

## Features

- Input Voltage Range 85-305VAC
- 88% Efficiency
- OVC II (EN 62368-1 & OVC II (EN 60335-1); 2000m altitude
- Single Output 5-48V DC
- SCP, OLP, OVP

## RS PRO Enclosed AC/DC

RS Stock No.: 0813910

0813911

0813912

0813914

0813915



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

- RS Series is a performance-focused 30W Encapsulated AC/DC PCB Mount Power Supply.
- Designed for use in applications such as network equipment and signal distribution hardware.
- This series is supplied with a Pin input connection and supports input voltages of 85~305V AC 47~63Hz.

## Electrical Specifications

| RS Stock# | Input Voltage | Output Voltage | Output Current | Output Wattage | Efficiency (Typ) | Max. Capacitive Load (uF) |
|-----------|---------------|----------------|----------------|----------------|------------------|---------------------------|
| 0813910   | 85~305V AC    | 5V             | 6A             | 30W            | 85%              | 8000                      |
| 0813911   | 85~305V AC    | 12V            | 2.5A           | 30W            | 87%              | 5000                      |
| 0813912   | 85~305V AC    | 15V            | 2A             | 30W            | 87%              | 2000                      |
| 0813914   | 85~305V AC    | 24V            | 1.25A          | 30W            | 87%              | 1000                      |
| 0813915   | 85~305V AC    | 12V            | 0.63A          | 30W            | 88%              | 800                       |

## Input Specifications

|                 |                                                                         |
|-----------------|-------------------------------------------------------------------------|
| Input Voltage   | 85-305VAC                                                               |
| Frequency Range | 47-63Hz                                                                 |
| AC Current      | 1.0A/115VAC      0.5A/230VAC                                            |
| Inrush Current  | Cold Start 45A/400us at 230VAC 50Hz Cold Start 25A/600us at 115VAC 50Hz |
| Leakage Current | <0.25mA/264VAC                                                          |

## Output Specifications

|                         |                                                                            |
|-------------------------|----------------------------------------------------------------------------|
| Voltage Tolerance       | +2.0%                                                                      |
| Line Regulation         | +0.5%                                                                      |
| Load Regulation         | ±1.0%                                                                      |
| Setup,Rise,Hold up Time | 1.5s,30ms,40ms/230VAC(at full load)<br>1.9s,30ms,10ms/115VAC(at full load) |

## Protection Specifications

|               |                                                                       |
|---------------|-----------------------------------------------------------------------|
| Over Load     | 115~160%                                                              |
|               | Hiccup mode, recovers automatically after fault condition is removed. |
| Short Circuit | Hiccup mode, recovers automatically after fault condition is removed. |
| Over Voltage  | 5.25 ~ 7.5V                                                           |
|               | Recovers automatically after fault condition is removed.              |

## Dimensions & Weight

|              |                                    |
|--------------|------------------------------------|
| Measurements | 69.5 × 39 x 24 mm    56YMR30-xx-RS |
| Carton Size  | 32.5×17.5x25cm - 56YMR30-xx-RS     |

## Safety & EMC

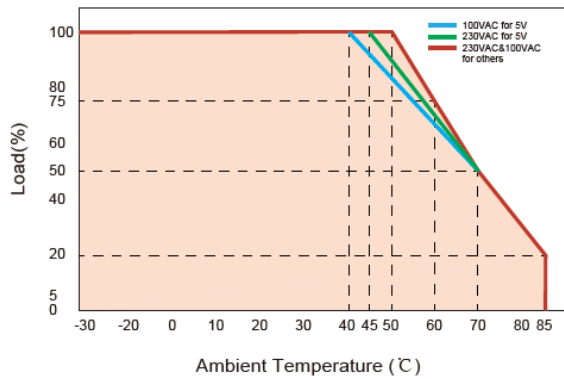
|                             |                                           |                        |                                                                           |
|-----------------------------|-------------------------------------------|------------------------|---------------------------------------------------------------------------|
| <b>Safety Standards</b>     | EN IEC 62368-1, IEC 62368-1, EN 60335-1   |                        |                                                                           |
| <b>Withstand Voltage</b>    | I/P-O/P: 3KVAC/1min                       |                        |                                                                           |
| <b>Isolation Resistance</b> | I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH |                        |                                                                           |
| <b>EMC Emission</b>         | Parameter                                 | Standard               | Test Level                                                                |
|                             | Conducted                                 | BS EN/EN55032(CISPR32) | CLASS B                                                                   |
|                             | Radiated                                  | BS EN/EN55032(CISPR32) | CLASS B                                                                   |
|                             | Harmonic Current                          | EN61000-3-2            | CLASS A                                                                   |
|                             | Voltage flicker                           | EN61000-3-3            | .....                                                                     |
| <b>EMC Immunity</b>         | BS EN/EN55035, BS EN/EN61000-6-2          |                        |                                                                           |
|                             | Parameter                                 | Standard               | Test Level                                                                |
|                             | ESD                                       | EN61000-4-2            | Level 3, 8KV air, Level 2, 4KV contact criteria A                         |
|                             | Radiated Susceptibility                   | EN61000-4-3            | Level 3, criteria A                                                       |
|                             | EFT/Burst                                 | EN61000-4-4            | Level 3, criteria A                                                       |
|                             | Surge                                     | EN61000-4-5            | Level 3, 1KV/L-N, criteria A                                              |
|                             | Conducted                                 | EN61000-4-6            | Level 3, criteria A                                                       |
|                             | Magnetic Field                            | EN61000-4-8            | Level 4, criteria A                                                       |
|                             | Voltage Dips and interruptions            | EN61000-4-11           | > 95% dip 0.5 periods, 30% dip 25 periods > 95% interruptions 250 periods |

