



2016-V1.0-1026

Specifications

AC-DC Switching Mode Power Supply

NK-200 Series, 200W

PAIRUI ELECTRONICS

No. 545 Museum Road
Yangzhou, Jiangsu
China 225009

Tel: 86 (514) 8279 1592

Fax: 86 (514) 8769 3159

2016

AC-DC Switching Mode Power Supply

NK-200 SERIES, SINGLE OUTPUT, 200W

Features

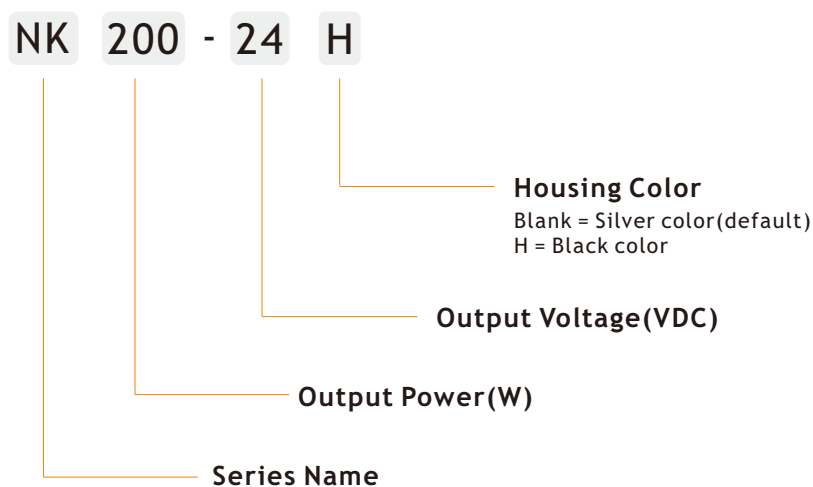
- 3 Year Warranty
- AC Input Range Selected by Switch(90-132/180-264Vac)
- 100% Full Load Burn-in Test
- Cooling by Free Air Convection
- Ultra-Slim Size
- Built-in EMI Filter
- LED Indicator for Power On
- All Round Protections: Short Circuit, Over Voltage, Over Load, and Over Temperature



Applications

- ✓ Process Control
- ✓ Home Appliance
- ✓ Factory Automation
- ✓ Other Industrial Applications

Electrical



Electrical

Part Number	Nominal Input Voltage	Output Voltage	Output Current	Ripple (Typ.)	Efficiency (Typ.)	Certificate
NK200-5	100-240VAC	5V	40A	100mV	87%	CE
NK200-12	100-240VAC	12V	17A	120mV	87%	CE
NK200-15	100-240VAC	15V	14A	120mV	88%	CE
NK200-24	100-240VAC	24V	8.8A	120mV	89%	CE
NK200-36	100-240VAC	36V	5.9A	200mV	89%	CE
NK200-48	100-240VAC	48V	4.4A	200mV	90%	CE

- NOTE:**
1. The ripple values are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with 0.1uF & 47uF parallel capacitor under ambient temperature 25°C at rated input voltage and rated load;
 2. The efficiency values are measured under ambient temperature 25°C at rated input voltage and rated load.

INPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Input voltage	Selected by switch	90 176		132 264	Vac Vac
Input frequency		47		63	Hz
Inrush current	Cold start, Vin=230Vac		60		A
Leakage current	Vin=240Vac			1	mA

OUTPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Output voltage adjustable range			±10		%
Minimum load		0			A
Line regulation	Vin from 100Vac to 240Vac			±0.5	%
Load regulation	Vout=5V Vout=12-48V		2		%
			1		%
Rise time	Full load, Vin=115Vac Full load, Vin=230Vac		50		ms
			50		ms
Hold up time	Full load, Vin=115Vac Full load, Vin=230Vac		15		ms
			10		ms

Protection

Short circuit	Hiccup mode, it will recover automatically after fault condition is removed
Overload	105-150%, hiccup mode, it will recover automatically after fault condition is removed
Over voltage	115-150%, hiccup mode, it will recover automatically after fault condition is removed
Over temperature	Hiccup mode, it will recover automatically after fault condition is removed

Environment

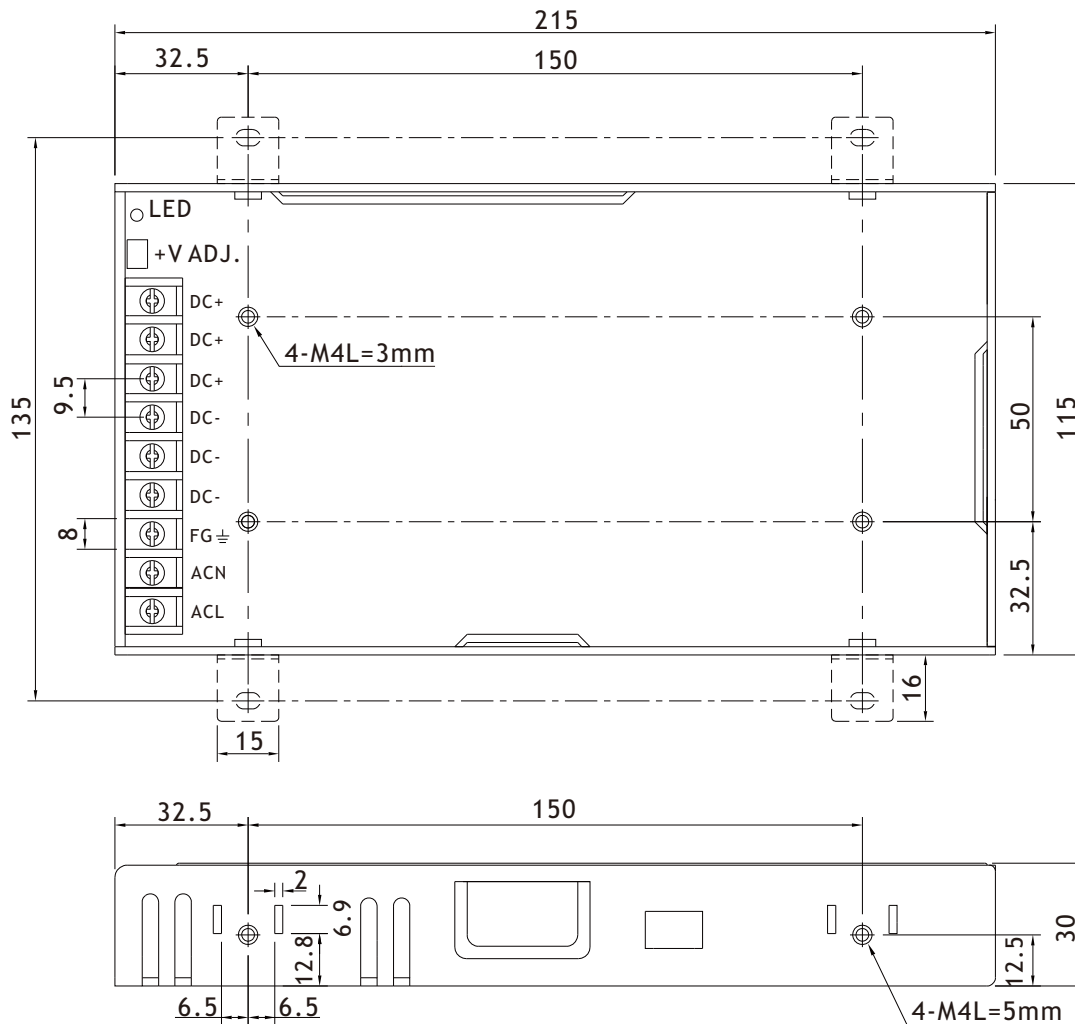
PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Ambient operating temperature	Startup at rated voltage (Derating required)	-25		+70	°C
Operating relative humidity	Non condensing	20		95	%
Storage temperature	Humidity 10 ~ 95% RH	-40		+85	°C
MTBF	Full load, 220Vac input, 25°C ambient temperature	200			Khrs
Cooling	Free air convection				
Dimension(W x H x D)	215.0 x 115.0 x 30.0mm (8.46 x 4.53 x 1.18inch)				
Weight	700g				
Packing	15pcs/12kg/0.7cuft/carton Carton size 620 x 260 x 175mm(LxWxH)				

Safety/EMC

Isolation voltage	I/P-O/P: 3KVac, I/P-FG: 1.5KVac, O/P-FG: 0.5KVac
Safety	Design in accordance to UL60950, EN60950, UL8750, EN61347, EN62493
EMC	EN 55015:2013+A1:2015 EN 61000-3-2 EN 61000-3-3 EN 61547:2009

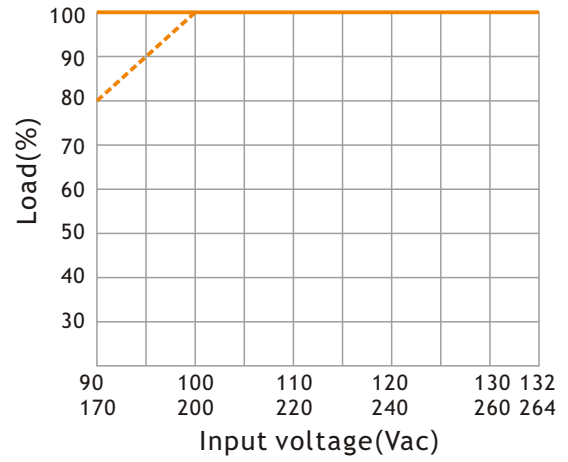
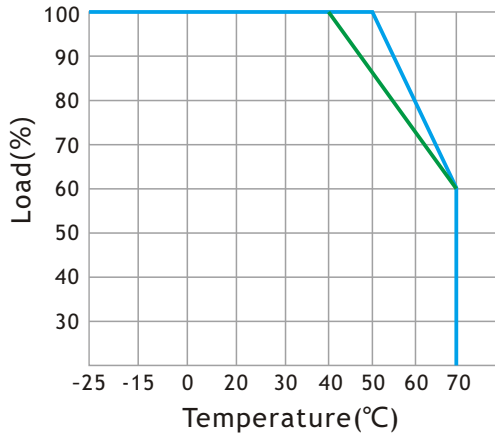
NOTE: Unless otherwise specified, all the above parameters are measured at ambient temperature of 25°C and Vin=100Vac to 240Vac.

Mechanical



Unit: mm
Tolerance: ±1.0

Electrical Curve



— 12-48Vdc Output
— 5Vdc Output

— 180-264Vac Input
- - - 90-132Vac Input

Block Diagram

