

- Industry Standard 2" x 1.6" Footprint
- Six Sided Shielding
- Agency Approved
- 12V, 24V and 48V Inputs

PXE Series

Single and Dual 20W to 30W
DC-DC Converters

Key Market Segments & Applications

Telecom
Datacom
Point of Load

PXE Features and Benefits

Features

- UL, CSA, EN, CE Approvals
- Wide Range Input
- Six Sided Shielding

Benefits

- Easier System Approvals
- Less Parts to Inventory
- Reduced Radiated Noise

Specifications

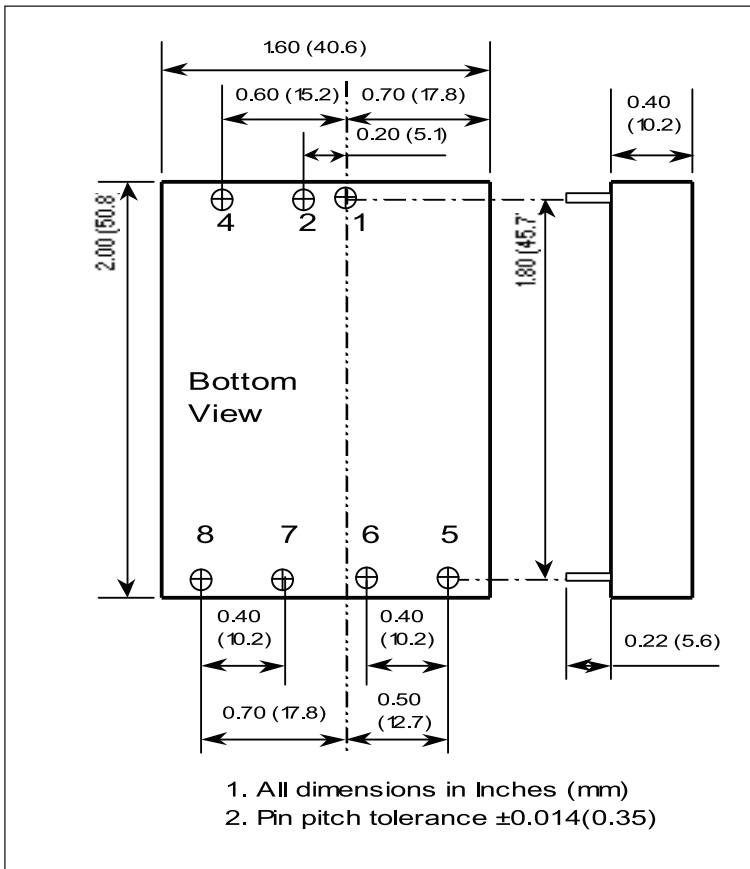
ITEMS	PXE20	PXE30
Max Output Power	20W	30W
Voltage Accuracy	±2%	±1%
Voltage Adjustment	±10%	
Minimum Load, each output (1)	10%	None
Line Regulation	±0.2% for single, ±0.5% for dual	
Load Regulation (25% to 100%)	Single ±0.5%, Dual ±3%	Single ±0.5%, Dual ±1%
Cross Regulation (25% to 100%)	Dual ±5%	
Ripple and Noise (P-P)	Single: 75mV; Dual: 100mV	
Start up time	20ms typ.	25ms typ.
Remote on/off (3) (4)	Positive Logic: ON: Open or 3.5-12V, OFF Short or <1.2V	
Temperature Coefficient	<±0.02%/°C	
Operating Temperature	-40°C to +85°C	
Maximum Case Temperature	+100°C	
Storage Temperature	-55°C to +105°C	
Thermal Shock	MIL-STD-810D	
Relative Humidity (non condensing)	5 to 95%	
Transient Response (25% step load change)	500µs recovery	300µs recovery
Overvoltage Protection (Zener clamp)	3.3V: 3.9V, 5V: 6.2V, 12V: 15V, 15V: 18V	
Overcurrent and Short Circuit Protection	Typically at 150%, hiccup with self recovery	
Input Surge Voltage (Maximum for 100ms)	12V input: 36V, 24V input: 50V, 48V input: 100V	
Reflected input ripple (peak to peak) (2)	25mA	30mA
Isolation Voltage	1600VDC minimum (Input-Output, Input-Case)	
Isolation Resistance	10 ⁹ Ω minimum	
Isolation Capacitance (max)	300pF	1000pF
Typical Switching Frequency (Fixed)	300kHz	
MTBF (BELLCORE TR-NWT-000332)	1,976,000 hours	1,535,000 hours
Vibration	10 - 55Hz, 2G, 30 minutes each X, Y, Z axis	
Conducted and Radiated Emissions	EN55022 Level A	
Immunity	EN61000-4-2, -3, -4, -5, -6 Pref Criteria 2	
Safety Agency Approval	EC/UL/CSA/EN 62368-1, 60950-1, CE Mark	
Size mm (L x W x H)	50.8 x 40.6 x 10.2	
Weight (g)	48	
Warranty (yrs)	3	

