(\*新星 **ERLD** 360Watts Single Output Industrial DIN Rail Power Supply

| : | 080000                               |
|---|--------------------------------------|
|   | бок +V +V -V -V                      |
| 4 | Cav.                                 |
| 9 | DC-DK(green)                         |
|   | Parallel Use<br>Single Use           |
|   | POWERLD®                             |
| ŝ | DG-360-24                            |
|   | INPUT:100-240 ~<br>5A Max<br>50/60Hz |
|   | OUTPUT:24V=; 15A                     |
|   | C E 🐻                                |
|   | MADEINCHINA                          |
|   | @ N L                                |

Features:

- ≻ Universal AC input range(85~264Vac) Support 1+1 or N+1 redundant system (suggest to use redundancy modules.)
- ۶ ≻ Built-in active PFC,PF>0.95
- High efficiency up to 93%  $\triangleright$
- ۶ Built-in current sharing function
- ≻ Built-in current limiting circuit
- ≻ Output protections: OVP/OLP/SCP/OTP
- ≻ Wide operating ambient temp (-25°C~70°C)
- ≻ 150%(540W) peak load capacity
- **Excellent Partial Load Efficiency** ≻
- ≻ Built-in DC OK relay contact
- ۶ Can be installed on TS-35/7.5 or TS-35/15
- ۶ 100% full load burn-in test
- ≻ Suitable for critical applications
- Ultra-slim, 50mm width ۶
- ≻ Free air convection
- ≻ 3 years warranty

#### **SPECIFICATION**

| MODEL                 | ATION                                |   | DG-360-24   | DG-360-36                | DG-360-48                |  |
|-----------------------|--------------------------------------|---|---|--------------------------|--------------------------|--|
|                       |                                      |   | 24V   | 36V                      | 48V                      |  |
|                       | DC Output                            |   | 15A   | 10A                      | 7.5A                     |  |
|                       | Rated Current   Current Range Note 1 |   | 0~15A   | 0~10A                    | 0~7.5A                   |  |
|                       | Ripple and Noise                     | 0~70°C  | ≤240mV  | ≤240mV                   | ≤480mV                   |  |
|                       |                                      |   |   |                          |                          |  |
|                       | Note 2                               | <b>-25°</b> ℃   | ≤480mV  | ≤480mV                   | ≤720mV                   |  |
|                       | Voltage ADJ. Range                   |   | 24~28V  | 34~37.5V                 | 48~56V                   |  |
| OUTPUT                | Voltage Accuracy                     |   | ±3.0%   |                          |                          |  |
|                       | Line Regulation                      |   | ±0.5%   |                          |                          |  |
|                       | Load Regulation                      |   | ±1.0%   |                          |                          |  |
|                       | Set-up Time                          |   | <3S@230Vac  |                          |                          |  |
|                       | Hold up Time                         |   | ≥20mS(230Vac input, Full load)  |                          |                          |  |
|                       | Temperature Coefficient              |   | ±0.03%/°C   |                          |                          |  |
|                       | Overshoot and Undershoot             |   | <5.0%   |                          |                          |  |
|                       | Voltage Range                        |   | 85Vac~264Vac, 127Vdc-375Vdc   |                          |                          |  |
|                       | Frequency Range                      |   | 47Hz~63Hz   |                          |                          |  |
|                       | Power Factor (typical)               |   | 0.99/110Vac 0.95/230Vac   | full load                |                          |  |
| INPUT                 | Efficiency (Typical) at 230Vac       |   | ≥93%  | ≥92.5%                   | ≥92.5%                   |  |
|                       | AC Current (max.)                    |   | <5A/100Vac <2.5A/230Vac   |                          |                          |  |
|                       | Inrush Current (Typical)             |   | <20A/110Vac, <40A/230Vac Cold start   |                          |                          |  |
|                       | Leakage Current                      |   | Input—output:<0.25mA Input—PG:<3.5mA  |                          |                          |  |
|                       | Over Load                            |   | 110%~150% of rated current, Constant current limiting for some time(150% of rated current, last 3S) then PS |                          |                          |  |
|                       |                                      |   | stop working for 7S,after 7S,if the load <=rated current, PS will work normally, auto recovery              |                          |                          |  |
| PROTECTION            | Over voltage                         |   | 29~33V, constant voltage,   | 39~43V, constant voltage | 58~63V, constant voltage |  |
| PROTECTION            |                                      |   | Auto recovery   | Auto recovery            | Auto recovery            |  |
|                       | Over temperature                     |   | 115±5°C, detect on heat sink of power transistor; shut down O/P, auto recovery after temperature goes down. |                          |                          |  |
|                       | Short Circuit                        |   | Long-term mode, auto recovery   |                          |                          |  |
| ENVIRONMENT           | Operating amb. Temp. & Hum.          |   | -25°C~70°C; 20%~90%RH No condensing   |                          |                          |  |
|                       | Storage Temp. & Hum.                 |   | -40°C~85°C; 5%~95%RH No condensing  |                          |                          |  |
| SAFETY &EMC<br>Note 3 | Safety Standards                     |   | meet UL508, UL60950, EN60950  |                          |                          |  |
|                       |                                      | Primary-Secondary: 3.0KVac/10mA .Primary-PG:2.5KVac/10mA. Secondary-PG: 0.5KVac/20mA. |   |                          |                          |  |
|                       | Withstand Voltage                    |   | Output-DC/OK: 0.5KVac/1mA   |                          |                          |  |
|                       | Isolation Resistance                 |   | 10M ohms  |                          |                          |  |
|                       | EMC Emission                         |   | Compliance to EN55022, EN55024, FCC PART 15 Class B   |                          |                          |  |
|                       | Harmonic Current                     |   | Compliance to EN61000-3-2, CLASS A  |                          |                          |  |
|                       | EMC Immunity                         |   | Compliance to EN61000-4-2,3,4,5,6,8,11; heavy industry level  |                          |                          |  |
| www.powerld.co        | <u>m</u> Tel:+86-755                 | 5-86051514  | Fax:+86-755-86051389  | Email: tom@powerld.com   | Updated on:2016-6-8 1    |  |



