2H

**Axioline F digital input and output module,
16 inputs, 24 V DC, 16 outputs, 24 V DC,
500 mA, 1-wire connection technology**

Data sheet
106378_en_00

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1 Description

The module is designed for use within an Axioline F station.

It is used to acquire and output digital signals.

The filter times of the inputs can be set to increase noise immunity.

Filter times of 100 μ s allow the user to implement a counter function with a maximum input frequency of 5 kHz in the application.

The outputs are short-circuit and overload-protected .

Input features

- 16 digital inputs according to EN 61131-2 type 1 and type 3
- 24 V DC, 2.4 mA
- Connection of sensors in 1-wire technology
- Filter times can be set in three increments: < 100 μ s, 1000 μ s or 3000 μ s
- Maximum input frequency: 5 kHz

Output features

- 16 digital outputs
- 24 V DC, 500 mA
- Connection of actuators in 1-wire technology

Features of Axioline F

- Minimum update time < 100 μ s
- Device type label stored
- Diagnostic and status indicators



This data sheet is only valid in association with the UM EN AXL F SYS INST user manual.



Make sure you always use the latest documentation.
It can be downloaded from the product at phoenixcontact.net/products.

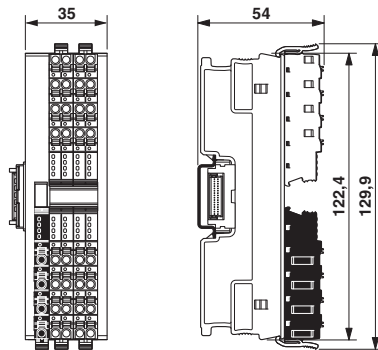
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3 Ordering data

| Description | Type | Order No. | Pcs. / Pkt. |
|---|--------------------------|-----------|-------------|
| Axioline F digital input and output module, 16 inputs, 24 V DC, 16 outputs, 24 V DC, 500 mA, 1-wire connection technology (including bus base module and connectors) | AXL F DI16/1 DO16/1 2H | 2702106 | 1 |
| Accessories | Type | Order No. | Pcs. / Pkt. |
| Axioline F bus base module for housing type H (Replacement item) | AXL F BS H | 2700992 | 5 |
| Zack marker strip for Axioline F (device labeling), in 2 x 20.3 mm pitch, unprinted, 25-section, for individual labeling with B-STIFT 0.8, X-PEN, or CMS-P1-PLOTTER (Marking) | ZB 20,3 AXL UNPRINTED | 0829579 | 25 |
| Zack marker strip, flat, in 10 mm pitch, unprinted, 10-section, for individual labeling with M-PEN 0.8, X-PEN, or CMS-P1-PLOTTER (Marking) | ZBF 10/5,8 AXL UNPRINTED | 0829580 | 50 |
| Documentation | Type | Order No. | Pcs. / Pkt. |
| User manual, English, Axioline F: System and installation | UM EN AXL F SYS INST | - | - |
| User manual, English, Axioline F: Diagnostic registers, and error messages | UM EN AXL F SYS DIAG | - | - |

4 Technical data

Dimensions (nominal sizes in mm)



| | |
|--------------------|---|
| Width | 35 mm |
| Height | 129.9 mm |
| Depth | 54 mm |
| Note on dimensions | The depth is valid when a TH 35-7.5 DIN rail is used (according to EN 60715). |

General data

| | |
|--|---|
| Color | traffic grey A RAL 7042 |
| Weight | 159 g (with connectors and bus base module) |
| Ambient temperature (operation) | -25 °C ... 60 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Permissible humidity (operation) | 5 % ... 95 % (non-condensing) |
| Permissible humidity (storage/transport) | 5 % ... 95 % (non-condensing) |
| 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) |

General data

| | |
|----------------------|--------------------------------------|
| Degree of protection | IP20 |
| Protection class | III, IEC 61140, EN 61140, VDE 0140-1 |
| Mounting position | Any (no temperature derating) |

