

## Device coupler - FB-8SP ISO - 2316311

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Zone 1 installed device coupler for Foundation Fieldbus and PROFIBUS PA with terminal connections for eight spurs connected to fieldbus end devices.

### Your advantages

- Connect up to eight Foundation Fieldbus or PROFIBUS PA field devices located in Zone 0/1
- Terminator preinstalled
- Provides current limiting short-circuit protection per spur
- Two isolation zones; Spurs 1-4 and 5-8
- Single-sided plug configuration eliminates cable bend radius issues



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 306803
GTIN	4055626306803

### Technical data

#### Note

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

Width	279 mm
Height	142 mm
Depth	66 mm

#### Ambient conditions

Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	95 % (non-condensing)

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## Technical data

### Ambient conditions

Degree of protection	IP20
	IP20, IP30 over trunk connections

### General

Mounting position	On horizontal and vertical DIN rail NS 35 in acc. with EN 60715
Net weight	1190 g
Degree of pollution	2
Overvoltage category	II
Conformance	EMC 2014/30/EU
	ATEX 2014/34/EU
Fieldbus Foundation	FF-846

### Power supply

Supply voltage range	16 V DC ... 32 V DC (input on trunk line side)
Max. current consumption	35 mA (trunk, no load)
	350 mA (maximum trunk current)
Conductor cross section flexible max.	0.20 mm <sup>2</sup>
Conductor cross section flexible min.	2.50 mm <sup>2</sup>
Conductor cross section solid max.	0.20 mm <sup>2</sup>
Conductor cross section solid min.	2.50 mm <sup>2</sup>
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	8
Connection method	Pluggable COMBICON screw connection for each spur
Termination resistor	Integrated termination, activated with bridge located in correct terminals
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Output nominal voltage	≤ 14 V (each spur)
Output current	35 mA (per spur)
Inductance L <sub>i</sub>	0 μH
Max. output voltage U <sub>o</sub>	16.7 V

### Safety data

Input voltage U <sub>i</sub>	32 V
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## Technical data

### Safety data

Max. output voltage $U_o$	16.7 V
Max. output current $I_o$	250 mA
Max. output power $P_o$	1.05 W
Group	IIC
Max. external capacity $C_o$	0.39 $\mu$ F
Group	IIB
Max. external capacity $C_o$	2.33 $\mu$ F
Group	IIC
Max. external inductivity $L_o$	0.56 mH
Group	IIB
Max. external inductivity $L_o$	2.27 mH
ATEX	DEMKO 16ATEX 1689X II 2(1) G Ex eb ib mb [ia Ga] IIC T4 Gb II (1D) [Ex ia Da] IIIC FISCO power supply (spur)
IECEX	IECEX UL 16.0114X Ex eb ib mb [ia Ga] IIC T4 Gb [Ex ia Da] IIIC FISCO power supply (spur)
Safety-related maximum voltage $U_m$	253 V

### Standards and Regulations

Type of test	Corrosive resistance in acc. to ANSI-ISA 71.04-1985 - Severity level G3
Flammability rating according to UL 94	V0
Shock	15g for 11 ms
Vibration (operation)	2g, 10 Hz ... 150 Hz
Conformance	EMC 2014/30/EU
	ATEX 2014/34/EU
Fieldbus Foundation	FF-846
Group	IIC
	IIB
	IIC
	IIB
ATEX	DEMKO 16ATEX 1689X II 2(1) G Ex eb ib mb [ia Ga] IIC T4 Gb II (1D) [Ex ia Da] IIIC FISCO power supply (spur)
IECEX	IECEX UL 16.0114X Ex eb ib mb [ia Ga] IIC T4 Gb [Ex ia Da] IIIC FISCO power supply (spur)
UL, USA/Canada	Install in Class I, Div. 2, Groups A, B, C, D Entity/FISCO spur to: Class I, Groups A, B, C, D; Class II, Groups E, F, G; Class III; Group IIIC Class I, Zone 1 AEx eb ib mb [ia Ga] IIC T4 Gb [AEx ia Da] IIIC FISCO power supply (spur)

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## Technical data

### Standards and Regulations

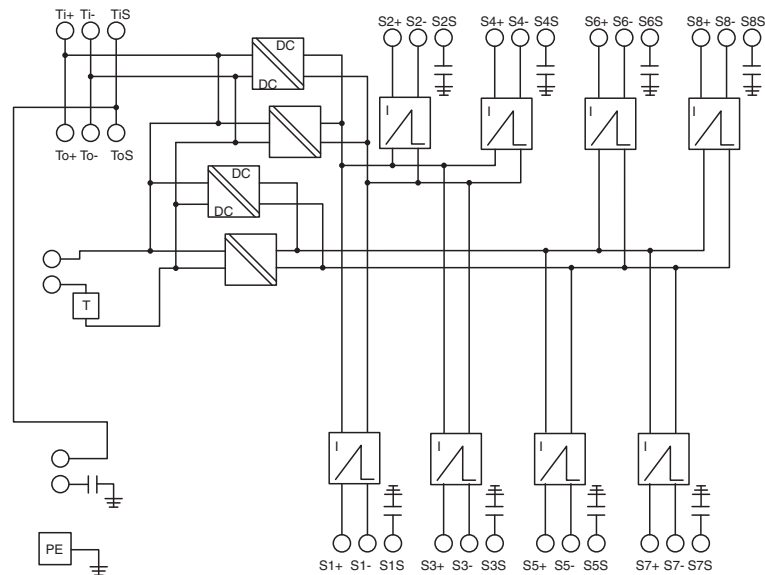
	Ex eb ib mb [ia Ga] IIC T4 Gb [Ex ia Da] IIIC FISCO power supply (spur)
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### Environmental Product Compliance

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

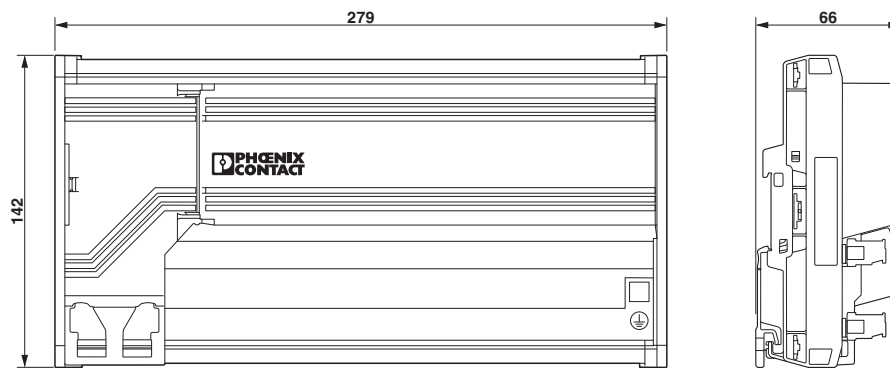
## Drawings

Block diagram



## Device coupler - FB-8SP ISO - 2316311

Dimensional drawing



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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>