



PHOENIX CONTACT 2878036 Analog Module User Guide

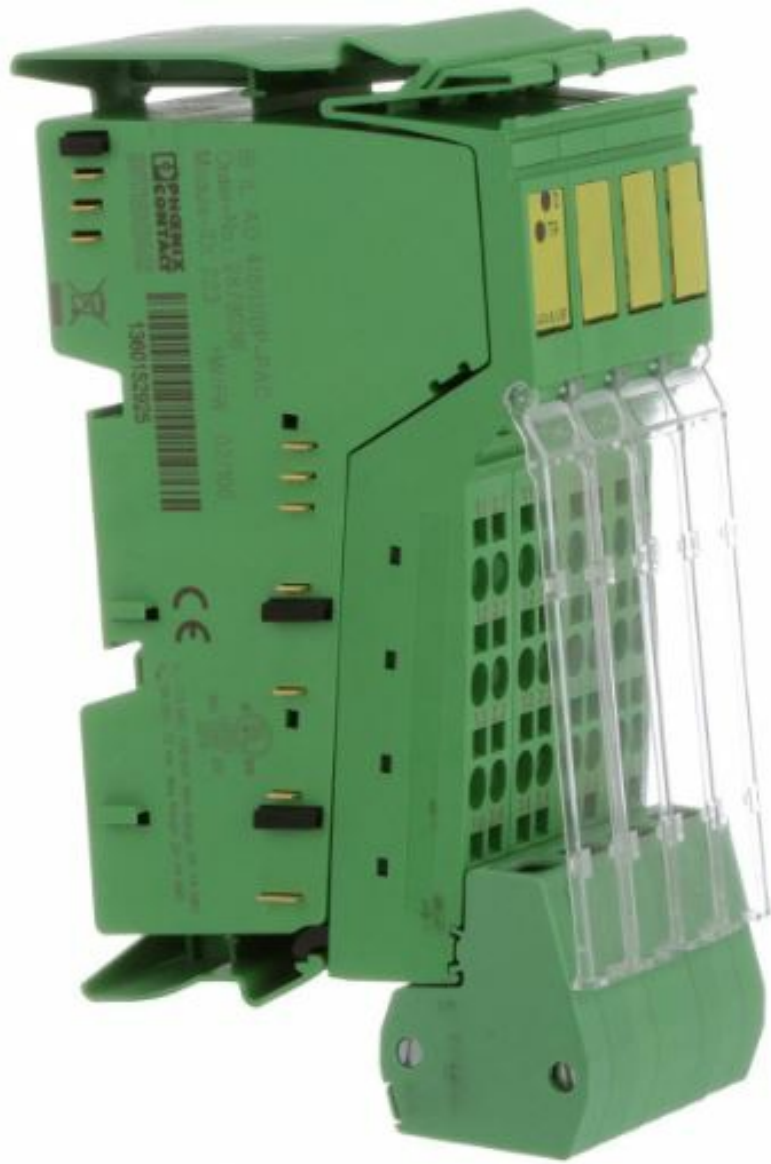
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PHOENIX CONTACT 2878036 Analog Module



Product Information

Specifications

- **Analog outputs:** 8
- **Voltage ranges:** 0 V ... 10 V, -10 V ... 10 V, 0 V ... 5 V, -5 V ... 5 V
- **Connection technology:** 2-conductor
- **Transmission speed in the local bus:** 500 kbps
- **Degree of protection:** IP20

Your Advantages

- **Commercial Data:**
 - Item number: 2878036
 - Packing unit: 1 pc
 - Minimum order quantity: 1 pc
 - Sales Key: DR01 DRI142
 - Catalog Page: 143 (C-6-2019)

- GTIN: 4046356048439
- Weight per Piece (including packing): 245.2 g
- Weight per Piece (excluding packing): 215 g
- Customs tariff number: 85389099
- Country of origin: DE

Product Usage Instructions

Installation

1. Ensure that the power supply is turned off.
2. Connect the module to the Inline connectors using the provided connectors.
3. Make sure the connections are secure.

Configuration

1. Refer to the user documentation for detailed configuration instructions.
2. Set the desired voltage range for the analog outputs.
3. Configure any additional parameters as required.

Connection

1. Connect the input devices to the module's analog outputs using 2-conductor cables.
2. Ensure the cables are properly stripped and connected.
3. Double-check the connections for accuracy.

