

|   |                                                                                   |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                            |            |    |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |    |       |     |   |   |  |
|---|-----------------------------------------------------------------------------------|---|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|------------|----|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----|-------|-----|---|---|--|
| 1 | 2                                                                                 | 3 | 4    | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 6                                          | 7          | 8  | 9           | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 11                                                                                    | 12 | 13    | 14  |   |   |  |
| A |  |   |      | <b>Spannungswandler 24V / 2000 W</b> <ul style="list-style-type: none"><li>- geeignet für Geräte bis zu 2000 W Verbrauchsleistung</li><li>- mit 1x USB-Anschluss (2100 mA) und eingebautem Lüfter</li><li>- externe Sicherung vorhanden</li><li>- Eingang und Ausgang des Umrichters sind vom Chassis elektrisch getrennt. Der Eingang ist elektrisch vom Ausgang getrennt.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                            |            |    |             | <b>Voltage converter 24V / 2,000 W</b> <ul style="list-style-type: none"><li>- suitable for devices up to 2,000 W power consumption</li><li>- with 1x USB port (2,100 mA) and a built-in ventilator</li><li>- external fuse available</li><li>- The converter has input and output electrically separated from chassis. The input is electrically separated from the output.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |    |       |     | A |   |  |
| B |                                                                                   |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                            |            |    |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |    |       |     | B |   |  |
| C |                                                                                   |   |      | <b>Anschlüsse:</b><br>Krokodilklemme<br>2x Schutzkontaktbuchse (Typ F, CEE 7/3)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                            |            |    |             | <b>Connections:</b><br>Clip terminal<br>2 safety socket (Typ F, CEE 7/3)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                       |    |       |     | C |   |  |
| D |                                                                                   |   |      | <b>Eingangsspannung:</b> 24 V $\overline{\text{---}}$ (22 - 30)<br><b>Eingangsstrom:</b> 104 A<br><b>Ausgangsspannung:</b> 230 V $\sim$ , 50 Hz, 2000 W max.<br><b>Max. Ausgangsleistung:</b> 2000 W<br><b>Dauerleistung:</b> 2000 W<br><b>Spitzenleistung 0,1 s:</b> 4000 W<br><b>Ausgangsfrequenz:</b> 50 $\pm$ 3 Hz (modifizierte Sinus)<br><b>Ausgangsspannung USB:</b> 5 V $\overline{\text{---}}$<br><b>Ausgangsstromstärke USB:</b> 2,1 A max.<br><b>Effizienz:</b> > 85 %<br><b>Nullast Eingang:</b> < 0,4 A<br><b>Eingang-Niederspannungsalarm:</b> 20,4 - 21,6 V $\overline{\text{---}}$<br><b>Eingang-Niederspannungsabschaltung:</b> 18,4 - 19,6 V $\overline{\text{---}}$<br><b>Eingang-Überspannungsabschaltung:</b> 30 - 32 V $\overline{\text{---}}$<br><b>Überlastabschaltung:</b> 2300 - 2600 W<br><b>Läufzeit:</b><br><b>Sicherung:</b> 35 A x 7<br><b>Betriebstemperatur:</b> 5°C ~ 35°C<br><b>Maße:</b> 350 x 218 x 100 mm<br><b>Gewicht:</b> 5300 g<br><b>Kindersicherung:</b> Shutter |                                            |            |    |             | <b>Input voltage:</b> 24 V $\overline{\text{---}}$ (22 - 30)<br><b>Input current:</b> 104 A<br><b>Output voltage:</b> 230 V $\sim$ , 50 Hz, 2000 W max.<br><b>Max. Output power:</b> 2000 W<br><b>Continuous load:</b> 2000 W<br><b>Peak power 0.1 s:</b> 4000 W<br><b>Output frequency:</b> 50 $\pm$ 3 Hz (modified sinus wave)<br><b>USB output voltage:</b> 5 V $\overline{\text{---}}$<br><b>Output current USB:</b> 2.1 A max.<br><b>Efficiency:</b> > 85 %<br><b>No-load input:</b> < 0.4 A<br><b>Input low voltage alarm:</b> 20.4 - 21.6 V $\overline{\text{---}}$<br><b>Input low voltage shutdown:</b> 18.4 - 19.6 V $\overline{\text{---}}$<br><b>Input overvoltage shutdown:</b> 30 - 32 V $\overline{\text{---}}$<br><b>Overload shutdown:</b> 2300 - 2600 W<br><b>Cooling method:</b> fan<br><b>Fuse:</b> 35 A x 4<br><b>Operating temperature:</b> 5°C ~ 35°C<br><b>Dimensions:</b> 350 x 218 x 100 mm<br><b>Weight:</b> 5300 g<br><b>Child lock:</b> Shutter |                                                                                       |    |       |     | D |   |  |
| E |                                                                                   |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                            |            |    |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |    |       |     | E |   |  |
| F |                                                                                   |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                            |            |    |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |    |       | F   |   |   |  |
| G |                                                                                   |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                            |            |    |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |    |       | G   |   |   |  |
| H |                                                                                   |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                            |            |    |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |    |       | H   |   |   |  |
| I | <b>Änderungen</b>                                                                 |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Datum                                      | Name       |    | Bezeichnung |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |    | Blatt |     | I |   |  |
| J | Datum                                                                             |   | Name |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | gez.:                                      | 14.11.2023 | ir |             | SPW KFZ 24V/230V 2000W<br>USB 2.1A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                       |    |       | 1/2 |   | J |  |
|   |                                                                                   |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | gepr.:                                     | 14.11.2023 | x  |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |    |       |     |   |   |  |
|   |                                                                                   |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Norm:                                      |            |    |             | Zeichnungs-Nr.:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |    |       | von |   |   |  |
|   |                                                                                   |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Änderungen vorbehalten / Subject to change |            |    |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |    |       |     |   |   |  |
| 1 | 2                                                                                 | 3 | 4    | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 6                                          | 7          | 8  | 9           | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 11                                                                                    | 12 | 13    | 14  |   |   |  |

