



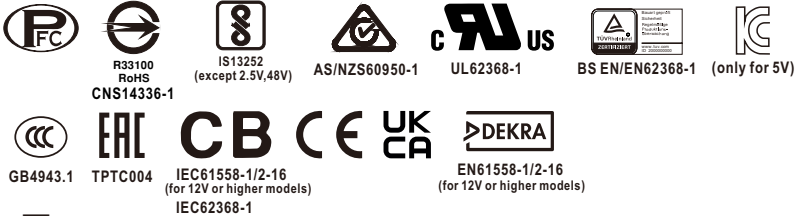
320W Single Output with PFC Function

RSP-320 series

Dimension

|      |   |      |   |           |
|------|---|------|---|-----------|
| L    | * | W    | * | H         |
| 215  | * | 115  | * | 30 mm     |
| 8.46 | * | 4.53 | * | 1.18 inch |

User's Manual



Features

- Universal AC input / Full range
- Built-in active PFC function
- High efficiency up to 90%
- Forced air cooling by built-in DC Fan with fan speed control function
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Optional conformal coating
- LED indicator for power on
- 3 years warranty

Applications

- Factory control or automation apparatus
- Test and measurement instrument
- Laser related machine
- Burn-in facility
- RF application

GTIN CODE

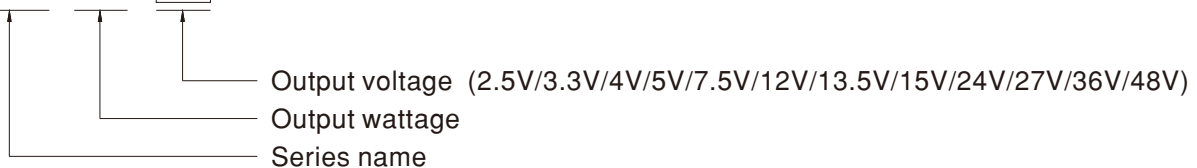
MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

Description

RSP-320 is a 320W single output enclosed type AC/DC power supply. This series operates for 88~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each model is cooled by the built-in fan with fan speed control, working for the temperature up to 70°C.

