

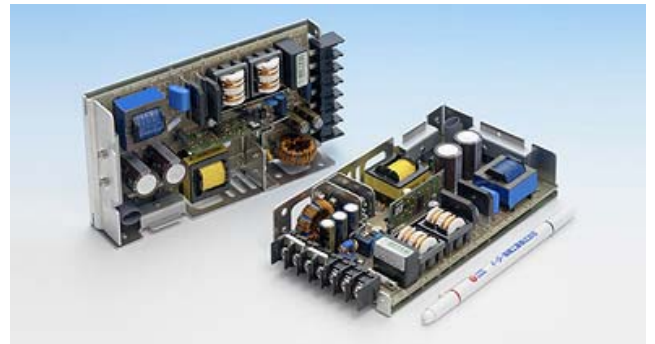
NEE**SX

150W

AC/DC Converter
Single output



The NEW and compact generation of AC-DC converters with universal input range for worldwide use. This small 150 W unit, is available with 5 single outputs. It's very compact design with an ultra low profile suits very well for U1-size racks and systems. A highly efficient (89-90%) and reliable converter for high end applications like Semiconductor-equipment, traffic-information systems, LED displays, etc. NEE –Series are safety approved acc. to UL, C-UL EN.



Features

Wide input voltage range: 85~264Vac
120~350Vdc

Ultra-compact size
Excellent reliability
Output voltage adjustable +/-10%
MTBF min. 320'000hrs
5 different single outputs
Warranty: 2 years

Mechanical features

Dimensions (WxLxH) mm:
92×163×34 w/out Case Cover
Weight: 450g
Connector: Screw type
Convection cooling

Standards

Safety approvals: Pending: UL 60950-1; C-UL: CSA 60950-1 and EN60950-1
EMI line conducted: VCCI Class B , FCC Part15 ClassB , EN55022 Class B
Harmonic distortion: IEC 61000-3-2

Possible applications

Automation & robotics
Office equipment
Computer peripherals
Telecommunication. & IT
Industrial electronics & machines
Transport/Automotive
Lab & Test Equipment
Air & Space
Displays, LED, TFT, LCD

Control features

Over voltage protection: integrated, latch type
Over current protection: integrated





Model	NEE3.3SX	NEE05SX	NEE12SX	NEE15SX	NEE24SX
Specifications					
Input Characteristics					
Rated Voltage [V]	AC100 - 240				
Input Current [A]Typ. (at AC100/AC230 V in) *1	1.3/0.54	1.9/0.8	1.96/0.82	1.9/0.8	1.97/0.82
Input Range [V]	AC85 ~ 264, DC 120 ~ 350				
Input Frequency [Hz]	50/60				
Input Frequency Range [Hz]	47 ~ 63				
Phase	Single				
Inrush Current [A] Typical	18(at AC100[V] in) 40(at AC230[V]in)				
Efficiency [%] Typical (at AC100/AC230 V in) *1	83 / 86	85 / 88	87 / 90	87 / 90	88 / 91
Power Factor Typical (at AC100/AC230 V in) *1	.99/.96	.99/.96	.99/.96	.99/.96	.99/.96
Output Characteristics					
Rated Output Voltage [V]	3.3	5	12	15	24
Rated Output Current [A]	30	30	13	10	6.5
Voltage Adjustment	Rated Output Voltage x (0.9 – 1.1)				
Ripple and Noise [mVp-p] Max.	150	150	220	250	340
Regulation					
a. Line Regulation [mV] Max.	26	40	96	120	190
b. Load Regulation [mV] Max.	35	45	108	135	216
c. Temp. Coefficient	0.03% / °C (-10-71 °C)				
d. Drift [mV]Max.	32	40	75	90	135
e. Dynamic Load Reg.[mV] Typ. *2	+/- 150	+/-200	+/-360	+/-450	+/-720
f. Recovery Time *2	5 (mS) Typical				
Rise-Up Time (mS)	500 max.				
Hold-Up Time (mS)	15 (at AC100 V in) typical				
Functions					
Over Current Protection	Built-in (Current limiting. Hiccup mode when Vout lowers.)				
Over Voltage Protection	Integrated, latch type				
Remote Sense	N.A.				
Remote Control	N.A.				
Series / Parellel Operation	N.A.				
Input Fuse	Integrated (AC250 (V), T3.15 (A) H)				
Environmental					
Operating Temperature/ Cooling	-10~50[°C](at 100% load) , convection cooling				
Derating	- 3.5 % / °C (50°C or more / not available (71°C or more)				
Operating Humidity	20 ~90[%RH]				
Storage Temperature	-20 ~ 85[°C]				
Withstanding Voltage	Primary-Secondary AC3000V 1minute Primary-Frame Ground AC2500V 1minute Secondary-Frame Ground AC1000V 1minute Sens Current: Secondary Frame Ground (20 (mA)/ others (10 mA)				
Isolation Resistance	P-S-FG 100[M Ω]Min. DC500[V]				
Vibration	5 ~ 10[Hz] 10[mm], 10 ~ 55[Hz];19.6(m/s ²) 30minute/cycle X,Y,Z Axes				
Shock	196 (m/s ²)				
Leak Current	0.15 / 0.6 at AC100/230V, at 50Hz (measured HIOKI-3155 Mode IEC60950)				
Harmonic Current	IEC61000-3-2				
Weight (typical)	450g				

*1 : at Rated Input and Rated Output , *2: at Output current quick change 25% to 75%





Dimensions NEESX:**

Connection

Term. #	Function
1	+V out
2	+V out
3	0V out
4	0V out
5	F G
6	ACin (L)
7	ACin (N)

