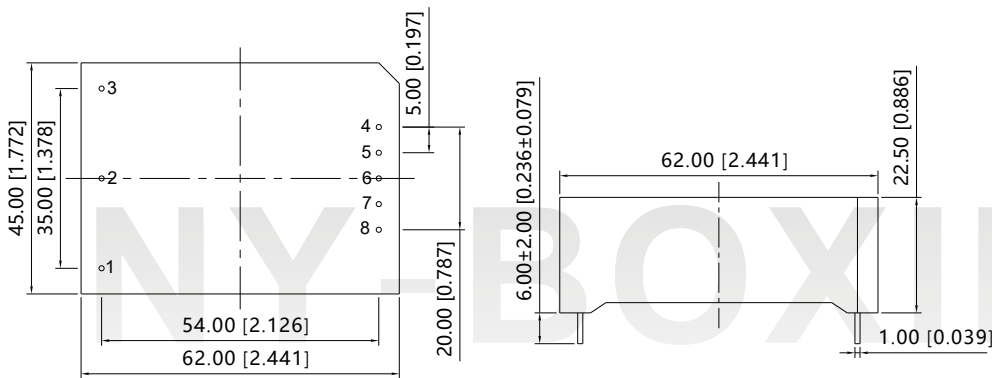


15W AC/DC SMPS
DESCRIPTION


- ★ Wide input AC85~264V & DC100~375V
- ★ Output short circuit, over-current protection
- ★ Compact size, high power density
- ★ I/O isolation test voltage 3k VAC
- ★ Low ripple & noise
- ★ RoHS Compliant
- ★ Industrial grade, high reliability
- ★ Single output, double output, positive and negative output

NR15-Txxxx series is one of Nyboxing's highly efficient green power AC-DC Converter series. They feature ultra-wide wide input range accepting either AC or DC voltage, high efficiency, low power consumption and Class II reinforced insulation.

Dimensions


PIN	管脚定义
1	FG
2	N
3	L
4	+Vo2
5	COM
6	-Vo2
7	+Vo1
8	-Vo1

注: 尺寸单位: mm[inch]
管脚直径公差: ±0.20[±0.008]
其他尺寸公差: ±0.50[±0.020]

Bottom View
Front View
Selection Guide

Part No.	Output Power	Nominal Output Voltage and Current		Efficiency at 230VAC (%) Typ.	Capacitive Load (μF) Max.	Dimensions (L×W×H)
		Vo1/Io1	Vo2/Io2			
NR15-T0512	15W	5V/2000mA	±12V/200mA	75%	2000μF	62.0x45.0x22.5mm

Input Specifications

Item	Operating Conditions	Min	Typ	Max
Input Voltage Range	AC input	85VAC	--	264VAC
	DC input	100VDC	--	375VDC
Input Frequency		47Hz	--	63Hz
Stand-by Power Consumption		--	0.2W	--
Input Current	115VAC	--	330mA	--
	230VAC	--	165mA	--

Output Specifications

Item	Operating Conditions	Min	Typ	Max
Output Voltage Accuracy	Primary output	--	±3%	--
	Secondary output	--	±10%	--
Line Regulation	Full load	Primary output	±1%	--
		Secondary output	±3%	--
Load Regulation	10%~100% Load	Single output	±3%	--
		Dual output (balanced load) ^①	±10%	--
Ripple & Noise ^②	20MHz bandwidth (peak-to-peak value)	--	100mV	--
Short Circuit Protection	Hiccup, continuous, self-recovery			
Over-current Protection	≥110%I _o			
Minimum Load	0		--	--
Start delay time	--		1s	--
Hold-up Time	--		20ms	--

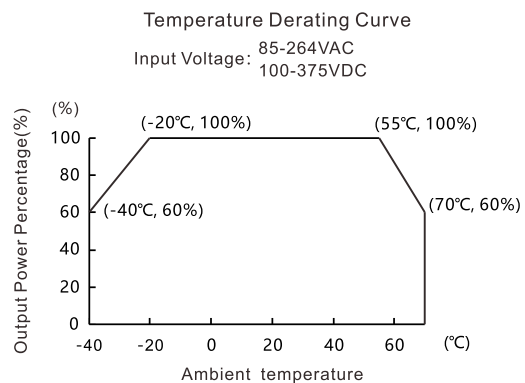
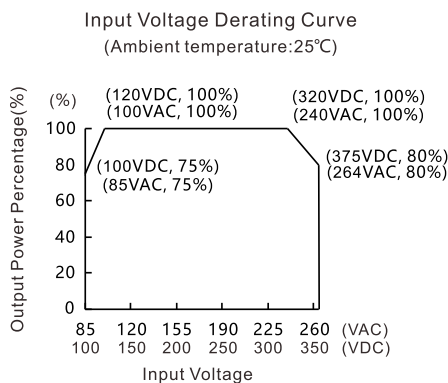
Note:①The balanced load is that the output load of the primary output and the secondary output changes in the same proportion.

