



## 65W DC-DC Non-Isolated Regulated Converter

NID65 series



## ■ Features :

- Economical open frame design
- Wide input range
- High efficiency up to 97%
- Remote ON / OFF control
- Compact size 2.0"×1.024"×0.433"(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.	NID65-5		NID65-12		NID65-15		NID65-24				
OUTPUT	DC VOLTAGE		5V		12V		15V		24V		
	CURRENT RANGE		0 ~ 6.5A		0 ~ 4.9A		0 ~ 4.3A		0 ~ 2.7A		
	RATED POWER		32.5W		58.8W		64.5W		64.8W		
	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 12VDC 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	3200mA/12VDC		2700mA/24VDC		3000mA/24VDC		1500mA/48VDC		
No load		20mA		30mA		30mA		50mA			
PROTECTION		Fuse recommended (5A)									
PROTECTION	OVERLOAD (Typ.)		120 ~ 250% 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 : Shut off o/p voltage, clamp by TVS diode						
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 & PIN11)								
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 ~ 55°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		16602.6K hrs min. Telcordia SR-332 (Bellcore) ; 890.7K hrs min. MIL-HDBK-217F (25°C)								
	DIMENSION		50.8*26*11mm or 2.0**1.024**0.433" inch (L*W*H)								
	WEIGHT		19g;280psc/6.32Kg/0.94CUFT								
NOTE	1.All parameters are specified at normal input, rated load, 25°C 70% RH Ambient.		2.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.		3.Line regulation is measured from low line to high line at rated load.		4.Load regulation is measured from 10% to 100% rated load.		※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a>		