Power On

1. Turn on the power supply.
2. Verify that the module is receiving power.

FAQ

- **Q:** What is the degree of protection for this module?
- **A:** The degree of protection is IP20.
- **Q:** What is the transmission speed in the local bus?
- **A:** The transmission speed is 500 kbps.
- **Q:** How many analog outputs does this module have?
- **A:** This module has 8 analog outputs.

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, Analog output terminal, Analog outputs: 8, 0 V ... 10 V, -10 V ... 10 V, 0 V ... 5 V, -5 V ... 5 V, connection technology: 2-conductor, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connectors and marking fields

Your advantages

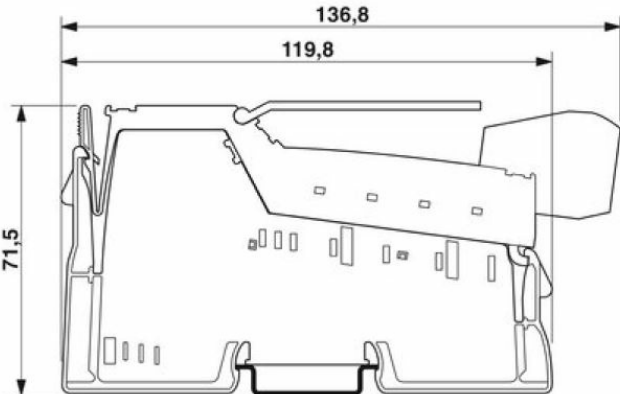
- Short update time of < 1 ms
- Short-circuit-proof current outputs
- Bipolar outputs
- Measured value acquisition with a resolution of 16 bits

Commercial Data

- **Item number:** 2878036
- **Packing unit:** 1 pc
- **Minimum order quantity:** 1 pc
- **Sales Key:** DR01
- **Product Key:** DRI142
- **Catalogue Page:** Page 143 (C-6-2019)
- **GTIN:** 4046356048439
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- **Country of origin:** DE

Technical Data

Dimensions

Dimensional drawing	
Width	48.8 mm
Height	136.8 mm
Depth	71.5 mm

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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Interfaces

Inline local bus

Connection method	Inline data jumper
Transmission speed	500 kbps
Transmission physics	Copper

System Properties

Module

ID code (dec.)	223
ID code (hex)	DF
Length code (hex)	05
Length code (dec)	05
Process data channel	80 bit
Input address area	10 Byte
Output address area	10 Byte
Register length	96 bit
Required parameter data	27 Byte
Required configuration data	5 Byte

Output data

Analog

Output name	Analog outputs
Connection technology	2-conductor

Note regarding the connection technology	shielded
Number of outputs	8
D/A converter resolution	16 bit
Protective circuit	Transient protection of outputs
Data formats	IB IL, IB ST, IB RT, standardized representation, S7 compatible
Representation of output values	16 bits (15 bits + sign)
Process data update	< 2 ms (depends on operating mode)
Voltage output signal	0 V ... 10 V
	-10 V ... 10 V
	0 V ... 5 V
	-5 V ... 5 V
Load/output load voltage output	> 2 kΩ 0.05 %

Product properties

Type	modular
Product type	I/O component
Product family	Inline
Scope of delivery	including Inline connectors and marking fields

Electrical properties

Potentials: Communications power (UL)

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	typ. 80 mA

Potentials: Supply of analog modules (UANA)

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	typ. 72 mA

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
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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

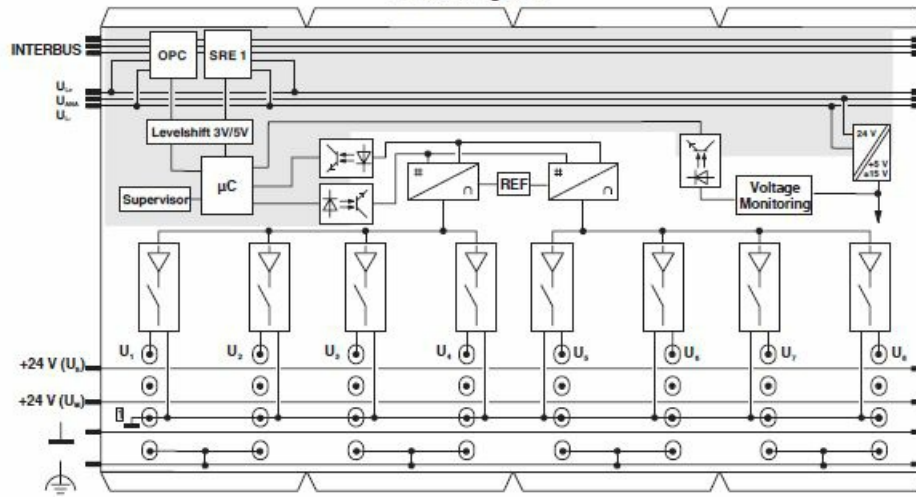
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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Mounting

