

## 3W Medical DC-DC Converters

### Features

- ◆ IndustryStandard DIP-24 Package
- ◆ 9-36V or 18-75VDC Input
- ◆ 5kVAC Isolation (2xMOPPs)
- ◆ 2.5uA Leakage Current
- ◆ Low Off-Load Power Draw



### Key Market Segments & Applications



Specifications		PXC-M03	PXC-M03W
Model		PXC-M03	PXC-M03W
Max Output Power	W		3W
Voltage Accuracy	%		±1%
Voltage Adjustment (T)	%	±10% (-10% +20% on 15V & 24V single output models) (see options table)	
Minimum Load	-		None
Line Regulation	%	Single Output: ±0.2%, Dual Output: ±0.5%	
Load Regulation	%	Single Output: ±0.2%, Dual Output: ±1%	
Cross Regulation	%	±5% (25-100% load)	
Ripple and Noise	-	See table	
Start up time	ms		30ms
Remote on/off	-	See options table	
Temperature Coefficient	%/°C	<±0.02%/°C	
Operating Temperature (1)	°C	-40 to +105°C, derating necessary above 94°C	
Storage Temperature	°C	-55 to 125/°C	
Thermal Shock	-	MIL-STD-810F	
Relative Humidity (non condensing)	%RH	5 to 95%RH	
Transient Response (25% step load change)	µs	< 250µs recovery	
Overvoltage Protection	V	Single Output: 3.3V: 3.7-5V, 5V: 5.6-7V, 12V: 13.5-16V, 15V: 18.3-22V, 24V: 29.1-34.5V Dual Output: 5V: 5.6-7V, 12V: 13.5-18.2V, 15V: 17-22V	
Overcurrent and Short Circuit Protection	%	Typically at 150%, hiccup with self recovery	
Input Surge Voltage (Maximum for 100ms)	V	5V input: 16V, 24V input: 50V, 48V input: 100V	
Isolation Voltage	V	5,000VAC	
Isolation Resistance	Ω	10 <sup>9</sup> Ω minimum	
Isolation Capacitance (max)	pF	17pF maximum	
Typical Switching Frequency (Fixed)	kHz	150kHz (±15kHz)	
MTBF (MIL-HDBK-217F)	Hours	6,444,000	
Vibration	-	MIL-STD-810F	
Conducted and Radiated Emissions	-	See Installation Diagrams	
Immunity	-	EN61000-4-2, -3, -4, -5, -6 Pref Criteria A	
Safety Agency Certifications	-	IEC/EN60601-1, ES60601-1, CE Mark	
Size (L x W x H)	mm(″)	31.8 x 20.3 x 10.2mm (1.25 x 0.8 x 0.4″)	
Weight	g	14g	
Warranty	Yrs	Two Years	

#### Notes:

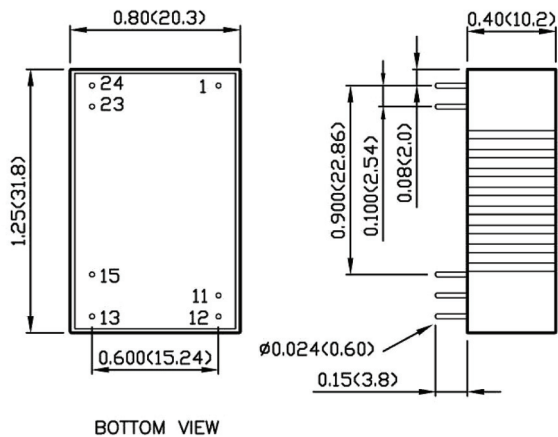
See installation manual for full specifications and test measurements.

(1) Convection cooling. See installation manual for forced air ratings.

## Model Selector

Model	Output Voltage (V)	Output Current (A)	Output Power (W)	Input Voltage (V)	Input Current No Load (mA)	Efficiency (%)	Ripple & Noise (Pk-Pk mV)	Max Load Capacitance (uF)
<b>Single Outputs</b>								
PXC-M03-24WS3P3-A	3.3	1	3.3	9 - 36	6	82.0	30	1050
PXC-M03-48WS3P3-A	3.3	1	3.3	18 - 75	4	81.0	30	1050
PXC-M03-24WS05-A	5	0.6	3.0	9 - 36	6	84.5	30	750
PXC-M03-48WS05-A	5	0.6	3.0	18 - 75	4	84.0	30	750
PXC-M03-24WS12-A	12	0.25	3.0	9 - 36	6	87.0	40	130
PXC-M03-48WS12-A	12	0.25	3.0	18 - 75	4	87.0	40	130
PXC-M03-24WS15-A	15	0.2	3.0	9 - 36	6	87.0	40	100
PXC-M03-48WS15-A	15	0.2	3.0	18 - 75	4	86.5	40	100
PXC-M03-24WS24-A	24	0.125	3.0	9 - 36	6	87.0	50	39
PXC-M03-48WS24-A	24	0.125	3.0	18 - 75	4	86.5	50	39
<b>Dual Outputs</b>								
PXC-M03-24WD05-A	±5	±0.3	3.0	9 - 36	6	83.0	30	±430
PXC-M03-48WD05-A	±5	±0.3	3.0	18 - 75	4	83.0	30	±430
PXC-M03-24WD12-A	±12	±0.125	3.0	9 - 36	6	87.0	40	±75
PXC-M03-48WD12-A	±12	±0.125	3.0	18 - 75	4	86.0	40	±75
PXC-M03-24WD15-A	±15	±0.1	3.0	9 - 36	6	86.0	40	±56
PXC-M03-48WD15-A	±15	±0.1	3.0	18 - 75	4	86.0	40	±56

## Outline Drawing, Pinout Style A



## Options

-A	Pinout style A (Standard Version)
No suffix	Pinout style B (No remote on/off & no trim pin)
-P	Pinout style B (Positive remote on/off & no trim pin)
-T	Pinout style B (Trim pin & no remote on/off)
-PT	Pinout style B (Positive remote on/off & trim pin)

## Other DC-DC Products

PX	10 - 60W, 12V, 24V, 48V input DC-DC
CC-E	1.5 - 25W, 5V, 12V, 24V & 48V input DC-DC
i6A	14A, 9-40V input POL
iA, iB, iC, iJ	3 - 60A, 5V & 12V input POL

For Additional Information, please visit  
[us.tdk-lambda.com/lp/products/pxc-m-series.htm](http://us.tdk-lambda.com/lp/products/pxc-m-series.htm)



## Pinout (Style A)

PIN #	Single Output	Dual Output
1	+ Input	+ Input
11	No pin	Common
12	- Output	No pin
13	+ Output	- Output
15	No pin	+ Output
23	- Input	- Input
24	- Input	- Input

(See website for Pinout Style B)