Notes: (1) To meet regulation & noise specifications. Operation at zero load will not damage the device.
(3) Max sink current 20mA (PXE20), 2.5mA (PXE30); The on/off pin is referenced to the negative input

(2) 12µH source impedance in series with + input
(4) Negative Logic : **OFF** Open or 3.5V -12V **ON** Short or <1.2V

Model Selector					
Output Volt (V)	Output Curr (A)	Output Power (W)	Input Volt (VDC)	Model	Efficiency (%)
Single Outputs					
1.5	8.0	30	10 - 40	PXE30-24WS1P5	80
1.5	8.0	30	18 - 75	PXE30-48WS1P5	80
1.8	8.0	30	10 - 40	PXE30-24WS1P8	83
1.8	8.0	30	18 - 75	PXE30-48WS1P8	83
2.5	8.0	30	10 - 40	PXE30-24WS2P5	85
2.5	8.0	30	18 - 75	PXE30-48WS2P5	86
3.3	6.0	18	9 - 18	PXE30-12S3P3	85
3.3	6.0	18	18 - 36	PXE30-24S3P3	88
3.3	6.0	18	36 - 75	PXE30-48S3P3	87
3.3	6.0	30	10 - 40	PXE30-24WS3P3	87
3.3	6.0	30	18 - 75	PXE30-48WS3P3	87
3.3	6.0	30	10 - 40	PXE30-24WS3P3	87
5	4.0	20	9 - 36	PXE20-24WS05	79
5	4.0	20	18 - 75	PXE20-48WS05	80
5	6.0	30	9 - 18	PXE30-12S05	87
5	6.0	30	18 - 36	PXE30-24S05	88
5	6.0	30	36 - 75	PXE30-48S05	89
5	6.0	30	10 - 40	PXE30-24WS05	87
5	6.0	30	18 - 75	PXE30-48WS05	88
12	1.67	20	9 - 36	PXE20-24WS12	81
12	1.67	20	18 - 75	PXE20-48WS12	81
12	2.5	30	9 - 18	PXE30-12S12	88
12	2.5	30	18 - 36	PXE30-24S12	89
12	2.5	30	36 - 75	PXE30-48S12	90
12	2.5	30	10 - 40	PXE30-24WS12	87
12	2.5	30	18 - 75	PXE30-48WS12	87
15	1.33	20	9 - 36	PXE20-24WS15	81
15	1.33	20	18 - 75	PXE20-48WS15	81
15	2.0	30	9 - 18	PXE30-12S15	88
15	2.0	30	18 - 36	PXE30-24S15	89
15	2.0	30	36 - 75	PXE30-48S15	90
15	2.0	30	10 - 40	PXE30-24WS15	88
15	2.0	30	18 - 75	PXE30-48WS15	88
Dual Outputs					
±5	±2.0	20	9 - 36	PXE20-24WD05	79
±5	±2.0	20	18 - 75	PXE20-48WD05	79
±12	±0.833	20	9 - 36	PXE20-24WD12	81
±12	±0.833	20	18 - 75	PXE20-48WD12	83
±12	±1.25	30	9 - 18	PXE30-12D12	87
±12	±1.25	30	18 - 36	PXE30-24D12	88
±12	±1.25	30	36 - 75	PXE30-48D12	88
±12	±1.25	30	10 - 40	PXE30-24WD12	84
±12	±1.25	30	18 - 75	PXE30-48WD12	85
±15	±0.666	20	9 - 36	PXE20-24WD15	82
±15	±0.666	20	18 - 75	PXE20-48WD15	84
±15	±1.0	30	9 - 18	PXE30-12D15	87
±15	±1.0	30	18 - 36	PXE30-24D15	88
±15	±1.0	30	36 - 75	PXE30-48D15	88
±15	±1.0	30	10 - 40	PXE30-24WD15	85
±15	±1.0	30	18 - 75	PXE30-48WD15	86

