General Specifications

PS-502-02

GS48C02Z02-00E-N

Power Supply Module (24/20 Vdc)

■ GENERAL

This power supply module is intended as logic supply for the ProSafe-SLS system.

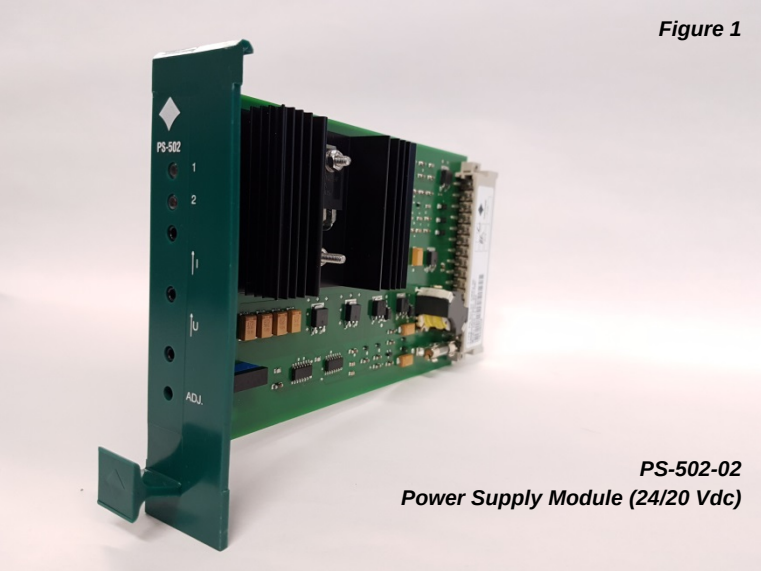

Figure 1
PS-502-02
Power Supply Module (24/20 Vdc)

The module converts the 24 V field voltage into a galvanically isolated and regulated 20 V logic voltage.

The regulated output has an electronic protection for overvoltage (crowbar) and over current (fold-back).

Power supplies may be connected in parallel for current increase and/or for redundancy. For this purpose the output is equipped with a serial diode. Load sharing is possible by fine tuning the regulated output voltage with the front trimmer. The front test jacks allow measuring the regulated output voltage and output current.

To extend the application of the power supply also the unregulated output voltage is available. This output is current protected by means of the module input fuse.

To allow external monitoring of the module also the voltage before the output serial diode is made available.

The module is provided with 2 red LEDs, indicating the input voltage and the regulated output voltage.