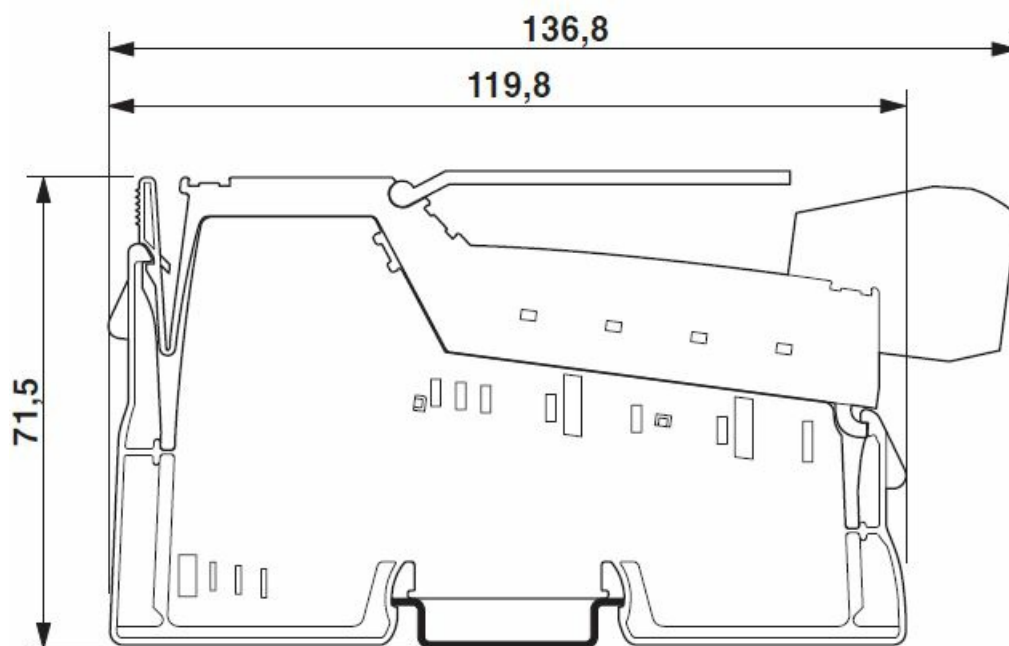
Mounting type	DIN rail mounting
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Drawings

