

Device coupler - FB-12SP - 2316310

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Device coupler for Foundation Fieldbus and PROFIBUS PA with terminal connections for 12 spurs connected to fieldbus end devices.




Your advantages

- ✓ Connect up to 12 Foundation Fieldbus or PROFIBUS PA field devices
- ✓ Terminator preinstalled
- ✓ Provides current limiting short-circuit protection per spur
- ✓ Ex nA [nL, Ex nA [ic] or FISCO ic spur connections
- ✓ Single-sided plug configuration eliminates cable bend radius issues



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 883597
GTIN	4046356883597

Technical data

Dimensions

Caption	FB-12SP dimensions
Width	254.1 mm
Height	112.5 mm
Depth	83.5 mm

Ambient conditions

Ambient temperature (operation)	-50 °C ... 90 °C
Ambient temperature (storage/transport)	-50 °C ... 90 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	non-condensing
Altitude	2000 m

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Ambient conditions

Degree of protection	IP20
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General

Standards/regulations	EN 60079-0:2011; EN 60079-11:2012; EN 60079-15:2005; EN 60079-15:2010
	IEC 60079-0:2011; IEC 60079-11:2011; IEC 60079-15:2005; IEC 60079-15:2010
Mounting position	On horizontal and vertical DIN rail NS 35 in acc. with EN 60715
Net weight	502.4 g
MTTF	723 Years (25 degrees C)
Conformance	CE-compliant, additionally EN 61326
Fieldbus Foundation	FF-846

Power supply

Supply voltage range	10.5 V DC ... 32 V DC (input on trunk line side)
Typical current consumption	6.5 mA
Conductor cross section flexible max.	0.20 mm ²
Conductor cross section flexible min.	2.50 mm ²
Conductor cross section solid max.	0.20 mm ²
Conductor cross section solid min.	2.50 mm ²
Max. AWG conductor cross section, flexible	12
Min. AWG conductor cross section, flexible	24
Conductor cross section AWG max.	12
Conductor cross section AWG min.	24

Serial interface

Interface 1	Foundation Fieldbus and PROFIBUS PA Segment
No. of ports	12
Connection method	Pluggable COMBICON screw connection for each spur
Termination resistor	100 Ω (external removable plug)
	100 Ω, external removable plug included
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Output nominal voltage	≤ 32 V (each spur)
Output current	38 mA
Inductance Li	4 μH
Max. output voltage U _o	U _{in} (spur)

Safety data

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Technical data

Safety data

Input voltage U_i	32 V (IIB (C/D))
Max. output voltage U_o	U_{in} (spur)
Max. output current I_o	56 mA (spur)
Max. output power P_o	1.792 W
Group	IIC/IIB
Max. external capacity C_o	80 nF
Additional text	spur
Group	IIC/IIB
Max. external inductivity L_o	0.26 mH
Additional text	spur
ATEX	Sira 13ATEX4247X; # II 3(3)G Ex nA [ic] IIC T4 Gc, Entity/FISCO ic spurs Ex nA [nL] IIC T4 Gc; # II 3G Ex ic IIC T4 Gc, FISCO ic
IECEX	IECEX SIR 13.0089X; Ex nA [ic] IIC T4 Gc, Entity/FISCO ic spurs; Ex nA [nL] IIC T4 Gc; Ex ic IIC T4 Gc, FISCO ic
UL, USA	Class I, Zone 2; AEx nA[ic] IIC T4, Entity/FISCO spurs Class I, Div. 2, Groups A, B, C, D; T4
CSA, USA/Canada	Class I, Div. 2, Groups A, B, C, D; Ex nA [nL] IIC T4; Class I, Zone 2, AEx nA [nC] IIC T4

Standards and Regulations

Type of test	Corrosive resistance in acc. to ANSI-ISA 71.04-1985 - Severity level G3
Standards/regulations	EN 60079-0:2011; EN 60079-11:2012; EN 60079-15:2005; EN 60079-15:2010
	IEC 60079-0:2011; IEC 60079-11:2011; IEC 60079-15:2005; IEC 60079-15:2010
Flammability rating according to UL 94	V0
Shock	30g, 11 ms
Vibration (operation)	5g, 10 Hz ... 150 Hz
Conformance	CE-compliant, additionally EN 61326
Fieldbus Foundation	FF-846
Group	IIC/IIB
	IIC/IIB
ATEX	Sira 13ATEX4247X; # II 3(3)G Ex nA [ic] IIC T4 Gc, Entity/FISCO ic spurs Ex nA [nL] IIC T4 Gc; # II 3G Ex ic IIC T4 Gc, FISCO ic
IECEX	IECEX SIR 13.0089X; Ex nA [ic] IIC T4 Gc, Entity/FISCO ic spurs; Ex nA [nL] IIC T4 Gc; Ex ic IIC T4 Gc, FISCO ic
UL, USA	Class I, Zone 2; AEx nA[ic] IIC T4, Entity/FISCO spurs Class I, Div. 2, Groups A, B, C, D; T4
CSA, USA/Canada	Class I, Div. 2, Groups A, B, C, D; Ex nA [nL] IIC T4; Class I, Zone 2, AEx nA [nC] IIC T4

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50

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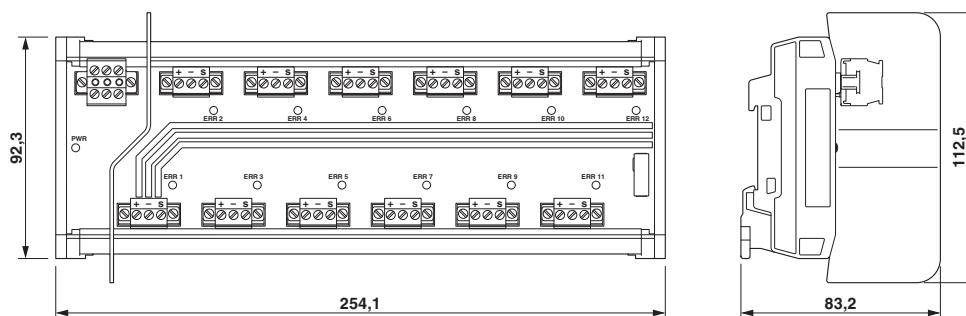
Technical data

Environmental Product Compliance

For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

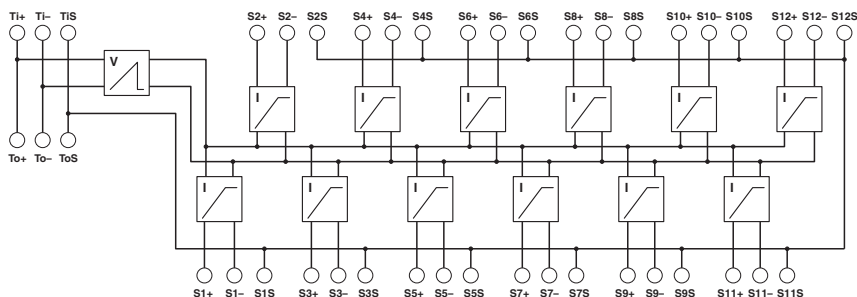
Drawings

Dimensional drawing



FB-12SP dimensions

Circuit diagram



Connection diagram: FB-12SP

Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals


IECEx / ATEX / UL Listed / cUL Listed / CSA / CSAus / cULus Listed / cCSAus

Approval details

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Approvals

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 330267
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cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 330267
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cULus Listed			
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PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>