



3000W Power Supply with Single Output

**RSP-3000** series

Dimension

|      |   |       |   |          |      |
|------|---|-------|---|----------|------|
| L    | * | W     | * | H        |      |
| 278  | * | 177.8 | * | 63.5(2U) | mm   |
| 10.9 | * | 7     | * | 2.5 (2U) | inch |



User's Manual



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## Features

- AC input 180~264VAC
- Built-in active PFC function
- High efficiency up to 91.5%
- Forced air cooling by built-in DC fan
- Output voltage programmable
- Active current sharing up to 9000W (2+1)
- Built-in remote ON-OFF control / remote sense / auxiliary power / power OK signal
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Optional conformal coating
- 5 years warranty

## Applications

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

## GTIN CODE

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

## Description

RSP-3000 is a 3KW single output enclosed type AC/DC power supply. This series operates for 180~264VAC 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. Moreover, RSP-3000 provides vast design flexibility by equipping various built-in functions such as the output programming, active current sharing, remote ON-OFF control, auxiliary power, etc.

## Model Encoding / Order Information

RSP - 3000 - 24

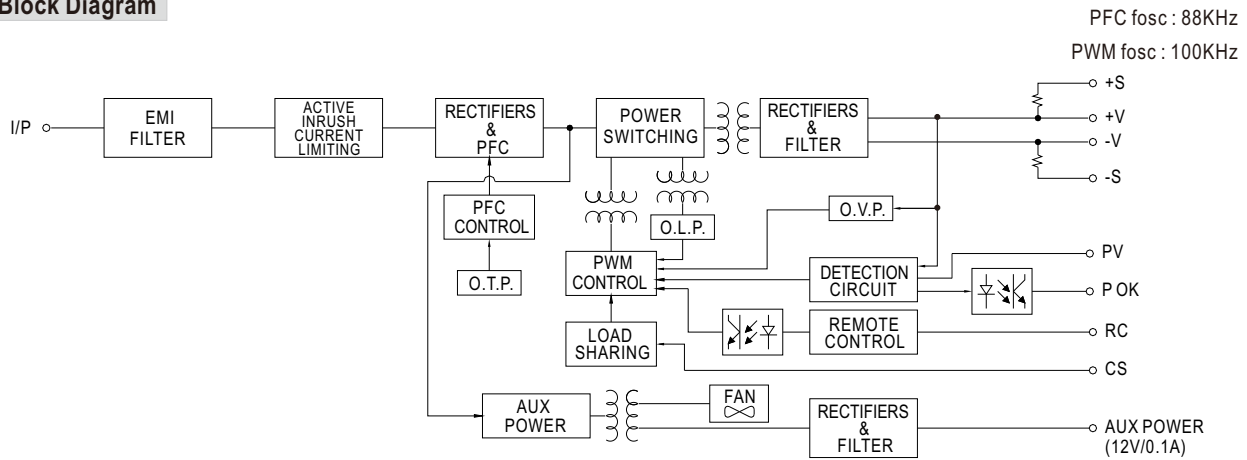
Output voltage (12V/24V/48V)  
Output wattage  
Series name

