

D E S C R I P T I O NPRODUCT COVERED:

* USR/CNR: Component - Power Supplies, Information Technology Equipment, Including Electrical Business Equipment, DC/DC Converters, Models BXB100-24S3V3, BXB100-24S05, BXB100-24S12, BXB100-24S15, BXB100-48S3V3, BXB100-48S05, BXB100-48S12, BXB100-48S15, BXB100-5074, BXB100-5083, BXB75-24D05-3V3, BXB75-24S3V3, BXB75-24S05, BXB75-24S12, BXB75-24S15, BXB75-48D05-3V3, BXB75-48D3V3-V8, BXB75-48S3V3, BXB75-48S05, BXB75-48S12, BXB75-48S15, BXB75-48D3V3-2V5, BXB75-5074, BXB75-5099, BXB50-48S3V3, BXB50-48S05, BXB50-48S12, BXB50-48S15, BXB50-243V3, BXB50-24S05, BXB50-24S12, and BXB50-24S15; may be followed by FLT or FHT, may be followed by XX, where "X" represents any alphanumeric character or blank.

ELECTRICAL RATINGS: (Optional)

Model	Input		Output	
	V	A	V	A
BXB100-24S3V3	18-36 dc	7.0	3.3	20
or	18-36 dc	5.4	3.3	20
BXB100-24S05	18-36 dc	7.0	5.0	20
or	18-36 dc	7.6	5.0	20
BXB100-24S12	18-36 dc	7.0	12.0	8.33
or	18-36 dc	7.6	12.0	8.3
BXB100-24S15	18-36 dc	7.0	15.0	6.67
or	18-36 dc	7.6	15.0	6.7
BXB100-48S3V3	36-75 dc	3.7	3.3	20
or	36-75 dc	2.7	3.3	20.0
BXB100-48S05	36-75 dc	3.7	5.0	20
or	36-75 dc	3.8	5.0	20.0
BXB100-48S12	36-75 dc	3.7	12.0	8.33
or	36-75 dc	3.7	12.0	8.3
BXB100-48S15	36-75 dc	3.7	15.0	6.67
or	36-75 dc	3.7	15.0	6.7
BXB100-5074	36-75 dc	3.7	5.0	20
BXB100-5083	36-75 dc	3.7	5.0	1 - 20
			3.3	1 - 20
			1.5	2.5

ELECTRICAL RATINGS: (Optional), continued

Model	Input		Output	
	V	A	V	A
BXB75-24D05-3V3	18-36 dc	5.5	5.0	15
			3.3	15
BXB75-24S3V3	18-36 dc	5.5	3.3	15
or	18-36 dc	4.0	3.3	15
BXB75-24S05	18-36 dc	5.5	5.0	15
or	18-36 dc	5.8	5.0	15
BXB75-24S12	18-36 dc	5.5	12.0	6.25
or	18-36 dc	5.8	12.0	6.3
BXB75-24S15	18-36 dc	5.5	15.0	5.0
or	18-36 dc	5.8	15.0	5
BXB75-48D05-3V3	36-75 dc	2.8	5.0	15
			3.3	15
BXB75-48D3V3-1V8	36-75 dc	2.8	3.3	14
			1.8	5
BXB75-48D3V3-2V5,	36-75 dc	2.8	3.3	15
			2.5	15
*BXB75-48S3V3,	36-75	2.8	3.3	15
BXB75-48S3V3N80				
or	36-75 dc	2.0	3.3	15.0
BXB75-48S05,	36-75 dc	2.8	5.0	15
BXB75-48S05JM05				
or	36-75 dc	2.9	5.0	15
BXB75-48S12	36-75 dc	2.8	12.0	6.25
or	36-75 dc	2.8	12.0	6.3
BXB75-48S15	36-75 dc	2.8	15.0	5.0
BXB75-5074	36-75 dc	2.8	5.0	15.0
BXB75-5099	36-75 dc	3.7	3.3	15.0
			5.0	15.0
			1.5	2.5
BXB50-24S3V3	18-36 dc	4.0	3.3	10
or	18-36 dc	2.7	3.3	10
BXB50-24S05	18-36 dc	4.0	5.0	10
or	18-36 dc	3.9	5.0	10
BXB50-24S12	18-36 dc	4.0	12.0	4.16
or	18-36 dc	3.9	12.0	4.2
BXB50-24S15	18-36 dc	4.0	15.0	3.33
or	18-36 dc	3.9	15.0	3.3
BXB50-48S3V3	36-75 dc	1.9	3.3	10
or	36-75 dc	1.3	3.3	10.0
BXB50-48S05	36-75 dc	1.9	5.0	10
BXB50-48S12	36-75 dc	1.9	12.0	4.16
or	36-75 dc	1.9	12.0	4.2
BXB50-48S15	36-75 dc	1.9	15.0	3.33
or	36-75 dc	1.8	15.0	3.3