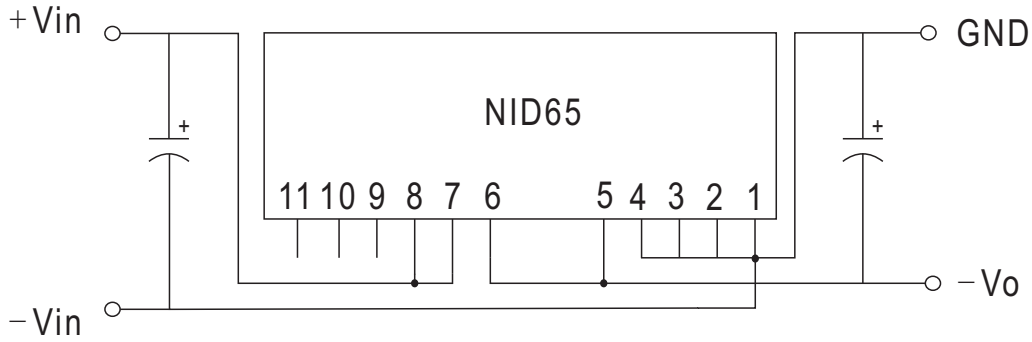


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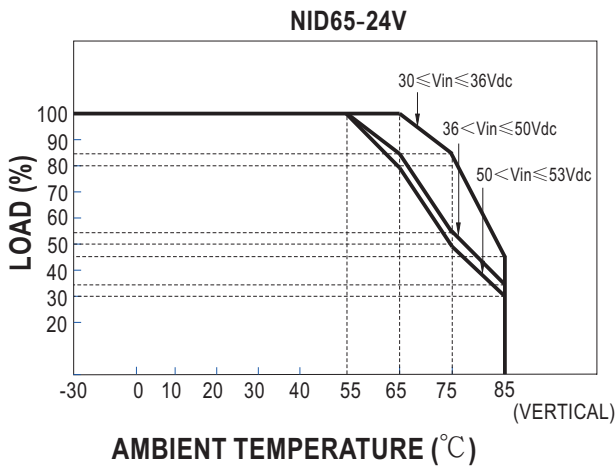
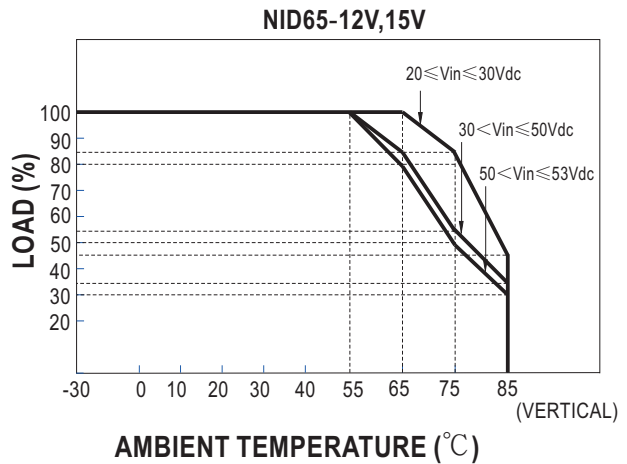
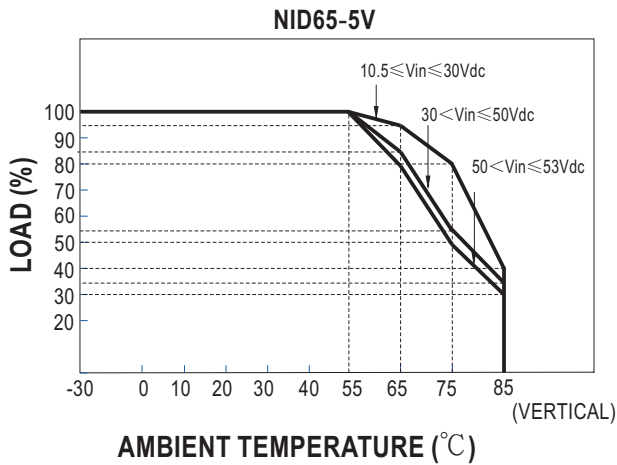
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### ■ Connection diagram to obtain negative output voltage

Note: input voltage must be < 30VDC.



### ■ Derating Curve



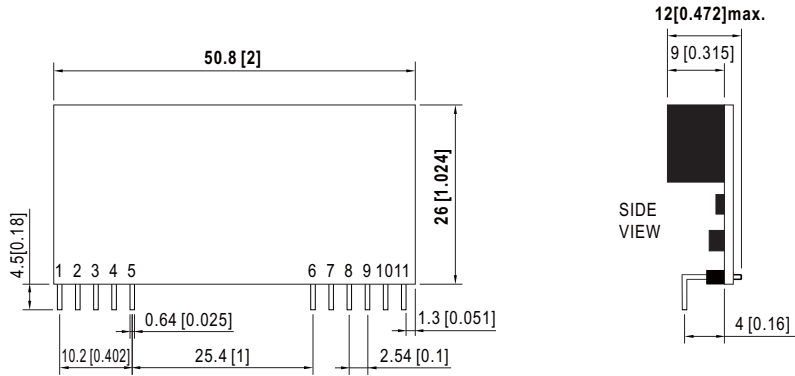


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## Mechanical Specification

Unit:mm(inch)

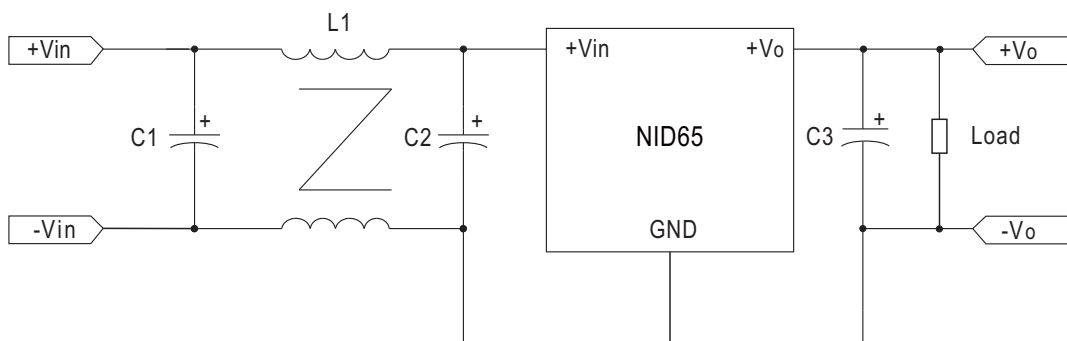


## Pin Configuration

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

## EMC Suggestion Circuit

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



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