

# AXL F MA DALI2 1H - Communication module



2702864

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Axioline F, DALI master, Single master, two channels, integrated DALI power supply unit, transmission speed in the local bus: 100 Mbps, degree of protection: IP20, including bus base module and Axioline F connectors

## Product description

The module is designed for use within an Axioline F station. The 2-channel DALI master enables communication with two DALI networks including their bus power supply with up to 230 mA each.

## Your advantages

- DALI master with integrated DALI bus supply
- Suitable for single master operation
- Electrical isolation of the DALI bus
- DALI bus protected against unintentional connection of mains voltage (up to 250 V AC)
- Device rating plate stored
- Certified in accordance with DALI-2 standard (single master)

## Commercial data

Item number	2702864
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR18
Product key	DRHABA
GTIN	4055626463360
Weight per piece (including packing)	191.5 g
Weight per piece (excluding packing)	190.5 g
Customs tariff number	85176200
Country of origin	DE

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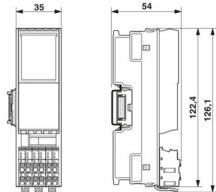


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## Technical data

### Dimensions

Dimensional drawing	
Width	35 mm
Height	126.1 mm
Depth	54 mm
Note on dimensions	The depth applies when a TH 35-7.5 DIN rail is used (in accordance with EN 60715).

### Notes

Note on application	
Note on application	Only for industrial use

### Material specifications

Color (Housing)	gray (RAL 7042)
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### Interfaces

#### DALI

Number of interfaces	2
Connection method	Push-in connection

#### Axioline F local bus

Number of interfaces	2
Connection method	Bus base module
Transmission speed	100 Mbps

#### Fieldbus: DALI

Designation	DALI
Note	The data apply for DALI bus 1 and DALI bus 2, respectively.
Connection method	Push-in connection
No. of channels	2 (DALI 1, DALI 2)
Supply voltage	typ. 16 V DC (Bus voltage)
Output current	230 mA (guaranteed)
Output current with short-circuit	max. 250 mA
Current carrying capacity	max. 195 mA (Bus load, see derating)
Transmission speed	1200 bps
Type of protection	Bus protected up to 250 V AC, maximum

## System properties

### Programming data

Input address area	8 Byte
Output address area	8 Byte

### Fieldbus data telegram

Required parameter data	1 Byte
Required configuration data	7 Byte

## Product properties

Product type	I/O component
Product family	Axioline F
Type	block modular
Mounting position	any (no temperature derating)
Scope of supply	including bus base module and Axioline F connectors
Special properties	Single master two channels integrated DALI power supply unit

### Insulation characteristics

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

## Electrical properties

### Potentials: Axioline F local bus supply ( $U_{BUS}$ )

Supply voltage	5 V DC (via bus base module)
Current draw	max. 65 mA
Power consumption	max. 325 mW

### Potentials: Feed-in of supply voltage ( $U_I$ )

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current draw	max. 470 mA (at nominal voltage) typ. 250 mA
Power consumption	max. 8.8 W (both channels loaded with 195 mA)
Protective circuit	Surge protection; electronic (35 V, 0.5 s) Reverse polarity protection; parallel diode; with external 5 A fuse Transient protection; Suppressor diode
Protection	max. 8 A (polarity reversal protection up to 5 A)

### Electrical isolation/isolation of the voltage ranges

Test voltage: 5 V supply of the local bus ( $U_{BUS}$ ) / 24 V supply (I/Os)	500 V AC, 50 Hz, 1 min
Test voltage: 5 V supply of the local bus ( $U_{BUS}$ ) / functional ground	500 V AC, 50 Hz, 1 min

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Test voltage: 24 V supply (I/O) / functional ground	500 V AC, 50 Hz, 1 min
Test voltage: DALI 1 / DALI 2	500 V AC, 50 Hz, 1 min
Test voltage: DALI / 5 V supply of the local bus ( $U_{Bus}$ )	1.5 kV AC, 50 Hz, 1 min
Test voltage: DALI/24 V supply (periphery)	1.5 kV AC, 50 Hz, 1 min
Test voltage: DALI/functional ground	1.5 kV AC, 50 Hz, 1 min

## Connection data

### Connection technology

Connection name	Axioline F connector
Note on the connection method	Please observe the information provided on conductor cross-sections in the "Axioline F: system and installation" user manual.

### Axioline F connector

Connection method	Push-in connection
Note on the connection method	Please observe the information provided on conductor cross-sections in the "Axioline F: system and installation" user manual.
Conductor cross-section, rigid	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section, flexible	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section AWG	24 ... 16
Stripping length	8 mm

## Environmental and real-life conditions

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °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)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)

### Mechanical test

Vibration resistance in accordance with EN 60068-2-6/IEC 60068-2-6	5g
Shock in accordance with EN 60068-2-27/IEC 60068-2-27	30g
Continuous shock in accordance with EN 60068-2-27/IEC 60068-2-27	10g

## Standards and regulations

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

Mounting type	DIN rail mounting
Mounting position	any (no temperature derating)

