



## 800W Parallel Type With PFC Function

# SCP-800 series



### ■ Features :

- AC 180~260VAC input
- PF> 0.98@ 230VAC
- Protections: Short circuit/ Overload/ Over voltage/ Over temperature
- Built in remote sense function
- Built-in remote ON-OFF control
- Power good signal
- With parallel function(N+1)
- Can adjust from 20~100% output voltage by external control 1-5V
- Forced air cooling by built-in DC fan
- 3 years warranty

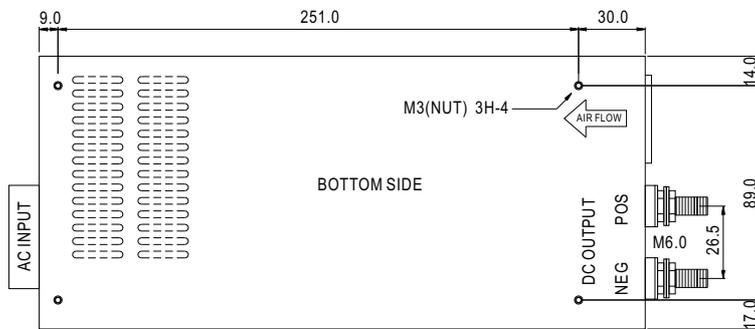
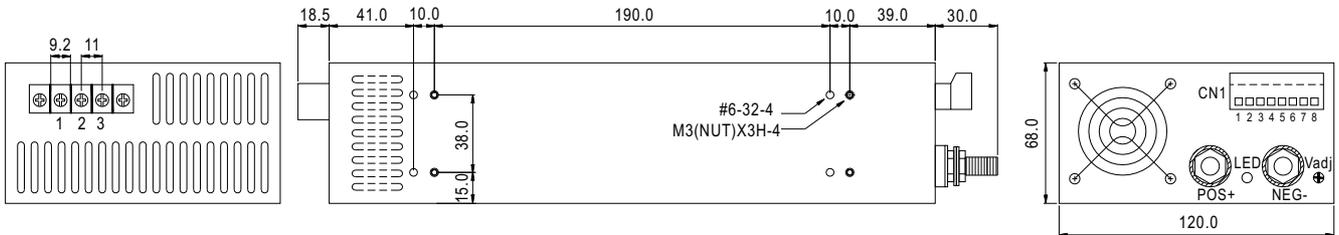


