



DPX30W Series

Single and Dual Output 30W Din Rail Mount
DC-DC Converters

- Single and dual output
- Meet EN55022 Class B
- Input fuse protection
- Input reverse polarity protection
- Input in-rush current protection
- Overload and short circuit protection
- Over voltage protection
- Reliable snap-on for DIN rail TS-35/7.5 or TS-35/15
- I/O-isolation 1600 VDC
- Output DC-OK indicator

Key Market Segments & Applications

Communication Systems, Industry Control Systems
Factory Automation, Semiconductor Equipment

DPX30W Features and Benefits

Features

- CE Approval
- Wide Range Input

Benefits

- Easier System Approvals
- Less Parts to Inventory

Specifications

DPX30W	
ITEMS	
Rated Input voltage range	24V nominal input 10-40VDC 48V nominal input 18-75VDC
Frequency	300Hz, typ
Maximum Input Current	See Table
Input Fuse	24V input, 6A Fuse 48V input, 4A fuse
Max Output Power (W)	See Table
Voltage Accuracy (Note 7)	Single/Dual $\pm 1.0\%$ / Single (3.3V) $\pm 1.5\%$
Voltage Adjustment	Single output $\pm 10\%$
Minimum Load	N/A
Line Regulation (LL to HL at full load)	Single $\pm 0.5\%$ / Dual $\pm 0.5\%$
Ripple and Noise	20MHz bandwidth See table
Start up time (Nominal Vin and constant resistive load)	Power up 100mS, typ
Remote on/off (option) (Note 2)	POSITIVE Logic: ON: Open or 3-12V, OFF Short or <1.2V NEGATIVE Logic: ON: Short or <1.2V, OFF Open or 3-12V
Efficiency	See Table
Over Current Protection, Factory Set	Maximum, 150% of full load
Short Circuit Protection (Note 3)	Hiccup, auto recovery
Overvoltage Protection	3.3V output 3.9V 5V output 6.2V 12V output 15V 15 output 18V
Operating Temperature	-40°C ~ 67°C (without derating) 67°C ~ 90°C (with derating - see curve)
Storage Temperature	-40°C ~ 105°C
Thermal Shock	MIL-STD-810F
Relative Humidity (non condensing)	5% to 95% RH
Transient Response (25% step load change)	250µS
MTBF BELLCORE TR-NWT-000332 (Note 1)	1,124,000 hrs
Vibration	MIL-STD-810F
Conducted and Radiated Emissions	EN55022, Class B
Immunity	EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6 Perf. Criteria A
Safety	CE
Size (H x W x D)	57.6 x 24.5 x 125.0 mm
Weight	170g
Connector	Screw Terminal
Cooling	Convection
Front Panel LED	Output DC good
Warranty	2 Years

Notes: See page 2



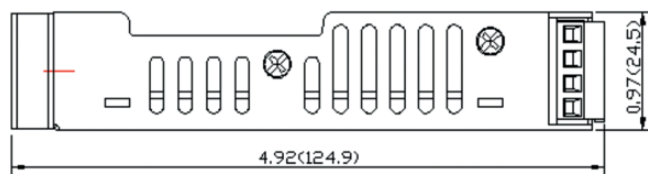
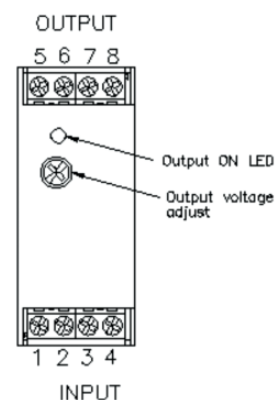
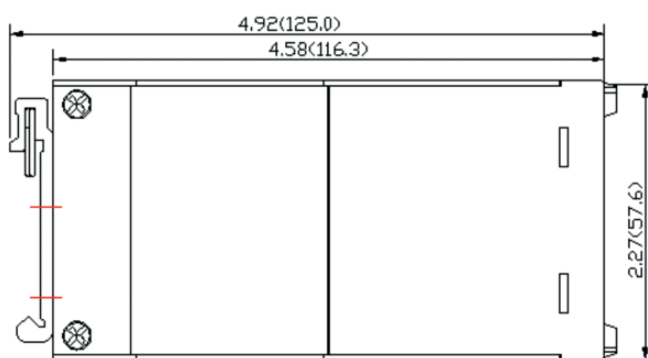
Notes

1. BELLCORE TR-NWT-000332. Case I: 50% Stress, Temperature at 40°C. MIL-HDBK-217F Notice2 @Ta=25°C, Full load(Ground, Benign, controlled environment).
2. The ON/OFF control pin voltage is referenced to -Vin. Positive logic standard. To order Negative logic ON/OFF control add the suffix-N (Ex:DPX30-48WS05-N)
3. Typical value at nominal input voltage and full load.
4. Typical value at nominal input voltage and no load.
5. Maximum value at nominal input voltage and full load.
6. Test by minimum Vin and constant resistive load.
7. Single outputs have a potentiometer to adjust the output voltage.

