

# DIN30W series

30W Din Rail Power Supply



## ■ Features:

- European AC input range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Can be installed on DIN Rail TS-35/7.5 or 15
- Isolation class II
- LED indicator for power on



## ELECTRICAL SPECIFICATION

| MODEL                                | DIN30W12   | DIN30W24             |
|--------------------------------------|--|----------------------|
| <b>OUTPUT</b>                        |  |                      |
| <b>RATED VOLTAGE</b>                 | 12V  | 24V                  |
| <b>RATED CURRENT</b>                 | 2.5A   | 1.25A                |
| <b>CURRENT RANGE</b>                 | 0 ÷ 2.5A   | 0 ÷ 1.25A            |
| <b>RATED POWER</b>                   | 30W  |                      |
| <b>VOLTAGE ADJUSTMENT RANGE [4]</b>  | 10.8 ÷ 13.6V   | 21.6 ÷ 28.5V         |
| <b>LINE REGULATION</b>               | ± 1%   |                      |
| <b>LOAD REGULATION</b>               | ± 1%   |                      |
| <b>VOLTAGE TOLERANCE [3]</b>         | ± 2%   |                      |
| <b>RIPPLE &amp; NOISE (max.) [2]</b> | 240mV <sub>p-p</sub>   | 360mV <sub>p-p</sub> |
| <b>INPUT</b>                         |  |                      |
| <b>VOLTAGE RANGE</b>                 | 180 ÷ 264VAC   |                      |
| <b>FREQUENCY RANGE</b>               | 47 ÷ 63Hz  |                      |
| <b>EFFICIENCY (typ.)</b>             | 84%  | 85%                  |
| <b>AC CURRENT (typ.)</b>             | 0.45A/230VAC   |                      |
| <b>INRUSH CURRENT (typ.)</b>         | 40A / 230VAC(25°C)   |                      |
| <b>LEAKAGE CURRENT (max.)</b>        | 1mA / 230VAC   |                      |
| <b>PROTECTIONS</b>                   |  |                      |
| <b>OVERLOAD</b>                      | Range: 140 ÷ 210% rated power  |                      |
|                                      | Type: hiccup mode. recovers automatically after fault condition is removed |                      |
| <b>SHORT CIRCUIT</b>                 | Type: hiccup mode. recovers automatically after fault condition is removed |                      |
| <b>OVER VOLTAGE</b>                  | 18 ÷ 23V   | 36 ÷ 45V             |
|                                      | Type: shut off output voltage. Re-power on to recover.                     |                      |
| <b>OVER TEMPERATURE</b>              | Range: 135°C ÷ 165°C detect on main control IC                             |                      |
|                                      | Type: shut off, recovers automatically after temperature goes down         |                      |

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## ENVIRONMENT

|   |  |
|---|--|
| <b>WORKING TEMPERATURE</b>              | -20°C ÷ 50°C   |
| <b>WORKING HUMIDITY</b>                 | 20 ÷ 98% RH non-condensing   |
| <b>STORAGE TEMPERATURE AND HUMIDITY</b> | -30°C ÷ 70°C, 10 ÷ 98% RH non-condensing                                 |
| <b>TEMPERATURE COEFFICIENT</b>          | ± 0.05% / °C (-20°C ÷ 45°C)  |
| <b>VIBRATION</b>                        | 10 ÷ 500Hz, 2G, 10min / cycle, period for 30min. each along X, Y, Z axes |

## SAFETY & EMC REGULATIONS

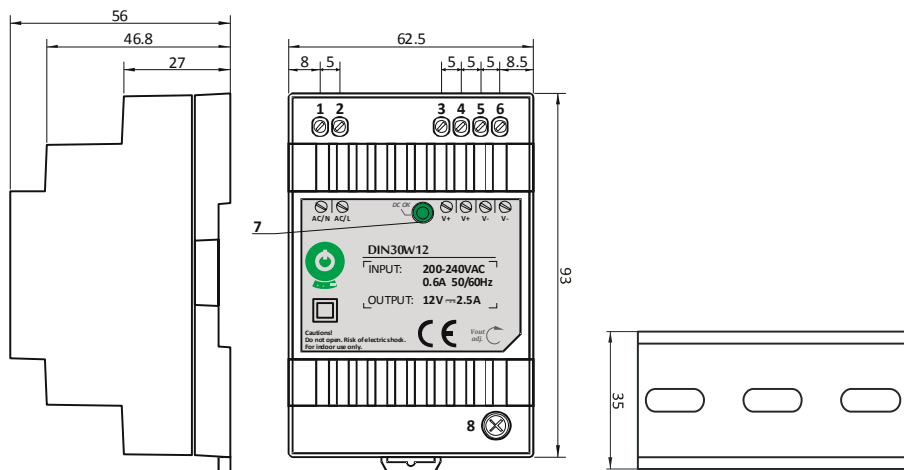
|                             |  |
|-----------------------------|--|
| <b>SAFETY STANDARDS</b>     | Compliance to EN60950-1                |
| <b>WITHSTAND VOLTAGE</b>    | I-P/O-P: 4.2kVDC/30s                   |
| <b>ISOLATION RESISTANCE</b> | I-P/O-P: 100MΩ/500VDC/25°C/70%         |
| <b>EMC EMISSION</b>         | Compliance to EN55022                  |
| <b>EMC IMMUNITY</b>         | Compliance to EN55024                  |
| <b>HARMONIC CURRENT</b>     | Compliance to EN61000-3-3; EN61000-3-2 |

## OTHERS

|                           |  |
|---------------------------|--|
| <b>DIMENSIONS</b>         | 62.5 x 93 x 56mm (L x W x H)   |
| <b>WEIGHT AND PACKING</b> | 0.2kg; 50pcs./box; box weight and dimensions: 11kg; 35.3 x 21.6 x 33.5cm |

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.
3. Tolerance includes set up tolerance, line regulation and load regulation.
4. By built-in potentiometer.
5. Power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment must be re-qualify to comply with EMC Directives.

## MECHANICAL SPECIFICATION



## PIN ASSIGNMENT

| No. | Assignment                | No. | Assignment                  |
|-----|---------------------------|-----|-----------------------------|
| 1   | Input: AC/N               | 5,6 | Output: U <sub>OUT-</sub>   |
| 2   | Input: AC/L               | 7   | LED indication for power on |
| 3,4 | Output: U <sub>OUT+</sub> | 8   | U <sub>OUT</sub> adjustment |