GENERAL:

The products covered are DC/DC converters. Their power transformers provide operational insulation, only. All components are mounted on a printed wiring board.

The Output voltages remain within SELV limits for all but one condition, see Condition of Acceptability, even with internally generated non-SELV voltages. This was demonstrated by performing Abnormal Tests which included single component failures and operational bypassing (short input to output circuit) with the input grounded and floating. In either case, the output voltages did not exceed SELV limits.

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Conditions of Acceptability - When installed in the end-use equipment, consideration shall be given to the following:

1. This component has been judged on the basis of the required spacings in the Standard for the Safety of Information Technology Equipment, Including Electrical Business Equipment, **CAN/CSA-C22.2, No. 60950-1-03 * UL 60950-1, first Edition.**
2. Overcurrent protection in the ungrounded side of the input supply, shall be provided in the end-product. For Models with suffix FLT or FHT, the Component Failure Test was conducted with an external 20 A fuse. For others, an 8 A was used.
3. The ability of the source to open the input fuse shall be evaluated in the end product. If the source to the converter does not have sufficient current capacity to open the input fuse immediately, consideration shall be given to repeating component failure tests which opened the input fuse. The outputs shall be monitored during the tests.

4. The outputs are not at hazardous energy levels.
5. This device is only provided with operation insulation. Also, the Component Failure Tests were conducted at the highest value of the input voltage range with the output(s) being within SELV limits. Based on this, the following shall be considered depending on the end use configuration.
 - A. If the input is earthed and the output is floating, then the output is at hazardous voltage levels.
 - B. Else:
 - * - The output is SELV, if the input source is SELV or Hazardous Voltage Secondary with Reinforced Insulation between primary and secondary.
 - * - The output is ELV, if the input source is ELV or Hazardous Voltage Secondary with Basic Insulation between primary and secondary.
- *6. The equipment has been evaluated for use in a Pollution Degree 2 environment.
- *7. A suitable electrical and fire enclosure shall be provided.
- *8. The base plate temperatures shall not exceed 100°C.

9. Model BXB100-5074 was tested with 350 LFM forced-air cooling. Models BXB100-5083 and BXB75-5099 were tested with 140 LFM forced-air cooling.
10. Model BXB75-5074 was tested with 200 LFM forced air cooling. The unit was mounted horizontally with the base plate up. (Air flow was obtained by use of a 20 CFM fan located 15 in. from the unit.)
11. For Models BXB75-24D05-3V3, BXB75-48D3V3-2V5, and BXB75-48D05-3V3, maximum continuous output power shall not exceed 75 W. For Model BXB100-5083, maximum continuous output power shall not exceed 100 W. For Model BXB75-5099, maximum continuous output power shall not exceed 75 W. For Model BXB75-48D3V3-1V8, maximum continuous output power shall not exceed 55.2 W.

Special Considerations - The following items are considerations that were used when evaluating this product.

"USR/CNL" indicates investigation to the U.S. and Canadian (Bi-National) Standard for Safety of Information Technology Equipment, Including Electrical Business Equipment, **CAN/CSA-C22.2, No. 60950-1-03 * UL 60950-1, First Edition, Sub-Clause 2.10.**

Use - For use only in (or with) complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

The equipment is considered for building in, Class I (earthed), intended for use on a TN power system.