# **POWERLD**<sup>2</sup> 360Watts Single Output Industrial DIN Rail Power Supply

| OTHERS              | MTBF (MIL-HDBK-217F)  | More than 300,000Hrs (25°C, Full load)   |  |  |  |  |
|---------------------|---|--|--|--|--|--|
|                     | Dimension (L*W*H)   | 50*124*127mm   |  |  |  |  |
|                     | Packing   | 12pcs/CTN, 11Kgs/CTN, 0.04cbm  |  |  |  |  |
|                     | Cooling method  | Cooling by free air convection   |  |  |  |  |
| Additional function | Power boost   | 150% of rated current  |  |  |  |  |
|                     | Parallel function   | support  |  |  |  |  |
|                     | DC-OK   | V On: when output voltage is up to 90% of rated output voltage   |  |  |  |  |
|                     |   | V Off: when output voltage is down to 80% of rated output voltage  |  |  |  |  |
|                     | DC-OK relay contact rating  | Max 30V/1A or 60V/0.3A or 30Vac/0.3A Resistive load  |  |  |  |  |
| NOTE                | 1. All parameters NOT specially mentioned are measured at rated input, rated load and 25°C of ambient temperature.                                |  |  |  |  |  |
|                     | 2. Measured at 20MHz of bandw   | 2. Measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uF & 10uF parallel capacitor. |  |  |  |  |
|                     | 3. The power supply is considered as 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" on          |  |  |  |  |  |
|                     | http://www.powerld.com.cn.  |  |  |  |  |  |

