



2016-V1.0-1026

# Specifications

---

**AC-DC Switching Mode Power Supply**

**NK-35 Series, 35W**

**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-35 SERIES, SINGLE OUTPUT, 35W

### Features

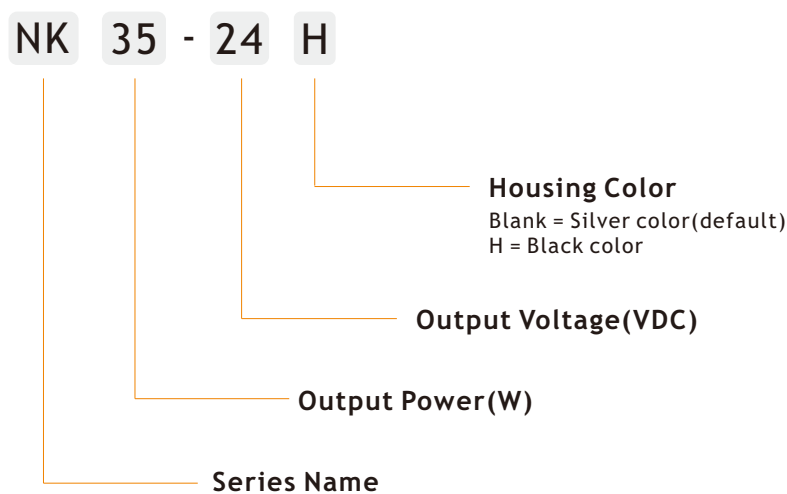
- 3 Year Warranty
- Universal Input 90~264Vac
- 100% Full Load Burn-in Test
- Cooling by Free Air Convection
- Ultra-Slim Size
- Built-in EMI Filter
- LED Indicator for Power On
- All Round Protections: Short Circuit, Over Voltage, Over Load



### 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
NK35-5	100-240VAC	5V	7A	80mV	82%	CE
NK35-12	100-240VAC	12V	3A	120mV	83%	CE
NK35-15	100-240VAC	15V	2.4A	120mV	84%	CE
NK35-24	100-240VAC	24V	1.5A	120mV	86%	CE
NK35-36	100-240VAC	36V	1A	200mV	87%	CE
NK35-48	100-240VAC	48V	0.8A	200mV	88%	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		90 125		264 370	Vac Vdc
Input frequency		47		63	Hz
Inrush current	Cold start, Vin=230Vac		45		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=5Vdc Vout=12/24/36/48Vdc		2		%
			1		%
Rise time	Full load, Vin=115Vac Full load, Vin=230Vac		30		ms
			30		ms
Hold up time	Full load, Vin=115Vac Full load, Vin=230Vac		30		ms
			11		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%, shut-off output voltage, the power supply will recover after the power is turned-on again

## Environment

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Ambient operating temperature	Startup at rated voltage (Derating required)	-30		+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)	99.0 x 82.0 x 30.0mm (3.90 x 3.23 x 1.18inch)				
Weight	230g				
Packing	60pcs/15kg/0.7cuft/carton Carton size 620 x 260 x 175mm(LxWxH)				

