

PRODUCT DATASHEET

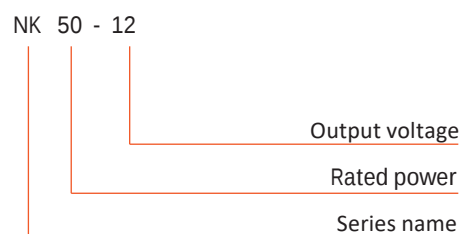
- Product characteristics
- Wide voltage input (90-264VAC)
- Protection:OCP/OVP/Short circuit protection
- Operating temperature range -30℃ to +60℃
- 3kV isolation voltage
- 100% high temperature aging and testing
- 3 years quality assurance



MODEL LIST

Model	Input voltage	Rated power	Output voltage	Voltage adjustable range	Rated current	Ripple & Noise	efficiency
NK50-12	90-264Vac	50.4W	12V	10.2-13.8V	4.2A	120mV	85%
NK50-15	90-264Vac	51W	15V	13.5-18V	3.4A	120mV	85%
NK50-24	90-264Vac	52.8W	24V	21.6-28.8V	2.2A	150mV	86%
NK50-36	90-264Vac	52.2W	36V	32.4-39.6V	1.45A	200mV	86%
NK50-48	90-264Vac	52.8W	48V	43.2-52.8V	1.1A	200mV	86%

