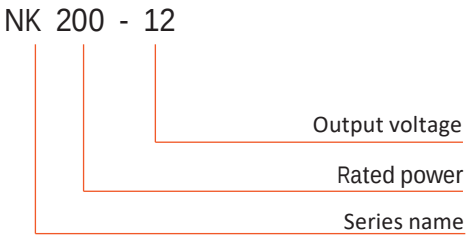
PRODUCT DATASHEET

- Product characteristics
- Wide voltage input (90-132VAC180-264Vac)
- 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
NK200-12	90-132Vac 180-264Vac Switching through a switch	200W	12V	10.2-13.8V	17A	150mV	85%
NK200-15		200W	15V	13.5-18V	14A	150mV	86%
NK200-24		200W	24V	21.6-28.8V	8.8A	150mV	87%
NK200-36		200W	36V	32.4-39.6V	5.9A	200mV	88%
NK200-48		200W	48V	43.2-52.8V	4.4A	200mV	88%

NAMING CONVENTION

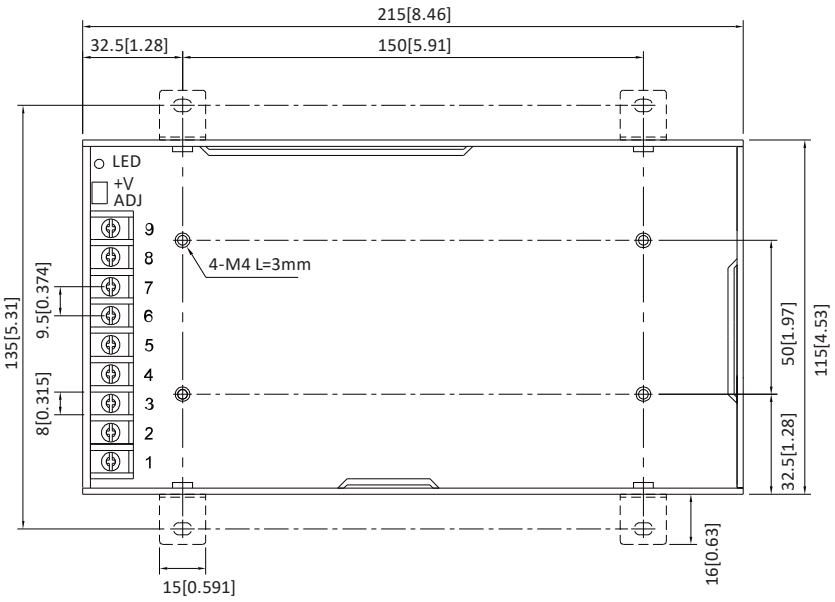


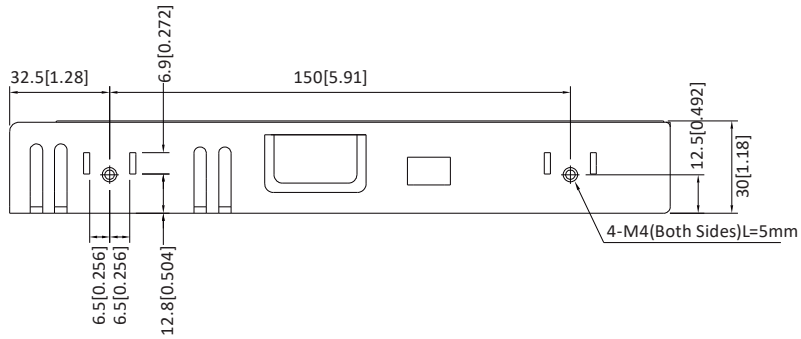
TECHNICAL PARAMETER

Output characteristic	Output voltage accuracy	±2.0%
	Linear adjustment rate	±1.0%
	Load adjustment rate	±1.5%
	Start, rise time (typical)	≤1500ms, ≤50ms/230VAC Full Load
	Holding time (typical value)	≥120ms/230VAC Full Load
Input characteristic	Input voltage range	90-132VAC/180-264Vac Switching through a switch
	Input frequency	47-63Hz,440Hz Max
	Input current (typical)	3.2A/115VAC 2.0A/230VAC
	Impulse current (typical)	Cold start 60A/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	12-36V hiccup mode, can automatically recover after removing abnormal conditions; 48V shutdown output voltage, restart to restore
	Short circuit protection	Power supply protection after short circuit in the output end. After eliminating short circuit, it can automatically return to normal operation
	Over Temperature Protection	12-36V hiccup mode, can automatically recover after the temperature drops; 48V shutdown output voltage, restart to restore
Working environment	Operating temperature	-25℃ to +70℃ (refer to derating curve)
	Working humidity	10-85%RH non-condensing
	Storage temperature	-40℃ to +105℃, 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	IEC62368, 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) class A
	ESD	IEC/EN 61000-4-2 level 4 Contact ±8kV/Air ±15kV
	Radiated Susceptibility	IEC/EN 61000-4-3 level 4
	EFT	IEC/EN 61000-4-4 level 4 4kV
	SURGE	IEC/EN 61000-4-5 level 4 2kV
other	MTBF	165K hrs min. MIL-HDBK-217F(25)
	Volume	215*115*30mm (L*W*H)
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.	