### SPECIFICATION

| ORDER NO.              | SCP-800-09  | SCP-800-12   | SCP-800-15 | SCP-800-18 | SCP-800-24   | SCP-800-36 | SCP-800-48 | SCP-800-60 |           |  |
|------------------------|---|--|------------|------------|--|------------|------------|------------|-----------|--|
| OUTPUT                 | SAFETY MODEL NO.  | 800S-P009  | 800S-P012  | 800S-P015  | 800S-P018  | 800S-P024  | 800S-P036  | 800S-P048  | 800S-P060 |  |
|                        | DC VOLTAGE  | 9V   | 12V        | 15V        | 18V  | 24V        | 36V        | 48V        | 60V       |  |
|                        | RATED CURRENT   | 88A  | 66A        | 53A        | 44.4A  | 33A        | 22.2A      | 16A        | 13A       |  |
|                        | CURRENT RANGE   | 0 ~ 88A  | 0 ~ 66A    | 0 ~ 53A    | 0 ~ 44.4A  | 0 ~ 33A    | 0 ~ 22.2A  | 0 ~ 16A    | 0 ~ 13A   |  |
|                        | RATED POWER   | 792W   | 792W       | 795W       | 800W   | 792W       | 800W       | 768W       | 780W      |  |
|                        | RIPPLE & NOISE (max.) Note.2  | 90mVp-p  | 120mVp-p   | 150mVp-p   | 180mVp-p   | 240mVp-p   | 360mVp-p   | 480mVp-p   | 500mVp-p  |  |
|                        | VOLTAGE ADJ. RANGE  | ±3.0% Typical adjustment by potentiometer  |            |            | 20% ~ 100% adjustment by 1 ~ 5VDC external control |            |            |            |           |  |
|                        | VOLTAGE TOLERANCE Note.3  | ±1.5%  | ±1.0%      | ±1.0%      | ±1.0%  | ±1.0%      | ±1.0%      | ±1.0%      | ±1.0%     |  |
|                        | LINE REGULATION   | ±0.5%  | ±0.5%      | ±0.5%      | ±0.5%  | ±0.5%      | ±0.5%      | ±0.5%      | ±0.5%     |  |
|                        | LOAD REGULATION   | ±1.0%  | ±0.5%      | ±0.5%      | ±0.5%  | ±0.5%      | ±0.5%      | ±0.5%      | ±0.5%     |  |
| SETUP, RISE, HOLD TIME | 800ms, 400ms, 12ms at full load   |  |            |            |  |            |            |            |           |  |
| INPUT                  | VOLTAGE RANGE   | 180 ~ 260VAC 260 ~ 370VDC see the derating curve   |            |            |  |            |            |            |           |  |
|                        | FREQUENCY RANGE   | 47 ~ 63Hz  |            |            |  |            |            |            |           |  |
|                        | POWER FACTOR  | >0.98 / 230VAC   |            |            |  |            |            |            |           |  |
|                        | EFFICIENCY (Typ.)   | 83%  | 84%        | 85%        | 86%  | 88%        | 88%        | 89%        | 90%       |  |
|                        | AC CURRENT  | 5.0A / 230VAC  |            |            |  |            |            |            |           |  |
|                        | INRUSH CURRENT (max.)   | 60A / 230VAC   |            |            |  |            |            |            |           |  |
|                        | LEAKAGE CURRENT(max.)   | 3.5mA / 240VAC   |            |            |  |            |            |            |           |  |
| PROTECTION             | OVER LOAD Note.4  | 105~115% rated output power<br>Protection type : Current limiting, delay shut down o/p voltage, re-power on to recover                         |            |            |  |            |            |            |           |  |
|                        | OVER VOLTAGE  | 110 ~ 135% Follow to output set up point<br>Protection type : Shut down o/p voltage, re-power on to recover                                    |            |            |  |            |            |            |           |  |
|                        | OVER TEMPERATURE  | >100°C / measure by heat sink, near transformer<br>Protection type : Shut down o/p voltage, recovers automatically after temperature goes down |            |            |  |            |            |            |           |  |
| ENVIRONMENT            | WORKING TEMP.   | -20 ~ +65°C (Refer to output load derating curve)  |            |            |  |            |            |            |           |  |
|                        | WORKING HUMIDITY  | 20 ~ 90% RH non-condensing   |            |            |  |            |            |            |           |  |
|                        | STORAGE TEMP., HUMIDITY   | -20 ~ +85°C 10~95% RH  |            |            |  |            |            |            |           |  |
|                        | TEMP. COEFFICIENT   | ±0.04% / °C (0 ~ 50°C)   |            |            |  |            |            |            |           |  |
|                        | VIBRATION   | 10 ~ 200Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes   |            |            |  |            |            |            |           |  |
| SAFETY & EMC (Note. 5) | SAFETY STANDARDS  | UL60950, TUV EN60950-1 Approved  |            |            |  |            |            |            |           |  |
|                        | WITHSTAND VOLTAGE   | I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC  |            |            |  |            |            |            |           |  |
|                        | ISOLATION RESISTANCE  | I/P-O/P, I/P-FG, OP/FG:100M Ohms / 500VDC  |            |            |  |            |            |            |           |  |
|                        | EMI CONDUCTION & RADIATION  | Compliance to EN55022 (CISPR22) class A  |            |            |  |            |            |            |           |  |
|                        | HARMONIC CURRENT  | Compliance to EN61000-3-2,3  |            |            |  |            |            |            |           |  |
|                        | EMS IMMUNITY  | Compliance to EN61000-4-2,3,4,5,6,8,11, Light industry level, criteria A   |            |            |  |            |            |            |           |  |
| OTHERS                 | POWER GOOD SIGNAL   | Open collector of NPN transistor   |            |            |  |            |            |            |           |  |
|                        | SPECIAL FUNCTION  | DC Voltage Adj., remote sensing, remote control, parallel operation(refer to control terminal instruction manual)                              |            |            |  |            |            |            |           |  |
|                        | COOLING   | By fan, >20% load or >50°C fan on  |            |            |  |            |            |            |           |  |
|                        | MTBF  | 74.9K hrs min. MIL-HDBK-217F(25°C)   |            |            |  |            |            |            |           |  |
|                        | DIMENSION   | 290*120*68mm (L*W*H)   |            |            |  |            |            |            |           |  |
|                        | PACKING   | 2.3kg; 8pcs / 20kg / CARTON  |            |            |  |            |            |            |           |  |
| NOTE                   | <ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. Current limiting 3 times(1.5s,3.0s,5.0s)Then intelligent auto recovery before shut down</li> <li>5. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</li> </ol> |  |            |            |  |            |            |            |           |  |