Model Encoding / Order Information

RSP - 320 - 24





**SPECIFICATION**

| MODEL                 | RSP-320-2.5   | RSP-320-3.3  | RSP-320-4    | RSP-320-5                   | RSP-320-7.5  | RSP-320-12  |              |
|-----------------------|---|--|--------------|-----------------------------|--------------|-------------|--------------|
| OUTPUT                | DC VOLTAGE  | 2.5V   | 3.3V         | 4V                          | 5V           | 7.5V        | 12V          |
|                       | RATED CURRENT   | 60A  | 60A          | 60A                         | 60A          | 40A         | 26.7A        |
|                       | CURRENT RANGE   | 0 ~ 60A  | 0 ~ 60A      | 0 ~ 60A                     | 0 ~ 60A      | 0 ~ 40A     | 0 ~ 26.7A    |
|                       | RATED POWER   | 150W   | 198W         | 240W                        | 300W         | 300W        | 320.4W       |
|                       | RIPPLE & NOISE (max.) Note.2  | 100mVp-p   | 100mVp-p     | 100mVp-p                    | 150mVp-p     | 150mVp-p    | 150mVp-p     |
|                       | VOLTAGE ADJ. RANGE  | 2.35 ~ 2.85V   | 2.97 ~ 3.8V  | 3.7 ~ 4.3V                  | 4.5 ~ 5.5V   | 6 ~ 9V      | 10 ~ 13.2V   |
|                       | VOLTAGE TOLERANCE Note.3  | ±2.0%  | ±2.0%        | ±2.0%                       | ±2.0%        | ±2.0%       | ±1.0%        |
|                       | LINE REGULATION   | ±0.5%  | ±0.5%        | ±0.5%                       | ±0.5%        | ±0.5%       | ±0.3%        |
|                       | LOAD REGULATION   | ±1.5%  | ±1.5%        | ±1.0%                       | ±1.0%        | ±1.0%       | ±0.5%        |
|                       | SETUP, RISE TIME  | 1500ms, 50ms/230VAC      3000ms, 50ms/115VAC at full load  |              |                             |              |             |              |
| HOLD UP TIME (Typ.)   | 8ms at full load    230VAC /115VAC  |  |              |                             |              |             |              |
| INPUT                 | VOLTAGE RANGE Note.4  | 88 ~ 264VAC  | 124 ~ 370VDC |                             |              |             |              |
|                       | FREQUENCY RANGE   | 47 ~ 63Hz  |              |                             |              |             |              |
|                       | POWER FACTOR (Typ.)   | PF>0.95/230VAC   |              | PF>0.98/115VAC at full load |              |             |              |
|                       | EFFICIENCY (Typ.)   | 75.5%  | 79.5%        | 81%                         | 83%          | 88%         | 88%          |
|                       | AC CURRENT (Typ.)   | 2.7A/115VAC  | 1.5A/230VAC  |                             | 4A/115VAC    | 2A/230VAC   |              |
|                       | INRUSH CURRENT (Typ.)   | 20A/115VAC   | 40A/230VAC   |                             |              |             |              |
|                       | LEAKAGE CURRENT   | <1mA / 240VAC  |              |                             |              |             |              |
| PROTECTION            | OVERLOAD  | 105 ~ 135% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed  |              |                             |              |             |              |
|                       | OVER VOLTAGE  | 2.88 ~ 3.38V   | 3.8 ~ 4.5V   | 4.5 ~ 5.3V                  | 5.75 ~ 6.75V | 9.4 ~ 10.9V | 13.8 ~ 16.2V |
|                       | OVER TEMPERATURE  | Shut down o/p voltage, recovers automatically after temperature goes down  |              |                             |              |             |              |
| ENVIRONMENT           | WORKING TEMP.   | -30 ~ +70°C (Refer to "Derating Curve")  |              |                             |              |             |              |
|                       | WORKING HUMIDITY  | 20 ~ 90% RH non-condensing   |              |                             |              |             |              |
|                       | STORAGE TEMP., HUMIDITY   | -40 ~ +85°C, 10 ~ 95% RH   |              |                             |              |             |              |
|                       | TEMP. COEFFICIENT   | ±0.03%/°C (0 ~ 50°C)   |              |                             |              |             |              |
|                       | VIBRATION   | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes   |              |                             |              |             |              |
| SAFETY & EMC (Note 5) | SAFETY STANDARDS  | UL62368-1,TUV BS EN/EN62368-1,EAC TP TC 004, CCC GB4943.1,BSMI CNS14336-1, AS/NZS 60950.1, IS13252(Part1)/ IEC60950-1(except for 2.5V,48V),Dekra EN 61558-1/2-16,IEC 61558-1/2-16(for 12V or higher models) approved |              |                             |              |             |              |
|                       | WITHSTAND VOLTAGE   | I/P-O/P:3KVAC    I/P-FG:2KVAC    O/P-FG:0.5KVAC  |              |                             |              |             |              |
|                       | ISOLATION RESISTANCE  | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH   |              |                             |              |             |              |
|                       | EMC EMISSION  | Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020, CNS13438, GB9254 Class B, GB17625.1  |              |                             |              |             |              |
|                       | EMC IMMUNITY  | Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, light industry level, EAC TP TC 020   |              |                             |              |             |              |
| OTHERS                | MTBF  | 1826.4K hrs min.    Telcordia SR-332 (Bellcore) ; 192.9K hrs min.    MIL-HDBK-217F (25°C)  |              |                             |              |             |              |
|                       | DIMENSION   | 215*115*30mm (L*W*H)   |              |                             |              |             |              |
|                       | PACKING   | 0.9Kg; 15pcs/14.5Kg/0.67CUFT   |              |                             |              |             |              |
| NOTE                  | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Derating may be needed under low input voltages. Please check the derating curve for more details.</p> <p>5. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</p> <p>6. For charging related applications, please consult Mean Well for details.</p> <p>7. Strongly recommended that external output capacitance should not exceed 5000uF. (Only for: RSP-320-2.5/-3.3/-4/-5/-7.5/-12/-13.5/-15)</p> <p>8. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p> |  |              |                             |              |             |              |