Connection data

| | |
|--|---|
| Designation | Axioline F connector |
| Connection method | Push-in technology |
| Conductor cross section solid / stranded | 0.2 mm ² ... 1.5 mm ² / 0.2 mm ² ... 1.5 mm ² |
| Conductor cross section [AWG] | 24 ... 16 |
| Stripping length | 8 mm |

Interface Axioline F local bus

| | |
|--------------------|-----------------|
| Connection method | Bus base module |
| Transmission speed | 100 MBit/s |

Communications power

| | |
|------------------------------------|------------------------------|
| Communications power U_{BUS} | 5 V DC (via bus base module) |
| Current consumption from U_{BUS} | max. 120 mA |
| Power consumption at U_{BUS} | max. 600 mW |

I/O supply

| | |
|--|--|
| Digital input and output module supply U_{IO} | 24 V DC |
| Maximum permissible voltage range | 19.2 V DC ... 30 V DC (including all tolerances, including ripple) |
| Current consumption from U_{IO} | max. 8 A (external fuse) |
| Power consumption at U_{IO} | typ. 325 mW (Without actuators), max. 240 W (of which 0.5 W internal losses) |
| Surge protection of the supply voltage | Electronic (35 V, 0.5 s) |
| Polarity reversal protection of the supply voltage | Parallel diode; with external 5 A fuse (for startup only) |
| Protection | max. 8 A (polarity reversal protection up to 5 A) |



When using for the first time, protect the module with a 5 A fuse. If all the modules are correctly connected in the system, the 5 A fuse can be replaced by an 8 A fuse. you can now load the module up to 8 A. Loads over 8 A are not permitted.



NOTE: Damage to the electronics

Provide the module with an external fuse to protect it against polarity reversal. The power supply unit must be able to supply four times the nominal current of the external fuse, to ensure that it trips in the event of an error.

Digital inputs

| | |
|--|---|
| Number of inputs | 16 |
| Connection method | Push-in technology |
| Connection method | 1-wire |
| Description of the input | EN 61131-2 types 1 and 3 |
| Nominal input voltage | 24 V DC |
| Nominal input current | 2.4 mA |
| Current flow | Linear until nominal current is reached, then constantly approx. 2.4 mA |
| Input voltage range "0" signal | -3 V DC ... 5 V DC |
| Input voltage range "1" signal | 11 V DC ... 30 V DC |
| Input filter time | 3000 μ s (default), 1000 μ s, < 100 μ s |
| Process data update | < 100 μ s |
| Polarity reversal protection of the inputs | Parallel diode (30 V, 5 s) |

Digital outputs

| | |
|---|---|
| Number of outputs | 16 |
| Connection method | Push-in technology |
| Connection method | 1-wire |
| Nominal output voltage | 24 V DC |
| Maximum output current per channel | 500 mA |
| Maximum output current per device | 8 A (external fuse) |
| Nominal load, ohmic | max. 12 W (48 Ω; with nominal voltage) |
| Nominal load, inductive | max. 12 VA (1.2 H; 48 Ω; with nominal voltage) |
| Nominal load, lamp | max. 12 W (at nominal voltage) |
| Signal delay | max. 100 μs (when switched on) |
| Signal delay | max. 100 μs (when switched off; with at least 50 mA load current) |
| Switching frequency | max. 10000 per second (with at least 50 mA load current) |
| Switching frequency | max. 1 per second (with inductive load) |
| Switching frequency | max. 16 per second (with nominal lamp load) |
| Load min. | 10 kΩ |
| Energy consumption | see diagram |
| Limitation of the voltage induced on circuit interruption | -25.8 V ... -15 V |
| Output voltage when switched off | max. 1 V |
| Output current when switched off | max. 300 μA |
| Behavior with overload | Shutdown with automatic restart |
| Behavior with inductive overload | Output can be destroyed |
| Reverse voltage resistance to short pulses | Limited protection up to 0.5 A for 1 s |



