

## Backup power supplies in the cover

# 75PS13V8 K40/5A 1PS13V8 K40/10A

Backup power supplies 75PS13V8 K40/5A and 1PS13V8 K40/10A are designed to power device that require a continuous supply of direct current voltage 13,8 Vdc, respectively 12 Vdc.

They are designed for connection of backup accumulator with a capacity from 17 Ah to 40 Ah. The accumulator is connected permanently to the power supplies. Is maintained fully charged with charger circuit and there is no danger of accumulator overcharging.

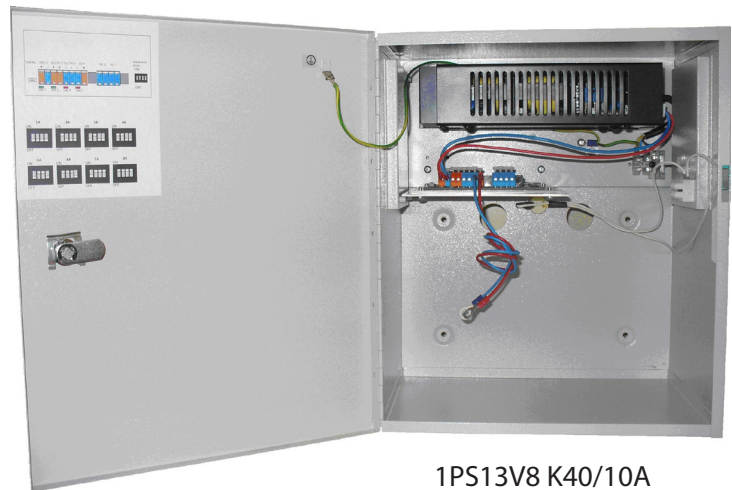
Also the circuit ZOM.01 ensures compliance with the set charging current.

The power supply is placed in a metal cover with ventilation holes, it is equipped with a mechanical lock and two tamper contacts. One indicates a opening of the cover and second a removing of the power supply (mechanical cover) from assembly place.

- > **Cover with space for accumulator up to 40 Ah**
- > **Accumulator protection against deep discharge**
- > **Optional accumulator charging rate, depending on the set charging current**
- > **Check accumulator voltage every 1 second**
- > **Visual indication of the state - 4 LED diodes**
- > **Signaling unconnected accumulator when connected network 230 V/50Hz**
- > **Lockable cover with protection contact of opening the cover**
- > **Protection contact with indication of removing from assembly place**
- > **Electronic overload protection**
- > **Adjustable charging current value**
- > **High efficiency according to applied switched supplies**
- > **Compact design for wall assembly**



75PS13V8 K40/5A























1PS13V8 K40/10A

| Type   | 75PS13V8 K40/5A              | 1PS13V8 K40/10A                |
|--|------------------------------|--------------------------------|
| Input supply voltage                                 | 195 - 255 Vac / 47 - 63 Hz   |                                |
| Output voltage                                       | 13,8 Vdc < 2 %               | 13,8 Vdc < 1 %                 |
| Output voltage waving                                | < 20 mV                      | < 60 mV                        |
| Maximum output current of supply                     | 5 A                          | 10 A                           |
| Maximum charging current to accumulator (adjustable) | 1A, 2A, 3A, 4A               | 1A, 2A, 3A, 4A, 5A, 6A, 7A, 8A |
| Signal relay for network outage 230V/50Hz            | Contact type NC 1 A / 12 Vss |                                |
| Signal relay for accumulator voltage < 10,5 V        | Contact type NC 1 A / 12 Vss |                                |
| Maximum input  | 81 W                         | 163 W                          |
| Working temperature                                  | -15° up to +40° C            |                                |
| Cover dimension                                      | 335 x 280 x 195 mm           |                                |
| Protection   | IP20                         |                                |
| Network fuse   | T 1A/250 Vac                 | T 1,25A/250 Vac                |
| Radio interference                                   | EN 55022-B:2007/A1:2008      |                                |
| Resistance to interference                           | STN EN 50 130-4              |                                |
| Electrical safety                                    | EN 60950-1:2005/A1:2007      |                                |

Module ZOM.01 ensures correct accumulator charging, state signalization and components protection.

|  |   |
|--|---|
| Nominal output voltage from primary power supply               | 13,6-13,8Vdc for nominal accumulator voltage 12Vdc      |
| Transfer resistance module ZOM.01 supply -> load               | 15 mΩ   |
| Transfer resistance module ZOM.01 accumulator -> load          | 30 mΩ   |
| Transfer resistance module ZOM.01 supply -> accumulator        | 40 mΩ   |
| Custom collection module ZOM.01                                | < 30 mA   |
| Maximum current to the load                                    | 10 A  |
| Indicated a low level of accumulator voltage (12V)             | 10,5 V ± 0,1V   |
| Disconnect backup accumulator voltage                          | 10,1 V ± 0,2V for accumulators with nominal voltage 12V |
| Limit of current from accumulator at short circuit in the load | yes   |
| Adjustable limit of charging current to accumulator            | yes 1A – 8A set by step 1A                              |
| Indication of voltage loss from the primary supply             | relay NC1 and LED1                                      |
| Carrying capacity of output NC1 a NC2                          | 12Vdc / 1A  |
| Module dimension   | 130 x 90 x 20 mm  |

| Supply voltage<br>230Vac/50Hz | Accumulator                               | LED 1<br>(green)   | LED 2<br>(green)   | LED 3<br>(red)  | LED 4<br>(red)   | Output<br>NC1 | Output<br>NC2 | Notice  |
|-------------------------------|---|--|--|---|--|---------------|---------------|---|
| connected                     | connected                                 | on<br>  | on<br>  | off<br>      | off<br> | closed        | closed        | normal operating condition  |
| connected                     | not connected                             | on<br>  | off<br> | flashing<br> | on<br>  | closed        | un-closed     | network connected, ACU not connected, connection test every 1sec                                      |
| not connected                 | connected and voltage $U_a > 10,5V$       | off<br> | on<br>  | off<br>      | off<br> | unclosed      | closed        | network outage, ACU all right   |
| not connected                 | connected and voltage $10,5V > U_a > 10V$ | off<br> | on<br>  | off<br>      | on<br>  | unclosed      | un-closed     | network outage, ACU is discharged under 10,5V   |
| not connected                 | connected and voltage $U_a < 10V$         | off<br> | off<br> | off<br>      | off<br> | unclosed      | un-closed     | network outage, ACU is disconnected with module from the load (ACU protection against deep discharge) |

Backup power supply in the cover consists of :

- power supply 75PS13V8/5A.2 respectively 1PS13V8/10A.4
- module ZOM.01
- lockable metal COVER Z40 with protection contact of opening
- back tamper contact
- wires to connect the accumulator

Accumulator not included in the delivery.

Manufacturer



**S Power product s.r.o.**

www.spower-prod.sk  
spower@spower-prod.sk

Tel. +421 2 4445 8319  
Fax +421 2 4445 7882

Odborárska 52, P.O.BOX 24  
830 03 Bratislava  
Slovakia

