



## 1500W Single Output With Parallel Function

## SCN-1K5 series



### ■ Features :

- AC input 200~260V only
- Protections: Short circuit / Overload / Over voltage / Over temp.
- High reliability/ Low ripple noise
- Built-in remote sense function
- Built-in remote ON-OFF control
- Built-in parallel operation function
- Can adjust from 20~100% output voltage by external control 1-5V
- Forced air cooling by built-in DC fan
- Case coating with paint
- 2 years warranty

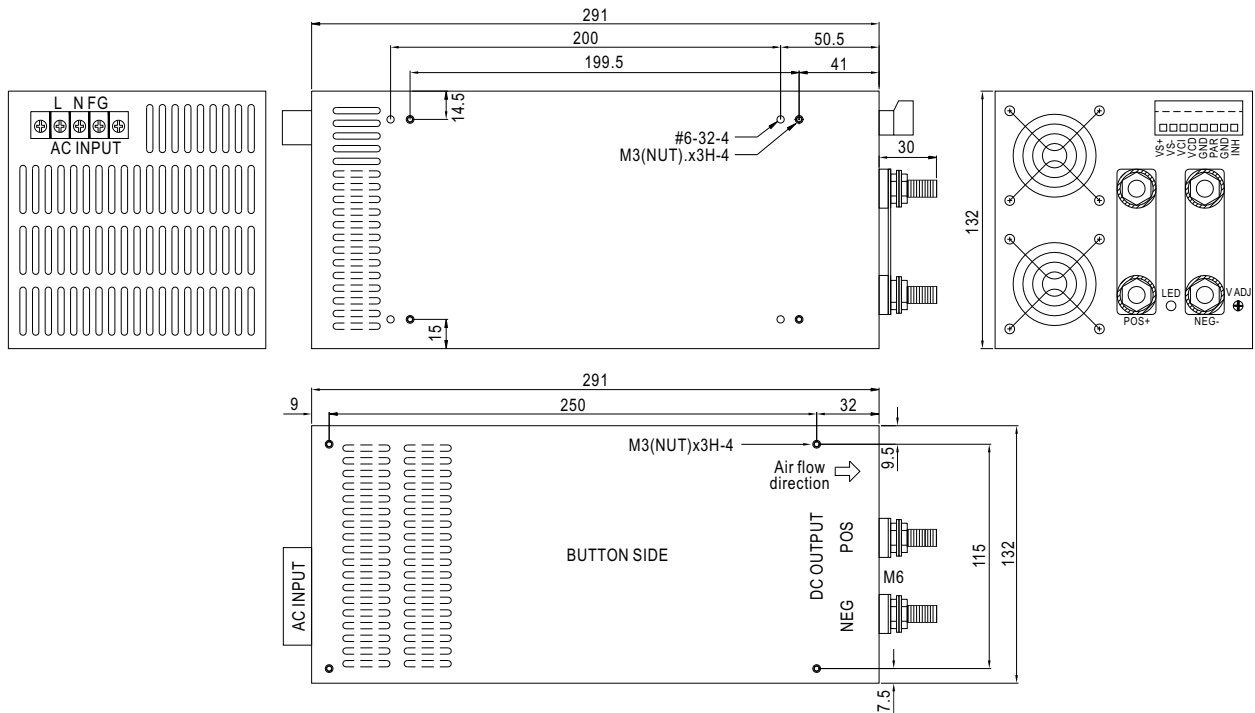
Parallel

### SPECIFICATION

| ORDER NO.                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                           | SCN-1K5-12                                                                                                               | SCN-1K5-15 | SCN-1K5-24 | SCN-1K5-48 |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------|------------|------------|
| OUTPUT                    | MODEL NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1K5S-N012                                                                                                                | 1K5S-N015  | 1K5S-N024  | 1K5S-N048  |
|                           | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                | 12V                                                                                                                      | 15V        | 24V        | 48V        |
|                           | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                             | 125A                                                                                                                     | 100A       | 62.5A      | 32A        |
|                           | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0 ~ 125A                                                                                                                 | 0 ~ 100A   | 0 ~ 62.5A  | 0 ~ 32A    |
|                           | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1500W                                                                                                                    | 1500W      | 1500W      | 1536W      |
|                           | RIPPLE & NOISE (max.) Note.2                                                                                                                                                                                                                                                                                                                                                                                                                              | 120mVp-p                                                                                                                 | 150mVp-p   | 240mVp-p   | 480mVp-p   |
|                           | VOLTAGE ADJ. RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                        | ±5.0% typical adjustment by potentiometer      20~100% adjustment by 1~5VDC external control                             |            |            |            |
|                           | VOLTAGE TOLERANCE Note.3                                                                                                                                                                                                                                                                                                                                                                                                                                  | ±1.0%                                                                                                                    | ±1.0%      | ±1.0%      | ±1.0%      |
|                           | LINE REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                           | ±0.5%                                                                                                                    | ±0.5%      | ±0.5%      | ±0.5%      |
|                           | LOAD REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                           | ±0.5%                                                                                                                    | ±0.5%      | ±0.5%      | ±0.5%      |
| SETUP, RISE, HOLD UP TIME |                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 800ms, 50ms, 16ms at full load                                                                                           |            |            |            |
| INPUT                     | VOLTAGE RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                             | 200 ~ 260VAC    290 ~ 370VDC                                                                                             |            |            |            |
|                           | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                           | 47 ~ 63Hz                                                                                                                |            |            |            |
|                           | EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                         | 83%                                                                                                                      | 84%        | 85%        | 87%        |
|                           | AC CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                | 15A / 230VAC                                                                                                             |            |            |            |
|                           | INRUSH CURRENT (max.)                                                                                                                                                                                                                                                                                                                                                                                                                                     | 120A / 230VAC                                                                                                            |            |            |            |