NOTE: Damage to the electronics

If there is a faulty external voltage (reverse voltage) at one of the outputs, the output may be destroyed. This may cause unintentional setting of further outputs.

| | |
|---|-------------|
| Overcurrent shut-down | as of 0.7 A |
| Output current with ground connection interrupt when switched off | < 1 mA |
| Short-circuit protection, overload protection of the outputs | Electronic |

Configuration and parameter data in a PROFIBUS system

| | |
|-----------------------------|--------|
| Required parameter data | 3 Byte |
| Need for configuration data | 7 Byte |

Error messages to the higher level control or computer system

| | |
|---|-----|
| I/O supply failure | Yes |
| Short-circuit / overload of the digital outputs | Yes |

Electrical isolation/isolation of the voltage areas

| Test section | Test voltage |
|---|------------------------|
| 5 V communications power (logic), 24 V supply (I/O) | 500 V AC, 50 Hz, 1 min |
| 5 V supply (logic)/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 |

Mechanical tests

| | |
|--|-----|
| Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6 | 5g |
| Shock in acc. with EN 60068-2-27/IEC 60068-2-27 | 30g |
| Continuous shock according to EN 60068-2-27/IEC 60068-2-27 | 10g |

Conformance with EMC Directive 2004/108/EC

Noise immunity test in accordance with EN 61000-6-2

| | |
|--|---|
| Electrostatic discharge (ESD) EN 61000-4-2/IEC 61000-4-2 | Criterion B; 6 kV contact discharge, 8 kV air discharge |
| Electromagnetic fields EN 61000-4-3/IEC 61000-4-3 | Criterion A; Field intensity: 10 V/m |
| Fast transients (burst) EN 61000-4-4/IEC 61000-4-4 | Criterion B, 2 kV |
| Transient surge voltage (surge) EN 61000-4-5/IEC 61000-4-5 | Criterion B; DC supply lines: ± 0.5 kV/ ± 0.5 kV (symmetrical/asymmetrical) |
| Conducted interference EN 61000-4-6/IEC 61000-4-6 | Criterion A; Test voltage 10 V |

Noise emission test according to EN 61000-6-3

| | |
|--|---------|
| Radio interference properties EN 55022 | Class B |
|--|---------|

Approvals

For the latest approvals, please visit phoenixcontact.net/products.

5 Maximum outputs power consumption when inductive loads are switched off



NOTE: Damage to the electronics
 Restrict freewheeling voltage to a maximum of -17 V when using an external freewheeling circuit! The external freewheeling circuit does not function in the case of higher negative voltages.

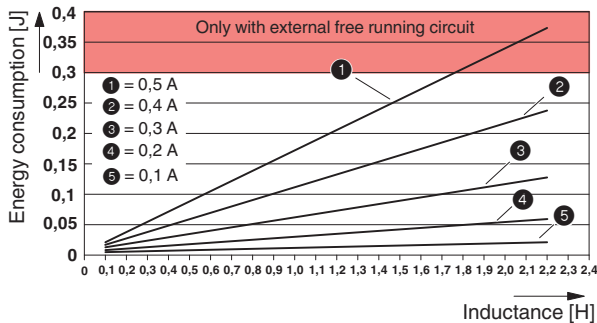


Figure 1 Maximum outputs power consumption when inductive loads are switched off

The specifications in the diagram refer to a maximum switching frequency of 1 Hz.

The diagram shows the maximum amount of energy that may be fed back into the corresponding output groups (outputs 1 to 8, 9 to 16) for each switch-off procedure when switching off an inductive load without external freewheeling circuit.

The current data refers to the ohmic DC voltage component of the inductive load.

