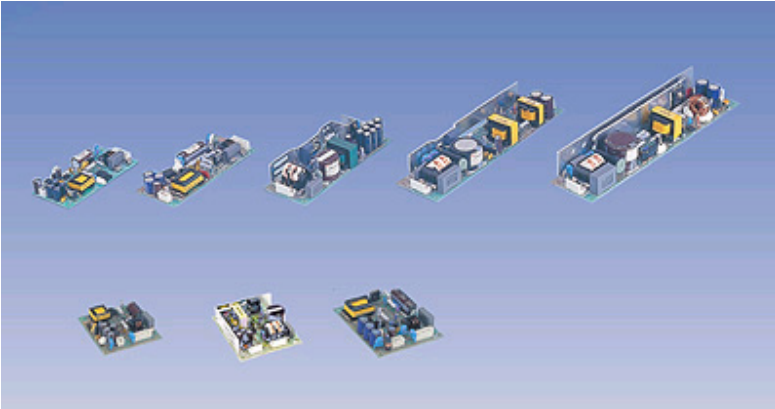


30 WATT AC-DC CONVERTER

BNT/ BNTE-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

- * Cover (add suffix "-P")
- * Wire harness

Features

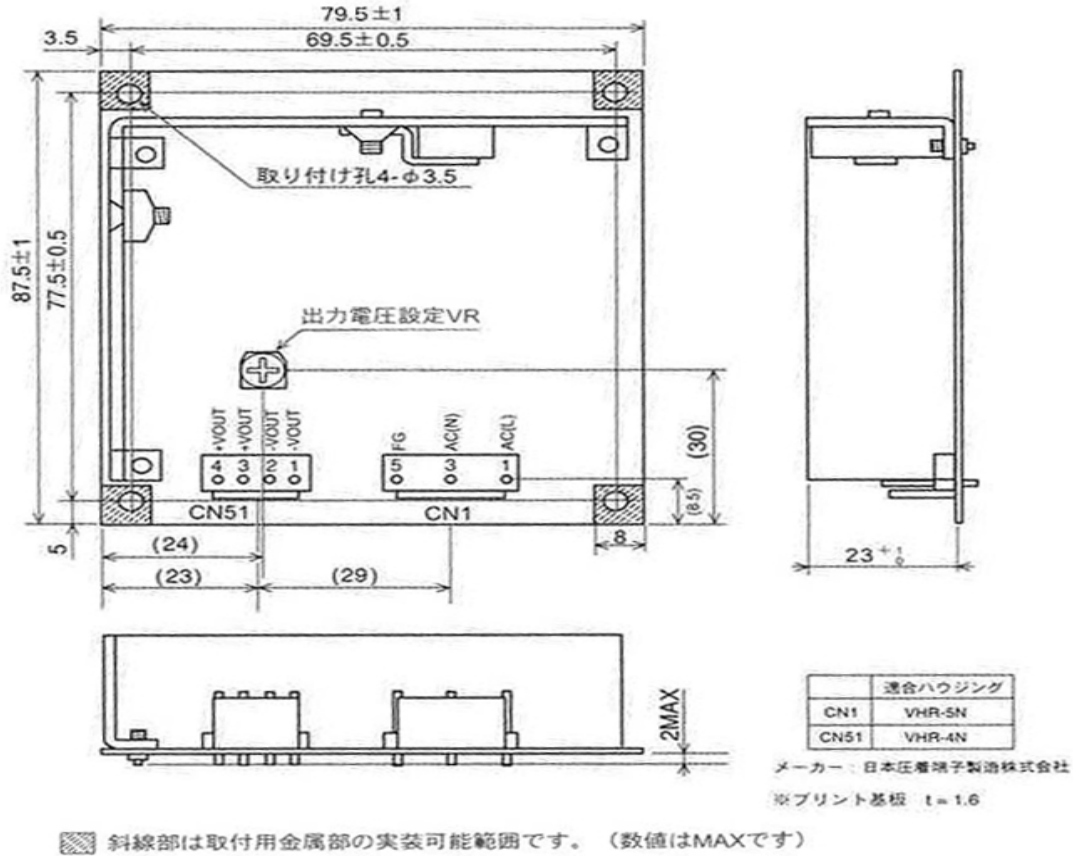
1. Cost Effective
2. High Efficiency
3. Small Size
4. Mountable , 5ways mounting
5. Input: 85~132Vac
6. EMI: complies with FCC/B
6. Safety: UL 1950, CSA950(C-UL), VDE
7. CE-marked acc. To LVD

Specifications<AC/DC>	Model							
	BNT**SA-U/BNTE**SA 30WATTS/SINGLE	BNT3.3SA-U BNTE3.3SA	BNT05SA-U BNTE05SA	BNT12SA-U BNTE12SA	BNT15SA-U BNTE15SA	BNT24SA-U BNTE24SA	BNT36SA-U BNTE36SA	BNT48SA-U BNTE48SA
Input Characteristic								
Input Voltage	AC100-115V							
Input Current	0.7A							
Input Range	AC85-132V(DC110-175V)							
Input Frequency	50/60Hz							
Input Frequency Range	47-440Hz							
Phase	Single							
Inrush Current *1	25A(typical) at AC100V							
Efficiency [%] (typical) *2	70	77	80	82	84	84	85	