|                           | LEAKAGE CURRENT(max.)                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3.5mA / 240VAC                                                                                                           |            |            |            |
| PROTECTION                | OVERLOAD                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 110 ~ 135% 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℃ / measure by heat sink, near transformer<br>Protection type : Shut down o/p voltage, re-power on to recover        |            |            |            |
|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                          |            |            |            |
| ENVIRONMENT               | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                             | -10 ~ +65℃ (Refer to output load derating curve)                                                                         |            |            |            |
|                           | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                          | 20% ~ 90% RH non-condensing                                                                                              |            |            |            |
|                           | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                   | -20 ~ +85℃, 10 ~ 95% RH                                                                                                  |            |            |            |
|                           | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                         | ±0.04% / ℃ (0 ~ 50℃)                                                                                                     |            |            |            |
|                           | VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 10 ~ 200Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                                                  |            |            |            |
| SAFETY & EMC<br>(Note. 4) | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                          | Design refer to UL1950, CSA22.2, IEC60950                                                                                |            |            |            |
|                           | WITHSTAND VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                         | I/P-O/P, I/P-FG:1500VAC                                                                                                  |            |            |            |
|                           | ISOLATION RESISTANCE                                                                                                                                                                                                                                                                                                                                                                                                                                      | I/P-O/P, I/P-FG, >100M Ohms / 500VDC / 25℃ / 70% RH                                                                      |            |            |            |
|                           | EMI CONDUCTION & RADIATION                                                                                                                                                                                                                                                                                                                                                                                                                                | Design refer to FCC part 15 class A                                                                                      |            |            |            |
|                           | HARMONIC CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                          | ----                                                                                                                     |            |            |            |
|                           | EMS IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                              | ----                                                                                                                     |            |            |            |
| OTHERS                    | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 60Khrs min. MIL-HDBK-217F (25℃)                                                                                          |            |            |            |
|                           | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 291*132*132mm (L*W*H)                                                                                                    |            |            |            |
|                           | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4.75kg; 4pcs / 20kg / CARTON                                                                                             |            |            |            |
|                           | SPECIAL FUNCTION                                                                                                                                                                                                                                                                                                                                                                                                                                          | DC voltage adj., Remote sensing, remote control, parallel operation (refer to terminal instruction manual)               |            |            |            |
| NOTE                      | 1.All parameters are specified at 230VAC input, rated load, 25℃ 70% RH ambient.<br>2.Tolerance: includes set up tolerance, line regulation, load regulation.<br>3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.<br>4.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. |                                                                                                                          |            |            |            |