新星 POWERLD 360Watts Single Output Industrial DIN Rail Power Supply

# DG-360 Series

| FORERED 300         | Swatts Sing              |                                    |    |
|---------------------|--------------------------|------------------------------------|----|
| Mechanical Spectrum | ecification              | Unit: mm                           |    |
|                     | -127<br>-121.6<br>©<br>© |                                    |    |
| 1.AC terminal bl    |                          |                                    |    |
| Terminal No.        | Function                 | Specs                              |    |
| 1                   | PG                       | 6.25mm, 2pip.corow torminal blocks |    |
| 2 3                 | N<br>L                   | 6.35mm, 3pin screw terminal blocks |    |
| 5                   | L                        |                                    |    |
| 2.DC terminal bl    | ocks installa            | tion information                   |    |
| Terminal No.        | Function                 | Specs                              |    |
| 1                   | DC                       | •                                  |    |
| 2                   | OK                       | 6.35mm 3pin acrow terminal blacks  |    |
| 3~4                 | V+                       | 6.35mm, 3pin screw terminal blocks |    |
| 5~6                 | V-                       |                                    |    |
|                     |                          |                                    |    |
|                     |                          | AC/DC Terminal                     |    |
| Туре                |                          | Screw terminal blocks              |    |
| Solid Wire          |                          | 0.5-6mm <sup>2</sup>               |    |
| Strand Wire         |                          | 0.5-4mm <sup>2</sup>               |    |
| Wire Spec           |                          | AWG20-10 (PG wire >18AWG)          |    |
| Max Wire Diame      |                          | 2.8mm                              |    |
| Recommended         | stripping len            |                                    |    |
| Screwdriver         |                          | 3.5mm Straight or Cross Screwdriv  | er |
|                     | -                        |                                    |    |

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**Recommended Torque** 

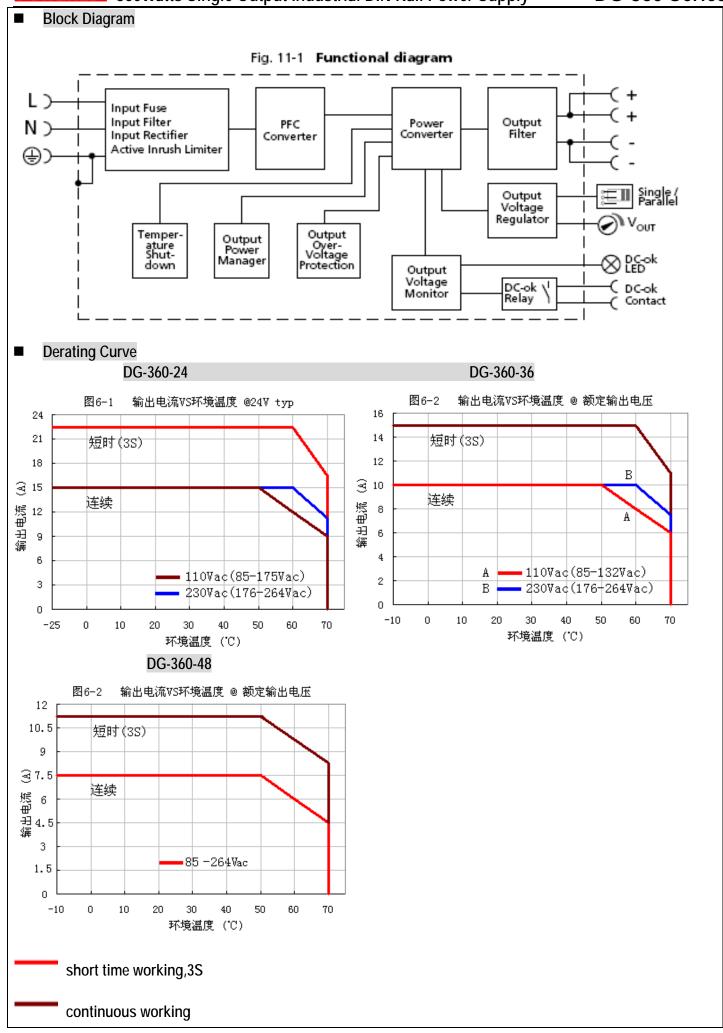
Tel:+86-755-86051514 Fax:+86-755-86051389

1NM

Email: tom@powerld.com

# 新星 POWERLD 360Watts Single Output Industrial DIN Rail Power Supply

# **DG-360 Series**





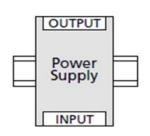
# Mounting method instruction

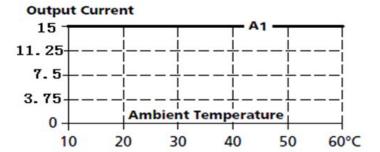
A1 is recommended output current

A2 is the allowed max output current (PSU lifetime is around half of A1)