SPECIFICATION

| MODEL                 | RSP-320-13.5   | RSP-320-15   | RSP-320-24   | RSP-320-27                  | RSP-320-36   | RSP-320-48   |            |
|-----------------------|--|--|--------------|-----------------------------|--------------|--------------|------------|
| OUTPUT                | DC VOLTAGE   | 13.5V  | 15V          | 24V                         | 27V          | 36V          | 48V        |
|                       | RATED CURRENT  | 23.8A  | 21.4A        | 13.4A                       | 11.9A        | 8.9A         | 6.7A       |
|                       | CURRENT RANGE  | 0 ~ 23.8A  | 0 ~ 21.4A    | 0 ~ 13.4A                   | 0 ~ 11.9A    | 0 ~ 8.9A     | 0 ~ 6.7A   |
|                       | RATED POWER  | 321.3W   | 321W         | 321.6W                      | 321.3W       | 320.4W       | 321.6W     |
|                       | RIPPLE & NOISE (max.) Note.2   | 150mVp-p   | 150mVp-p     | 150mVp-p                    | 200mVp-p     | 220mVp-p     | 240mVp-p   |
|                       | VOLTAGE ADJ. RANGE   | 12 ~ 15V   | 13.5 ~ 18V   | 20 ~ 26.4V                  | 26 ~ 31.5V   | 32.4 ~ 39.6V | 41 ~ 56V   |
|                       | VOLTAGE TOLERANCE Note.3   | ±1.0%  | ±1.0%        | ±1.0%                       | ±1.0%        | ±1.0%        | ±1.0%      |
|                       | LINE REGULATION  | ±0.3%  | ±0.3%        | ±0.2%                       | ±0.2%        | ±0.2%        | ±0.2%      |
|                       | LOAD REGULATION  | ±0.5%  | ±0.5%        | ±0.5%                       | ±0.5%        | ±0.5%        | ±0.5%      |
|                       | SETUP, RISE TIME   | 1500ms, 50ms/230VAC      3000ms, 50ms/115VAC at full load  |              |                             |              |              |            |
| HOLD UP TIME (Typ.)   | 8ms at full load    230VAC /115VAC   |  |              |                             |              |              |            |
| INPUT                 | VOLTAGE RANGE Note.4   | 88 ~ 264VAC  | 124 ~ 370VDC |                             |              |              |            |
|                       | FREQUENCY RANGE  | 47 ~ 63Hz  |              |                             |              |              |            |
|                       | POWER FACTOR (Typ.)  | PF>0.95/230VAC   |              | PF>0.98/115VAC at full load |              |              |            |
|                       | EFFICIENCY (Typ.)  | 88%  | 88.5%        | 89%                         | 89%          | 89.5%        | 90%        |
|                       | AC CURRENT (Typ.)  | 4A/115VAC  | 2A/230VAC    |                             |              |              |            |
|                       | INRUSH CURRENT (Typ.)  | 20A/115VAC   | 40A/230VAC   |                             |              |              |            |
|                       | LEAKAGE CURRENT  | <1mA / 240VAC  |              |                             |              |              |            |
| PROTECTION            | OVERLOAD   | 105 ~ 135% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed  |              |                             |              |              |            |
|                       | OVER VOLTAGE   | 15.7 ~ 18.4V   | 18.8 ~ 21.8V | 27.6 ~ 32.4V                | 32.9 ~ 38.3V | 41.4 ~ 48.6V | 58.4 ~ 68V |
|                       | OVER TEMPERATURE   | Shut down o/p voltage, recovers automatically after temperature goes down  |              |                             |              |              |            |
| ENVIRONMENT           | WORKING TEMP.  | -30 ~ +70°C (Refer to "Derating Curve")  |              |                             |              |              |            |
|                       | WORKING HUMIDITY   | 20 ~ 90% RH non-condensing   |              |                             |              |              |            |
|                       | STORAGE TEMP., HUMIDITY  | -40 ~ +85°C, 10 ~ 95% RH   |              |                             |              |              |            |
|                       | TEMP. COEFFICIENT  | ±0.03%/°C (0 ~ 50°C)   |              |                             |              |              |            |
|                       | VIBRATION  | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes   |              |                             |              |              |            |
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|                       | WITHSTAND VOLTAGE  | I/P-O/P:3KVAC    I/P-FG:2KVAC    O/P-FG:0.5KVAC  |              |                             |              |              |            |
|                       | ISOLATION RESISTANCE   | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH   |              |                             |              |              |            |
|                       | EMC EMISSION   | Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020, CNS13438, GB9254 Class B, GB17625.1  |              |                             |              |              |            |
|                       | EMC IMMUNITY   | Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, light industry level, EAC TP TC 020   |              |                             |              |              |            |
| OTHERS                | MTBF   | 1826.4K hrs min.    Telcordia SR-332 (Bellcore) ; 192.9K hrs min.    MIL-HDBK-217F (25°C)  |              |                             |              |              |            |
|                       | DIMENSION  | 215*115*30mm (L*W*H)   |              |                             |              |              |            |
|                       | PACKING  | 0.9Kg; 15pcs/14.5Kg/0.67CUFT   |              |                             |              |              |            |
| NOTE                  | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Derating may be needed under low input voltages. Please check the derating curve for more details.</p> <p>5. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</p> <p>6. For charging related applications, please consult Mean Well for details.</p> <p>7. Strongly recommended that external output capacitance should not exceed 5000uF.<br/>(Only for: RSP-320-2.5/-3.3/-4/-5/-7.5/-12/-13.5/-15)</p> <p>8. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p> |  |              |                             |              |              |            |

