

YSDW240 SERIES 240W



C Y L US
LISTED
E520888

YSDW series are designed with metal housing and for single or two phase system with wide range from 180V AC to 550V AC.

The series offer DC Ok relay contact , built-in constant current limiting circuit and active PFC function(except YSDW60&120) , and operating in wide temperature range.

They are suitable for industrial-related applications such as industrial control, semiconductor fabrication equipment, and factory automation etc.

Features



single and Two phase Ultrawide Input Range 180~550VAc



Built-in Active pF_c circuit



Built-in Dc oK Relay contact



protection:short circuit/overload /over Voltage/over Temperature



Built-in constant current Limiting circuit



High Efficiency 91% and Lower power Dissipation



Three years warranty

Model Information

| yingjiao Part number | DC VOLTAGE | RATED CURRENT | RATED POWER | VOLTAGE ADJ. RANGE |
|-------------------------|---------------|------------------|----------------|-----------------------|
| YSDW240-24 | 24V | 10A | 240W | 24 ~ 28V |
| YSDW240-48 | 48V | 5A | 240W | 48 ~ 55V |

Input

| | |
|-----------------------|------------------------------------------------|
| INPUTVOLTAGE RANGE | 180 ~ 550vAC or 254 ~ 780vDC |
| FREQUENCY RANGE | 47~63Hz |
| POWER FACTOR (TYP.) | PF \geq 0.84/400vAC PF \geq 0.84/230vAC |
| EFFICIENCY (TYP.) | 91% |
| AC CURRENT | 1A/400vac 2A/230vac |
| INRUSH CURRENT (max.) | COLD START 50A |
| LEAKAGE CURRENT | <3.5mA / 530vac |

Output

| | |
|-----------------------|-----------------------------------------------------------------------|
| RIPPLE & NOISE (max.) | 150mvp-p |
| VOLTAGETOLERANCE | \pm 2.0% |
| LINE REGULATION | \pm 0.5% |
| LOAD REGULATION | \pm 1.0% |
| SETUP, RISETIME | 800ms, 150ms/400vac at full load 1500ms, 150ms/230vac at full load |
| HOLD UPTIME(TYP.) | 18ms/400vac at full load 18ms/230vac at full load |

protection

| | |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OVER LOAD | 105 ~ 130% rated output power. protection type : constant current limiting, unit will shutdown after 3 sec., auto-recovery after 1 minute if the fault condition is removed. |
| OVERVOLTAGE | 29~33v YSDW240-24 56~65v YSDW240-48 protection type : Shutdown o/p voltage, auto-recovery after 1 minute if the fault condition is removed. |
| OVERTEMPERATURE | 90 °C±5 °C (TSW) detect on heatsink of power switch. protection type : Shutdown o/p voltage, recovers automatically after temperature goes down. |

Environment

| | |
|------------------------|--------------------------------------------------------------------------------------------------------------------|
| WORKINGTEMP. | -30 ~ +70 °C (Refer to "Derating curve") |
| WORKING HUMIDITY | 20 ~ 95% RH non-condensing |
| STORAGETEMP., HUMIDITY | -40 ~ +85 °C, 10 ~ 95% RH |
| COLD START | -40 °C |
| TEMP. COEFFICIENT | ±0.03%/ °C (0 ~ 50 °C) |
| VIBRATION | component: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X,Y, Z axes; Mounting clip: compliance to IEC60068-2-6. |
| MTBF | 900k hrs min.TelcordiaSR-332 (Bellcore) |

Function

| | |
|------------------------------------|-------------------------------------------------|
| DC OK REALY CONTACT RATINGS (max.) | 60vdc/0.3A, 30vdc/1A, 30vac/0.5A resistive load |
|------------------------------------|-------------------------------------------------|

SAFETY & EMC

| | |
|----------------------|-------------------------------------------------------------|
| SAFETY STANDARDS | UL61010-1, UL61010-2-201, BS EN/EN62368-1 |
| WITHSTANDVOLTAGE | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC O/P-DC OK:0.5KVAC |
| ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25°C/ 70% RH |
| EMC EMISSION | Compliance to BS EN/EN55032, BS EN/EN61000-3-2,-3 |
| EMC IMMUNITY | Compliance to BS EN/EN61000-4-2, 3, 4, 5, 6, 8, 11 |

Note

1.All parameters NOT specially mentioned at 400VAC input, ratedload and 25°C of ambient temperature.

2.Ripple&noise are measured at 20MHz of bandwidth bY using a 12,,twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.

3.Installation clearances: top with 40mm, bottom with 20mm,left and right with 5mm. Increase the space to 10-15mm when the adjacent device is heat source.