File Name:RSP-3000-SPEC 2026-07-20

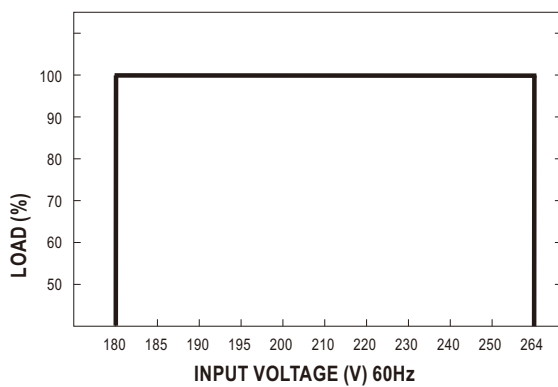
# SPECIFICATION

| SPECIFICATION            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                |                                   |                                                                                         |  |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------|--|
| MODEL                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | RSP-3000-12                                                                                                                                                                    | RSP-3000-24                       | RSP-3000-48                                                                             |  |
| OUTPUT                   | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 12V                                                                                                                                                                            | 24V                               | 48V                                                                                     |  |
|                          | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 200A                                                                                                                                                                           | 125A                              | 62.5A                                                                                   |  |
|                          | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0 ~ 200A                                                                                                                                                                       | 0 ~ 125A                          | 0 ~ 62.5A                                                                               |  |
|                          | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 2400W                                                                                                                                                                          | 3000W                             | 3000W                                                                                   |  |
|                          | RIPPLE & NOISE (max.) Note.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 150mVp-p                                                                                                                                                                       | 150mVp-p                          | 200mVp-p                                                                                |  |
|                          | VOLTAGE ADJ. RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 10.8 ~ 13.2V                                                                                                                                                                   | 22 ~ 28V                          | 43 ~ 56V                                                                                |  |
|                          | VOLTAGE TOLERANCE Note.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ± 1.0%                                                                                                                                                                         | ± 1.0%                            | ± 1.0%                                                                                  |  |
|                          | LINE REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ± 0.5%                                                                                                                                                                         | ± 0.5%                            | ± 0.5%                                                                                  |  |
|                          | LOAD REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ± 0.5%                                                                                                                                                                         | ± 0.5%                            | ± 0.5%                                                                                  |  |
|                          | SETUP, RISE TIME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1000ms, 80ms at full load                                                                                                                                                      |                                   |                                                                                         |  |
|                          | HOLD UP TIME (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 10ms at full load                                                                                                                                                              |                                   |                                                                                         |  |
| INPUT                    | VOLTAGE RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 180 ~ 264VAC      254 ~ 370VDC                                                                                                                                                 |                                   |                                                                                         |  |
|                          | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 47 ~ 63Hz                                                                                                                                                                      |                                   |                                                                                         |  |
|                          | POWER FACTOR (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0.95/230VAC at full load                                                                                                                                                       |                                   |                                                                                         |  |
|                          | EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 87.5%                                                                                                                                                                          | 90%                               | 91.5%                                                                                   |  |
|                          | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 20A/180VAC      16A/230VAC                                                                                                                                                     |                                   |                                                                                         |  |
|                          | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 60A/230VAC                                                                                                                                                                     |                                   |                                                                                         |  |
|                          | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <2.0mA / 240VAC                                                                                                                                                                |                                   |                                                                                         |  |
| PROTECTION               | OVERLOAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 100 ~ 112% rated output power<br>User adjustable continuous constant current limiting or constant current limiting with delay shutdown after 5 seconds, re-power on to recover |                                   |                                                                                         |  |
|                          | OVER VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 13.8 ~ 16.8V                                                                                                                                                                   | 28.8 ~ 33.6V                      | 57.6 ~ 67.2V                                                                            |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Protection type : Shut down o/p voltage, re-power on to recover                                                                                                                |                                   |                                                                                         |  |
|                          | OVER TEMPERATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Shut down o/p voltage, recovers automatically after temperature goes down                                                                                                      |                                   |                                                                                         |  |
| FUNCTION                 | OUTPUT VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2.4 ~ 13.2V                                                                                                                                                                    | 4.8 ~ 28V                         | 9.6 ~ 56V                                                                               |  |
|                          | PROGRAMMABLE(PV)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Please refer to the Function Manual.                                                                                                                                           |                                   |                                                                                         |  |
|                          | CURRENT SHARING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Up to 9000W or (2+1) units. Please refer to the Function Manual.                                                                                                               |                                   |                                                                                         |  |
|                          | AUXILIARY POWER(AUX)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 12V@0.1A(Only for Remote ON/OFF control)                                                                                                                                       |                                   |                                                                                         |  |
|                          | REMOTE ON-OFF CONTROL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Please refer to the Function Manual                                                                                                                                            |                                   |                                                                                         |  |
|                          | REMOTE SENSE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Compensate voltage drop on the load wiring up to 0.25V. Please refer to the Function Manual.                                                                                   |                                   |                                                                                         |  |
|                          | ALARM SIGNAL OUTPUT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Power OK signal. Please refer to the Function Manual                                                                                                                           |                                   |                                                                                         |  |
| ENVIRONMENT              | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | -20 ~ +70°C (Refer to "Derating Curve")                                                                                                                                        |                                   |                                                                                         |  |
|                          | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 20 ~ 90% RH non-condensing                                                                                                                                                     |                                   |                                                                                         |  |
|                          | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | -40 ~ +85°C, 10 ~ 95% RH non-condensing                                                                                                                                        |                                   |                                                                                         |  |
|                          | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ±0.05%/°C (0 ~ 50°C)                                                                                                                                                           |                                   |                                                                                         |  |
|                          | VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes                                                                                                                   |                                   |                                                                                         |  |
| SAFETY & EMC<br>(Note 4) | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | UL62368-1, CSA C22.2 No. 62368-1, TUV BS EN/EN62368-1, BSMI CNS15598-1, AS/NZS62368.1, IS13252(Part1)/IEC60950-1 (except for 48V), EAC TP TC 004 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Parameter                                                                                                                                                                      | Standard                          | Test Level / Note                                                                       |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Conducted                                                                                                                                                                      | BS EN/EN55032 (CISPR32), CNS15936 | Class B                                                                                 |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Radiated                                                                                                                                                                       | BS EN/EN55032 (CISPR32), CNS15936 | Class A                                                                                 |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Harmonic Current                                                                                                                                                               | BS EN/EN61000-3-2                 | -----                                                                                   |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Voltage Flicker                                                                                                                                                                | BS EN/EN61000-3-3                 | -----                                                                                   |  |
|                          | EMC IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | BS EN/EN55035, BS EN/EN61000-6-2, BSMI CNS13438                                                                                                                                |                                   |                                                                                         |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Parameter                                                                                                                                                                      | Standard                          | Test Level / Note                                                                       |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ESD                                                                                                                                                                            | BS EN/EN61000-4-2                 | Level 3, 8KV air ; Level 2, 4KV contact                                                 |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Radiated                                                                                                                                                                       | BS EN/EN61000-4-3                 | Level 3                                                                                 |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFT / Burst                                                                                                                                                                    | BS EN/EN61000-4-4                 | Level 3                                                                                 |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Surge                                                                                                                                                                          | BS EN/EN61000-4-5                 | Level 3, 2KV/Line-Earth ; Level 2, 1KV/Line-Line                                        |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Conducted                                                                                                                                                                      | BS EN/EN61000-4-6                 | Level 3                                                                                 |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Magnetic Field                                                                                                                                                                 | BS EN/EN61000-4-8                 | Level 4                                                                                 |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Voltage Dips and Interruptions                                                                                                                                                 | BS EN/EN61000-4-11                | >95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods                |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | OTHERS                                                                                                                                                                         | MTBF                              | 677.3K hrs min.    Telcordia SR-332 (Bellcore) ; 75.2K hrs min.    MIL-HDBK-217F (25°C) |  |
|                          | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                | 278*177.8*63.5mm (L*W*H)          |                                                                                         |  |
| PACKING                  | 4Kg; 4pcs/16Kg/2.04CUFT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                |                                   |                                                                                         |  |
| NOTE                     | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation.<br>4. 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 720mm*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."<br>(as available on <a href="https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf">https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf</a> )<br>5. 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).<br>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a> |                                                                                                                                                                                |                                   |                                                                                         |  |

