



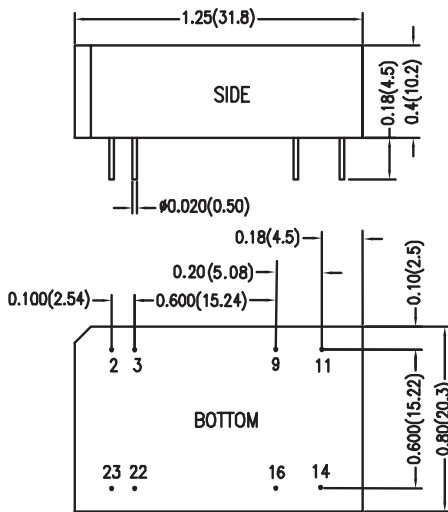
- Efficiency up to 84%
- 3000VDC Isolation
- MTBF > 1,000,000 Hours
- 4:1 Input Range
- No Minimum Load Required
- Overload Protection
- Short Circuit Protection
- CSA Approved
- RoHS Compliant



## 3 Watt DPX Single and Dual Series



Model Number	Voltage			Current			Reflected Ripple	Efficiency	Capacitive Load
	Input		Output	Input		Output			
	Nom. (VDC)	Range (VDC)	(VDC)	@ No Load (mA)	@ Max Load (mA)	Max mA			
DPX3K24S3R3	24	9-36	3.3	30	134	750	15	77	680 $\mu$ F
DPX3K24S5	24	9-36	5	30	158	600	15	79	470 $\mu$ F
DPX3K24S12	24	9-36	12	30	152	250	15	82	330 $\mu$ F
DPX3K24S15	24	9-36	15	30	151	200	15	83	220 $\mu$ F
DPX3K24S24	24	9-36	24	30	154	125	15	81	100 $\mu$ F
DPX3K24D5	24	9-36	$\pm$ 5	30	130	$\pm$ 250	15	80	220 $\mu$ F
DPX3K24D12	24	9-36	$\pm$ 12	30	152	$\pm$ 125	15	82	150 $\mu$ F
DPX3K24D15	24	9-36	$\pm$ 15	30	152	$\pm$ 100	15	82	100 $\mu$ F
DPX3K48S3R3	48	18-75	3.3	20	67	750	10	77	680 $\mu$ F
DPX3K48S5	48	18-75	5	20	78	600	10	80	470 $\mu$ F
DPX3K48S12	48	18-75	12	20	75	250	10	83	330 $\mu$ F
DPX3K48S15	48	18-75	15	20	74	200	10	84	220 $\mu$ F
DPX3K248S24	48	18-75	24	20	76	125	10	82	100 $\mu$ F
DPX3K24D5	48	18-75	$\pm$ 5	20	65	$\pm$ 250	10	80	220 $\mu$ F
DPX3K24D12	48	18-75	$\pm$ 12	20	76	$\pm$ 125	10	82	150 $\mu$ F
DPX3K24D15	48	18-75	$\pm$ 15	20	76	$\pm$ 100	10	82	100 $\mu$ F



Dimensions are inches (mm) unless noted

Tolerance: Inches      Millimeters

X.XX  $\pm$ 0.01      X.X  $\pm$ 0.25

X.XXX  $\pm$ 0.005      X.XX  $\pm$ 0.13

Pin       $\pm$ 0.002       $\pm$ 0.05

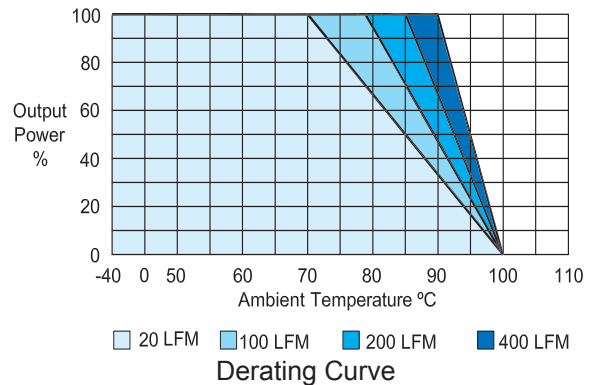
Pin Connections (NC) Not Connected		
Pin	Single	Dual
2	-Vin	-Vin
3	-Vin	-Vin
9	No Pin	Common
11	NC	-Vout
14	+Vout	+Vout
16	-Vout	Common
22	+Vin	+Vin
23	+Vin	+Vin



Input Parameters	Min	Typ	Max	Units
Short Circuit Input Power			2000	mW
Start Voltage 24 Vin 48 Vin			9 18	VDC
Input Surge Voltage (100mS MAX) 24 Vin 48 Vin	-0.7 -0.7		50 100	VDC
Under Voltage Shutdown 24 Vin 48 Vin			8.5 17.5	VDC
Switching Frequency	90			kHz
Input Filter	Pi Filter			
Conducted EMI	Meets EN55022, Class A and FCC Part 15, Class A			
Output Parameters	Min	Typ	Max	Units
Output Voltage Accuracy			±2.0	%
Output Voltage Balance Dual Output, Balanced Loads		±0.5	±2.0	%
Load Regulation Io = 0% to 100%		±0.3	±1.0	%
Minimum Load	None Required			
Line Regulation Vin=Min. to Max.		±0.3	±1.0	%
Ripple & Noise (20MHz)			70	mV P-P
Over Current Protection Foldback	120	150		%
Transient Recovery Time 25% Load Step Change		200	500	µs
Transient Response Deviation, 25% Load Step Change		±3	±5	%
Temperature Coefficient		±0.01	±0.02	% / °C
Short Circuit Protection	Continuous			
General Specifications	Min	Typ	Max	Units
Isolation Voltage, seconds	60 3000			VDC
Isolation Resistance 500VDC	1000			Mohms
Isolation Capacitance, 100kHz, 1V			300	pF
Operating Temperature (Ambient)	-40		+85	°C
Operating Temperature (Case)			+100	°C
Storage Temperature	-50		+125	°C
Humidity			95	%
MTBF MIL-HDBK-217F @25°C, Ground Benign		1000		K Hours
Cooling	Natural Convection			
Case Size	1.25 x 0.80 x 0.40 inches 31.8 x 20.3 x 10.2 mm			
Case Material	Non Conductive Black Plastic (UL94V-0)			
Weight	12.8g			
Agency Approval	CSA 60950-1			

Notes:

- Specifications typical at Ta=+25°C, resistive load, nominal input voltage, full rated output current unless otherwise noted.
- Transient recovery time is measured to within 1% error band for a step change in output load 75% to 100%.
- The series has a limitation of a maximum connected capacitance at the output. The power module may be operated in current limiting mode during start-up, affecting the ramp-up and the startup time.
- When measuring peak-to-peak output noise, use a Cout 0.47µF ceramic capacitor. Scope measurement should be made by using a BNC socket, measurement bandwidth is 0-20MHz. Position the load between 2" and 2.5" from the converter.
- Water washability - ConTech DC/DC converters are designed to withstand most solder/wash processes. Careful attention should be used when assessing the applicability in your specific manufacturing process. Converters are not hermetically sealed.
- See ConTech website for Definition of Terms, Application Notes, and Test Setups and Parameters. [www.ConTech-us.com/appnotes.html](http://www.ConTech-us.com/appnotes.html).
- Specifications subject to change without notice.
- See ConTech website [www.ConTech-us.com/pdf/rohs.pdf](http://www.ConTech-us.com/pdf/rohs.pdf) for RoHS Statement.



To avoid exceeding the maximum temperature rating of the components inside the power module, the case temperature must be kept below 100°C.