Model Selector

Model	Input Range	Output Voltage	Output Current Min Load	Output Current Full Load	Output (3) Ripple & Noise	Input Current No Load (4)	Input Current Full Load (5)	Eff. % (3)	Capacitor Load Max (6)
DPX30-24WS3P3	10 - 40 VDC	3.3 VDC	0mA	6000mA	60mVp-p	52mA	1031mA	84	19500μF
DPX30-24WS05	9.5 - 36 VDC	5 VDC	0mA	6000mA	75mVp-p	67mA	1563mA	84	10200μF
DPX30-24WS12	10 - 40 VDC	12 VDC	0mA	2500mA	100mVp-p	69mA	1563mA	84	3300μF
DPX30-24WS15	10 - 40 VDC	15 VDC	0mA	2000mA	100mVp-p	75mA	1543mA	85	1100μF
DPX30-24WD12	10 - 40 VDC	± 12 VDC	0mA	± 1250 Ma	100mVp-p	34mA	1623mA	81	±1000μF
DPX30-24WD15	10 - 40 VDC	± 15 VDC	0mA	±1000mA	100mVp-p	40mA	1603mA	82	±680μF
DPX30-48WS3P3	18 - 75 VDC	3.3 VDC	0mA	6000mA	60mVp-p	32mA	509mA	85	19500μF
DPX30-48WS05	18 - 75 VDC	5 VDC	0mA	6000mA	75mVp-p	32mA	762mA	86	10200μF
DPX30-48WS12	18 - 75 VDC	12 VDC	0mA	2500mA	100mVp-p	38mA	772mA	85	3300μF
DPX30-48WS15	18 - 75 VDC	15 VDC	0mA	2000mA	100mVp-p	48mA	762mA	86	1100μF
DPX30-48WD12	18 - 75 VDC	± 12 VDC	0mA	±1250mA	100mVp-p	28mA	791mA	83	±1000μF
DPX30-48WD15	18 - 75 VDC	± 15 VDC	0mA	±1000mA	100mVp-p	28mA	781mA	84	±680μF

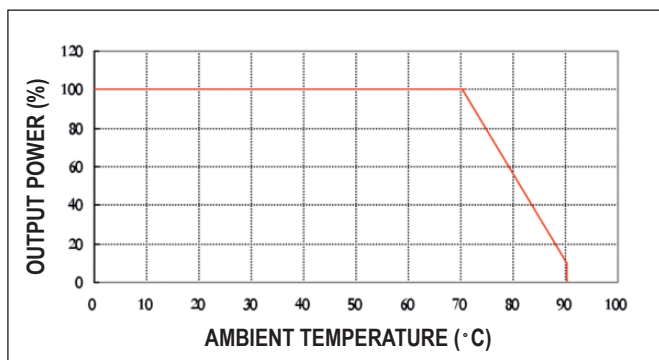
Outline Drawing DPX30W Series



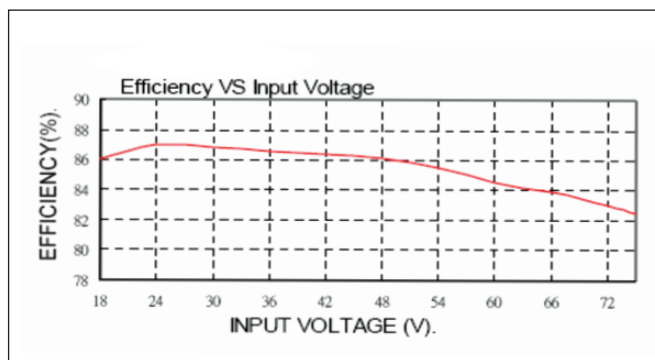
All dimensions in inches (mm)
Tolerance: X. XX ± 0.04 (X.X±1.0)
X. XXX ± 0.02 (X.XX±0.5)



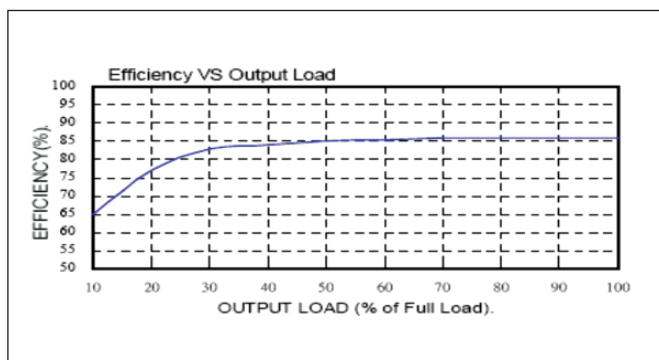
Derating Curve DPX30-48WS05



Derating Curve DPX30-48WS05



Derating Curve DPX30-48WS05

**Pinout**

PIN	Single	Dual
1	CTRL	CTRL
2	- Input	- Input
3	- Input	- Input
4	+ Input	+ Input
5	NC	NC
6	- Output	- Output
7	+ Output	Common
8	NC	+ Output

NC: No connection

Screw terminals - wire range from 14 to 18 AWG

Options

Option	Suffix
Negative Logic Remote ON/OFF	- N

For full data and drawings please visit
www.emea.tdk-lambda.com/www/dpx



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