6 Internal circuit diagram

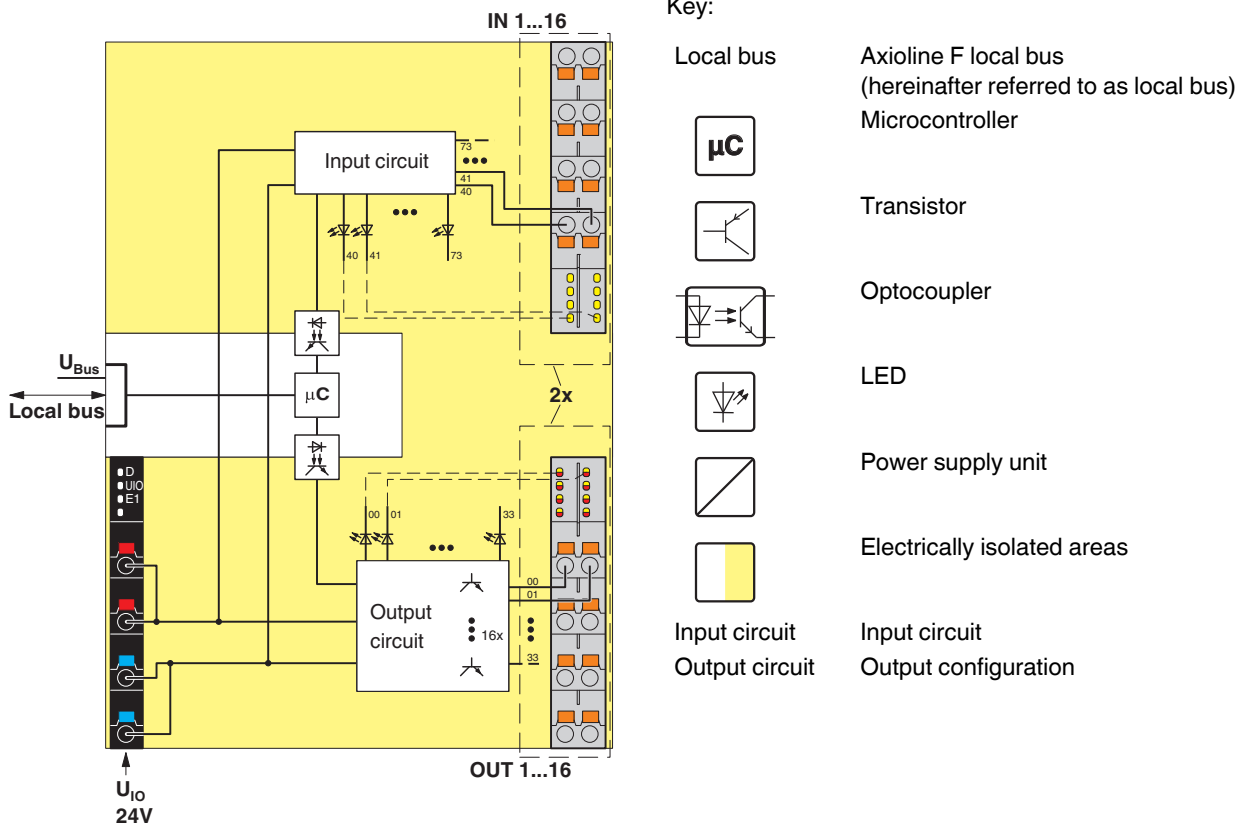


Figure 2 Internal wiring of the terminal points

7 Terminal point assignment

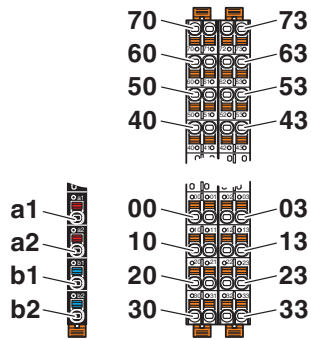


Figure 3 Terminal point assignment

| Terminal point | Color | Assignment | |
|-----------------------------|--------|----------------------------|--|
| Supply voltage input | | | |
| a1, a2 | Red | 24 V DC (U _{IO}) | Supply to digital input and output modules (internally jumpered) |
| b1, b2 | Blue | GND | Reference potential of the supply voltage (internally jumpered) |
| Digital outputs | | | |
| 00 ... 03 | Orange | OUT1 ... OUT4 | Digital outputs 1 ... 4 |
| 10 ... 13 | Orange | OUT5 ... OUT8 | Digital outputs 5 ... 8 |
| 20 ... 23 | Orange | OUT9 ... OUT12 | Digital outputs 9 ... 12 |
| 30 ... 33 | Orange | OUT13 ... OUT16 | Digital outputs 13 ... 16 |
| Digital inputs | | | |
| 40 ... 43 | Orange | IN1 ... IN4 | Digital inputs 1 ... 4 |
| 50 ... 53 | Orange | IN5 ... IN8 | Digital inputs 5 ... 8 |
| 60 ... 63 | Orange | IN9 ... IN12 | Digital inputs 9 ... 12 |
| 70 ... 73 | Orange | IN13 ... IN16 | Digital inputs 13 ... 16 |

8 Connection example

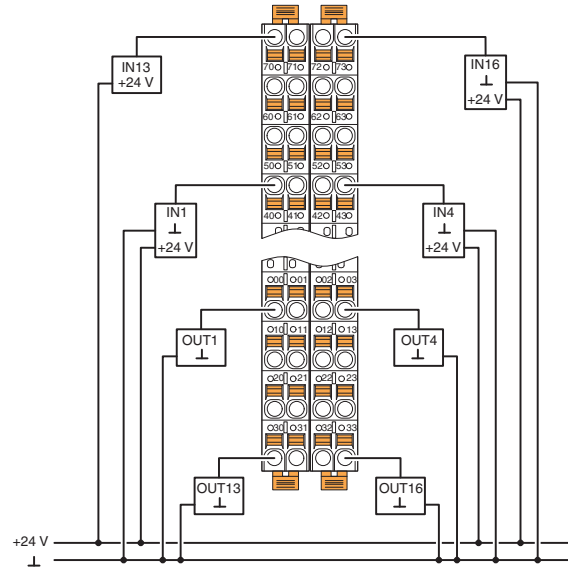


Figure 4 Typical connection of sensors and actuators when using external busbars

Ensure that GND of the sensors and actuators and GND for U_{IO} have the same potential.

9 Local status and diagnostic indicators

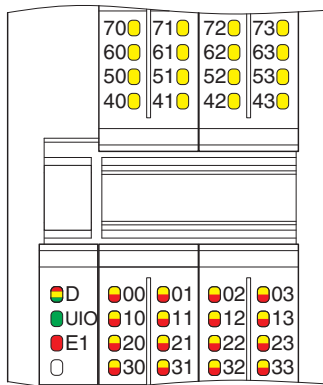


Figure 5 Local status and diagnostic indicators

| Designation | Color | Meaning | State | Description |
