

Power supply

LB9006C

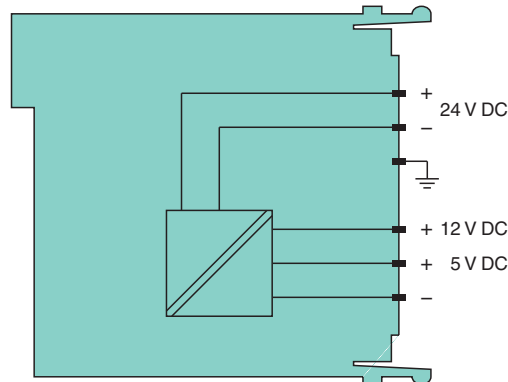
- Power supply for 24 V
- Permits vertical or horizontal mounting in Zone 2
- Use three power supplies for redundancy
- Galvanic isolation to mains
- Supply of I/O modules and com units
- Mounting in Zone 2, Class I/Div.2 or in the safe area



Function

The power supply provides power for the I/O modules and com units mounted on the backplane. Input and output are galvanically isolated from each other (EN 60950-1).

Wiring Diagram



Zone 2
Div. 2

Technical Data

Slots	
Bus coupler	2
I/O modules	>12, depending on the type
Supply	
Maximum safe voltage U_m	60 V DC (SELV/PELV)
Input voltage range	U 18 ... 32 V DC (SELV/PELV)
Power dissipation	approx. 15 % of power consumption
Power consumption	max. 30 W for Zone 2 applications max. 45 W for applications in safe area parallel connection with other LB9006C (autom. power sharing)
Inrush current	1.5 A (10 ms)
Output	
Voltage	5.4 V DC +/- 5% , 12 V DC + 4/- 2%

Technical Data

Power	$P_{5V} \leq 5.4 \text{ W}$, $P_{12V} \leq 25 \text{ W}$ - P_{5V} for Zone 2 applications $P_{5V} \leq 5.4 \text{ W}$, $P_{12V} \leq 39 \text{ W}$ - P_{5V} for applications in safe area
Indicators/settings	
LED indication	Power LED (P) green: OFF in case of loss of 24 V or 12 V or 5 V
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013
Conformity	
Electromagnetic compatibility	NE 21
Degree of protection	IEC 60529
Environmental test	EN 60068-2-14
Shock resistance	EN 60068-2-27
Vibration resistance	EN 60068-2-6
Damaging gas	EN 60068-2-42
Relative humidity	EN 60068-2-78
Ambient conditions	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Relative humidity	95 % non-condensing
Altitude	max. 2000 m
Shock resistance	shock type I, shock duration 11 ms, shock amplitude 15 g, number of shocks 18
Vibration resistance	frequency range 10 ... 150 Hz; transition frequency: 57.56 Hz, amplitude/acceleration $\pm 0.075 \text{ mm/1 g}$; 10 cycles frequency range 5 ... 100 Hz; transition frequency: 13.2 Hz amplitude/acceleration $\pm 1 \text{ mm/0.7 g}$; 90 minutes at each resonance
Damaging gas	designed for operation in environmental conditions acc. to ISA-S71.04-1985, severity level G3
Mechanical specifications	
Degree of protection	IP20 (module) , mounted on backplane
Mass	approx. 220 g
Dimensions	32.5 x 100 x 102 mm (1.28 x 3.9 x 4 inch)
Data for application in connection with hazardous areas	
Certificate	PF 08 CERT 1234 X
Marking	Ⓜ II 3 G Ex nA IIC T4 Gc
Galvanic isolation	
Output/power supply, internal bus	EN 60950-1 (Safety requirement: < 60 V, external supply SELV/PELV)
Directive conformity	
Directive 2014/34/EU	EN IEC 60079-0:2018+AC:2020 EN 60079-15:2010
International approvals	
ATEX approval	PF 08 CERT 1234 X
UL approval	E106378
IECEx approval	
IECEx certificate	IECEx BVS 09.0037X
IECEx marking	Ex nA IIC T4 Gc
General information	
System information	The module has to be mounted in appropriate backplanes (LB9****) in Zone 2 or outside hazardous areas. Here, observe the corresponding declaration of conformity. For use in hazardous areas (e. g. Zone 2, Zone 22 or Div. 2) the module must be installed in an appropriate enclosure.
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 .

Assembly

Front view

Power LED green

