PZB 6000 POWER SUPPLY UNIT

Purpose

PZB 6000 Fire approved power supply unit is designed for continuous use. The powered devices may be a fire detection and protection devices, or even purposed for smoke extraction. It is intended for cooperation with any device that requires stable 24 V DC power. Each power supply unit provides four fused power outputs with 14,4 A continuous load capacity and up to 20 A rush current depending on power supply unit model.
The power supply unit can operate as standalone, can be linked into redundant unit sets, or as a programmable loop device for POLON 6000 system.

Equipment

PZB 6000 Fire approved power supply unit has a modular build, which allows flexible configuration. The available moduses are:

- MZ-61 supply module (4 variants depending on permissible power: MZ-61-75, MZ-61-150, MZ-61-300, MZ-61-3000), AC/DC converter 24 V +/- 25%,
- MZZ-60 power distribution module, distributes power to all modules inside the PZB 6000 cabinet,
- MZS-60 sounders and alarming devices module, allows to connect and operate up to four sounder lines used in the fire alar system,
- MRZ-60 redundant supply module, allows to provide redundant operation in case of linking two PZB 6000 units,
- MKA-60 addressable communication module, allows to put PZB 6000 on POLON 6000 detection loop.

Features

Main purpose for PZB 6000 is to supply the fire protection devices which are equipped with electric servomotors, electromagnet locks and to supply and operate the Alarm devices and sounder used within POLON 6000 system.

Power supply has four 24 V +/- 25% power outputs up to 20A rush current and 14,4 A continuous load capacity while operating with 134 Ah batteries.

PZB 6000 is equipped with PU (fault) and a programmable relay output. Output operation can be made according to five available modes and four criterions. There is a two or three-level state analysis available on the unit inputs also.

The RS232 port feature provides the PZB 6000 ability to communicate via Modbus RTU or second PZB unit link to achieve power redundancy.

MKA-60 module allows to utilize the unique functionality to operate the power supply as a loop device which reduces the response time between fire alarm panel and the PZB unit. This module extends the functionality as well.

MZS-60 allows to connect up to four sounder/strobe lines. Each line can operate with constant 2A load and it can be activated by five available modes and four criterions including two or three-level input state analysis.

THE OUTPUT CURRENT DEPENDS ON THE PROPER VARIANT:					
Variant	**Cabinet**	**Suggested batteries**	**Supply module**	**Max rush current**	**Max continuous current**
1	M70	2 x 12V 7Ah	MZ-61-75 (75 W)	2,5 A	2,2 A
2			MZ-61-150 (150 W)	5 A	4,7 A
3		2 x 12V 18Ah	MZ-61-75 (75 W)	2,5 A	1,7 A
4			MZ-61-150 (150 W)	5 A	4,2 A
5	M71	2x12V 28Ah	MZ-61-150 (150 W)	5 A	3,8 A
6			MZ-61-300 (300 W)	10 A	8,8 A
7		2x12V 40 Ah	MZ-61-150 (150 W)	5 A	3,3 A
8			MZ-61-300 (300 W)	10 A	8,3 A
9	M72	2x12V 80 Ah	MZ-61-150 (150 W)	5 A	1,6 A
10			MZ-61-300 (300 W)	10 A	6,6 A
11	M72 + M73	2x12V 134 Ah	MZ-61-300 (300 W)	10 A	4,4 A
12			MZ-61-600 (600 W)	20 A	14,4 A
Output voltage 24 V DC +/- 25 %					

Power supply build and basic variants

PZB 6000 has a modular construction and three housings are available. The available variants are listed above.

Technical Specification

Supply voltage:
- primary:
  - mains 230 V + 10% - 15%/50 Hz
- backup:
  - cabinet M70 2 x 12 V od 7 Ah do 18 Ah batteries
  - cabinet M71 2 x 12 od 28 Ah do 40 Ah batteries
  - cabinet M72 2 x 12 V 80 Ah batteries
  - cabinet M72+ M73 2 x 12 V 134 Ah batteries

Maximum mains current drawn depending on supply module:

MZ-61-75 (75 W)	0,85 A
MZ-61-150 (150 W)	1,6 A
MZ-61-300 (300 W)	2 A
MZ-61-600 (600 W)	4,4 A

Programmable / fault relay:

- Load capacity on NO/NC contact	2 A / 24 V DC
- Continuity supervision (for programmable relay only)	YES

RS232 communication:

- RS232 (EIA/TIA-232 and V.28)	
- Max baud rate	220 kbps

MZS-60 Sounders control module:
- 4 separate outputs:

- Output voltage	24 V DC +/- 25%
- Max load	2 A
- EOL resistance	6,2 kΩ
- Max cabling resistance	50 Ω
- Programmable continuity supervision	TAK

MRZ-60 power redundancy module:
- 2 separate outputs:

- Output voltage	24 V DC +/- 25%
- Max load (each A and B output)	15 A

Operating temperature range	-10°C to +40°C
Dimensions (without brackets):	
- M70 cabinet	444 x 434 x 112,5 mm
- M71 cabinet	444 x 444,5 x 197,5 mm
- M72 cabinet	554 x 503,5 x 217,5 mm
- M73 cabinet	354 x 503,5 x 217,5 mm