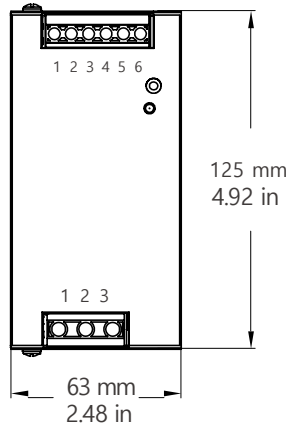
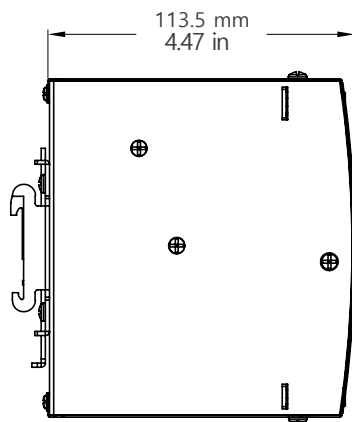
4.The ambient temperature derating of 3.5 °C/1000m for operating altitude higher than 2000m(6500ft).

5.The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to“EMI testing of component power supplies.”

Dimensions & weight

| | |
|---------|------------------|
| Length: | 63mm / 2.48in |
| width: | 113.5mm / 4.47in |
| Height: | 125mm / 4.92in |
| weight: | 1kg |

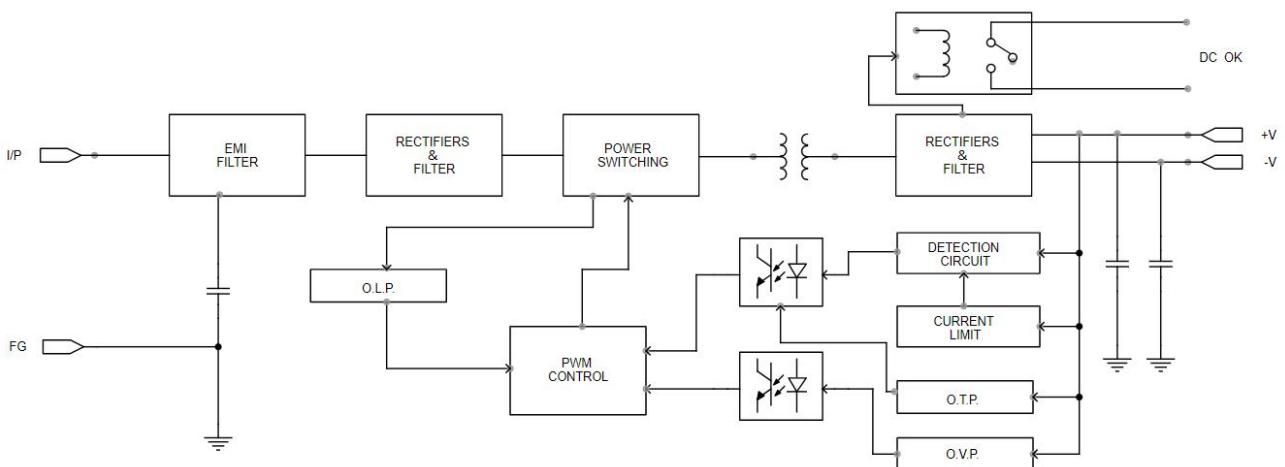
Mechanical Specification



| INPUT | |
|-------|-------------|
| NO. | Description |
| 1 | FG |
| 2 | AC/L2 |
| 3 | AC/L1 |

| OUTPUT | |
|--------|---------------|
| NO. | Description |
| 1,2 | Relay Contact |
| 3,4 | DC OUTPUT +V |
| 5,6 | DC OUTPUT -V |

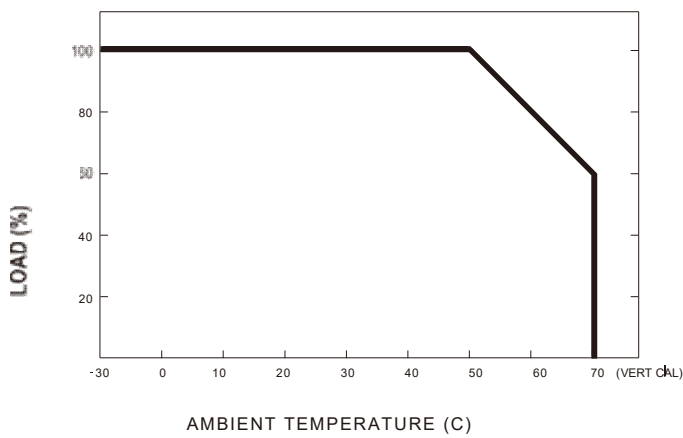
Block Diagram



DC OK Relay Contact

| | |
|------------------------|--------------------------|
| Contact Close | PSU turns ON / DC OK. |
| Contact Open | PSU turns OFF / DC FAIL. |
| Contact Ratings (max.) | 30V/1A resistive load. |

Deduction curve and Temperature



Minus output and Input voltage curves