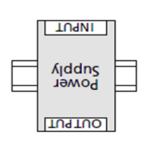
Below curves are tested under 230Vac(179~264Vac), when 110Vac input(85~175Vac), all derating points drops 10 °C DG-360-24

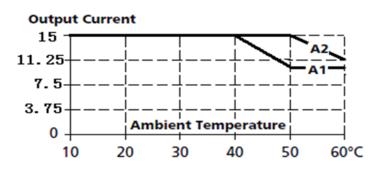
# Mounting A



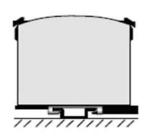


#### Mounting B

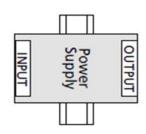


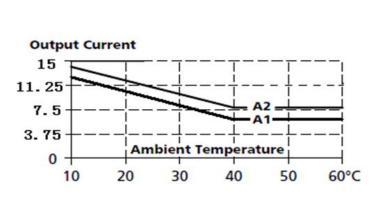


# Mounting C



# Mounting D





Ambient Temperature

40

30

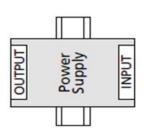
Ambient Temperature

40

50

30

#### Mounting E



20

**Output Current** 

15 11.25

> 7.5 3.75

> > 0 + 10

**Output Current** 

15 11.25 7.5 3.75

0 -

10

20

60°C

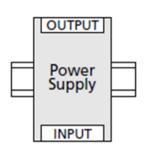
50

60°C

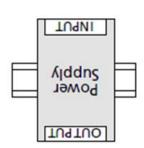
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# **POWERLD**<sup>2</sup> 360Watts Single Output Industrial DIN Rail Power Supply

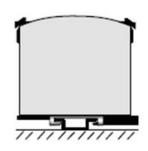
DG-360-36 Mounting A



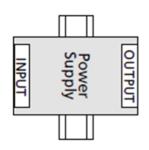
## Mounting B



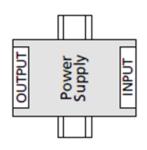
### Mounting C

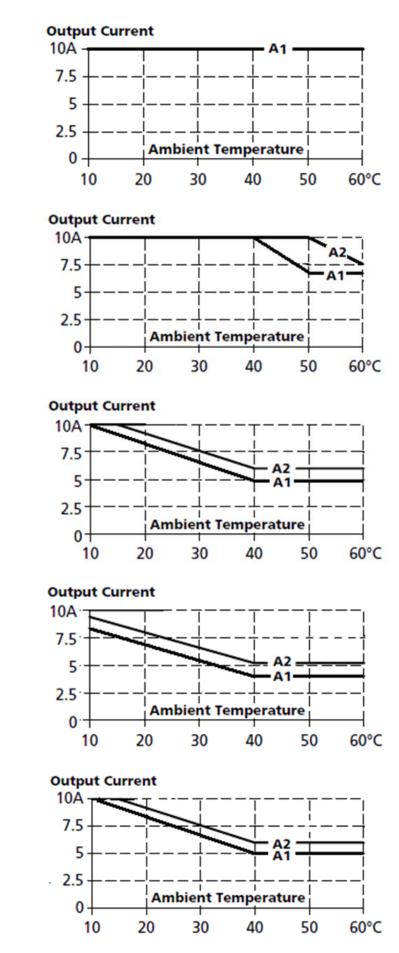


# Mounting D



# Mounting E

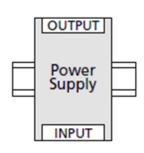




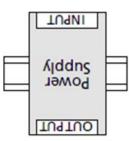
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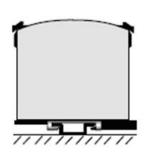
## DG-360-48 Mounting A



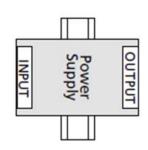








Mounting D



Mounting E