Model	NK200-12	NK200-15	NK200-24	NK200-36	NK200-48
Guard point	13.5-16V	16.8-19.5V	27-32V	40-48V	53-60V

OVERALL DIMENSION



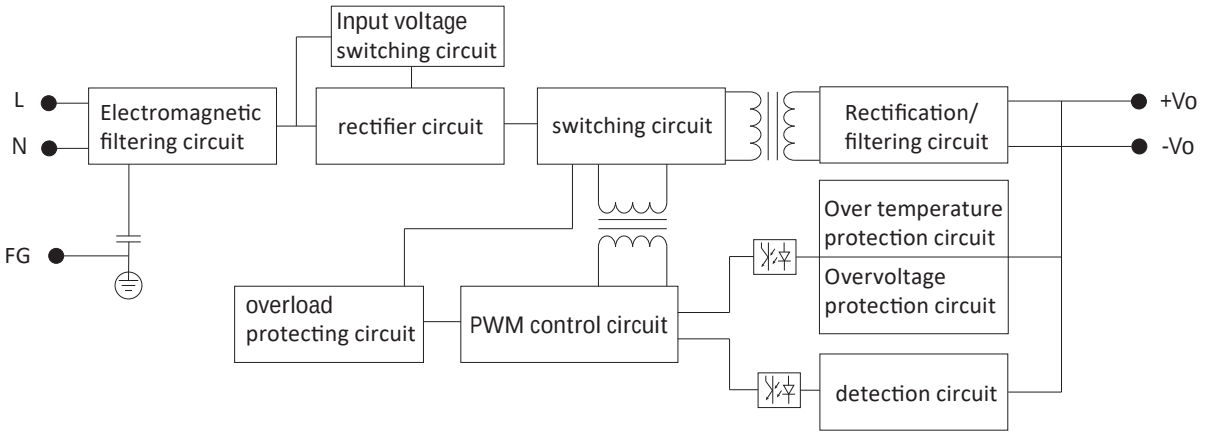


Pin definition

Pin	definition
1	AC(L)
2	AC(N)
3	FG
4 5 6	Output -
7 8 9	Output +

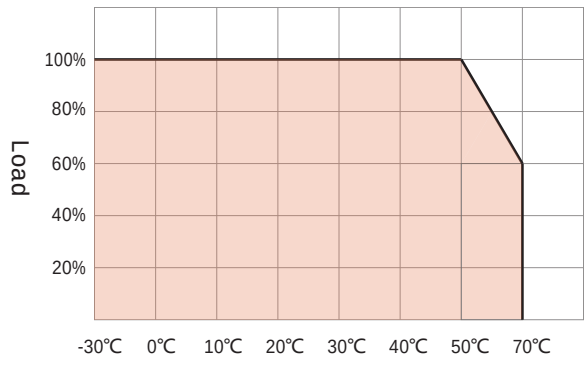
Unit: mm[inth]

PRODUCT FRAME DRAWING

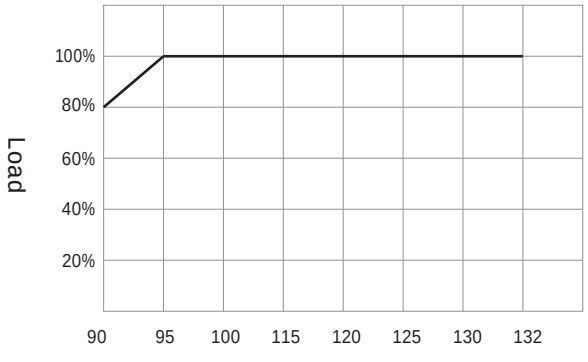


DERATING CURVE

Temperature derating curve



Input voltage reduction curve
90-132Vac



Input voltage reduction curve
180-264Vac