



DPX60W Series

Single and Dual Output 60W 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

DPX60W Features and Benefits

Features

- CE Approvals
- Wide Range Input

Benefits

- Easier System Approvals
- Less Parts to Inventory

Specifications

ITEMS		DPX60W	
Rated Input voltage range		24V nominal input 18-36VDC	48V nominal input 36-75VDC
Frequency		300Hz, typ	
Maximum Input Current		See Table	
Max Output Power (W)		See Table	
Voltage Accuracy		Single/Dual $\pm 1.0\%$	
Voltage Adjustment	(Note 7)	Single (3.3V) $\pm 1.5\%$ / Single output $\pm 10\%$	
Minimum Load		N/A	
Line Regulation (LL to HL at full load)		Single at $\pm 0.5\%$	
Ripple and Noise		20MHz bandwidth See table	
Start up time (Nominal Vin and constant resistive load)		Power up 100mS, typ (remote 20mS, 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	3.7 VDC - 5.4VDC
		5V output	5.6VDC - 7.0VDC
		12V output	13.5VDC - 20.5VDC
		15 output	16.8VDC - 20.5VDC
Operating Temperature		-40°C ~ 60°C (without derating) 60°C ~ 85°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)	9,576,000 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		182g	
Connector		Screw Terminal	
Cooling		Convection	
Front Panel LED		Output DC good	
Warranty		2 Years	

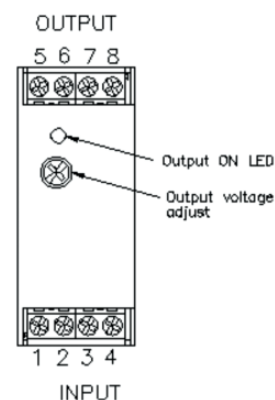
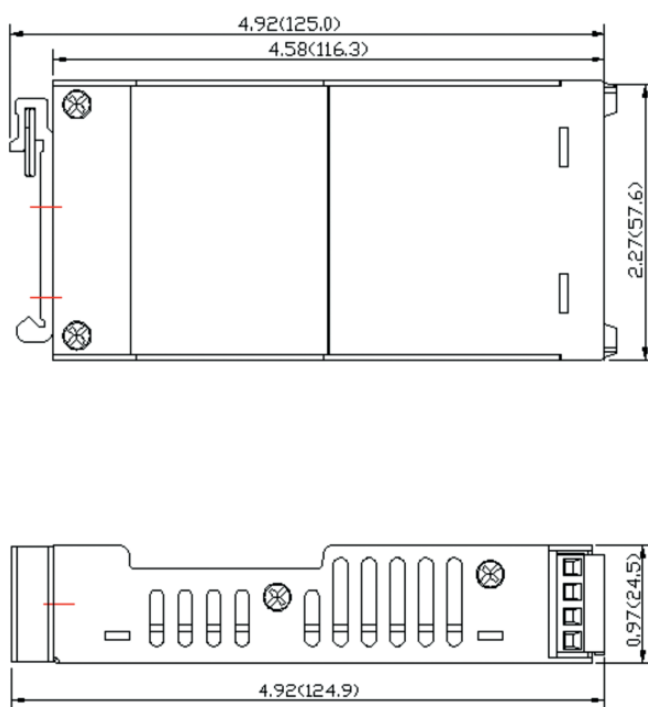
Notes: See page 2

**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:DPX60-48S05-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)
DPX60-24S3P3	18 - 36 VDC	3.3 VDC	0mA	14000mA	75mVp-p	103mA	2376mA	85	36000μF
DPX60-24S05	18 - 36 VDC	5 VDC	0mA	12000mA	75mVp-p	155mA	3049mA	86	20400μF
DPX60-24S12	18 - 36 VDC	12 VDC	0mA	5000mA	100mVp-p	155mA	3049mA	86	3550μF
DPX60-24S15	18 - 36 VDC	15 VDC	0mA	4000mA	100mVp-p	155mA	3049mA	86	2300μF
DPX60-48S3P3	36 -75 VDC	3.3 VDC	0mA	14000mA	75mVp-p	83mA	1188mA	85	36000μF
DPX60-48S05	36 -75 VDC	5 VDC	0mA	12000mA	75mVp-p	104mA	1524mA	86	20400μF
DPX60-48S12	36 -75 VDC	12 VDC	0mA	5000mA	100mVp-p	104mA	1524mA	86	3550μF
DPX60-48S15	36 -75 VDC	15 VDC	0mA	4000mA	100mVp-p	104mA	1524mA	86	2300μF

Outline Drawing DPX60W Series

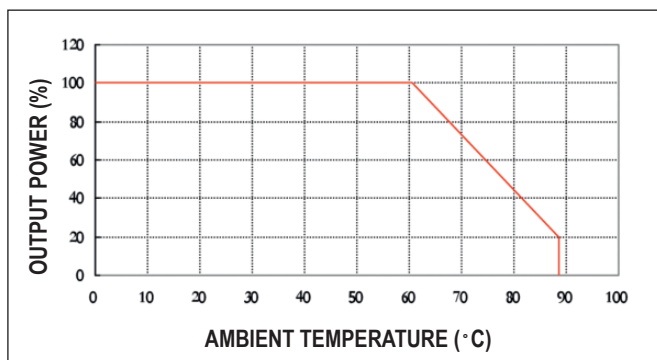
All dimensions in inches (mm)

Tolerance: X. XX ± 0.04 (X.X±1.0)

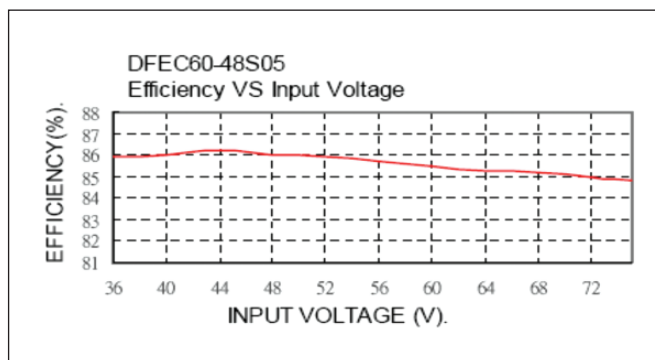
X. XXX ± 0.02 (X.XX±0.5)



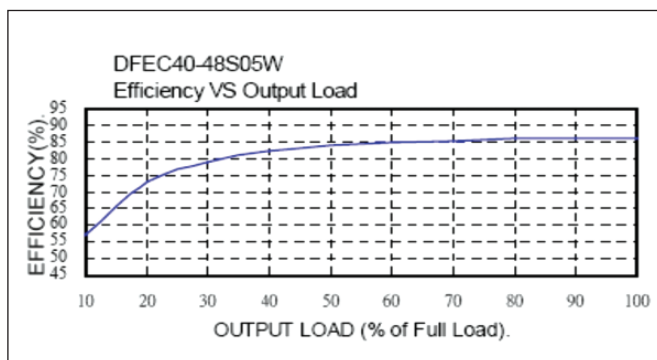
Derating Curve DPX60-48WS05



Derating Curve DPX60-48S05



Derating Curve DPX60-48S05

**Pinout**

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

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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