Extract from the online catalog

MACX MCR-EX-SL-SD-23-48-LFD

Order No.: 2924867

http://eshop.phoenixcontact.net/phoenix/treeViewClick.do?UID=2924867

Ex i solenoid driver for controlling Ex i solenoid valves in the Ex area, current limitation at 48 mA, logic input, line fault transparency, and with error message output up to SIL 3 according to IEC 61508; screw connection

SIL IEC 61508

Product notes

WEEE/RoHS-compliant since: 04/02/2013

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Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

Commercial data

EAN	4 046356 635172
Note	Made-to-order
Pack	1 pcs.
Customs tariff	85437090
Gross weight in pieces	0.1584 KG
Net weight per piece (exclusive packing)	0.10 KG
Product key	CK3142
country of origin	DE
Catalog page information	Page 179 (CAT-7-2013)

Technical data

Dimensions

Width	12.5 mm
Height	99 mm
Depth	114.5 mm

Ambient conditions	
Ambient temperature (operation)	-20 °C ... 60 °C (Any mounting position)
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Maximum altitude	≤ 2000 m
Permissible humidity (operation)	10 % ... 95 % (no condensation)
Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.
Degree of protection	IP20
Output data	
Output characteristic curve: Output resistor	≥ 269 Ω (Internal resistance R_i)
Response time	< 30 ms
Power supply	
Nominal supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (24 V DC (-20% ... +25%))
Power consumption	< 1.5 W
Connection data	
Conductor cross section solid min.	0.2 mm²
Conductor cross section solid max.	2.5 mm²
Conductor cross section stranded min.	0.2 mm²
Conductor cross section stranded max.	2.5 mm²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	14
Stripping length	7 mm
Screw thread	M3
Connection method	Screw connection
Tightening torque, min	0.5 Nm
Tightening torque max	0.6 Nm
General	
Status display	Green LED (supply voltage)
	LED yellow (switching state)
	Red LED (line errors)
Inflammability class according to UL 94	V0
Pollution degree	2
Surge voltage category	II

Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Emitted interference	EN 61000-6-4
Housing material	PA 66-FR
Color	green
Electrical isolation of output/input	630 V (U_{DC} according to EN 60079-15)
Electrical isolation output / supply	630 V (U_{DC} according to EN 60079-15)
Electrical isolation of output/supply, T connector	375 V (Peak value in accordance with EN 60079-11)
Conformance	CE-compliant, additionally EN 61326
ATEX	Ex II (1) G [Ex ia Ga] IIC
	Ex II (1) D [Ex ia Da] IIIC
	Ex II 3(1) G Ex nA [ia Ga] IIC T4 Gc X
IECEx	[Ex ia Ga] IIC
	[Ex ia Da] IIIC
	Ex nA IIC T4 Gc
Functional safety (SIL)	SIL 3 (applied for)

Safety data

Output voltage U_o	≤ 25.3 V
Output current I_o	≤ 94 mA
Output power P_o	≤ 595 mW
Gas group	IIC
Max. external inductivity L_o	3 mH
Max. external capacity C_o	95 nF
Safety-related maximum voltage U_m	253 V
Gas group	IIB
Max. external inductivity L_o	12 mH
Max. external capacity C_o	810 nF

Certificates / Approvals

Certification

Certifications applied for:

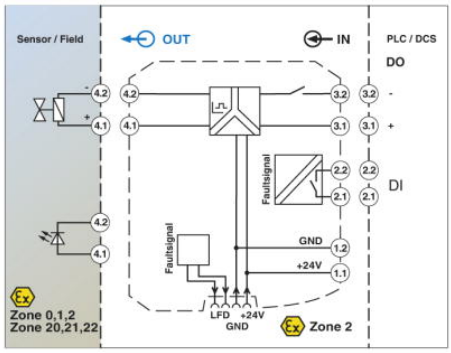
Certification Ex:

Accessories

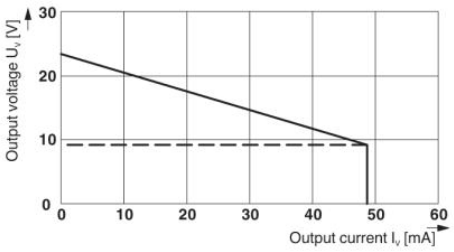
Item	Designation	Description
General		
2865625	MACX MCR-PTB	Power and error message module
2924184	MACX MCR-PTB-SP	Power and error message module, spring-cage terminal blocks
2869728	ME 6,2 TBUS-2 1,5/5-ST-3,81 GN	DIN rail connector for DIN rail mounting. Universal for T-BUS housing. Gold-plated contacts, 5-pos.

Diagrams/Drawings

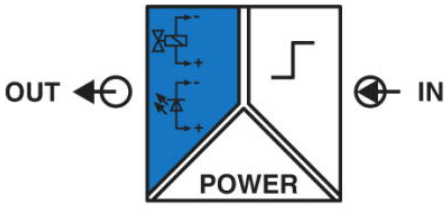
Block diagram



Diagram



Pictogram



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