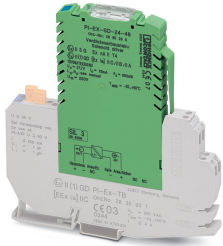


Solenoid driver - PI-EX-SD-24-48 - 2865298


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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Ex i solenoid driver, pluggable. To control intrinsically safe solenoid valves, alarm modules as well as simple electric equipment installed in Ex areas. For Group IIC gases, loop-powered. Electrical isolation.



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 147101
GTIN	4046356147101
Weight per Piece (excluding packing)	89.600 g
Custom tariff number	85437090
Country of origin	Germany

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
-------------------------	---

Dimensions

Width	12.4 mm
Height	79 mm
Depth	118.4 mm

Ambient conditions

Ambient temperature (operation)	-20 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (relative humidity, non-condensing)

Solenoid driver - PI-EX-SD-24-48 - 2865298

Technical data

Output data

Output characteristic curve: Output resistor	$\leq 278 \Omega$ (Internal resistance R_i)
Response time	< 30 ms

Compatible valves

Note	This is an extract of possible combinations of valves and solenoid drivers.
Compatible valve	ASCO Coil 195
	ASCO Coil 302 (12 V)
	Bürkert Coil AC 10 standard
	Bürkert Coil AC 10 high resistance
	Bürkert Coil AC 21 standard 700 mW / 65°C
	Bürkert Coil AC 21 high resistance 700 mW / 65°C
	Bürkert Coil AC 21 standard 900 mW / 45°C
	Bürkert Coil AC 21 high resistance 900 mW / 45°C
	Bürkert Coil AC 21 standard 900 mW / 60°C
	Bürkert Coil AC 21 high resistance 900 mW / 60°C
	Bürkert Coil G1 642735 standard 800 mW / 40°C
	Bürkert Coil G1 642735 high resistance 800 mW / 40°C
	Bürkert Coil G1 642735 standard 1000 mW / 40°C
	Bürkert Coil G1 642735 high resistance 1000 mW / 40°C
	FESTO Coil MFH-...IA-SA-EX GBXE022AIAD03
	FESTO Coil (J)MFH-...BIA-SA-EX GBXE022AIAD03
	Norgren Herion Coil 2050
	Norgren Herion Coil 2051
	Norgren Herion Coil 2052
	Norgren Herion Coil 2053
	Norgren Herion Coil 2080 / 2082
	Norgren Herion Coil 2081 / 2083
	Norgren Herion Coil 2084
	Norgren Herion Coil 3039
	Nass Coil 1259 30.1-00
	Nass Coil 1259 50.1-00
	Parker Coil VZ07 488650.01
	Parker Coil VZ33 494035.10
	Parker Coil VZ08 488660.01
	Parker Coil VZ09 488670.01
	Parker Coil VZ95 482160.01 EEx ia IIB T6
	Parker Coil VZ23 482870.01
	Samson Coil 3701-12 (12 V)

Solenoid driver - PI-EX-SD-24-48 - 2865298

Technical data

Compatible valves

	Samson Coil 3701-13 (24 V)
	Samson Coil 3963-12 (12 V)
	Samson Coil 3963-13 (24 V)
	Samson Coil 3964-12 (12 V)
	Samson Coil 3964-13 (24 V)
	Seitz Pilot valve PV 12F73 Ci oH
	Seitz Pilot valve PV 12F73 Xi oH
	Seitz Pilot valve PV 12F73 Xi oH-2
	Seitz Solenoid coil 11 G 52

Power supply

Max. current consumption	< 110 mA (at 24 V)
Power dissipation	max. 1.5 W (at 24 V)

General

Maximum temperature coefficient	0.01 %/K
Status display	Yellow LED (status display) Red LED (line errors)
Housing material	PBT and polyamide PA non-reinforced
Color	green
Designation	Input/output
Electrical isolation	375 V (Peak value as per EN 50020 / EN 60079-11)
Test voltage	2.5 kV AC (50 Hz, 1 min.)