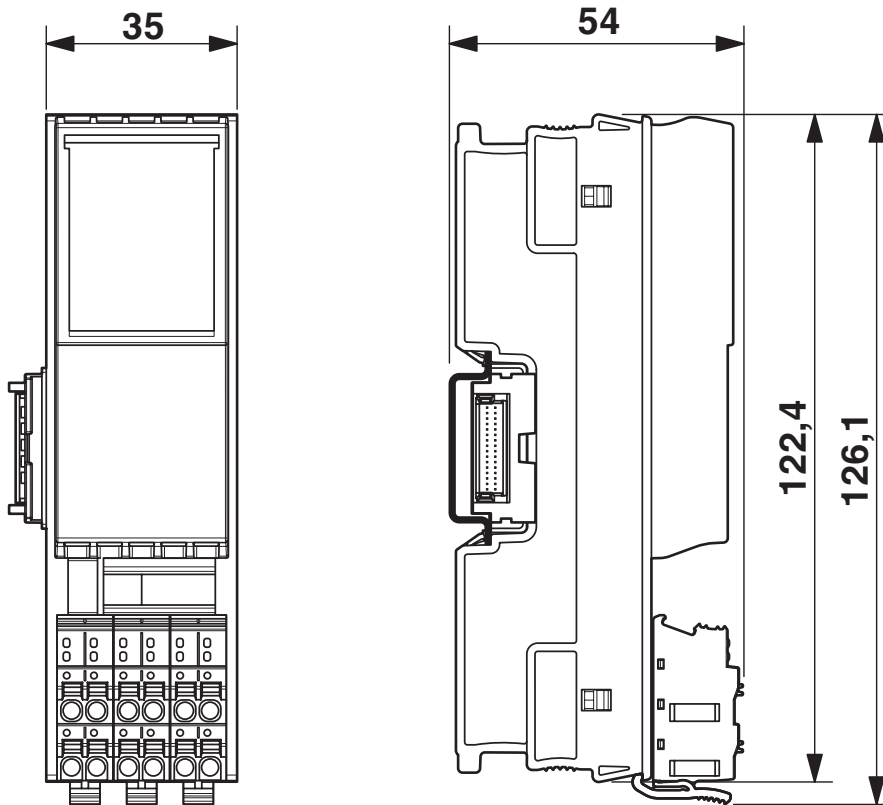
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## Drawings

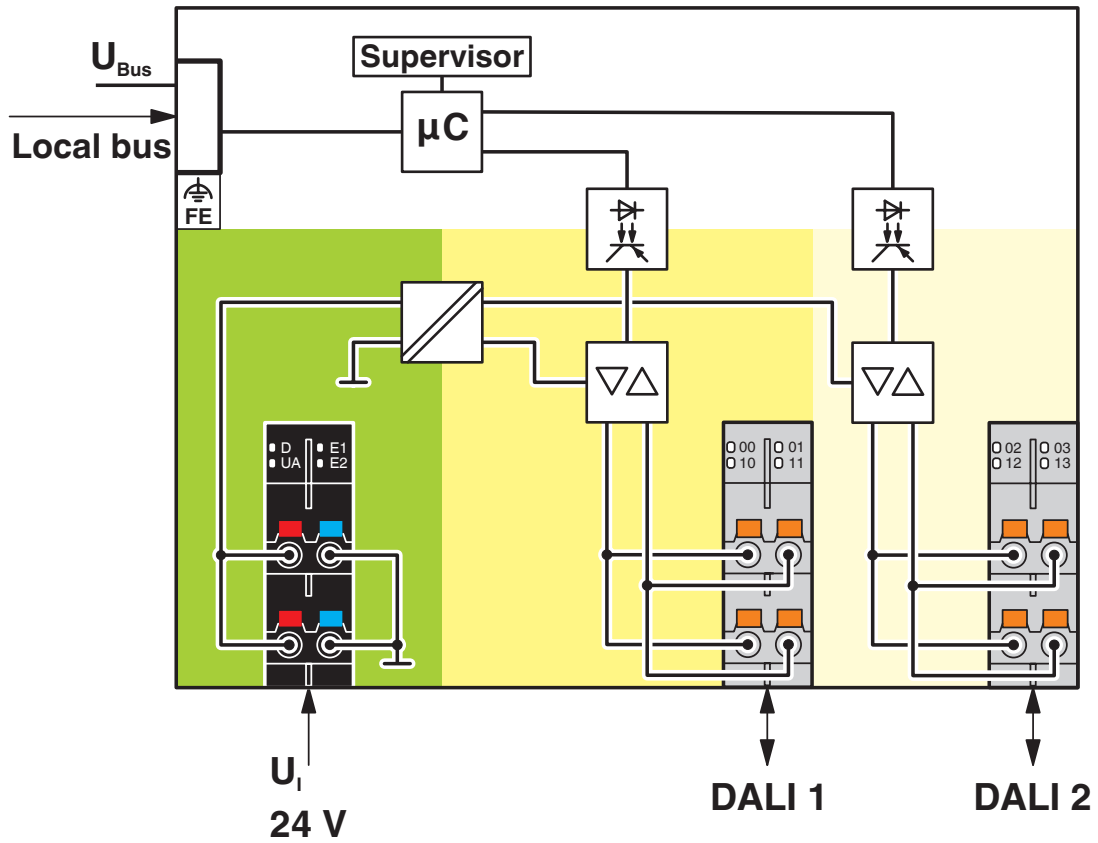
Dimensional drawing



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Block diagram



Internal wiring of the terminal points

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2702864>



**cULus Listed**

Approval ID: E238705

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## Classifications

### ECLASS

ECLASS-13.0	27242608
ECLASS-15.0	27242608

### ETIM

ETIM 10.0	EC001604
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### UNSPSC

UNSPSC 21.0	32151600
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## 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: 7439-92-1)
SCIP	42552c89-05d1-405d-8a92-cb7f1802aaf8

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