



2016-V1.0-1026

Specifications

AC-DC Switching Mode Power Supply

NK-350 Series, 350W

PAIRUI ELECTRONICS

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2016

AC-DC Switching Mode Power Supply

NK-350 SERIES, SINGLE OUTPUT, 350W

Features

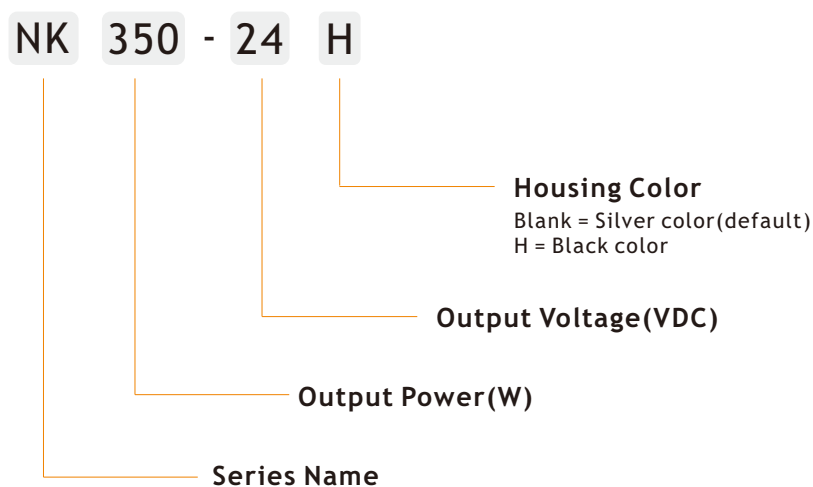
- 3 Year Warranty
- AC Input Range Selected by Switch(90-132/180-264Vac)
- 100% Full Load Burn-in Test
- Ultra-Slim Size
- Built-in EMI Filter
- LED Indicator for Power On
- All Round Protections: Short Circuit, Over Voltage, Over Load, and Over Temperature



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 |
|-------------|-----------------------|----------------|----------------|---------------|-------------------|-------------|
| NK350-5 | 100-240VAC | 5V | 60A | 120mV | 87% | CE |
| NK350-12 | 100-240VAC | 12V | 29A | 120mV | 87% | CE |
| NK350-15 | 100-240VAC | 15V | 23.2A | 120mV | 88% | CE |
| NK350-24 | 100-240VAC | 24V | 14.6A | 120mV | 89% | CE |
| NK350-36 | 100-240VAC | 36V | 9.7A | 200mV | 89% | CE |
| NK350-48 | 100-240VAC | 48V | 7.3A | 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