**Mechanical Specification**

Unit:mm



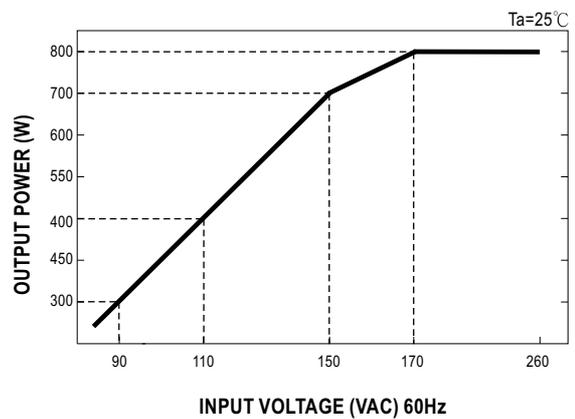
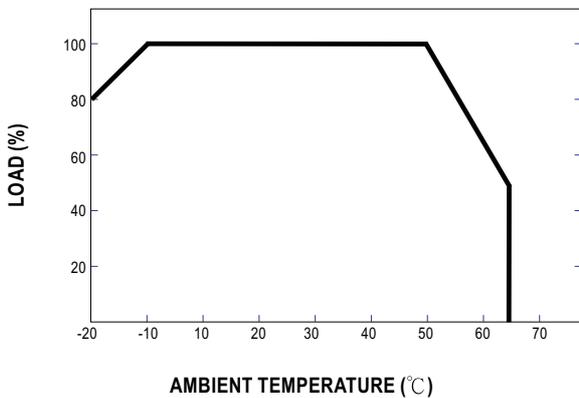
Terminal Pin. No. Assignment

| Pin No. | Assignment |
|---------|------------|
| 1       | AC/L       |
| 2       | AC/N       |
| 3       | FG $\perp$ |

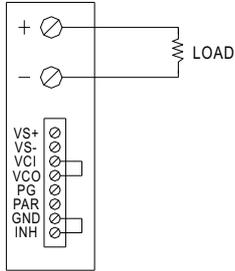
Control terminal Pin. No. Assignment (CN1) : Dinkle 51HDBC-O8P or equivalent

| Pin No. | Assignment | Pin No. | Assignment | Mating With                       |
|---------|------------|---------|------------|-----------------------------------|
| 1       | VS+        | 5       | PG         | Dinkle 51SDB-O8P<br>or equivalent |
| 2       | VS-        | 6       | PAR        |                                   |
| 3       | VCI        | 7       | GND        |                                   |
| 4       | VCO        | 8       | INH        |                                   |