## Block Diagram

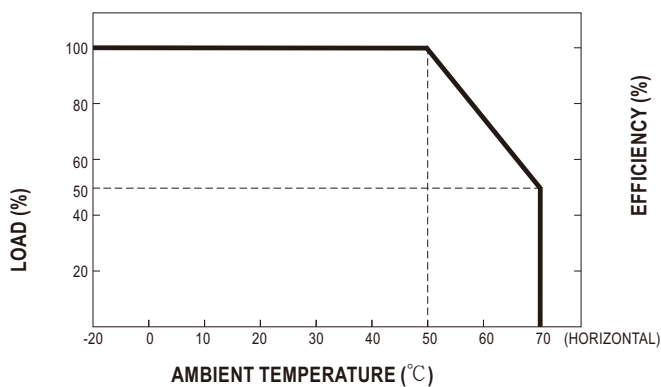


## Static Characteristics



| MODEL      | 12V   | 24V   | 48V   |
|------------|-------|-------|-------|
| INPUT      | 2400W | 3000W | 3000W |
| 180~264VAC | 200A  | 125A  | 62.5A |

## Derating Curve



## Efficiency vs Load (48V Model)

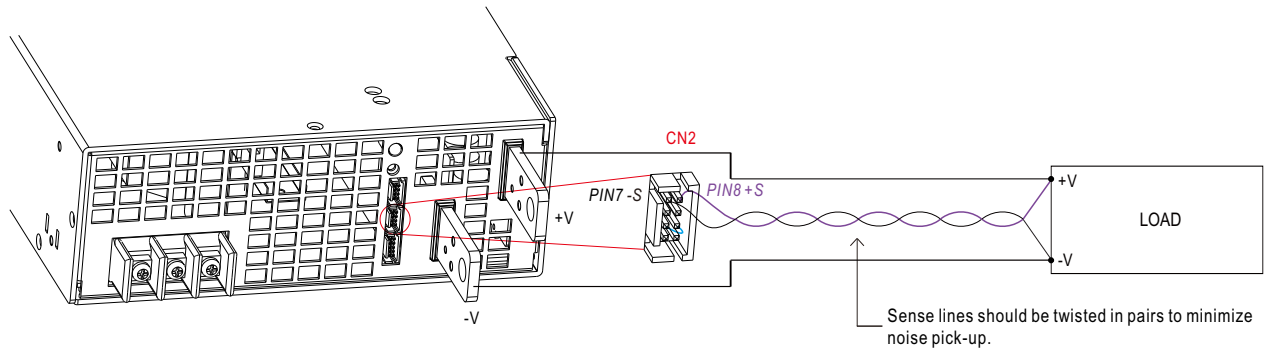
※ The curve above is measured at 230VAC.

◎ Load (%) typically represents the output power.  
However, when the PV function is involved, Load (%) changes to indicate the percentage of the output current.  
For example, with the PV function used for the RSP-3000-24, 100A corresponds to 80% of the load.