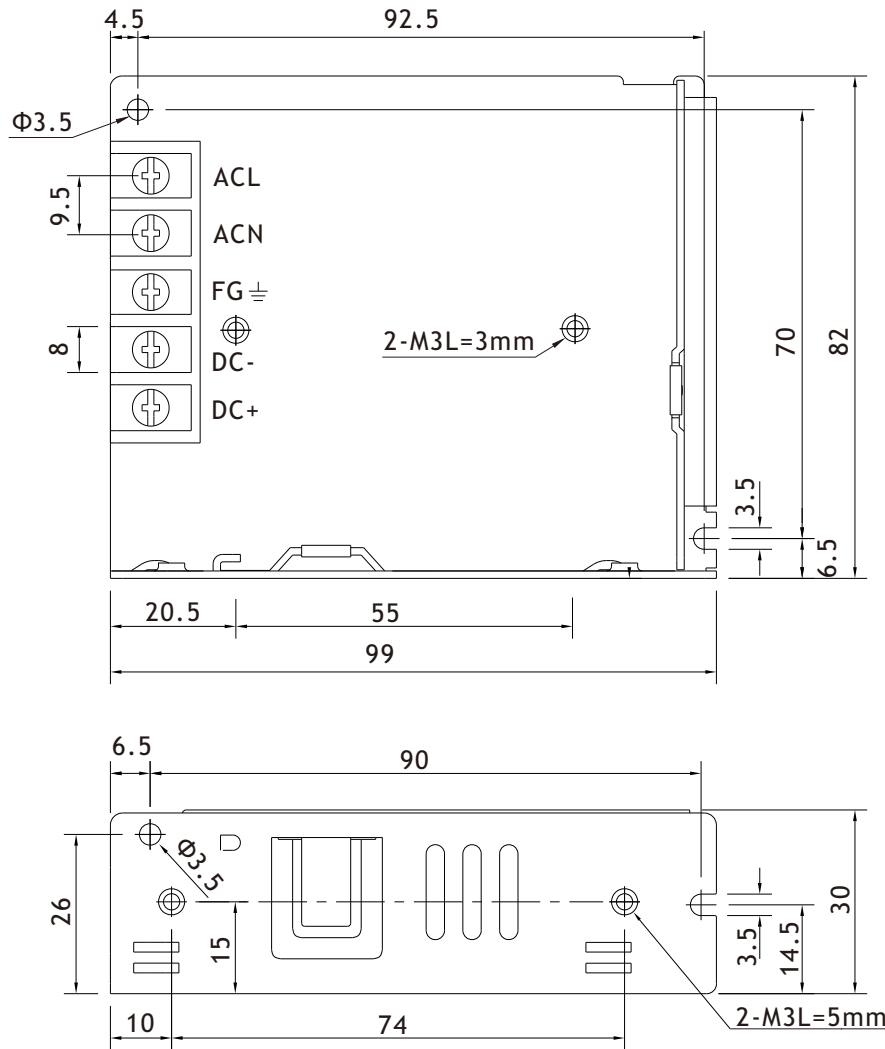
Safety/EMC

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.

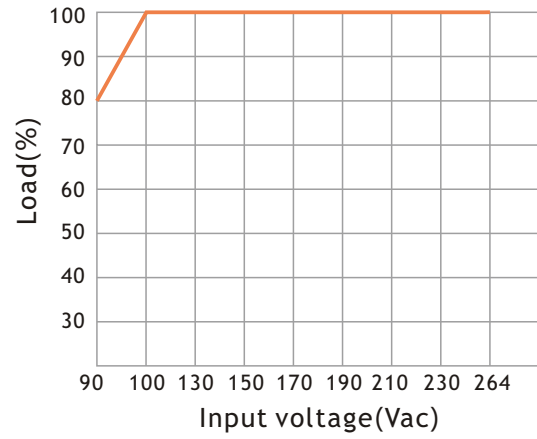
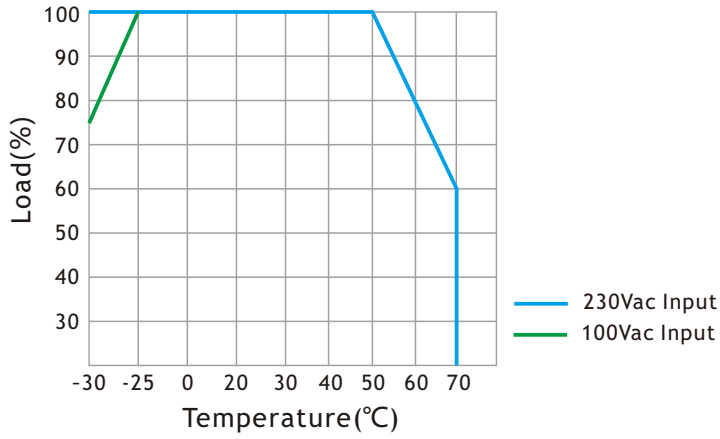


Mechanical



Unit: mm  
Tolerance:  $\pm 1.0$

## Electrical Curve



## Block Diagram

