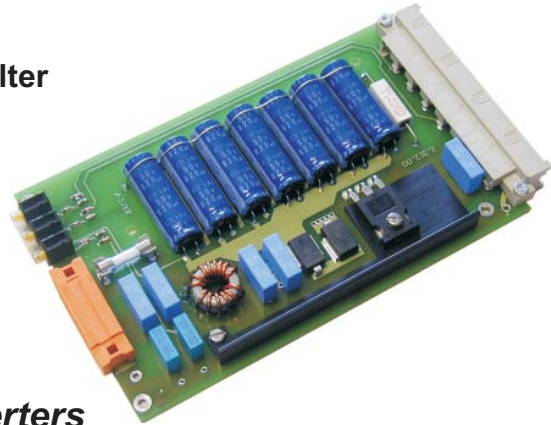


- External storage unit for 10ms hold-up time
- Frontend input
- With transient protection and C-L²-C Pre-filter
- Disturbance proof EN61000-4-4/5
- Low input capacity
- Passive pre-switch module with soft start
- 19"-cassette style 3U / 4TE-front panel



Series SPK 04

Passive hold-up time for DC/DC-converters

Main points

Input:

- Input fuse
- Low input capacity
- Low inrush currents
- Burst/Surge EN61000-4-4/5 1,8kV/5Ω
- Radio suppression EN55022.B
- Input reverse pol. protection and energy re-flow protection
- Plug: Weidmüller SLA 5/90B

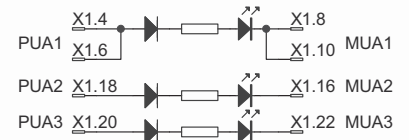
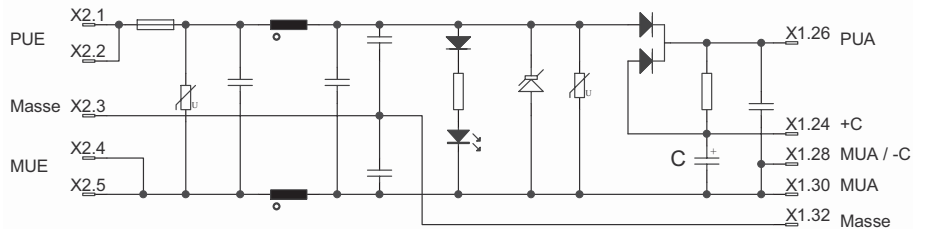
General:

- Hold-up time 10ms for max. 60W f=constant (TU/ΔC/aging)
- Storage element electrolytic capacitors
- Charging time constant: <0,2s
- Repeat constant: >10s
- Formula of hold-up time:
 $C = ((2 \cdot P_{in}) / \eta \cdot T_{SP}) / (U^2_{C_{ext}} - U^2_{Imin})$
- Storage C not at access of U_{in}
- Ambient temperature -25°C / +70°C
- Option H: -40°C / +85°C
- Isolation test voltage:
Input-housing: 1,5kV AC 1min
- Shock/vibration EN50155
- Output: H15 connector
- Dimension : 100x160 mm³ 4TE
- Direct mounting to a converter: +3TE

U _{in} V	Storage C	Charging voltage V	Model number
14,4 - 52	2,7mF ±20%	>40	SPK04.30.60.010
40 - 158 170 dyn.	150μF ±20%	>120	SPK04.80.60.010
Version H		-40°C up to +85°C	additional charge
Modification costs for possible changes above values:			on request

According to the functional principle circuit, an additionally filtering for high frequent disturbances is included. With this filter the distance to the EN55022.B limit is extended about >8db (not fundamental wave). The transient protection limits surge disturbances according to EN61000-4-5 level 3 (1000V/2Ω) or EN50155 (1800V / 5Ω) standards to system suitable values to the output. In the case of a network interruption or input sided short circuit, the energy re-flow out of the converter into the source is prevented with a reverse polarity protection. Optionally an active storage unit is available with constant bridging time >U_{in} min.

Principle circuit



Mechanics