Specifications<AC/DC>	Model						
BNT**SA-U/BNTE**SA 30WATTS/SINGLE	BNT3.3SA-U BNTE3.3SA	BNT05SA-U BNTE05SA	BNT12SA-U BNTE12SA	BNT15SA-U BNTE15SA	BNT24SA-U BNTE24SA	BNT36SA-U BNTE36SA	BNT48SA-U BNTE48SA
Output Characteristic							
Output Voltage [V]	3.3	5	12	15	24	36	48
Output Current [A]	6.0	6.0	2.5	2.0	1.3	0.9	0.7
Voltage Adjust Range	+/- 10% of Rated Output Voltage(at no load within the input range)						
Ripple and Noise [mVp-p](max) 0 to +60C *3 -10 to 0C	120	120	150	150	150	250	350
Regulation	160	160	180	180	180	300	400
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						
Functions							
Overcurrent Protection *7 = or >105% of Rated Output	Current Limiting with automatic recovery						
	6.3	6.3	2.6	2.1	1.4	0.95	0.74
Overvoltage Protection = or >115% of Rated Output Voltage[V]	Zener diode clamping						
	3.8	5.75	13.8	17.3	27.6	41.4	55.2
Remote Sense	not available						
Remote On/Off	not available						
Environmental							
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 ² ,20minutes' period for 60minutes each along X,Y,Z axes (non-operating)						
Shock	196m/s ²						
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 Built to meet VCCI Class B						
Safety	UL: UL1950(Except BNTE) C-UL: CSA C22.2 No.950(Except BNTE)						
Weight (typical)	open board type:140g						

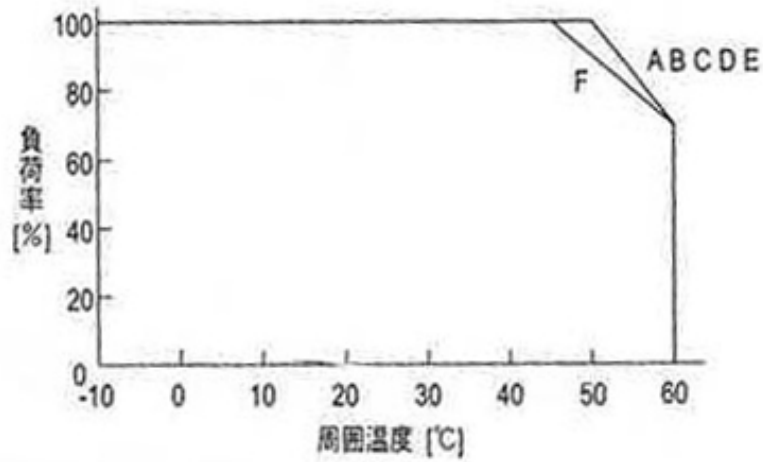


BNTE Dimensions:

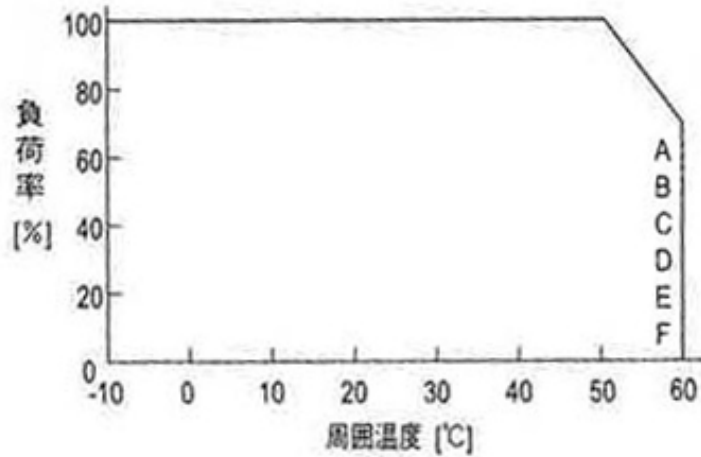


BNTE Derating:

(BNTE05SA)

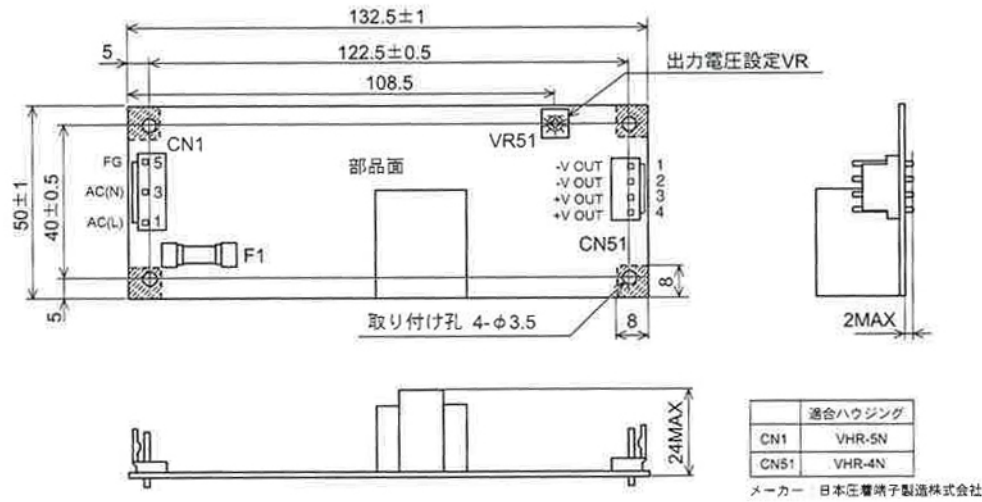


(BNTE3.3/12/15/24/36/48SA)



BNT Dimensions:

■ BNT-(L)SAシリーズ (30W) 単出力



■ 4カ所の斜線部は取付用金属部の実装可能範囲です。(数値はMAXです)

BNT Derating:

