



- 4 intrinsically safe power supply channels
- Intrinsically safe outputs:
Ex ib IIC
- Installation in the Ex-area:
Ex de [ib] IIC T4
- Contained in an explosion-protected, pressure-tight encapsulated housing (Ex d) with external connection terminals for increased safety (Ex e) in a separate terminal compartment
- Device installation in Zone 1, Zone 2, or Zone 22

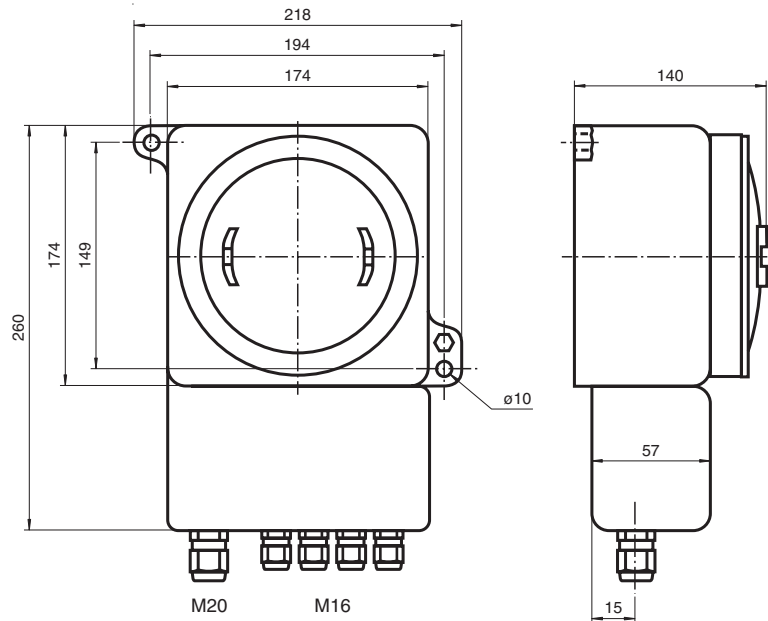
Function

This power supply unit can be installed directly in hazardous areas. It has four (4) intrinsically safe output channels. The power supply unit is kept in an explosion-protected, flameproof encapsulated housing. For increased safety, the external connections are kept in a separate terminal box for the following connections:

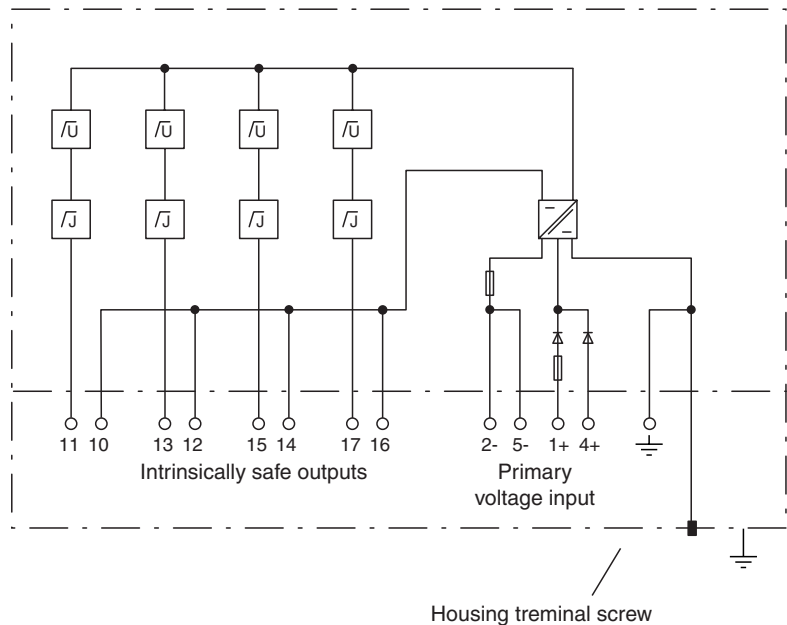
1. Primary voltage input
2. Redundant primary voltage input
3. Intrinsically safe power supply outputs

The input and output voltage are galvanically separated from each other. The outputs have no galvanic separation from each other.

Dimensions



Connection



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Supply	
Connection	terminals 1+, 4+; 2-, 5-, PE
Rated voltage	18 ... 32 V DC
Ripple	5 % AC
Power loss	21 W
Power consumption	55 W
Output	
Connection	terminals 10+, 12+, 14+, 16+, 11-, 13-, 15-, 17-
Voltage	8.7 ... 9.5 V DC
Power	8.5 W per channel
Directive conformity	
Electromagnetic compatibility	
Directive 2004/108/EC	EN 61326-1:2006
Explosion protection	
Directive 94/9/EC	EN 60079-0: 2006, EN 60079-1: 2007, EN 60079-7: 2007, EN 60079-11: 2007
Conformity	
Insulation coordination	EN 50178
Electrical isolation	EN 60079-11:2007
Protection degree	IEC 60529
Standard conformity	
Electrical isolation	EN 60079-11:2007
Electromagnetic compatibility	NE 21:2006 for U > 20 V
Ambient conditions	
Classification	3K3
Ambient temperature	-20 ... 70 °C (-4 ... 158 °F)
Storage temperature	-20 ... 100 °C (-4 ... 212 °F)
Relative humidity	95 % non-condensing
Shock resistance	15 g peak, 11 ms period
Vibration resistance	2 g , 10 ... 500 Hz according to IEC 60068-2-6
Damaging gas	acc. to ISA-S71.04-1985, severity level G3
Mechanical specifications	
Connection type	Terminals
Core cross-section	≤ 2.5 mm ²
Protection degree	IP65
Mass	5360 g
Mounting	panel mounting
Tightening torque of clamping screws	0.4 Nm
Data for application in connection with Ex-areas	
EC-Type Examination Certificate	DMT 02 ATEX E 237 X , for additional certificates see www.pepperl-fuchs.com
Group, category, type of protection	⊕ II 2G Ex de [ib] IIC
Temperature class	T4
Supply	18 ... 32 V DC
Maximum safe voltage U _m	40 V DC
Output	
Voltage U _o	9.5 V
Current I _o	1 A
Power P _o	9.5 W
Declaration of conformity	PF 10 CERT 1518 X
Group, category, type of protection, temperature classification	⊕ II 3D Ex tD A22 IP54 T90°C
Electrical isolation	
Output/power supply	safe electrical isolation acc. to EN 60079-11: 2007, voltage peak value 375 V
Output/Output	no electrical isolation
General information	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .

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Notes**Ex e input:**

The PE conductor of the cable must **not** be connected with the terminals or housing of the power stage. The potential equalisation lead **must** be connected with the housing.

The Ex e input has an M20 screwed connection and can receive cables from 6 mm to 12 mm in diameter. The Ex e terminals receive cables of max. 1 x 2.5 mm² or 2 x 1 mm². The maximum current for these terminals is 23 A. The input is protected by a 5 A fuse.

Ex i output (9 V DC):

The Ex i outputs have M16 screwed connections and are suitable for cables of from 4 mm to 8 mm in diameter.

Maximum cable length:

- 3.5 m (1.5 mm²)
- 5.9 m (2.5 mm²)