②The “parallel cable” method is used for Ripple and noise test, please refer to AC-DC Converter Application Notes for specific information.

General Specifications

Item	Operating Conditions	Min	Typ	Max
Isolation	Electric Strength Test for 1min	--	3000VAC	--
Operating Temperature		-40°C	--	+70°C
Storage Temperature		-40°C	--	+105°C
Storage Humidity		--	--	95%RH
Working frequency		--	65KHz	--
MTBF	MIL-HDBK-217F, 25°C	215,000h		
Casing Material	Black flame-retardant and heat-resistant plastic (UL94-V0)			

Product Characteristic Curve



Design Reference

1 Typical application

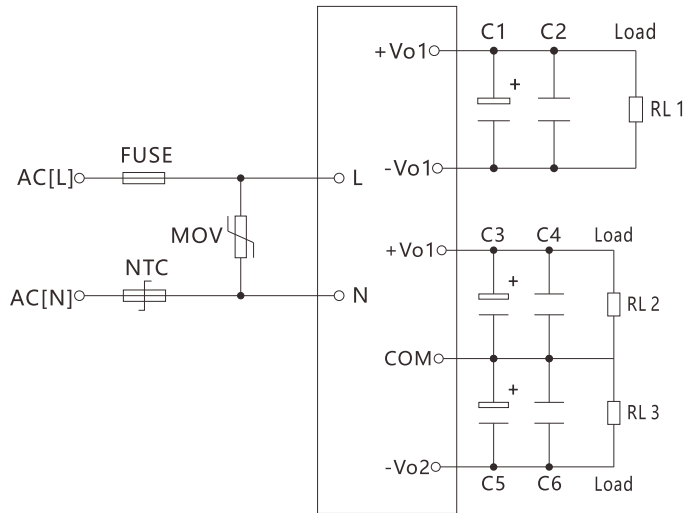


Fig. 1: typical circuit diagram

Note

We recommend using an electrolytic capacitor with high frequency, and low ESR rating for C1 (refer to manufacturer's datasheet). Choose a Capacitor voltage rating with at least 20% margin, in other words not exceeding 80%. C2 is a ceramic capacitor used for filtering high-frequency noise.

2 EMC compliance recommended circuit

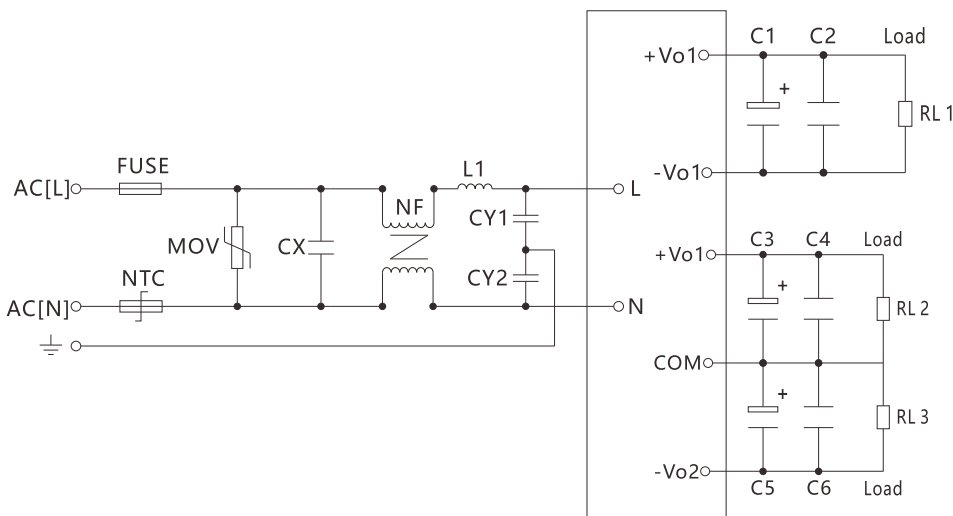


Fig. 2: EMC application circuit with higher requirements

3 Input part: parameter recommendation

Component	Recommended value
FUSE	2.0A/250VAC,slow-blow required)
NTC	5D-9
MOV	471KD10
CX	0.33 μ F/275VAC
L1	330 μ H
NF	10mH-30mH
CY1,CY2	1000pF/250V

4 Output part: parameter recommendation

Number	C1	C3,C5	C2,C4,C6
Parameter	680 μ F/10V	220 μ F/25V	1 μ F/50V

Safety precautions

- 1.If the product is not operated within the required load range, the product performance cannot be guaranteed to comply with all parameters in the datasheet;
2. Unless otherwise specified, parameters in this datasheet were measured under the conditions of Ta=25°C, humidity<75% with nominal input voltage and rated output load;
3. All index testing methods in this datasheet are based on our Company's corporate standards;
4. We can provide product customization service, please contact our technicians directly for specific information;
5. For more product information, please visit our official website (www.gzny-boxing.com) or email us (sales@gzny-boxing.com) .