## Mechanical Specification

Unit:mm



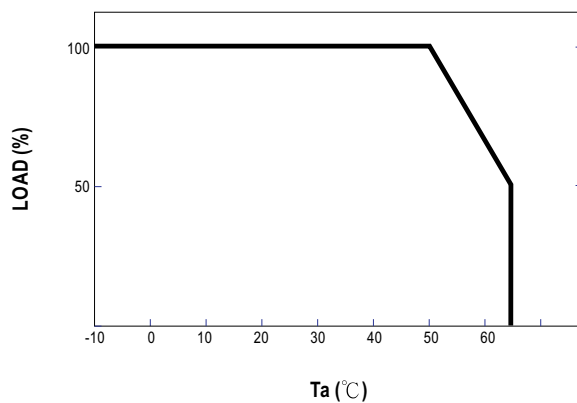
Terminal Pin No. Assignment

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

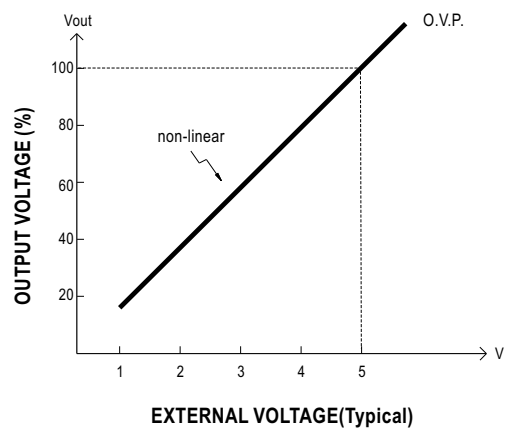
Control terminal Pin No. Assignment (CN1) : Dinkle 51HDBC-O8P or equivalent

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

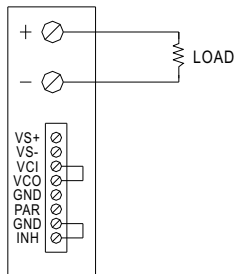
## Derating Curve



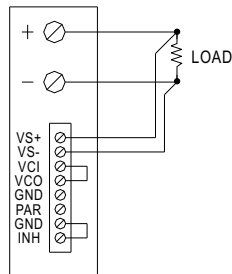
## External DC Control VS Output Voltage



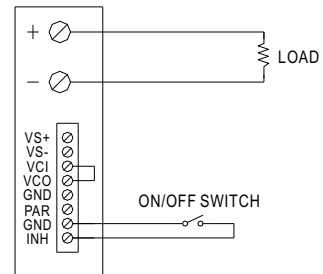
## Control terminal instruction manual



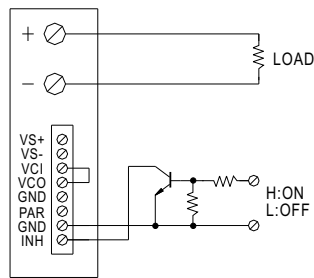
USING INTERNAL VOLTAGE CONTROL



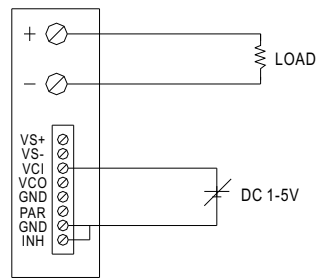
REMOTE SENSING



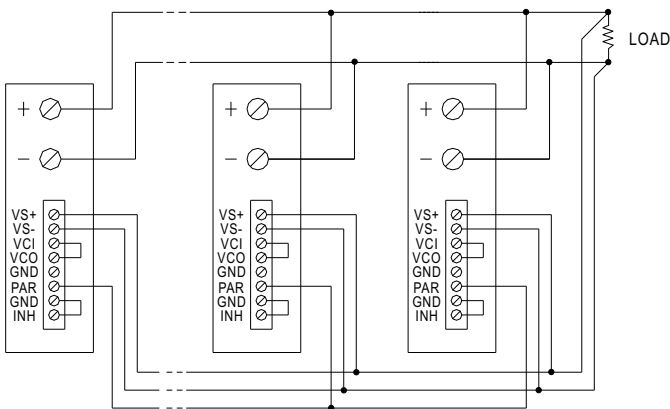
ON/OFF CONTROL BY SWITCH



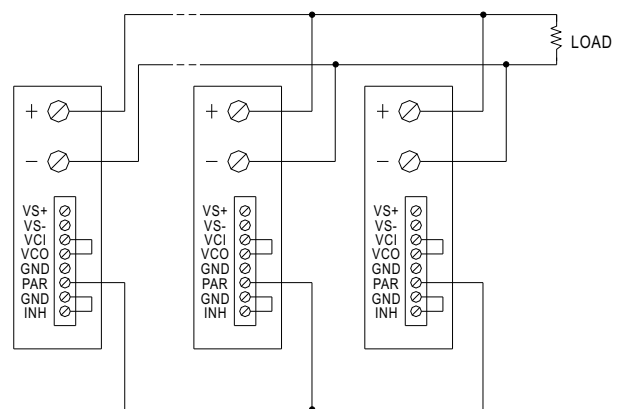
ON/OFF CONTROL BY TRANSISTOR



OUTPUT VOLTAGE ADJUST WITH DC 1-5V



PARALLEL OPERATION WITH REMOTE SENSING



PARALLEL OPERATION