

# FA MCR-EX-DS-I-I-OLP - Digital display



2908800

<https://www.phoenixcontact.com/us/products/2908800>

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Ex i, Output loop-powered process indicator for installation in the control cabinet. HART



## Commercial data

Item number	2908800
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	C430
Product key	DK1241
GTIN	4055626357225
Weight per piece (including packing)	367.3 g
Weight per piece (excluding packing)	353.5 g
Customs tariff number	90328900
Country of origin	DE

## Technical data

### Product properties

Product type	Digital displays
Product family	Field Analog
Configuration	Keyboard
	Software

### System properties

#### Functionality

Configuration	Keyboard
	Software

### Electrical properties

Maximum temperature coefficient	< 0.02 %/K
Maximum transmission error	0.1 % (of final value)

#### Supply

Supply voltage range	loop-powered, no external supply necessary
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### Input data

#### Signal: Current

Current input signal	4 mA ... 20 mA
Max. current input signal	200 mA
Voltage drop	≤ 1 V
	≤ 3.9 V (with display lighting)
Input impedance	≈ $\ominus \downarrow \Omega$

#### Signal: HART

Current input signal	up to 4x HART process variables
Voltage drop	≤ 1.9 V
	≤ 4.8 V (with display lighting)
Input impedance	$R_x = 40 \Omega / C_x = 2.3 \text{ nF}$

### Output data

#### Signal: Current

Current output signal	4 mA ... 20 mA
Number of positions displayed	5
Display	7-segment LC display, with backlight, dot matrix for text/bar graph
Display value	scalable

#### Signal: HART

Current output signal	up to 4x HART process variables
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## Connection data

Connection method	Push-in connection
Stripping length	9 mm
Conductor cross-section rigid	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section flexible	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section AWG	26 ... 16

## Ex data

Ex installation (EPL)	Gb
	Div. 1
Ex i circuits (EPL)	Gb
	Div. 1

## Interfaces

### Data communication (bypass)

Protocols supported	HART
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## Dimensions

Width	96 mm
Height	48 mm
Depth	41.5 mm

## Material specifications

Color	light gray (RAL 7035)
Housing material	Aluminum / polycarbonate

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65 (Front)
	IP20 (On the rear)
Ambient temperature (operation)	-40 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	< 5000 m (Above sea level)
Climatic class	according to IEC 60654-1, class B2

## Approvals

### CE

Certificate	CE-compliant
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### ATEX

Identification	Ⓔ II 2G Ex ib IIC T6 Gb
Certificate	PTB 17 ATEX 2025 X

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## IECEX

Identification	Ex ib IIC T6 Gb
Certificate	IECEX PTB 16.0033X

## UKCA Ex (UKEX)

Certificate	CML 21UKEX2993X
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## CCC / China-Ex

Identification	Ex ib IIC T6 Gb
Certificate	2021322309004298

## UL, USA/Canada

Identification	UL 61010 Listed
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## Shipbuilding approval

Certificate	DNV GL TAA000013C
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## Shipbuilding data

Temperature	B
Humidity	B
Vibration	A
EMC	B
Enclosure	Required protection according to the Rules shall be provided upon installation on board

## EMC data

### Noise emission

Standards/regulations	IEC 61326, class B
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## Standards and regulations

### GB Standard

Standards/regulations	GB 3836.1
	GB 3836.4

## Mounting

Mounting type	Panel mount
Mounting position	Max. viewing angle range +/- 45° from the centre line of the display in every direction

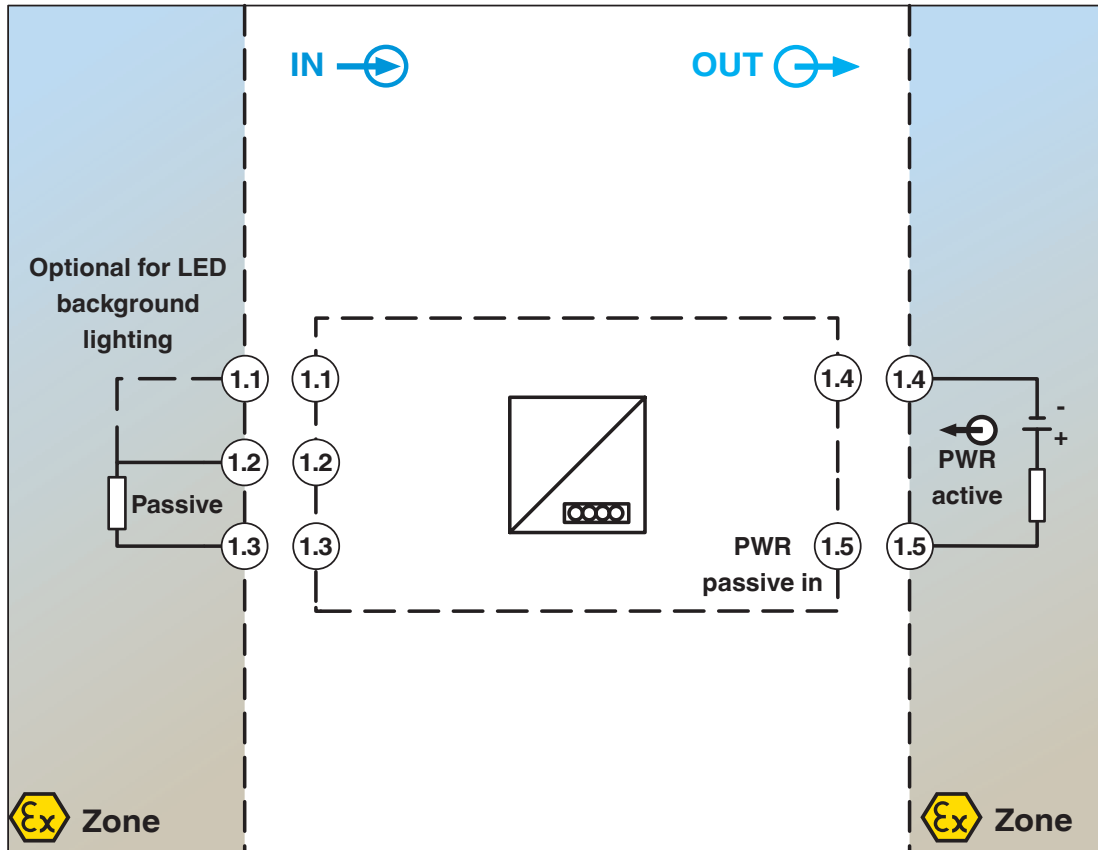
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## Drawings

Block diagram



Block diagram FA MCR-EX-DS-I-I-OLP

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2908800>



**EAC**

Approval ID: RU\*DE.\*08.B.01522/19



**UL Listed**

Approval ID: E330267



**cUL Listed**

Approval ID: FILE E 330267



**CCC**

Approval ID: 2021322309004298

**DNV**

Approval ID: TAA000013C



**IECEX**

Approval ID: IECEX PTB 16.0033X



**ATEX**

Approval ID: PTB 17 ATEX 2025 X



**CSA**

Approval ID: 70106894



**FM approved**

Approval ID: FM16US0464



**CSAus**

Approval ID: 70106894

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## Classifications

### ECLASS

ECLASS-13.0	27210301
ECLASS-15.0	27210301

### ETIM

ETIM 10.0	EC011349
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### UNSPSC

UNSPSC 21.0	39121000
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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)
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