## Function Manual

### 1. Remote Sense

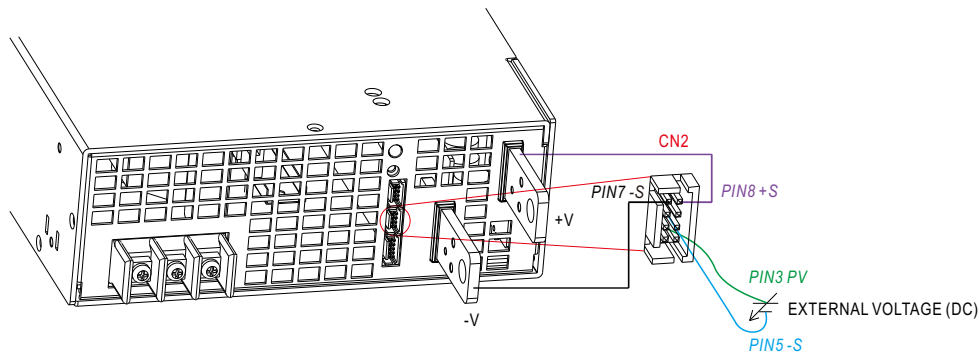
※ The Remote Sense compensates voltage drop on the load wiring up to 0.25V



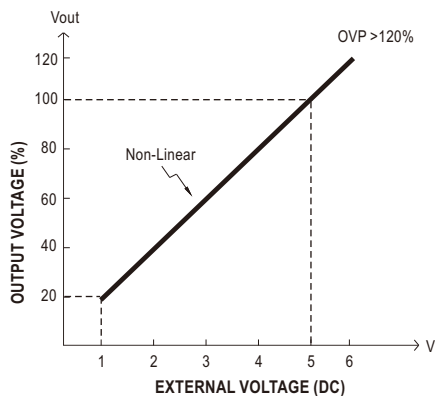
※ Caution: The power supply, by factory default (also the assumption for other sections), is shipped with, -S & -V on CN2, as well as +S & +V, shorted by connector. When activating the Remote Sense, the +S signal should be connected to the positive terminal of the load whereas -S signal to the negative terminal of the load.

### 2. Output Voltage Programming (or, PV / remote voltage programming / remote adjust / margin programming / dynamic voltage trim)

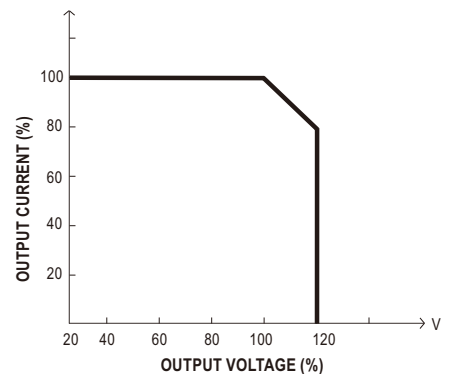
※ In addition to the adjustment via the built-in potentiometer, the output voltage can be trimmed to 20~110% (Typ.) of the nominal voltage by applying EXTERNAL VOLTAGE.



◎ Connecting an external DC source between PV & -S on CN2, and +S & +V, -S & -V also need to be connected.



◎ Please do not adopt PWM signal as the EXTERNAL VOLTAGE.



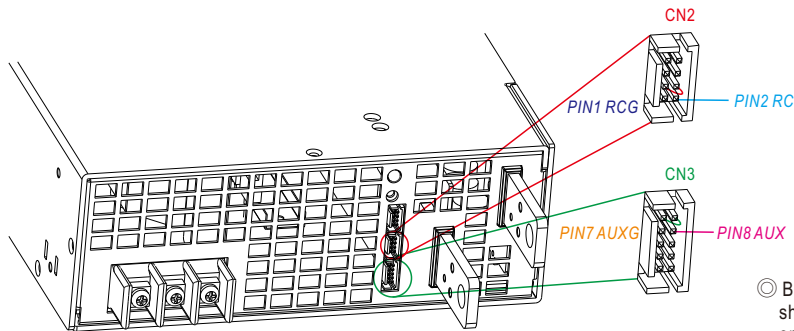
◎ The rated current should change with the Output Voltage Programming accordingly.

※ Caution: (1) By factory default, the Output Voltage Programming is not activated, and PV(PIN3) and PS(PIN4) of CN2 are shorted by connector. Whenever this function is not needed to activate, as assumed in other sections' diagrams, please keep PV(PIN3) and PS(PIN4) of CN2 shorted; otherwise, the power supply will have no output.

(2) PV(PIN3) and PS(PIN4) of CN1 or CN2 must be disconnected if "Output Voltage Programming" function is used; otherwise, the internal electrical components may be damaged, and the power supply unit may thus be out of order.