Safety characteristic data

Integrity requirement	IEC 61508 - Low demand
Equipment type	Type A
Safety Integrity Level (SIL)	3
Safe Failure Fraction (SFF)	100 %
λ_{SU}	2.84×10^{-7} (284 FIT)
λ_{SD}	0
λ_{DU}	0
λ_{DD}	0
Probability of a hazardous failure on demand (PFD _{AVG})	0 (1 year) 0 (5 years) 0 (10 years)
Diagnostic coverage (DC)	DC _S =0 %, DC _D =0 %

Safety data

Solenoid driver - PI-EX-SD-24-48 - 2865298

Technical data

Safety data

Max. output voltage U_o	27.7 V
Max. output current I_o	101 mA
Max. output power P_o	697 mW
Group	IIA
Max. external inductivity L_o	20 mH
Max. external capacitance C_o	0.44 μ F
Group	IIB
Max. external inductivity L_o	2 mH
Max. external capacitance C_o	0.29 μ F
Group	IIC
Max. external inductivity L_o	0.5 mH
Max. external capacitance C_o	0.067 μ F
Max. ratio L_o/R_o	51.1 μ H/ Ω
Additional text	Please follow the technical data regarding the connecting cables used.
Safety-related maximum voltage U_m	250 V AC (125 V DC)

Standards and Regulations

Conformance	CE-compliant
ATEX	# II (1) GD [Ex ia] IIC / IIB / IIA
	# II 3 G Ex nA II T4 X
Group	IIA
	IIB
	IIC

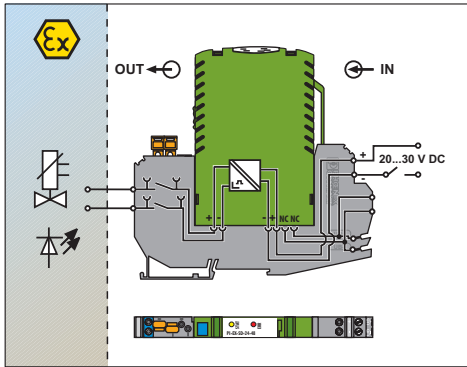
Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

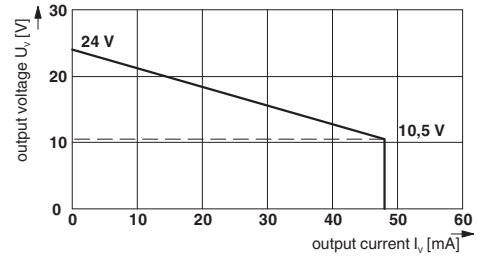
Drawings

Solenoid driver - PI-EX-SD-24-48 - 2865298

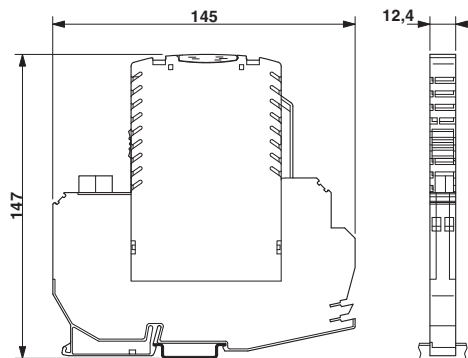
Block diagram



Diagram



Dimensional drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27210120
eCl@ss 11.0	27210120
eCl@ss 4.0	27210100
eCl@ss 4.1	27210100
eCl@ss 5.0	27210100
eCl@ss 5.1	27210100
eCl@ss 6.0	27210100
eCl@ss 7.0	27210120
eCl@ss 9.0	27210120

ETIM

ETIM 4.0	EC002653
ETIM 6.0	EC002653
ETIM 7.0	EC002653

Solenoid driver - PI-EX-SD-24-48 - 2865298

Classifications

UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	39121008
UNSPSC 18.0	39121008
UNSPSC 19.0	39121008
UNSPSC 20.0	39121008
UNSPSC 21.0	39121008

Approvals

Approvals

Approvals

Functional Safety

Ex Approvals

EAC Ex / ATEX / ATEX

Approval details

Functional Safety	06/06-05 R004 V2R0
-------------------	--------------------
