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

2908800

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

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CRA-READY

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

Notes

Note on application

Note on application	As things stand now, we are preparing the product so that, as of December 11, 2027, it will comply with the requirements of the EU Cyber Resilience Act (CRA) based on the information currently available regarding the CRA.

Product properties

Product type	Digital displays
Product family	Field Analog
No. of channels	1
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

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	≈ ⏚ Ω

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 Ω/C_x = 2.3 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

Connection data

Connection method	Push-in connection
Stripping length	9 mm
Conductor cross-section rigid	0.14 mm² ... 1.5 mm²
Conductor cross-section flexible	0.14 mm² ... 1.5 mm²
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

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
Climatic class	according to IEC 60654-1, class B2

Approvals

CE

Certificate	CE-compliant

ATEX

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

IECEx

Identification	Ex ib IIC T6 Gb
Certificate	IECEx PTB 16.0033X

UKCA Ex (UKEX)

Certificate	CML 21UKEX2993X

CCC / China-Ex

Identification	Ex ib IIC T6 Gb
Certificate	2021322309004298

UL, USA/Canada

Identification	UL 61010 Listed

Shipbuilding approval

Certificate	DNV GL TAA000013C

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

Standards and regulations

GB Standard

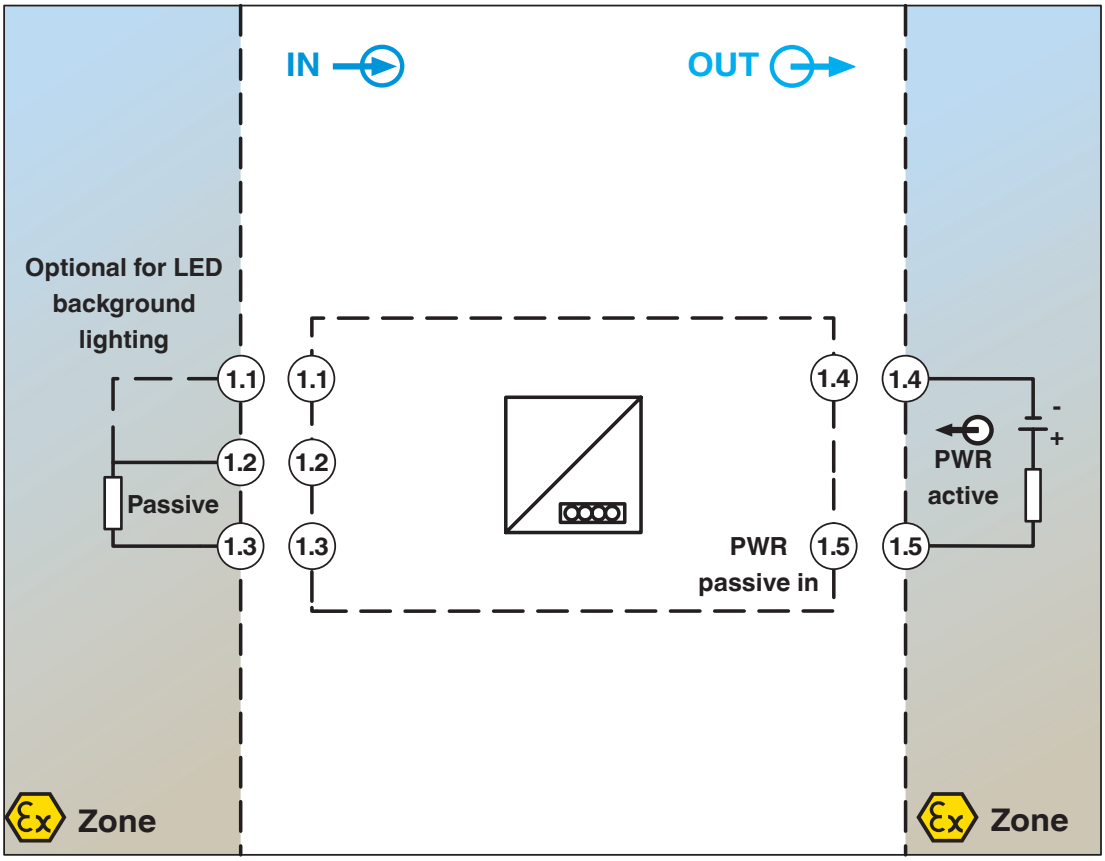
Standards/regulations	GB 3836.1
	GB 3836.4

Mounting

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

Drawings

Block diagram



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

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

Classifications

ECLASS

ECLASS-13.0	27210301
ECLASS-15.0	27210301

ETIM

ETIM 10.0	EC011349

UNSPSC

UNSPSC 21.0	39121000

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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