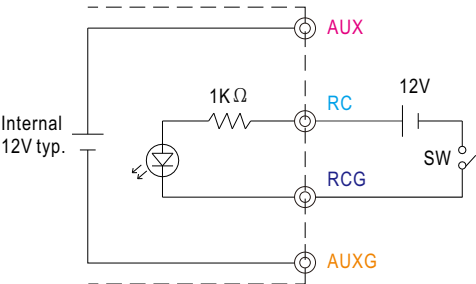
### 3.Remote ON-OFF

※ Remote ON-OFF is activated by the configuration with respect to CN1,CN2 and CN3 as shown in the following diagram.

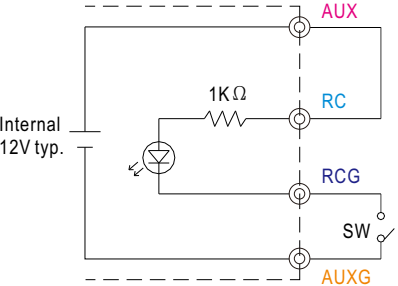


◎ By factory default, PV(PIN3) and PS(PIN4) on CN2 are shorted by connector; likewise, OLP(PIN9) and OL-SD(PIN10) on CN3 are shorted when shipped.

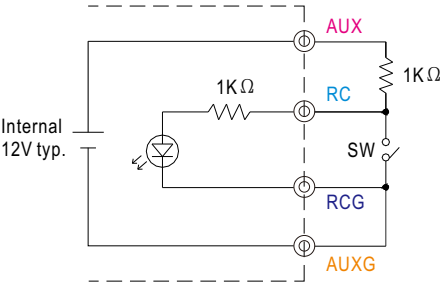
Example 3.2(A): Using external voltage source



Example 3.2(B): Using internal 12V auxiliary output



Example 3.2(C): Using internal 12V auxiliary output

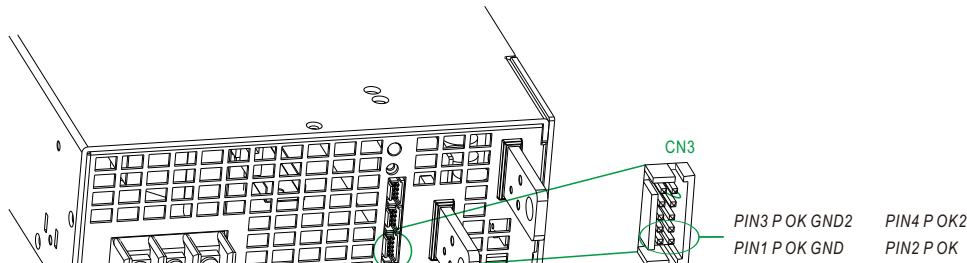


◎ Connection Method

|          |                         | Example 3.2(A) | Example 3.2(B) | Example 3.2(C) |
|----------|-------------------------|----------------|----------------|----------------|
| SW Logic | Power supply output ON  | SW Open        | SW Open        | SW Close       |
|          | Power supply output OFF | SW Close       | SW Close       | SW Open        |

## 4. Alarm Signal Output

※ Alarm signal is sent out through "P OK" & "P OK GND" and P OK2 & P OK GND2 pins on CN3. Please acknowledge an external voltage source is required for this function.



◎ By factory default, OLP(PIN9) and OL-SD(PIN10) on CN3 are shorted by connector when shipped.

| Function | Description                                                                                                       | Output of alarm(P OK, Relay Contact)                   | Output of alarm(P OK2, TTL Signal)                    |
|----------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------|
| P OK     | The signal is "Low" when the power supply is above 80% of the rated output voltage, or, say, Power OK             | Low<br>(0.5V max at 500mA)                             | Low<br>(0.5V max at 10mA)                             |
|          | The signal turns to be "High" when the power supply is under 80% of the rated output voltage, or, say, Power Fail | High or open<br>(External applied voltage, 500mA max.) | High or open<br>(External applied voltage, 10mA max.) |

Table 3.1 Explanation of alarm

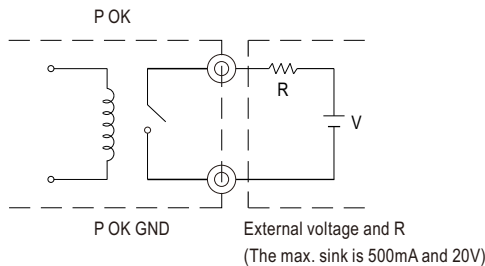


Fig. 4.2 Internal circuit of P OK (Relay, total is 10W)

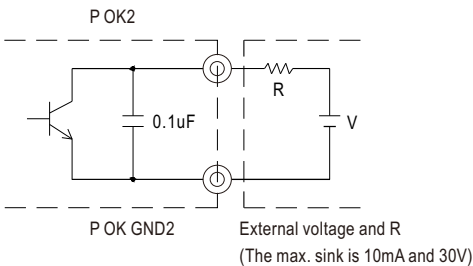


Fig. 4.3 Internal circuit of P OK2 (Open collector method)

## 5. Select Overload Protection Type

- (1) Insert the shorting connector on CN3 that is shown in Fig 5.2, the Overload Protection Type will be "constant current limiting with delay shutdown after 5 seconds, re-power on to recover". This is the factory default.
- (2) Remove the shorting connector on CN3 that is shown in Fig 5.1, the Overload Protection Type will be "continuous constant current limiting".