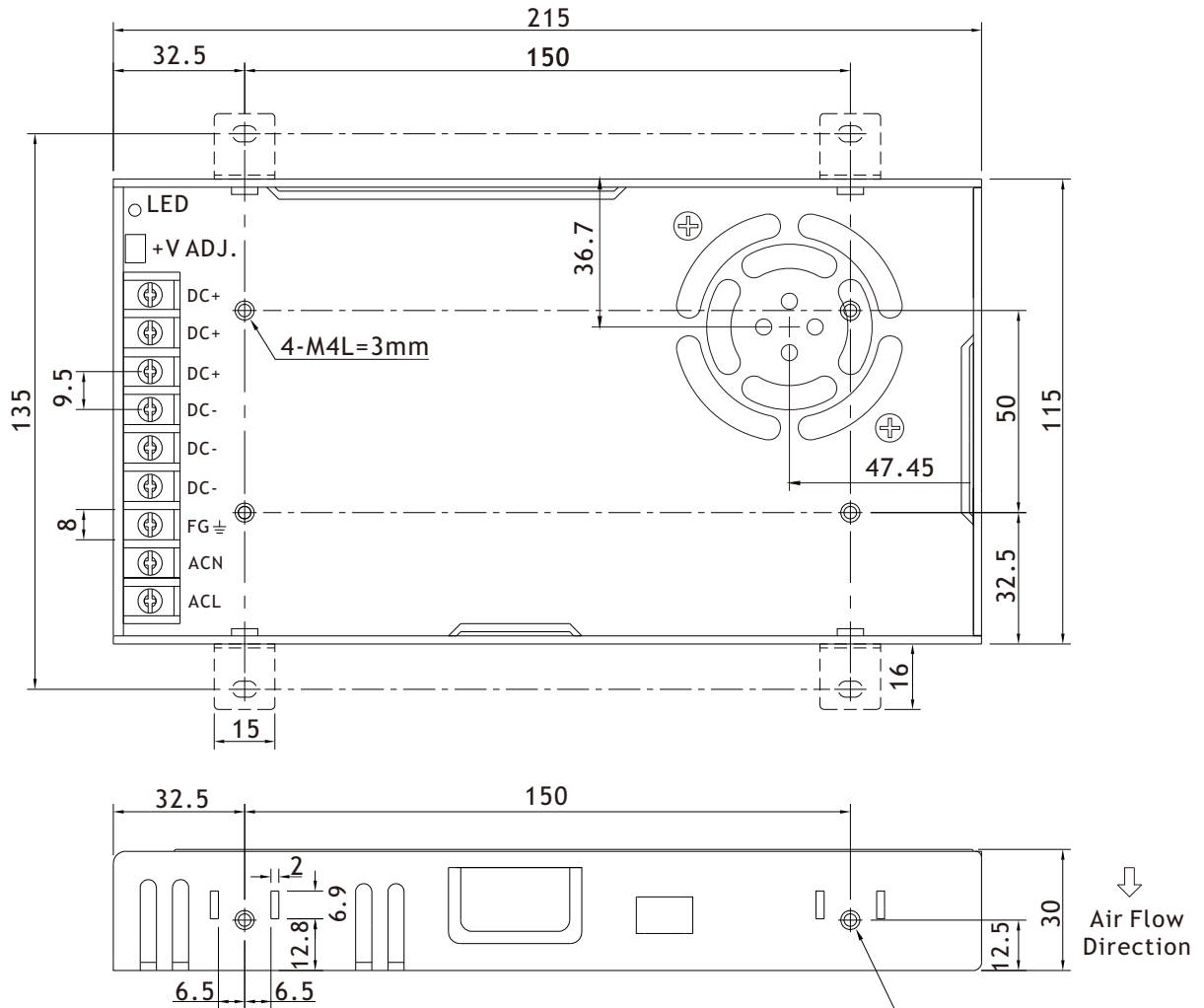
| PARAMETER | CONDITIONS | MIN | TYP | MAX | UNITS |
|-------------------------------|---|-----|-----|-----|-------|
| Ambient operating temperature | Startup at rated voltage (Derating required) | -25 | | +70 | °C |
| Operating relative humidity | Non condensing | 20 | | 95 | % |
| Storage temperature | Humidity 10 ~ 95% RH | -40 | | +85 | °C |
| MTBF | Full load, 220Vac input, 25°C ambient temperature | 200 | | | Khrs |
| Dimension(W x H x D) | 215.0 x 115.0 x 30.0mm (8.46 x 4.53 x 1.18inch) | | | | |
| Weight | 780g | | | | |
| Packing | 15pcs/13kg/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 |

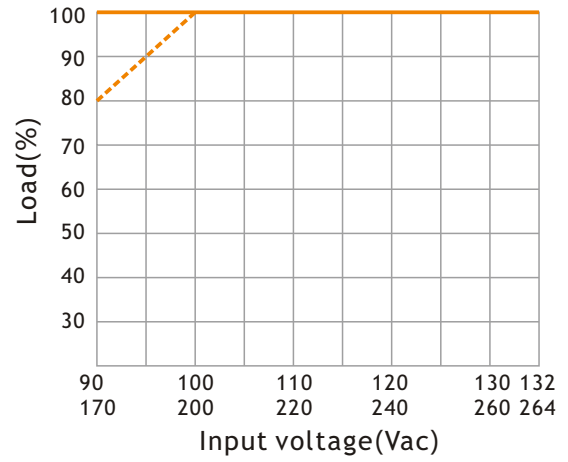
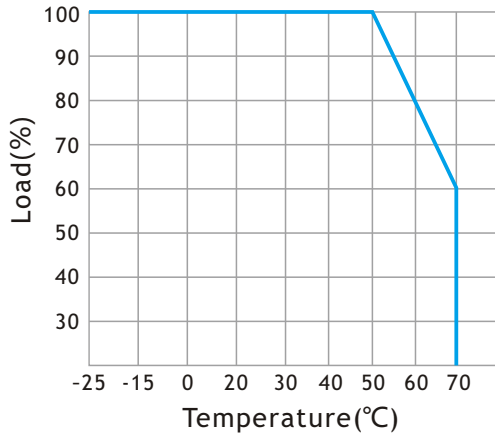
NOTE: Unless otherwise specified, all the above parameters are measured at ambient temperature of 25°C and Vin=100Vac to 240Vac.

Mechanical



Unit: mm
Tolerance: ±1.0

Electrical Curve



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

Block Diagram

