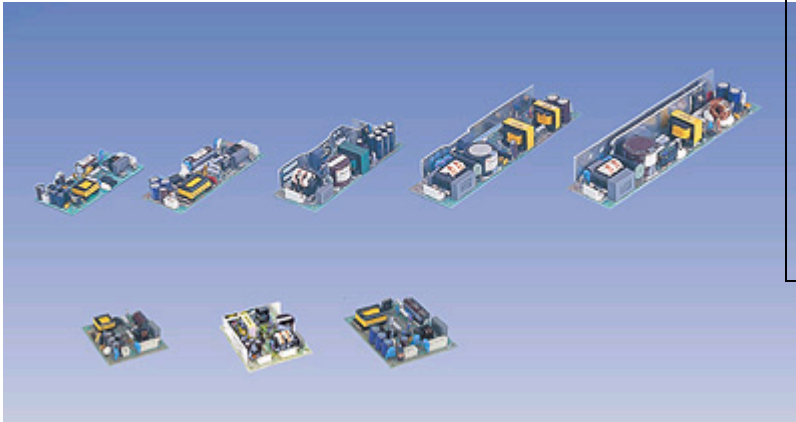


# 75 WATT AC-DC CONVERTER BNC-SA Series

## General Description

BN-Series are open frame, board type power supply with AC input range of 85~132 VAC for use in Japan and North America market. Simplified circuit design gives high cost-effectiveness and small size. This series meets UL/CSA and Japan Electrical Appliance and Material Control law, in addition to EMI limits of FCC class B and VCCI class.



## Options

N/A

## Features

1. Cost Effective
2. High Efficiency
3. Small Size
4. Mountable , 5 ways mounting
5. Input: 85~132Vac
6. EMI: complies with FCC/B
6. Safety: UL 1950, CSA950(C-UL), VDE
7. CE-marked acc. To LVD

Specifications<AC/DC>	Model						
BNC**SA-U 75WATTS/SINGLE	BNC3.3SA-U	BNC05SA-U	BNC12SA-U	BNC15SA-U	BNC24SA-U	BNC36SA-U	BNC48SA-U
<b>Input Characteristic</b>							
Input Voltage	AC100-115V						
Input Current	1.6A						
Input Range	AC85-132V(DC110-175V)						
Input Frequency	50/60Hz						
Input Frequency Range	47-440Hz						
Phase	Single						
Inrush Current *1	30A(typical) at AC100V						
Efficiency [%] (typical) *2	77	81	83	84	85	85	85



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<b>Output Characteristic</b>							
Output Voltage [V]	3.3	5	12	15	24	36	48
Output Current [A]	15.0	15.0	6.3	5.0	3.5(P4.2)	2.1	1.6
Voltage Adjust Range	+/- 10% of Rated Output Voltage(at no load within the input range)						
Ripple and Noise [mVp-p](max) 0 to +60C	100	100	150	150	150	250	350
*3 -10 to 0C	140	140	180	180	180	300	400
<b>Regulation</b>							
a.Statistic Line Regulation [mV](maximum)	26	40	96	120	192	288	384
b.Statistic Load Regulation [mV](maximum)	30	45	108	135	216	324	432
c.Temperature Coefficient *4	0.03%/C						
d.Drift[mV](maximum) *5	32	40	75	90	135	195	255
e.Dynamic Load Regulation [mV](typical) *6	not specified						
f.Recovery Time *6	not specified						
Rise up time	200mS(maximum) at 25C and rated input/output						
Hold up time	20mS(typical) at 25C and rated input/output						
<b>Functions</b>							
Overcurrent Protection *7 =	Current Limiting with automatic recovery						
or >105% of Rated Output Current[A]	15.8	15.8	6.62	5.25	4.41	2.21	1.68
Overvoltage Protection =	Zener diode clamping						
or >115% of Rated Output Voltage[V]	3.8	5.75	13.8	17.3	27.6	41.4	55.2
Remote Sense	not available						
Remote On/Off	not available						
<b>Environmental</b>							
Operating Temperature	-10 to +50C						
Operating Humidity	20 to 90%RH(non-condensing)						
Storage Temperature	-20 to +75C						
Storage Humidity	20 to 90%RH(non-condensing)						
Withstanding Voltage	Primary-Secondary AC2,000V for 1minute						
	Primary-Frame Ground AC2,000V for 1minute						
	Secondary-Frame Ground AC500V for 1minute						
Isolation Resistance	Primary-Secondary-Frame Ground 50MOhm(minimum) by DC500V insulation tester						
Vibration	5-10Hz:10mm double amplitude,10-55Hz:19.6m/s <sup>2</sup> ,20minutes' period for 60minutes each along X,Y,Z axes(non-operating)						
Shock	196m/s <sup>2</sup>						
Cooling	Convection						
Leakage Current	0.5mA(maximum) at 25C,rated input/output and rated input frequency						
Line Conducted Noise	Built to meet FCC Part15-B Class B						
Safety	Built to meet VCCI Class B						
	UL: UL1950						
Weight (typical)	C-UL: CSA C22.2 No.950						
	open board type:250g						
MTBF [H]	420,000						
Switching Frequency[kHz](typical)	140						

Conditions:

\*1 at cold start

\*2 at DC130V input/rated output

\*3 measured by a bayonet probe at the end of a pair of 15cm long wires terminated with a 100uF electrolytic capacitor and 0.1uF film capacitor in parallel at a 0 to 20MHz bandwidth

\*4 at -10 to +50°C

\*5 for 7hour period after 1hour warm-up at 25°Cand rated input/output

\*6 when output current changed from 25% to 75% of rated output current rapidly at AC100V input

\*7 for less than 1minute of overcurrent and short circuit