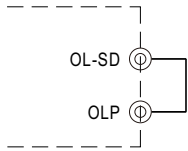


Fig. 5.1 Insert the CN3

Overload Protection Type : constant current limiting with delay shutdown after 5 seconds

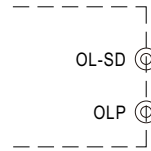


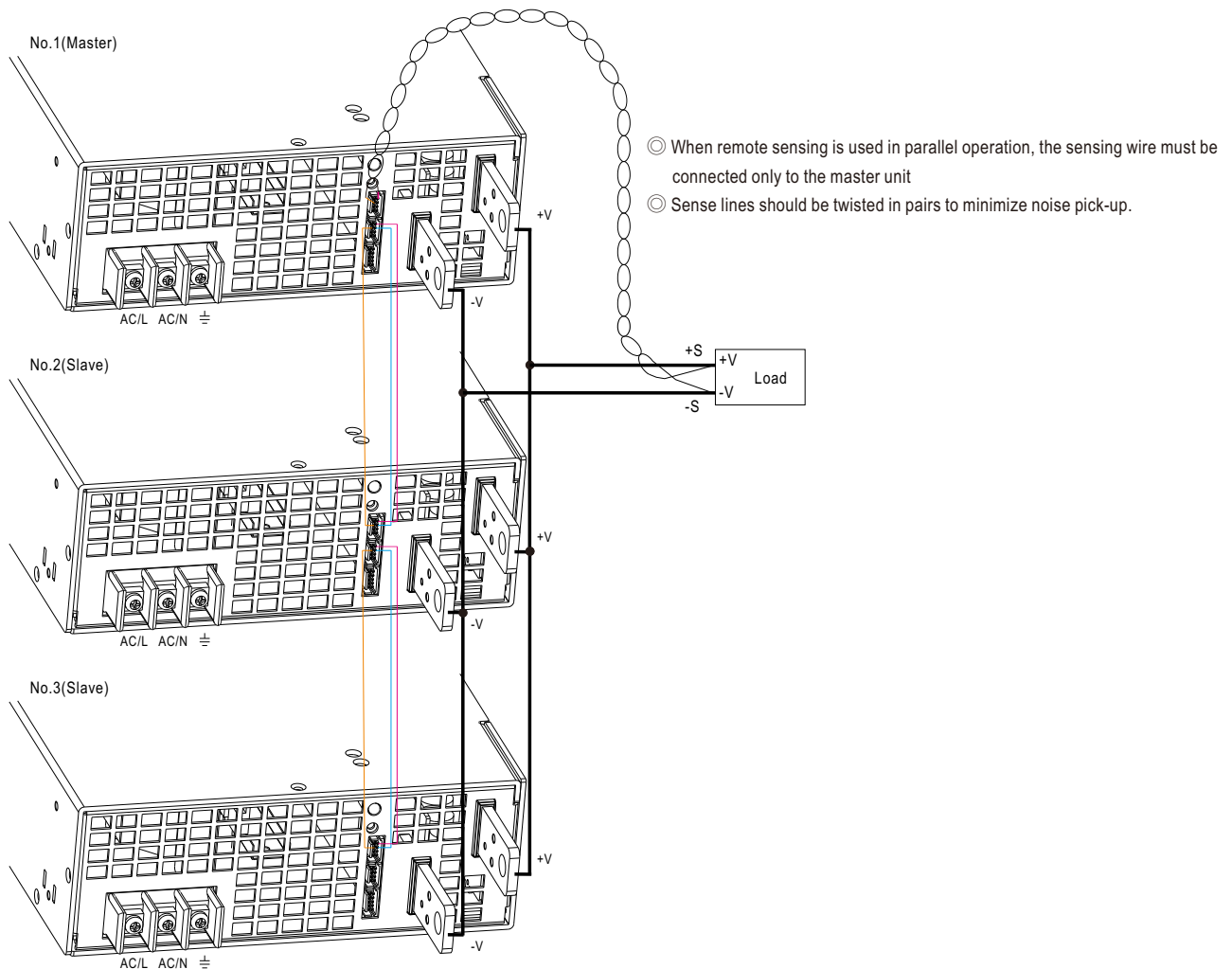
Fig. 5.2 Remove the CN3

Overload Protection Type : constant current limiting

## 6. Current Sharing with Remote Sense

RSP-3000 has the built-in active current sharing function and can be connected in parallel, up to 3 units, to provide higher output power as exhibited below :

- ※ The power supplies should be paralleled using short and large diameter wiring and then connected to the load.
- ※ Difference of output voltages among parallel units should be less than 0.2V.
- ※ The total output current must not exceed the value determined by the following equation:  
Maximum output current at parallel operation = (Rated current per unit) × (Number of unit) × 0.9
- ※ When the total output current is less than 3% of the total rated current, or say (3% of Rated current per unit) × (Number of unit) the current shared among units may not be fully balanced.