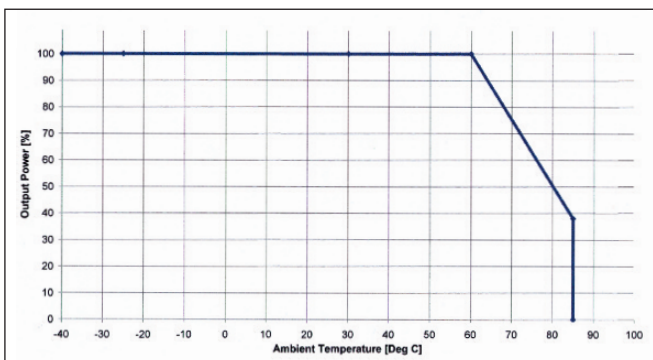
Outline Drawing PXE Series



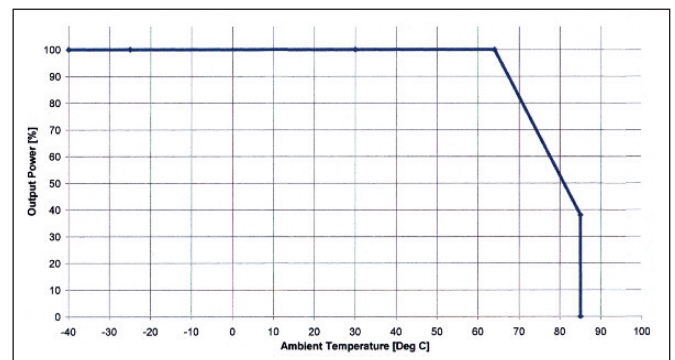
Pinout

PIN #	Function	
	Single Output	Dual Output
1	+ Input	+ Input
2	- Input	- Input
4	Remote on/off	Remote on/off
5	No Pin	+ Output
6	+ Output	Common
7	- Output	- Output
8	Trim	Trim

Derating Curve PXE20 Series



Derating Curve PXE30 Series



Options

Single Output

Dual Output

Suffix

Function

Function

No Suffix

Positive Logic & Output Trim

Positive Logic & Output Trim

N

Negative Logic & Output Trim ⁽⁴⁾
(PXE30 wide range only)

Negative Logic & Output Trim ⁽⁴⁾
(PXE30 wide range only)

Add suffix for N option, Example PXE30-48S12-N



TDK-Lambda France SAS

3 Avenue du Canada
 Parc Technopolis
 Bâtiment Sigma
 91940 les Ulis
 France
 Tel: +33 1 60 12 71 65
 Fax: +33 1 60 12 71 66
france@fr.tdk-lambda.com
www.emea.lambda.tdk.com/fr



Italy Sales Office

Via Giacomo Matteotti 62
 20092 Cinisello Balsamo (MI)
 Italy
 Tel: +39 02 61 29 38 63
 Fax: +39 02 61 29 09 00
info.italia@it.tdk-lambda.com
www.emea.lambda.tdk.com/it



Netherlands

info@nl.tdk-lambda.com
www.emea.lambda.tdk.com/nl



TDK-Lambda Germany GmbH

Karl-Bold-Strasse 40
 77855 Achern
 Germany
 Tel: +49 7841 666 0
 Fax: +49 7841 5000
info.germany@de.tdk-lambda.com
www.emea.lambda.tdk.com/de



Austria Sales Office

Aredstrasse 22
 2544 Leobersdorf
 Austria
 Tel: +43 2256 655 84
 Fax: +43 2256 645 12
info@at.tdk-lambda.com
www.emea.lambda.tdk.com/at



Switzerland Sales Office

Eichtalstrasse 55
 8634 Hombrechtikon
 Switzerland
 Tel: +41 44 850 53 53
 Fax: +41 44 850 53 50
info@ch.tdk-lambda.com
www.emea.lambda.tdk.com/ch



Nordic Sales Office

Haderslevvej 36B
 DK-6000 Kolding
 Denmark
 Tel: +45 8853 8086
info@dk.tdk-lambda.com
www.emea.lambda.tdk.com/dk



TDK-Lambda UK Ltd.

Kingsley Avenue
 Ilfracombe
 Devon EX34 8ES
 United Kingdom
 Tel: +44 (0) 12 71 85 66 66
 Fax: +44 (0) 12 71 86 48 94
info@uk.tdk-lambda.com
www.emea.lambda.tdk.com/uk



TDK-Lambda Ltd.

1 Alexander Yanai
 Segula
 Petah-Tikva
 Israel
 Tel: +9 723 902 4333
 Fax: +9 723 902 4777
info@tdk-lambda.co.il
www.emea.lambda.tdk.com/il



C.I.S.

Commercial Support:

Tel: +7 (495) 665 2627

Technical Support:

Tel: +7 (812) 658 0463

info@tdk-lambda.ru

www.emea.lambda.tdk.com/ru

Local Distribution