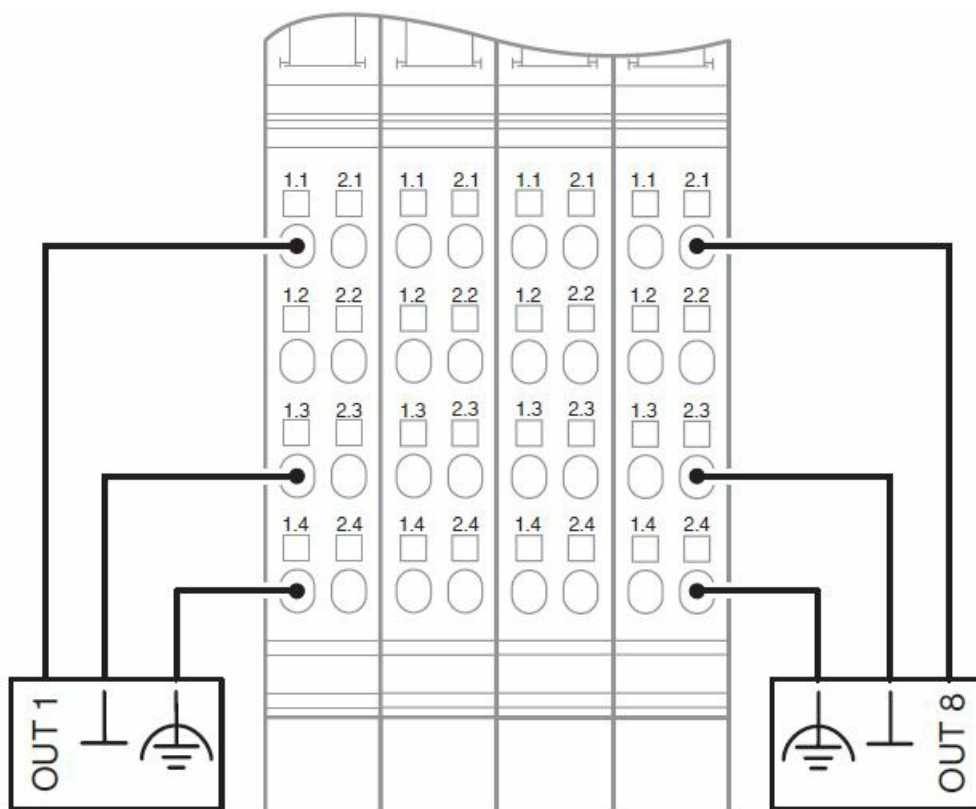
Block diagram



Dimensional drawing



Connection diagram



Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2878036>.



Approval ID: TR TS_D_01921-19



UL Listed

Approval ID: FILE E 140324



cUL Listed

Approval ID: FILE E 140324

UAE-RoHS

Approval ID: 22-04-13078

cULus Listed

Classifications

ECLASS

ECLASS-11.0	27242601
ECLASS-12.0	27242601
ECLASS-13.0	27242601

ETIM

ETIM 8.0	EC001596
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UNSPSC

UNSPSC 21.0	32151600
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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Accessories

- IB IL SCN 6-SHIELD-TWIN – Inline shield connector 2740245
- <https://www.phoenixcontact.com/us/products/2740245>. Inline shield connector.



- Labelling field, width: 12.2 mm



ESL 62X10 – Insert strip

- 0809492
- <https://www.phoenixcontact.com/us/products/0809492>.

Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems, CMS-P1-PLOTTER, mounting type: insert, lettering field size: 62 x 10 mm, Number of individual labels: 72



IB IL SCN-6 SHIELD – Inline shield connector 2726353

- <https://www.phoenixcontact.com/us/products/2726353>.
- Inline shield connector.



CONTACT

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Documents / Resources

	PHOENIX CONTACT 2878036 Analog Module [pdf] User Guide 2878036 Analog Module, 2878036, Analog Module, Module
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References

- [!\[\]\(ba3216d69f468f236e1d04b7d0e65923_img.jpg\) Phoenix Contact USA](#)
- [!\[\]\(fd21eb2b7bde1d62aa23cc122d69349a_img.jpg\) IB IL AO 4/8/U/BP-PAC - Analog module - 2878036 | Phoenix Contact](#)
- [!\[\]\(7bc6efac5be8a57f742cddf3c5b5db36_img.jpg\) IB IL AO 4/8/U/BP-PAC - Analog module - 2878036 | Phoenix Contact](#)
- [!\[\]\(ce247c342301314020a84f1a39257c80_img.jpg\) IB IL FIELD 2 - Marking field - 2727501 | Phoenix Contact](#)
- [!\[\]\(26f7a4f41bac56293de17e7f3075a3cb_img.jpg\) IB IL SCN-6 SHIELD - Inline shield connector - 2726353 | Phoenix Contact](#)
- [!\[\]\(3ef891075b7e0640e1868c31f0e0f074_img.jpg\) ESL 62X10 - Insert strip - 0809492 | Phoenix Contact](#)
- [!\[\]\(0d7e4a9cd86e8c45cd3a4122f6276ed1_img.jpg\) ESL 62X10 - Insert strip - 0809492 | Phoenix Contact](#)
- [!\[\]\(58f90ac06aeffc79f60a70146662f706_img.jpg\) IB IL SCN-6 SHIELD - Inline shield connector - 2726353 | Phoenix Contact](#)
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- [!\[\]\(f1bccec08f53d73cc6dd81c747c4a793_img.jpg\) IB IL SCN 6-SHIELD-TWIN - Inline shield connector - 2740245 | Phoenix Contact](#)
- [!\[\]\(3c1ef41087ea713bb17b3a1c674f1676_img.jpg\) IB IL AO 4/8/U/BP-PAC - Analog module - 2878036 | Phoenix Contact](#)
- [User Manual](#)