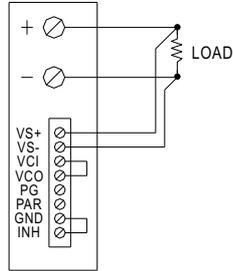
**Derating Curve**



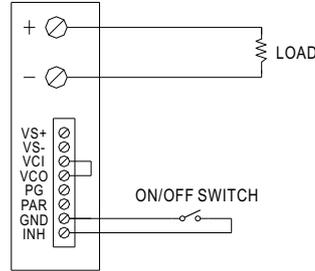
Control terminal instruction manual



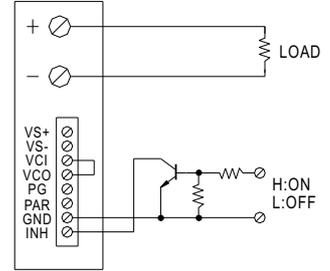
USING INTERNAL VOLTAGE CONTROL



REMOTE SENSING

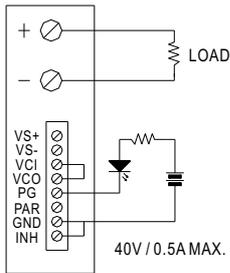


ON/OFF CONTROL BY SWITCH

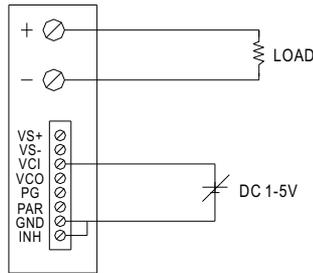


ON/OFF CONTROL BY TRANSISTOR

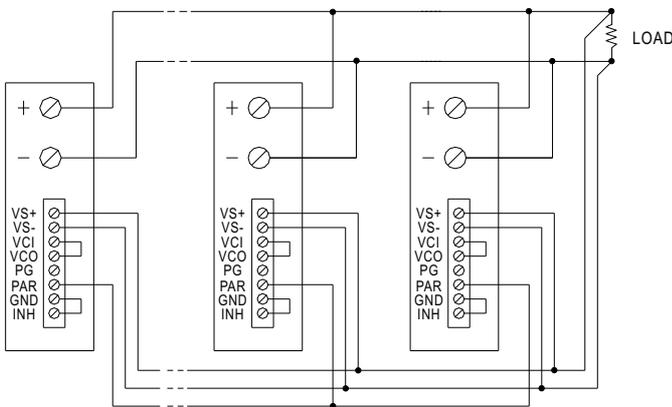
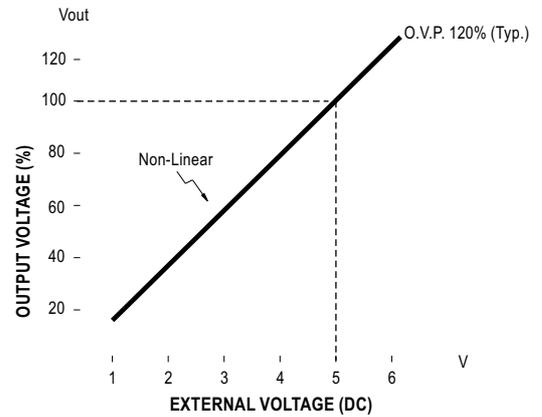
GOOD : LED OFF  
FAIL : LED ON



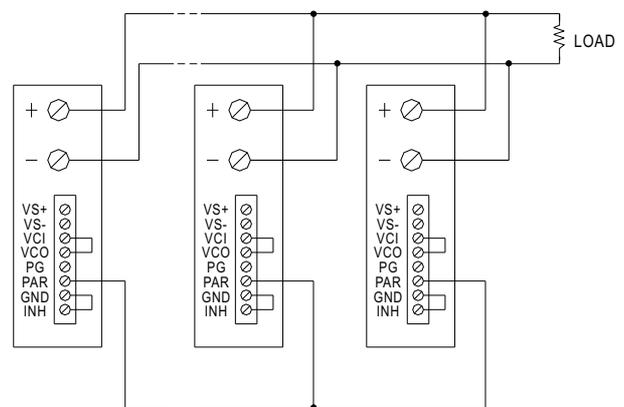
POWER GOOD SIGNAL



OUTPUT VOLTAGE ADJUST WITH DC 1-5V



PARALLEL OPERATION WITH REMOTE SENSING



PARALLEL OPERATION WITHOUT REMOTE SENSING