|-------------|--------------------------|--|-----------------------|---|
| D | Red/ yellow/ green | Diagnostics of local bus communication | | |
| | | Run | Green ON | The device is ready for operation, communication within the station is OK. All data is valid. There are no faults. |
| | | Active | Green flashing | The device is ready for operation, communication within the station is OK. The data is not valid. Valid data from the controller/higher-level network not available. There is no fault in the module. |
| | | Device application not active | Flashing green/yellow | The device is ready for operation, communication within the station is OK. Output data cannot be outputted and/or input data cannot be read. There is a fault on the periphery side of the module.. |
| | | Ready | Yellow ON | The device is ready for operation but did not detect a valid cycle after power-on. |
| | | Connected | Yellow flashing | The device is not (yet) part of the active configuration. |
| | | Reset | Red ON | The device is ready for operation but has lost the connection to the bus head. |
| | | Not connected | Red flashing | The device is ready for operation but there is no connection to the previously existing device. |
| | | Power down | OFF | Device in (power) reset. |
| UIO | Green | U _{input/output} | ON | Supply for digital input and output modules is available. |
| | | | OFF | Supply for digital input and output modules is not available. |
| E1 | Red | Peripheral fault | ON | Short-circuit/overload of an output |
| | | | OFF | No I/O error. |

