

## Power supply unit - STEP-PS/ 1AC/24DC/2.5 - 2868651

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Primary-switched STEP POWER power supply for DIN rail mounting, input: 1-phase, output: 24 V DC/2.5 A

### Product Description

STEP POWER power supplies for installation distributors


The STEP POWER power supply range was developed especially for building automation. The low idling losses and high degree of efficiency ensure maximum energy efficiency. They allow flexible use and can be snapped onto the DIN rail or screwed onto an even surface.

### Why buy this product

- Reliable power supply thanks to high MTBF (mean time between failures) of more than 500,000 hours and U/I characteristic curve
- Flexible mounting by simply snapping onto the DIN rail or screwing onto a level surface
- Energy savings thanks to maximum energy efficiency and incredibly low idling losses



### Key Commercial Data

|                                      |   |
|--------------------------------------|---|
| Packing unit                         | 1 pc  |
| GTIN                                 | <br>4 046356 163224 |
| Weight per Piece (excluding packing) | 270.0 g   |
| Custom tariff number                 | 85044030  |
| Country of origin                    | Germany   |

### Technical data

#### Dimensions

|        |       |
|--------|-------|
| Width  | 72 mm |
| Height | 90 mm |
| Depth  | 61 mm |

#### Ambient conditions

|  |  |
|--|--|
| Degree of protection                           | IP20   |
| Ambient temperature (operation)                | -25 °C ... 70 °C (> 55° C derating : 2.5%/K) |
| Ambient temperature (storage/transport)        | -40 °C ... 85 °C                             |
| Max. permissible relative humidity (operation) | ≤ 95 % (at 25 °C, non-condensing)            |

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## Technical data

### Ambient conditions

|                |                   |
|----------------|-------------------|
| Noise immunity | EN 61000-6-2:2005 |
|----------------|-------------------|

### Input data

|                                     |   |
|-------------------------------------|---|
| Nominal input voltage range         | 100 V AC ... 240 V AC                     |
| Input voltage range                 | 85 V AC ... 264 V AC                      |
|                                     | 95 V DC ... 250 V DC                      |
| AC frequency range                  | 45 Hz ... 65 Hz                           |
| Frequency range DC                  | 0 Hz                                      |
| Inrush surge current                | < 15 A (typical)                          |
| Power failure bypass                | > 20 ms (120 V AC)                        |
|                                     | > 100 ms (230 V AC)                       |
| Input fuse                          | 3.15 A (slow-blow, internal)              |
| Choice of suitable circuit breakers | 6 A ... 16 A (Characteristics B, C, D, K) |
| Type of protection                  | Transient surge protection                |
| Protective circuit/component        | Varistor                                  |

### Output data

|   |   |
|---|---|
| Nominal output voltage                            | 24 V DC $\pm$ 1 %   |
| Setting range of the output voltage ( $U_{Set}$ ) | 22.5 V DC ... 29.5 V DC (> 24 V DC, constant capacity restricted) |
| Nennausgangsstrom ( $I_N$ )                       | 2.5 A (-25 °C ... 55 °C)  |
|   | 2.75 A (-25 °C ... 40 °C permanent)                               |
| Output current $I_{max}$                          | 4.4 A   |
| Derating  | 55 °C ... 70 °C (2.5%/K)  |
| Connection in parallel                            | Yes, for redundancy and increased capacity                        |
| Connection in series                              | Yes   |
| Control deviation                                 | < 1 % (change in load, static 10 % ... 90 %)                      |
|   | < 2 % (change in load, dynamic 10 % ... 90 %)                     |
|   | < 0.1 % (change in input voltage $\pm$ 10 %)                      |
| Residual ripple                                   | < 80 mV <sub>PP</sub> (20 MHz)                                    |
| Output power                                      | 60 W  |
| Typical response time                             | < 0.5 s   |
| Peak switching voltages nominal load              | < 40 mV <sub>PP</sub> (20 MHz)                                    |
| Maximum power dissipation in no-load condition    | < 0.7 W   |
| Power loss nominal load max.                      | 9.9 W   |

### General

|                                 |  |
|---------------------------------|--|
| Net weight                      | 0.27 kg                                  |
| Operating voltage display       | Green LED                                |
| Efficiency                      | > 86 % (for 230 V AC and nominal values) |
| Insulation voltage input/output | 4 kV AC (type test)                      |
|                                 | 3.75 kV AC (routine test)                |
| Protection class                | II (in closed control cabinet)           |