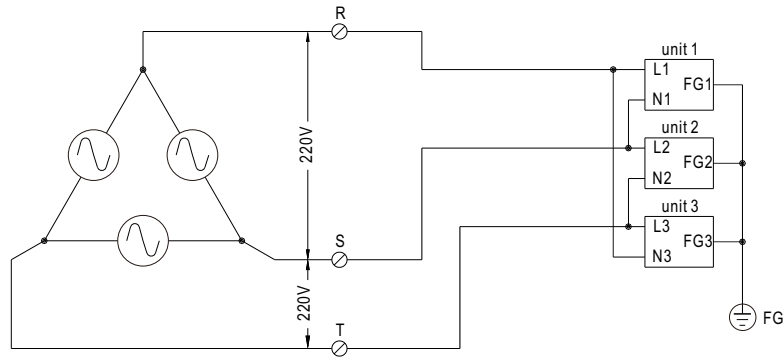


- ◎ +S, -S and CS on CN1 or CN2 are connected mutually in parallel.
- ◎ Under parallel operation, the "output voltage programming" function is not available.

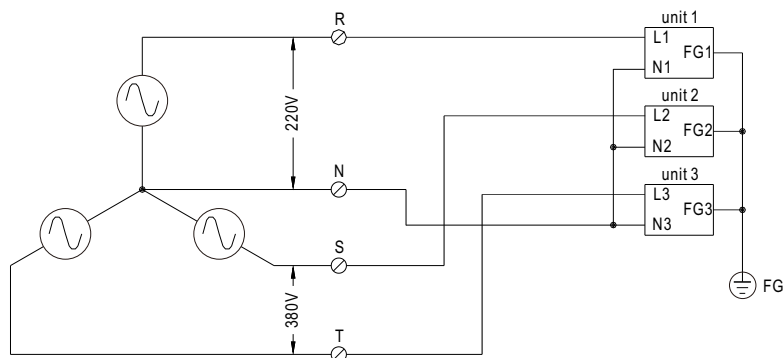
## 7. Three Phase Connect

Users can exploit three units of RSP-3000(unit 1,unit 2,unit 3) to work with 3  $\phi$  power system. Please refer to following diagrams for configuration.