| Designation | Color | Meaning | State | Description |
|---|----------------|--|-----------|---------------------------------------|
| 00 ... 03, 10 ... 13, 20 ... 23, 30 ... 33 | Red/ yellow | Diagnos- tics / Status of the out- puts | Red ON | Short-circuit/overload of the output. |
| | | | Yellow ON | Output is set. |
| | | | OFF | No error, output is not set. |
| 40 ... 43, 50 ... 53, 60 ... 63, 70 ... 73 | Yellow | Status of the inputs | ON | Input is set. |
| | | | OFF | Input is not set. |

10 Process data

The I/O data is displayed in S7-compatible format.

OUT process data

| Byte | 0 | | | | | | | |
|-------------------|----|----|----|----|----|----|----|----|
| Bit | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
| Output | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Terminal point | 13 | 12 | 11 | 10 | 03 | 02 | 01 | 00 |

| Byte | 1 | | | | | | | |
|-------------------|----|----|----|----|----|----|----|----|
| Bit | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
| Output | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 |
| Terminal point | 33 | 32 | 31 | 30 | 23 | 22 | 21 | 20 |

IN process data

| Byte | 0 | | | | | | | |
|-------------------|----|----|----|----|----|----|----|----|
| Bit | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
| Input | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Terminal point | 53 | 52 | 51 | 50 | 43 | 42 | 41 | 40 |

| Byte | 1 | | | | | | | |
|-------------------|----|----|----|----|----|----|----|----|
| Bit | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
| Input | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 |
| Terminal point | 73 | 72 | 71 | 70 | 63 | 62 | 61 | 60 |

11 Parameter, diagnostics and information (PDI)

Parameter and diagnostic data as well as other information is transmitted via the PDI channel of the Axioline F station.

The standard and application objects stored in the module are described in the following section.

The following applies to all tables below:

Please refer to the UM EN AXL F SYS INST for an explanation of the object codes and data types.

| Abbreviation | Meaning |
|--------------|------------------------|
| A | Number of elements |
| L | Length of the elements |
| R | Read |
| W | Write |



Every visible string is terminated with a zero terminator (00_{hex}). The length of a visible string element is therefore one byte larger than the amount of user data.



For detailed information on PDI and the objects, please refer to the UM EN AXL F SYS INST user manual.