## Environmental

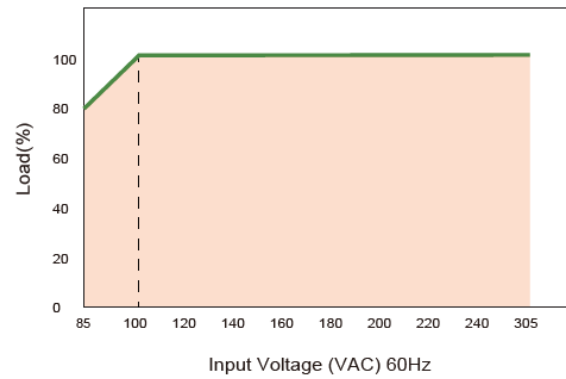
|                                |                                                                                                                                    |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Working Temp</b>            | -30 ~ +85°C (Full load can be operated at -30°C to 50°C, while load should be reduced at 50°C to 85°C. Refer to "Derating Curve".) |
| <b>Working Humidity</b>        | 20 ~ 90%RH Non-condensing                                                                                                          |
| <b>Storage Temp., Humidity</b> | -40 ~ +85°C, 10 ~ 95%RH Non-condensing                                                                                             |
| <b>Temp. Coefficient</b>       | ± 0.03%/(0 ~ 40°C)                                                                                                                 |
| <b>Soldering Temperature</b>   | Wave soldering: 265°C 5s(max.); Manual soldering: 390°C 3s(max)                                                                    |
| <b>Vibration</b>               | PCB Mounting: 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes.                                             |
| <b>MTBF</b>                    | 654.7Khrs min. MIL-HDBK-217F(25°C)                                                                                                 |
| <b>Over Voltage Category</b>   | OVC II in accordance with EN 62368-1 or OVC III in accordance with EN 60335-1; altitude up to 2000m                                |

## Electrical Drawing

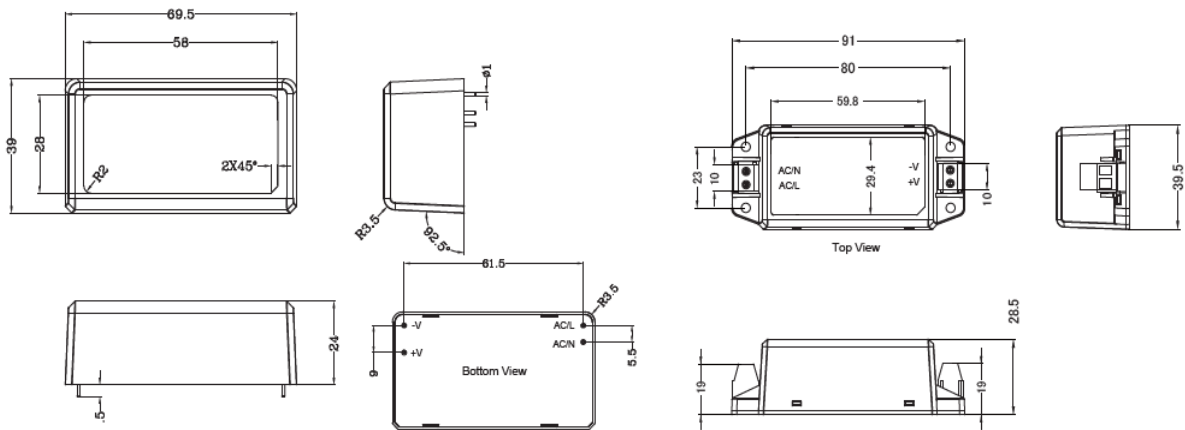
Derating Curve



Static Characteristics



(Unit: mm , tolerance:  $\pm 0.5$ mm)



fosc: 65KHz

