



**THE DATASHEET OF  
NID100-12**





### ■ Features :

- Economical open frame design
- Wide input range
- High efficiency up to 97%
- Remote ON / OFF control
- Compact size 2.0"x1.082"x 0.472"(SIP package)
- Protections: Short circuit / Overload / Over voltage
- -30~+85°C wide working temperature
- Cooling by free air convection
- Comply to BS EN/EN55032 ClassA without additional components
- Trimming output (optional)
- 3 years warranty

### ■ GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

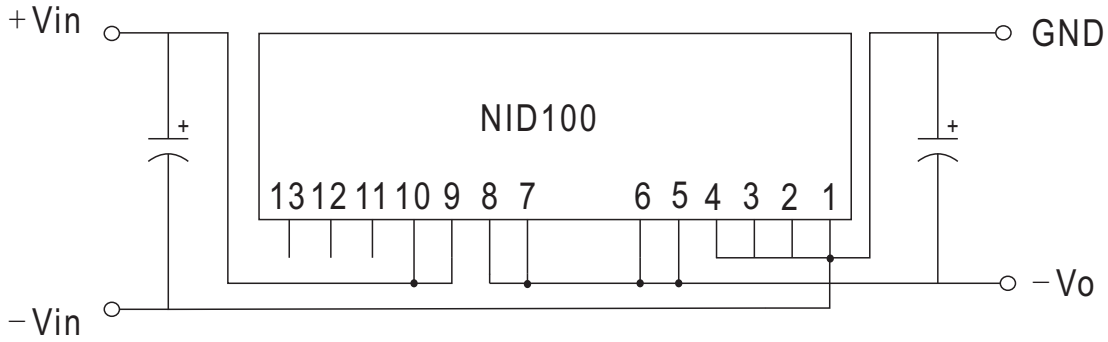


### SPECIFICATION

ORDER NO.	NID100-5		NID100-12		NID100-15		NID100-24		
OUTPUT	DC VOLTAGE	5V	12V	15V	24V				
	RATED CURRENT	11A	7.5A	6.5A	4.2A				
	RATED POWER	55W	90W	97.5W	100.8W				
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	150mVp-p	200mVp-p				
	LINE REGULATION Note.3	±0.5%	±0.5%	±0.5%	±0.5%				
	LOAD REGULATION Note.4	±0.5%	±0.5%	±0.5%	±0.5%				
	VOLTAGE TOLERANCE	±2.0%	±2.0%	±2.0%	±2.0%				
	SWITCHING FREQUENCY (Typ.)	200KHz							
EXTERNAL CAPACITANCE LOAD (max.)	100uF/16V low ESR	68uF/25V low ESR	47uF/50V low ESR	47uF/50V low ESR					
INPUT	VOLTAGE RANGE	10.5 ~ 53VDC	20 ~ 53VDC	20 ~ 53VDC	30 ~ 53VDC				
	NORMAL VOLTAGE	24VDC (or 48VDC)	24VDC (or 48VDC)	24VDC (or 48VDC)	48VDC				
	EFFICIENCY (Typ.)	24Vin	93% (12/24VDC)	96%	97%	-----			
		48Vin	92%	95%	95%	96%			
	DC CURRENT	Full load	5400mA/12VDC	4500mA/24VDC	4600mA/24VDC	2300mA/48VDC			
No load		20mA	30mA	30mA	50mA				
PROTECTION	Fuse recommended (8A)								
PROTECTION	OVERLOAD (Typ.)	120 ~ 300% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed							
	OVER VOLTAGE	6.4 ~ 7.5V	15.6~ 18V	17.5~ 21V	28~ 33V				
	SHORT CIRCUIT	All output equipped with short circuit Protection type : Hiccup mode, recovers automatically after fault condition is removed							
FUNCTION	REMOTE CONTROL	Power on : 1.2VDC < R.C ~ com < 12VDC or open circuit ; power off : R.C ~ com < 0.4VDC or short circuit (PIN5,6,7,8 & PIN13)							
ENVIRONMENT	SAFETY STANDARDS	EAC TP TC 004 approved							
	WORKING TEMP.	-30 ~ +85°C (Refer to "Derating Curve")							
	WORKING HUMIDITY	20% ~ 85% RH non-condensing							
	STORAGE TEMP.	-30 ~ +105°C							
	TEMP. COEFFICIENT	±0.03% / °C (0 ~ 50°C)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes							
SAFETY & EMC	SAFETY STANDARD	BS EN/EN62368-1(LVD)							
	EMC EMISSION	Parameter	Standard		Test Level / Note				
		Conducted	BS EN/EN55032		Class A without external components, Class B with external components				
		Radiated	BS EN/EN55032		Class A without external components, Class B with external components				
	EMC IMMUNITY	BS EN/EN55035							
		Parameter	Standard		Test Level / Note				
		Radiated	BS EN/EN61000-4-3		Level 2, 3V/m ; criteria A				
		EFT / Burst	BS EN/EN61000-4-4		Level 2, 1KV ; criteria A				
Surge		BS EN/EN61000-4-5		Level 2, 1KV/Line-Line, criteria A					
Conducted	BS EN/EN61000-4-6		Level 2, 3V ; criteria A						
OTHERS	MTBF	17290.5K hrs min. Telcordia SR-332 (Bellcore) ; 1000.6K hrs min. MIL-HDBK-217F (25°C)							
	DIMENSION	50.8*27.5*12mm or 2.0*1.082*0.472" inch (L*W*H)							
	WEIGHT	35g;280psc/10.8Kg/0.94CUFT							
NOTE	<p>1.All parameters are specified at normal input, rated load, 25°C 70% RH Ambient.</p> <p>2.Ripple &amp; noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf &amp; 47uf capacitor.</p> <p>3.Line regulation is measured from low line to high line at rated load.</p> <p>4.Load regulation is measured from 10% to 100% rated load.</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p>								