12 Standard objects

12.1 Objects for identification (device rating plate)

| Index (hex) | Object name | Object type | Data type | A | L | Rights | Meaning | Contents |
|--------------------------|-----------------|-------------|----------------|---|--------|--------|----------------------------|--|
| Manufacturer | | | | | | | | |
| 0001 | VendorName | Var | Visible String | 1 | 16 | R | Vendor name | Phoenix Contact |
| 0002 | VendorID | Var | Visible String | 1 | 7 | R | Vendor ID | 00A045 |
| 0003 | VendorText | Var | Visible String | 1 | 49 | R | Vendor text | Components and systems for industrial automation |
| 0012 | VendorURL | Var | Visible String | 1 | 23 | R | Vendor URL | www.phoenixcontact.com |
| Module - general | | | | | | | | |
| 0004 | DeviceFamily | Var | Visible String | 1 | 19 | R | Device family | I/O digital IN-OUT |
| 0006 | ProductFamily | Var | Visible String | 1 | 6 | R | Product family | AXL F |
| 000E | CommProfile | Var | Visible String | 1 | 4 | R | Communication profile | 633 |
| 000F | DeviceProfile | Var | Visible String | 1 | 5 | R | Device profile | 0010 |
| 0011 | ProfileVersion | Record | Visible String | 2 | 11; 20 | R | Profile version | 2011-12-07; Basic Profile V2.0 |
| 003A | VersionCount | Array | Unsigned 16 | 4 | 4 * 2 | R | Version counter | e.g., 0007 0001 0000 0000 _{hex} |
| Module - special | | | | | | | | |
| 0005 | Capabilities | Array | Visible String | 1 | 8 | R | Features | Nothing |
| 0007 | ProductName | Var | Visible String | 1 | 23 | R | Product name | AXL F DI16/1 DO16/1 2H |
| 0008 | SerialNo | Var | Visible String | 1 | 11 | R | Serial number | xxxxxxxx (e. g., 1234512345) |
| 0009 | ProductText | Var | Visible String | 1 | 57 | R | Product text | 16 digital inputs, adjustable filter, 16 digital outputs |
| 000A | OrderNumber | Var | Visible String | 1 | 8 | R | Order No. | 2702106 |
| 000B | HardwareVersion | Record | Visible String | 2 | 11; 3 | R | Hardware version | e. g., 2011-02-04; 00 |
| 000C | FirmwareVersion | Record | Visible String | 2 | 11; 3 | R | Firmware version | 0000-00-00; -- |
| 000D | PChVersion | Record | Visible String | 2 | 11; 6 | R | Parameter channel version | 2010-01-08; V1.00 |
| 0037 | DeviceType | Var | Octet string | 1 | 8 | R | Module identification | 00 C0 00 02 00 00 0D 04 _{hex} |
| Use of the device | | | | | | | | |
| 0014 | Location | Var | Visible String | 1 | 59 | R/W | Location | Can be filled out by the user. |
| 0015 | EquipmentIdent | Var | Visible String | 1 | 59 | R/W | Equipment identifier | Can be filled out by the user. |
| 0016 | ApplDeviceAddr | Var | Unsigned 16 | 1 | 2 | R/W | Application device address | Can be filled out by the user. |

12.2 Object for multilingual capacity

| Index (hex) | Object name | Object type | Data type | A | L | Rights | Meaning | Contents |
|-------------|-------------|-------------|----------------|---|------|--------|----------|----------------|
| 0017 | Language | Record | Visible String | 2 | 6; 8 | R | Language | en-us; English |

12.3 Diagnostics objects

| Index (hex) | Object name | Object type | Data type | A | L | Rights | Assignment/content |
|-------------|-------------|-------------|-----------|---|---------------------|--------|--------------------|
| 0018 | DiagState | Record | | 6 | 2; 1; 1; 2; 1; 1 | R | Diagnostic state |

Diagnostics state (0018_{hex}: DiagState)

This object is used for a structured message of an error.

| 0018 _{hex} : DiagState (Read) | | | | | |
|--|----------------|-----------------|----------------------|----------------------------------|--------------------|
| Subindex | Data type | Length in bytes | Meaning | Contents | |
| 0 | Record | 8 | Diagnostic state | Complete diagnostics information | |
| 1 | Unsigned 16 | 2 | Error number | 0 ... 65535 _{dez} | |
| 2 | Unsigned 8 | 1 | Priority | 00 _{hex} | No error |
| | | | | 01 _{hex} | Error |
| | | | | 02 _{hex} | Warning |
| | | | | 81 _{hex} | Error removed |
| | | | | 82 _{hex} | Warning eliminated |
| 3 | Unsigned 8 | 1 | Channel/group/module | 00 _{hex} | No error |
| | | | | FF _{hex} | entire device |
| 4 | Unsigned 16 | 2 | Error code | See table below | |
| 5 | Unsigned 8 | 1 | More follows | 00 _{hex} | |
| 6 | Visible String | 1 | Text | 00 _{hex} | |



The message with the priority 81_{hex} or 82_{hex} is a one-time internal message to the bus coupler that is implemented onto the error mechanisms of the higher-level system by the bus coupler.