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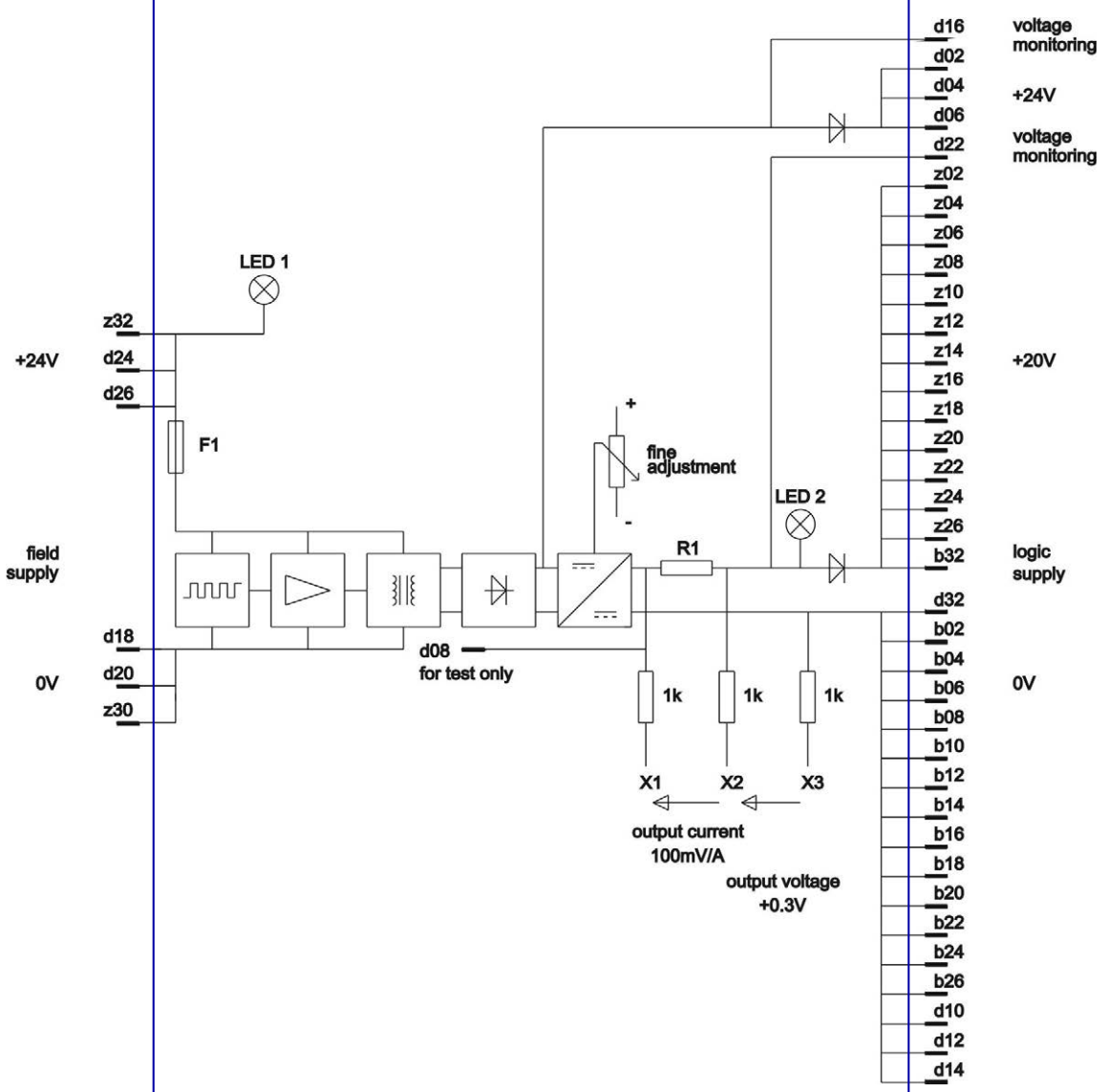
■ FUNCTIONAL DIAGRAM

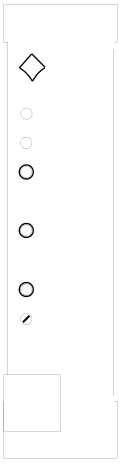


Supply

z32	see ‘inputs’
z30	see ‘inputs’
b32	see ‘outputs’
d32	see ‘outputs’
d30	not used
b30	not used

Notes

Front



1	Power input
2	Power output
3	Test jack X1
4	
5	Test jack X2
6	
7	Test jack X3
8	Fine adjust

■ SPECIFICATIONS

Description		Data
General	Number of channels	1
	Width	6HP
	Identification	PS-502 on front and more detailed on connector label
	Weight	205 gram
Input	Supply Voltage Ripple Current Fuse Status indication	Field supply 24 Vdc ±10% Max. 1 V top-top 70 mA + 1.1 x load current 1.17 A at 1 A load 2 A fast Red LED
Output	Stabilization Efficiency	Serial regulation 71% with full load
	Regulated output Voltage Current Status indication	Logic supply 20 Vdc ±1% default (fine adjustable by front trimmer) Max. 1 A (electronically protected) Typ. 0.35 A with a short circuit (current fold-back) Red LED
	Unregulated output Voltage Current	24 Vdc +10%, -5% and field voltage tolerance Max. 1 A input fuse protected total current from 20 V and 24 V outputs
Supply		See ‘input’
Dissipation		2 W with no load 9 W with full load

■ NOTES