BXF400 Series

Single output

ARTESYN TECHNOLOGIES

- **Industry standard footprint**
- **Adjustable output voltage with output currents of 80A**
- **No minimum load required**
- **2:1 input range for battery powered applications**
- **Undervoltage lockout (UVLO)**
- **Overvoltage and overcurrent protection**
- **Synchronisable and parallelable with load sharing**
- **Overtemperature and short circuit protection**
- **Current monitor and power good signal**
- **Remote ON/OFF**
- **Available RoHS compliant**

RoHS 2002/95/EC

BXF400 Series high power density DC/DC converters can provide up to 80A output current and have an industry-standard footprint, measuring just 2.40 x 4.60 x 0.52 inches. These converters have the highest output current rating of any comparably-sized products on the market, are equally suitable for new designs or as replacement power sources in existing equipment. BXF400 Series converters are designed specifically for redundant and distributed power systems in the computer and telecommunications sectors, but their feature-rich specifications make them suitable for a very wide range of applications. Using Bellcore 332, the MTBF is over 1,000,000 hours. Aluminium baseplate technology and four threaded M3 inserts make heatsink attachment and thermal management easy. The BXF400 Series is approved by UL, CSA and VDE.

CE (LVD / RoHS) VDE cULus CSA

2 YEAR WARRANTY

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

SPECIFICATIONS

OUTPUT SPECIFICATIONS

Voltage adjustability		Model specific
Set point accuracy		±0.5% typ., ±1.6% max.
Line regulation	Low line to high line	±0.10% typ.
Load regulation	Full load to min. load	±0.15% typ.
Minimum load		0%
Overshoot		0V
Undershoot	At turn-on and turn-off	0V
Ripple and noise	5Hz to 20MHz (See Note 1)	20mV
Temperature coefficient		±0.01%/°C
Transient response	Recovery time (See Note 2) Peak deviation	500µs 500mV
Remote sense		0.5VDC transmission line drop compensation

INPUT SPECIFICATIONS

Input voltage range	48Vin nominal	36 to 75VDC
Input current	No load Remote OFF	100mA max. 20mA max.
Input current (max.)	(See Note 3)	12A max.
Input reflected ripple	(See Note 5)	35mA pk-pk
Active low remote ON/OFF Logic compatibility ON OFF		 1.2VDC max. Open circuit
Undervoltage lockout	48Vin: power up 48Vin: power down	34.8V 33.1V
Start-up time (See Note 6)	Power up Remote ON/OFF	15ms 13ms

EMC CHARACTERISTICS

Conducted emissions (See Note 7)	Bellcore 332 FCC part 15 EN55022, CISPR22	Level A Level A Level A

GENERAL SPECIFICATIONS

Efficiency		See table
Isolation voltage	Input/case Input/output Output/case	1500VDC 1500VDC 1500VDC
Switching frequency	Fixed	850kHz typ.
Approvals and standards (See Note 4)		VDE0805, EN60950, IEC950 UL1950, CSA C22.2 No. 950
Case material		Aluminium baseplate and plastic casing
Material flammability		UL94V-0
Weight		200g (7.06oz)
MTBF	Bellcore 332 MIL-HDBK-217F @ 40°C, 100% FL	>1,000,000 hours >200,000 hours

ENVIRONMENTAL SPECIFICATIONS

Thermal performance	Operating case temp. Non-operating	-40°C to +100°C -55°C to +125°C
Altitude	Operating Non-operating	10,000 feet max. 40,000 feet max.
Vibration	5Hz to 500Hz	2.4G rms (approx.)

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For the most current data and application support visit www.artesyn.com/powergroup/products.htm

OUTPUT POWER (MAX.)	INPUT VOLTAGE	OVP	OUTPUT VOLTAGE	INPUT CURRENT (MAX. LOAD)	OUTPUT CURRENT (MAX.)	EFFICIENCY (TYP.)	REGULATION		MODEL NUMBER (8)
							LINE	LOAD	
264W	48VDC	3.8 VDC	3.3V	7.0A	80A	78%	±0.10%	±0.15%	BXF400-48S3V3LJ

Notes

1. Measured with 10µF tantalum capacitor and 1µF ceramic capacitor across the output.
2. Iout = Inom; delta Iout = ±25% Iout (max), di/dt = 1A/µs.
3. Input fusing is required based on surge and maximum input current.
4. This product is only for inclusion by professional installers within other equipment and must not be operated as a stand alone product.
5. Input reflected ripple current test set-up uses a Pi filter; 220µF, 12µH, 100µF.
6. Start-up into resistive load.
7. Units should be characterised within systems. External components and filtering required.
8. The 'J' suffix indicates that these parts are Pb-free (RoHS 6/6) compliant. TSE RoHS 5/6 (non Pb-free) compliant versions may be available on special request, please contact your local sales representative for details..

PROTECTION

Short circuit protection	Continuous, automatic recovery
Overvoltage protection	Latching
Undervoltage protection	Non-latching
Thermal protection	110°C baseplate, automatic recovery

TELECOM SPECIFICATION

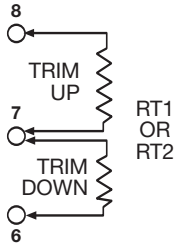
Central office interface A	ETS300-132-2

PIN CONNECTIONS

PIN NUMBER	FEATURE
1	Power Good
2	Current Monitor
3	Parallel
4	Trim Adjust
5	+ Sense
6	- Sense

EXTERNAL OUTPUT TRIMMING

Output can be externally trimmed by using the method shown.



International Safety Standard Approvals

VDE0805/EN60950/IEC950 File No. 10401-3336-0148

UL1950 File No. E136005

CSA C22.2 No. 950 File No. LR41062C