Error and status of the local status and diagnostics indicators

| Subindex | 2 | 3 | 4 | | | | | |
|-------------------------------------|----------|------------------------------|------------|-------|---------------------------|-----|--------|--------|
| Error | Priority | Channel/ group/ module | Error code | | LED | | | |
| | hex | hex | hex | dec | D | UIO | E1 | xx |
| No error | 00 | 00 | 0000 | 0 | Green ON | ON | OFF | OFF |
| Short-circuit/overload of an output | 02 | FF | 2344 | 9028 | Green ON | ON | Red ON | Red ON |
| I/O supply failure | 01 | FF | 3400 | 13312 | Flashing green/ yellow | OFF | OFF | OFF |

xx LED Diagnostics of the output
 xx 00 ... 03, 10 ... 13, 20 ... 23, 30 ... 33, 40 ... 43, 50 ... 53, 60 ... 63, 70 ... 73



After all errors have been eliminated, it is automatically reset.

12.4 Objects for process data management

| Index (hex) | Object name | Object type | Data type | A | L | Rights | Assignment |
|-------------|--------------|------------------|--------------|---|---------|--------|--|
| 0025 | PDIN | Var | Octet string | 1 | 2 | R | Input process data |
| 0026 | PDOOUT | Var | Octet string | 1 | 2 | R | Output process data |
| 003B | PDIN_Descr | Array of Records | | 3 | 8; 2; 2 | R | Description of the IN process data |
| 003C | PDOOUT_Descr | Array of Records | | 3 | 8; 2; 2 | R | Description of the output process data |

The objects 003B_{hex} and 003C_{hex} are only applicable to tools.

IN process data (0025_{hex}: PDIN)

You can read the IN process data of the module with this object.
 The structure corresponds to the representation in the "Process data" section.

| 0025 _{hex} : PDIN (Read) | | | |
|-----------------------------------|--------------|-----------------|--------------------|
| Subindex | Data type | Length in bytes | Meaning |
| 0 | Octet string | 2 | Input process data |

OUT process data (0026_{hex}: PDOOUT)

You can read the OUT process data of the module with this object.
 The structure corresponds to the representation in the "Process data" section.

| 0026 _{hex} : PDOOUT (Read) | | | |
|-------------------------------------|--------------|-----------------|---------------------|
| Subindex | Data type | Length in bytes | Meaning |
| 0 | Octet string | 2 | Output process data |

13 Application objects

| Index (hex) | Object name | Object type | Data type | A | L | Rights | Assignment |
|-------------|------------------------------------|-------------|------------|---|---|--------|---------------------------|
| FF8D | PD Output Substitute Configuration | Var | Unsigned 8 | 1 | 1 | R/W | Substitute value behavior |
| FF8F | Input_Filter | Var | Unsigned 8 | 1 | 1 | R/W | Filter time |

In the case of valid parameters, the parameterization is stored in the module permanently.

13.1 Substitute value behavior (FF8D_{hex}: PD Output Substitute Configuration)

With this object, you parameterize the behavior of the module so that an application reset can be detected if necessary.

| FF8D _{hex} : PD Output Substitute Configuration (Read, write) | | | | |
|--|-----------|-----------------|-----------------------------|-------------------------------|
| Subindex | Data type | Length in bytes | Contents | |
| 0 | Var | 1 | 00 _{hex} (Default) | "0" output to all output bits |
| | | | 01 _{hex} | Hold last value |

13.2 Filter time (FF8F_{hex}: Input_Filter)

You parameterize the filter time of the module with this object.

| FF8F _{hex} : Input_Filter (read, write) | | | | |
|--|-----------|-----------------|-----------------------------|----------|
| Subindex | Data type | Length in bytes | Contents | |
| 0 | Var | 1 | 00 _{hex} (Default) | 3000 μs |
| | | | 01 _{hex} | 1000 μs |
| | | | 02 _{hex} | < 100 μs |

14 Device descriptions

The device is described in the device description files.

The device descriptions for controllers from Phoenix Contact are included in PC Worx and the corresponding service packs.

The device description files for other systems are available for download at phoenixcontact.net/products in the download area of the bus coupler used.