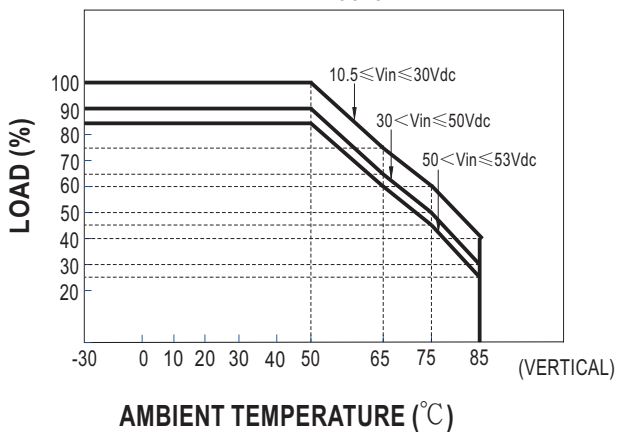
■ **Connection diagram to obtain negative output voltage**

Note: input voltage must be  $< 30\text{VDC}$ .

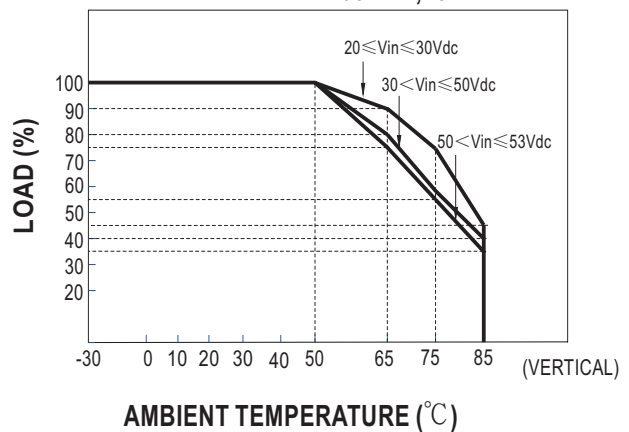


■ **Derating Curve**

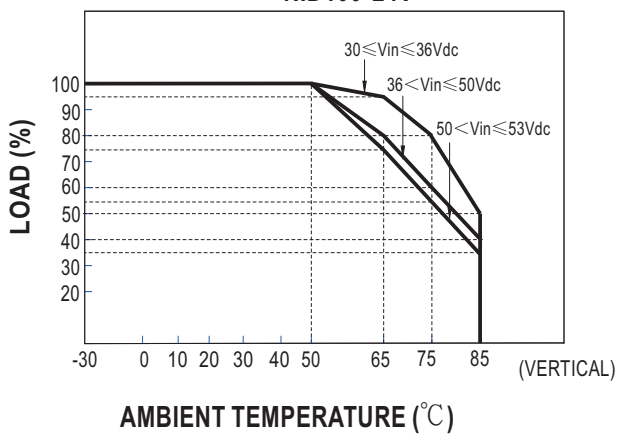
**NID100-5V**



**NID100-12V,15V**

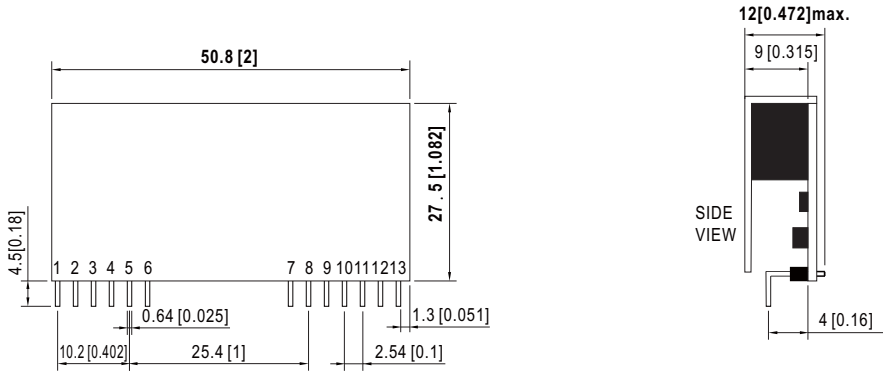


**NID100-24V**



**Mechanical Specification**

Unit:mm(inch)

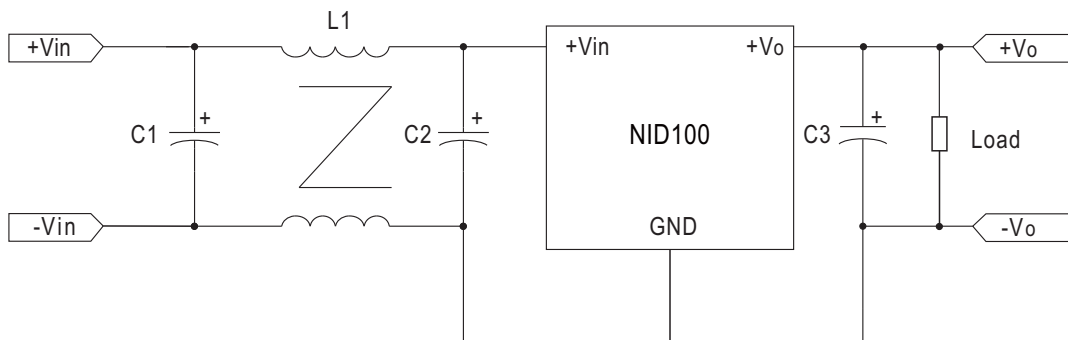


**Pin Configuration**

Pin No.	Pin_Out
1,2,3,4	+Vout
5,6,7,8	Com
9,10	+Vin
11	N.C.
12	Trim(optional)
13	R.C.

**EMC Suggestion Circuit**

※Comply to EN55032 Class A without additional componenets ,required external componenets to meet Class B emisson are as below:



C1/C2	L1	C3
120 $\mu$ F/63V	15 $\mu$ H(NiZn)	22 $\mu$ F/35V

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- [View NID100-12 on WIN SOURCE](#)
- [Mean Well Enterprises Co., Ltd. Information](#)

## Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management