



RLH Industries, Inc.

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PRODUCT  
DATA SHEET

DS-073 2025-0714

## 90W AC/DC 24V+12V Dual Output Power Supply

RD21003F

### Compact, DIN or Wall mountable, with Universal Input

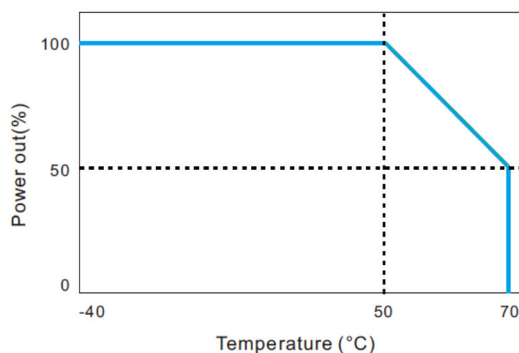
RLH Industries power supplies are commonly used in communications and industrial control environments. The dual output can provide reliable power to a wide range of industrial equipment.

The RLH 90 Watt AC/DC 24V +12V Dual DC Output Power Supply features a universal input of 100-240VAC or 120-370VDC. Designed for industrial use and operates over a wide temperature range. Includes a powder coated steel housing that can be DIN or wall mounted.

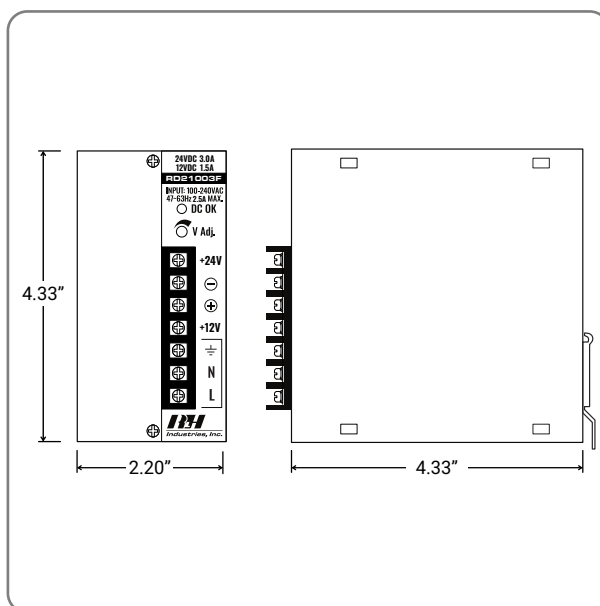
### Features

- Dual Independent 24V and 12V DC Outputs
- Universal Input Range 100-240VAC/120-370VDC
- E24VDC and 48VDC Output models available
- Short circuit, overload, and over voltage protection
- Wide operating temperature range of -40°C to 70°C (-40° to 158°F)
- DIN Rail or Wall Mountable
- Cooling by free air convection
- 100% full load tested

### Derating Curve



AC/DC 24V+12V Switching 90 Watt Power Supply



Dimensions





## General Specifications

Switching Frequency	85kHz
Isolation Voltage	<b>Input-Output:</b> 3000VAC /4242VDC
	<b>Input-FG:</b> 1500VAC/2121VDC
	<b>Output-FG:</b> 500VAC/ 710VDC
Isolation Resistance	100MΩ when Input-Output @500VDC
Temperature	<b>Operating:</b> -40°C~50°C (-40°F~122°F) Full Load , 50°C~70°C (122°F~158°F) derating curve applies
	<b>Storage:</b> -40°C~+85°C (-40°F~185°F)
Derating	2.5% per degree from 50°C to 70°C
Temperature Coefficient	±0.04% of output voltage per °C
Relative Humidity	5%~95% RH, Non-condensing
Attitude During Operation	2000m
Installation Position	Vertical
Vibration	Random Vibration, 10~500Hz. 3 axis
EMC Standards	EN55011 Class B, EN55022 Class B, EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8 (Magnetic Field), EN61000-4-11 (EMC)
Safety	CE, UL Listed, RoHS
MTBF	60,000 hrs Min. Per MIL-HDBK-217F, 25°C GB
Warranty	3 Years - Visit <a href="http://www.fiberopticlink.com">www.fiberopticlink.com</a> for warranty details

## Protection Specifications

Input Fuse:	3.15A/250V
Input Surge Load Protection:	Varistor, IEC6100-4-5
Degree of Protection:	IP20
Short Circuit Protection:	Autorecovery
Over Voltage Protection:	Autorecovery
Rated Over Load Protection:	160~200%
Overload Protection:	Power limited

## Input Specifications

Input Voltage	100~240VAC/120~370VDC
Input Frequency	47~63Hz
Inrush Current (Cold Start)	22A/115VAC 44A/230VAC
Rated Input Current	2.5A Max., Vi=100~240VAC
Leakage Current	Input-output 0.25mA, Inout-FG 3.5mA, Vi=250VAC



## Output Specifications

Output Voltage Accuracy	±1%
Minimum Load	0%
Line Regulation	±1%, measuring from low line to high line rated load
Load Regulation	±2%, measuring from 20% to 100% of rated load 230VAC input
Voltage Trim Range	±10%
Rated Continuous Loading	3.0A @ 24VDC (72 Watts)
	1.5A @ 12VDC (18 Watts)
Hold Up Time	30mS Min., Full load @ 230VAC.
Turn On Time	1300mS
Rise Time	13mS
Fall Time	25mS
Transient Response	Recovery Time: 2mS, Load change 50% to 100%
	Voltage Deviation: 5%, Load change 50% to 100%
Efficiency	80%
Ripple and Noise	<b>24V:</b> 240mVp-p
	<b>12V:</b> 120mVp-p

*\*Note: Measured by using 0.1μF metallized capacitor and 47μF electrolytic capacitor in parallel at rated load and 230VAC input*

## Ordering Information

Description	Part Number
90W AC/DC Dual Output Power, 24V/3.0A + 12V/1.5A, DIN or Wall Mountable	<b>RD21003F</b>

## Contact

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