NAMING CONVENTION

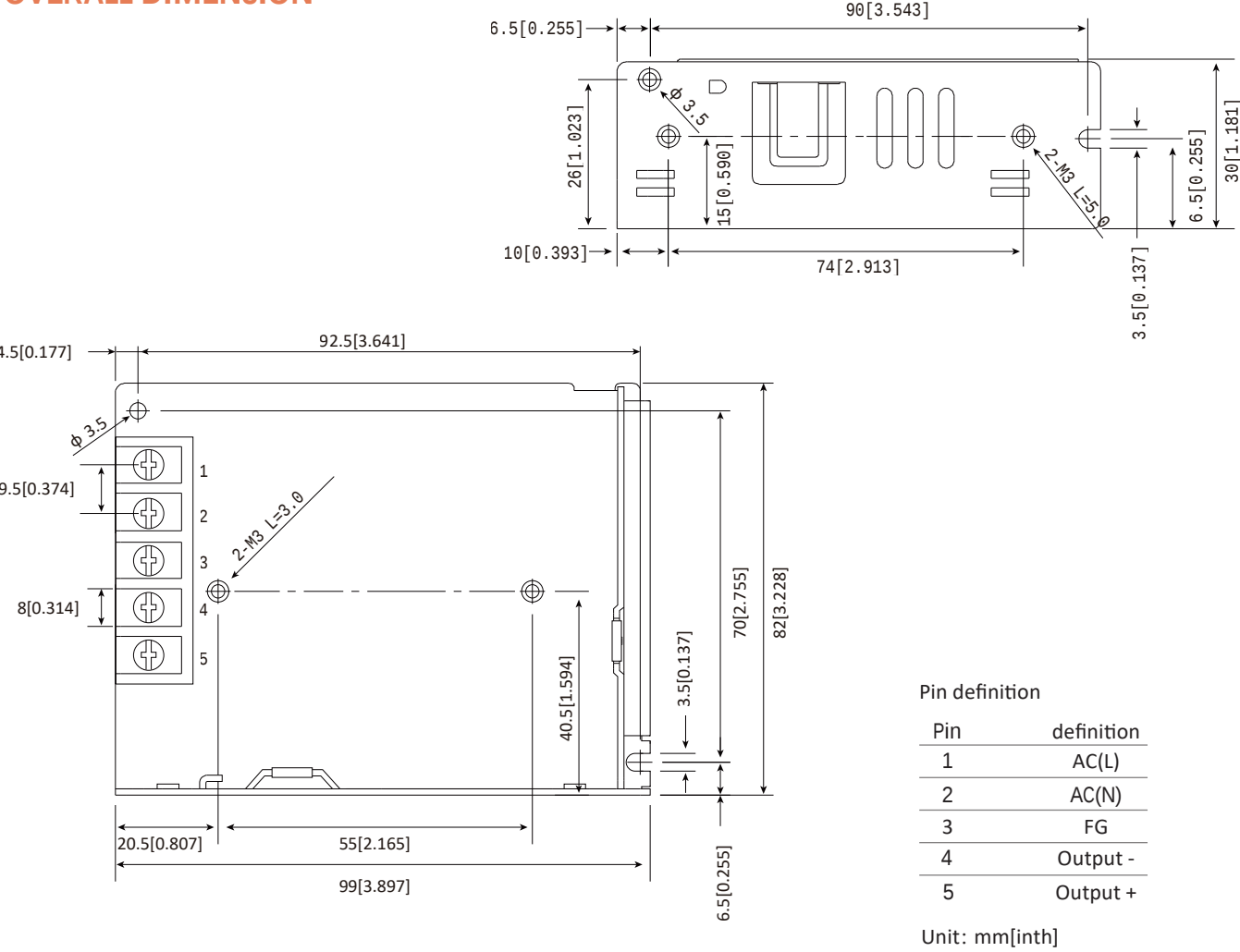


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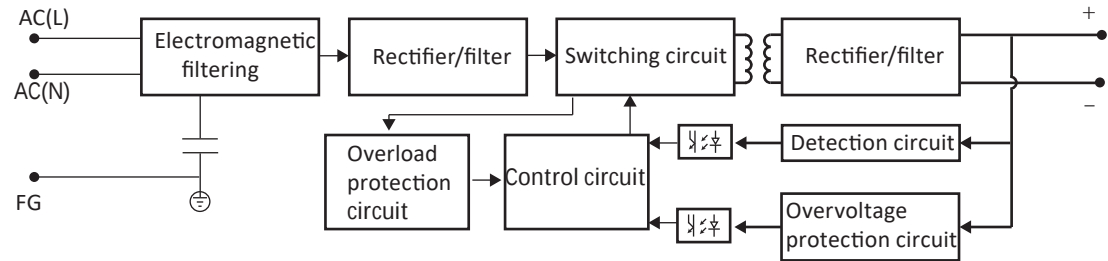
TECHNICAL PARAMETER

Output characteristic	Output voltage accuracy	±2.0%				
	Linear adjustment rate	±0.5%				
	Load adjustment rate	±1.5%				
	Start, rise time (typical)	≤2500ms, ≤50ms/230VAC Full Load				
	Holding time (typical value)	≥20ms/230VAC Full Load				
Input characteristic	Input voltage range	90-264VAC				
	Input frequency	47-63Hz				
	Input current (typical)	0.95A/115VAC 0.56A/230VAC				
	Impulse current (typical)	Cold start 45A/230VAC				
	Leakage current (typical)	<1mA/240VAC				
Protective characteristic	Overload protection	110-145% of rated power, hiccup mode, can automatically return to normal work after abnormal load removal				
	Overvoltage protection	Dual voltage loop voltage limiting, when the main voltage loop failure causes the output voltage to rise, the secondary voltage loop (overvoltage protection loop) works in real time, limiting the output voltage to a safe value range				
		Model	NK50-12	NK50-15	NK50-24	NK50-36 NK50-48
		Guard point	13.5-16V	16.8-19.5V	27-32V	40-48V 53-60V
	Short circuit protection	Power supply protection after short circuit in the output end. After eliminating short circuit, it can automatically return to normal operation				
Working environment	Operating temperature	-30℃ to +60℃ (refer to derating curve)				
	Working humidity	20-90%RH non-condensing				
	Storage temperature	-40℃ to +80℃, 10-95% RH				
	Temperature drift coefficient	0.03%/(0℃-50℃)				
	Vibration coefficient	10-500Hz, 2G10 minutes/cycle, X, Y, Z axis 60 minutes each				
Safety and electromagnetic compatibility	Safety standard	UL1012, EN62368, UL62368				
	Insulation voltage	I/P-O/P: 3.0kVAC I/P-FG: 1.5kVAC O/P-FG: 0.5kVAC				
	Insulation resistance	I/P-O/P,I/P-FG,O/P-FG: >100M Ohms/500VDC 25℃ 70% RH				
	Conduction & Radiation	EN55011, EN55022 (CISPR22)				
	ESD	IEC/EN 61000-4-2 level 4 Contact ±8kV/Air ±15kV				
	Radiated Susceptibility	IEC/EN 61000-4-3				
	EFT	IEC/EN 61000-4-4 level 4 4kV				
	SURGE	IEC/EN 61000-4-5 level 4 2kV				
other	MTBF	200K hrs min. MIL-HDBK-217F(25)				
	Volume	99*82*30mm (L*W*H)				
	Package	60 PCS/box 15KG/ box				
Remark	The above data are measured at TA=25℃, humidity <75%, nominal input voltage 230VAC and rated output load unless otherwise specified.					
	Ripple and noise measurement method: a 300mm twisted pair wire is used, and the terminal should be connected in parallel with a 0.1uF high-frequency ceramic capacitor and a 47uF electrolytic capacitor, and measured at 20Mhz bandwidth.					
	The power supply is regarded as a component in the system and needs to be verified for electromagnetic compatibility with the terminal device.					

OVERALL DIMENSION

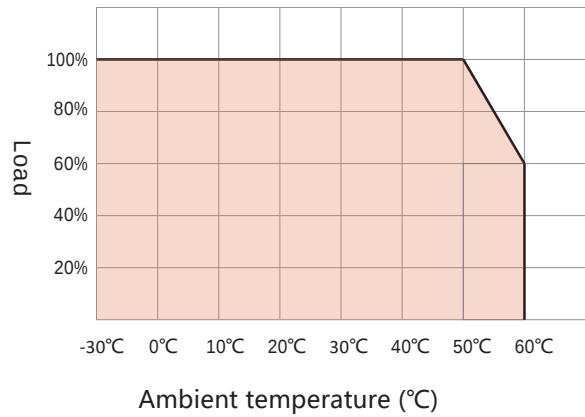


PRODUCT FRAME DRAWING



DERATING CURVE

Temperature derating curve



Input voltage reduction curve

