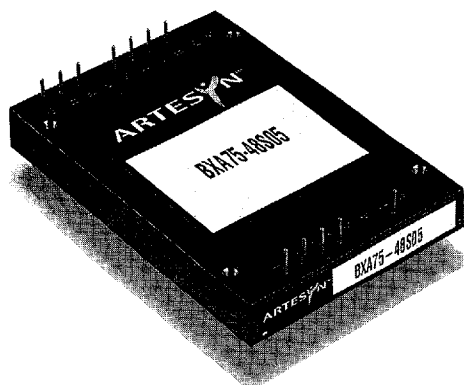
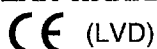




[2 YEAR WARRANTY]



BXA75 SERIES

Single output

- 3.5 x 2.4 x 0.5 inch package with stand-offs
- 19 Watts/in³ power density
- Efficiency up to 87%
- CISPR 22 and EN55022 conducted emissions level A
- UL, VDE and CSA safety approvals
- Indefinite short circuit protection
- Baseplate operating temperature range of -25°C to +85°C

The BXA75 series are high density DC/DC converters ideally suited for a wide variety of communications, industrial, computer and distributed power applications. With up to 80 Watts of power in a 3.5 x 2.4 x 0.5 inch package and efficiencies as high as 87%, the BXA75 can address a host of demanding power requirements, offering a wide input range of 36-75VDC with industry standard outputs of 3.3V, 5V, 12V and 15V. Approval to EN60950 and EN41003 coupled with conducted emissions compliance to CISPR 22, FCC and EN55022 level A, facilitate easy and cost effective design-in for communications systems. The demands of industrial systems are met by a baseplate operating temperature range of -25°C to 85°C, overvoltage, overtemperature and short circuit protection, along with tight load and line regulation and output ripple as low as 15mV rms. Other standard features include remote enable, remote sense and external trim.

SPECIFICATION

All specifications are typical at nominal input, full load at 25°C unless otherwise stated

OUTPUT SPECIFICATIONS		
Voltage adjustability	3.3V and 15V 5V and 12V	+10%, -3.0% +10%, -5.0%
Voltage accuracy		±0.5%
Remote sense	0.5V line drop compensation	
Total error band	See Note 2	±2.0%
Line regulation	Typical	±0.15%
Load regulation	Typical	±0.3%
Ripple and noise	5Hz-20MHz, See Note 3 No external capacitor	50mV pk-pk 15mV rms max. 100mV pk-pk, 25mV rms max.
Transient response (75% to 100% load step)		±4.0% max. dev. 100µs recovery to within 1% Vo
Temperature coefficient		±0.02%/°C Max.
Overvoltage protection	See Note 5	Yes, see table
Short circuit protection		Continuous automatic recovery
INPUT SPECIFICATIONS		
Input voltage range	36 to 75VDC	
Input filter	See Note 4	Yes
Remote ON/OFF Logic compatibility	(Ref. to -Vin)	CMOS/TTL
ON		>3.5VDC or open circuit
OFF		<0.8VDC
Shutdown idle current		Less than 50mA

EMC CHARACTERISTICS		
Conducted noise	EN55022, FCC, Note 4	Level A
Surge susceptibility	100V	No damage
GENERAL SPECIFICATIONS		
Efficiency	See table	
Isolation voltage	1500VDC	
Switching frequency	500kHz ±5.0%	
Approvals and standards	Safety	VDE0805, EN60950 IEC950, UL1950 CSA C22.2 No. 950
Case material	Plastic with aluminum baseplate	
Material flammability	UL94V-0	
Weight	160g (5.65oz)	
MTBF	Belcore, 25°C baseplate	2,600,000 hours minimum
ENVIRONMENTAL SPECIFICATIONS		
Thermal performance See Note 6	Operating, See curves Non-operating Over temperature shutdown	-25°C to +85°C -55°C to +125°C 115°C internal temperature auto. recovery
Altitude	Operating Non operating	10,000 feet max. 40,000 feet max.
Vibration	5Hz to 500Hz	2.4G RMS (approx.)

International Safety Standard Approvals

VDE0805/EN60950/IEC950 File No. 10401-3336-1073

UL1950 File No. E136005

CSA C22.2 No. 950 File No. LR41062C

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Notes

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- Technical drawing of a rectangular plate with dimensions and hole specifications. The plate has a total width of 3.5 (89.1) and a total height of 4.0 (101.6). The drawing includes a top view and a side view.
- Top View Dimensions:**
- Overall Width: 3.5 (89.1)
 - Overall Height: 4.0 (101.6)
 - Left Margin: 0.15 (3.8)
 - Right Margin: 0.15 (3.8)
 - Top Margin: 0.05 (1.3)
 - Bottom Margin: 0.15 (3.8)
 - Internal Width: 3.2 (81.3)
 - Internal Height: 3.5 (88.9)
- Hole Specifications:**
- Top Left Corner: 0.25 (6.4) Dia. Hole
 - Top Right Corner: 0.25 (6.4) Dia. Hole
 - Bottom Left Corner: 0.25 (6.4) Dia. Hole
 - Bottom Right Corner: 0.25 (6.4) Dia. Hole
 - Center: M3 x 0.5 Metric Tap Thru, 0.22 ± 0.03 Dia. Standoff
- Side View Dimensions:**
- Overall Height: 0.02 (0.5)
 - Top Flange: 0.04 Dia. (1.02)
 - Internal Height: 0.15 (3.8)
 - Bottom Flange: 0.5 (12.7)
 - Overall Length: 0.15 (3.8)

View from Underside (Pin Side)

ALL DIMENSIONS IN INCHES (mm)
All pins are in true position within .010 DIA. @ M.M.C.
Tolerance (inches) .XX = ± 0.02
.XXX = ± 0.005
Heatsink adds 0.74" to height of unit.

EXTERNAL OUTPUT TRIMMING

Output can be externally trimmed by using either method shown below.

The diagram illustrates two methods for external output trimming of an op-amp. The op-amp is represented by a central triangle with its non-inverting input (+) at the top, inverting input (-) at the bottom-left, and output at the bottom-right. The output is connected to a feedback network consisting of a 10K resistor and a TRIM potentiometer. The TRIM potentiometer has three terminals: a top terminal connected to the output, a bottom terminal connected to ground, and a wiper terminal that can be connected to either the inverting input (-) for 'TRIM UP' or the non-inverting input (+) for 'TRIM DOWN/DOWN'. The text 'Output can be externally trimmed by using either method shown below.' is written above the diagrams.

TEMPERATURE DERATING WITHOUT HEATSINK

BXA75-48S3V05

Output Power (% MAX)

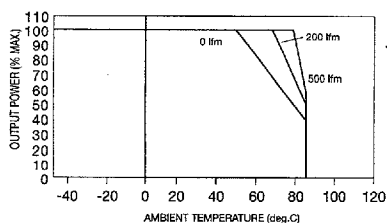
Ambient Temperature (deg.C)

0 lfm

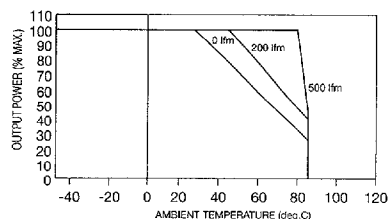
200 lfm

500 lfm

TEMPERATURE DERATING WITH HEATSINK
BXA75-48S3V3/05 (Note 6)



TEMPERATURE DERATING WITHOUT HEATSINK
BXA75-48S12/15



TEMPERATURE DERATING WITH HEATSINK
BXA75-48S12/15 (Note 6)