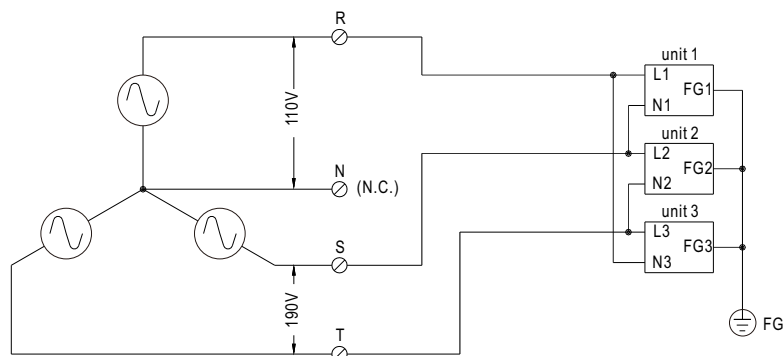
■ FIG. A: 3  $\phi$  3W 220VAC SYSTEM



■ FIG. B: 3  $\phi$  4W 220/380VAC SYSTEM



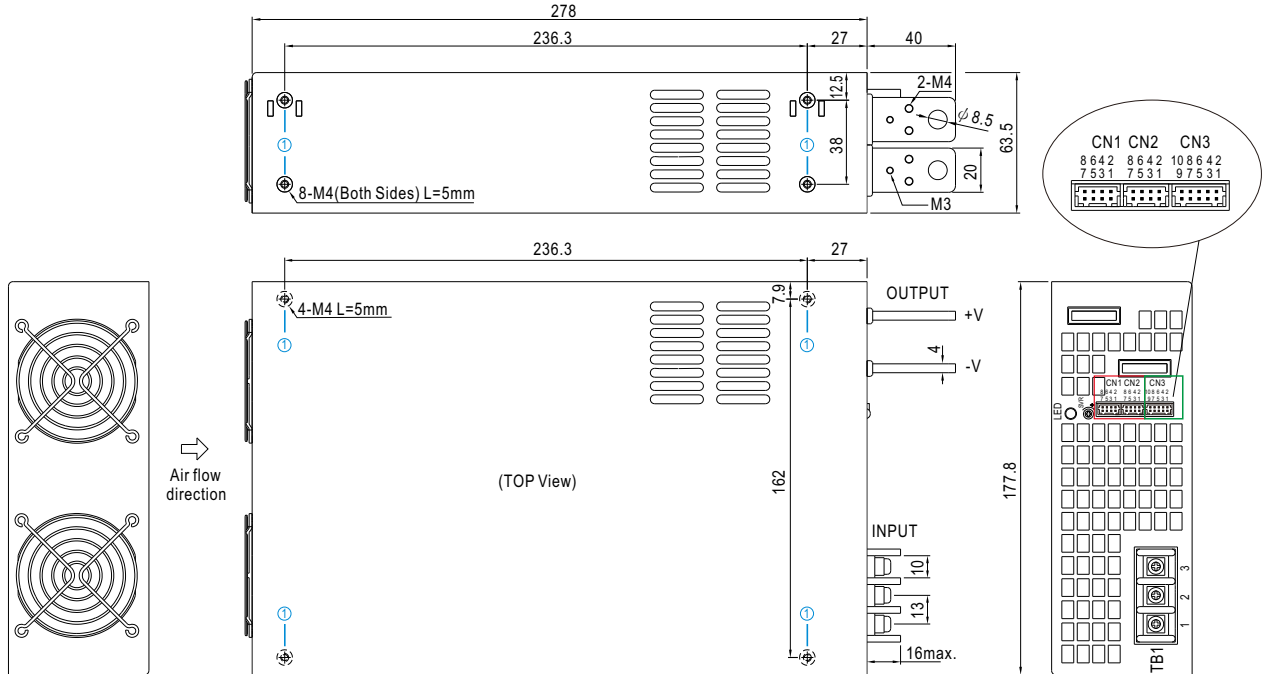
■ FIG. C: 3  $\phi$  4W 190/110VAC SYSTEM



## Mechanical Specification

(Unit: mm , tolerance  $\pm 0.5\text{mm}$ )

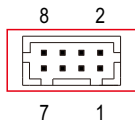
Case No.982B



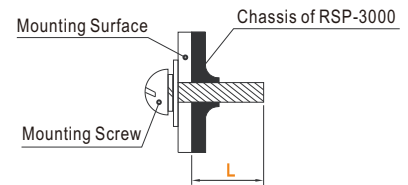
### ※ Mounting Instruction

| Hole No. | Recommended Screw Size | MAX. Penetration Depth L | Recommended mounting torque |
|----------|------------------------|--------------------------|-----------------------------|
| ①        | M4                     | 5mm                      | 7~10Kgf-cm                  |

※ Control Pin No. Assignment (CN1,CN2) : HRS DF11-8DP-2DS or equivalent



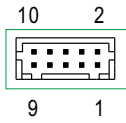
|                |                             |
|----------------|-----------------------------|
| Mating Housing | HRS DF11-8DS or equivalent  |
| Terminal       | HRS DF11-**SC or equivalent |



◎ CN1 and CN2 are connected internally.

| Pin No. | Function          | Description                               |
|---------|-------------------|-------------------------------------------|
| 1       | RCG               | Remote ON-OFF Ground                      |
| 2       | RC                | Remote ON-OFF                             |
| 3       | PV                | Connection for output voltage programming |
| 4       | PS                | Reference Voltage Terminal                |
| 5,7     | -S                | Negative sensing for remote sense         |
| 6       | CS(Current Share) | Current Share                             |
| 8       | +S                | Postive sensing for remote sense          |

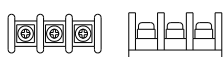
※Control Pin No. Assignment (CN3) : HRS DF11-10DP-2DS or equivalent



|                |                              |
|----------------|------------------------------|
| Mating Housing | HRS DF11-10DS or equivalent  |
| Terminal       | HRS DF11-1**SC or equivalent |

| Pin No. | Function  | Description                     |
|---------|-----------|---------------------------------|
| 1       | P OK GND  | Power OK Ground                 |
| 2       | P OK      | Power OK Signal (Relay Contact) |
| 3       | P OK GND2 | Power OK Ground                 |
| 4       | P OK2     | Power OK Signal (TTL Signal)    |
| 5       | RCG       | Remote ON-OFF Ground            |
| 6       | RC        | Remote ON-OFF                   |
| 7       | AUXG      | Auxiliary Ground                |
| 8       | AUX       | Auxiliary Output                |
| 9       | OLP       | Overload(OLP) type select       |
| 10      | OL-SD     |                                 |

※AC Input Terminal Pin No. Assignment

| Pin No. | Assignment | Diagram                                                                            | Maximum mounting torque |
|---------|------------|------------------------------------------------------------------------------------|-------------------------|
| 1       | AC/L       |  | 18Kgf-cm                |
| 2       | AC/N       |                                                                                    |                         |
| 3       | FG $\perp$ |                                                                                    |                         |

## ■ Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>