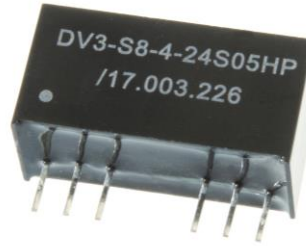




**3 Watt, 4:1 INPUT
DC/DC Converters
Series DV3-S8-4-H**



Features

- 3 Watt Isolated Output
- Regulated Outputs
- 4 : 1 Wide Input Range
- Isolation I/O 3000Vdc
- Remote ON/OFF
- SIP8 Package
- Efficiency to 84%
- Continuous Short Circuit Protection
- Input Under Voltage Protection
- Operating Case Temperature -40 to +85°C
- Safety Meets IEC/EN/UL62368-1

MODEL NUMBER	INPUT VOLTAGE [VDC]	OUTPUT VOLTAGE [VDC]	OUTPUT CURRENT [mA] MAX.	INPUT CURRENT NO LOAD [mA]	INPUT CURRENT FULL LOAD [A]	EFF. [%] (Note (1))	CAP. LOAD Max. [μ F]	CASE
DV3-S8-4-24S3,3HP	9-36	3,3	700	6	123	78	1800	S8
DV3-S8-4-24S05HP		5	600	4	154	81	1000	
DV3-S8-4-24S12HP		12	250	14	151	83	220	
DV3-S8-4-24S15HP		15	200	15	152	82	120	
DV3-S8-4-24D05HP		± 5	± 300	8	155	80	470	
DV3-S8-4-24D12HP		± 12	± 125	25	150	83	100	
DV3-S8-4-24D15HP		± 15	± 100	28	152	82	47	
DV3-S8-4-48S3,3HP	18-74	3,3	700	3	61	79	1800	S8
DV3-S8-4-48S05HP		5	600	3	76	82	1000	
DV3-S8-4-48S12HP		12	250	7	74	84	220	
DV3-S8-4-48S15HP		15	200	12	74	84	120	
DV3-S8-4-48D05HP		± 5	± 300	5	76	82	470	
DV3-S8-4-48D12HP		± 12	± 125	12	74	84	100	
DV3-S8-4-48D15HP		± 15	± 100	13	75	83	47	

NOTE:

1. Nominal Input Voltage 24 or 48 VDC.
2. Suffix "P": Positive Remote On/Off

INPUT SPECIFICATIONS:

Input Voltage Range.....	24V	9-36Vdc
	48V	18-74Vdc
Input Surge Voltage.....	100ms max., 24V	50Vdc max.
	100ms max., 48V	100Vdc max.
Under Voltage Protection	Turn-On Voltage Threshold, Vin 24V	7,5V max.
	Turn-On Voltage Threshold, Vin 48V	15,5V max.
	Turn-Off Voltage Threshold, Vin 24V	6,0 min.
	Turn-Off Voltage Threshold, Vin 48V	12V min.
Maximum Input Current.....	Vin=9V, Full Load, Vin 24V	427mA typ.
	Vin=18V, Full Load, Vin 48V	213mA typ.
Inrush Current		0,1 A ² s max.
Input Reflected Ripple Current Vin=Nominal, L=12uH, C=33uF, Load=Full Load.		30mA typ.
Input Filter		PI Capacitive
Positive Logic Remote On/Off, Refer to -Vin pin.		
Logic Low (Module Off)	Von/off at Ion/off=1.0mA	0 to 1.2V
Logic High (Module On).....		Pin open=On, high impedance
Off Converter Input Current	Shutdown input idle current	1mA max.

OUTPUT SPECIFICATION:

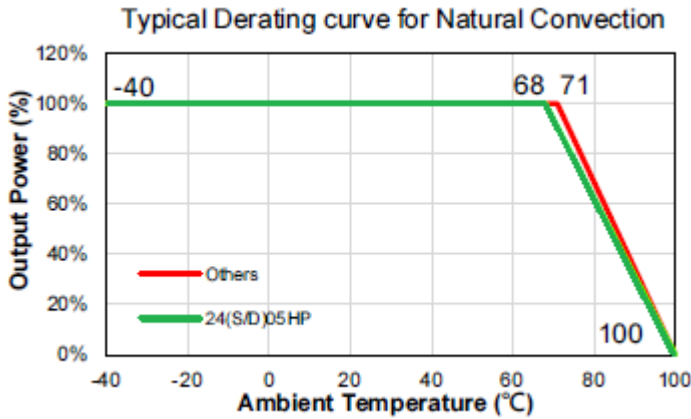
Voltage Set Point Accuracy	Vin=Nominal, Full Load, Tc=25°C	±1,5%max.
Output Voltage Balance.....	Vin=Nominal, Full Load, Tc=25°C	±1,0%max.
Line Regulation	Vin High Line to Low Line, Full Load	±0,5% max.
Load Regulation	Full load to 10% load, Single	±0,5% max.
	Full load to 10% load, Dual	±1,0% max.
Cross Regulation.....	Asymmetrical load 25%/100%, Dual	±5,0% max.
Temperature Coefficient	Tc=-40°C to 85°C	±0,03%/°C max.
Ripple and Noise (5Hz to 20 MHz BW) (Note 3)		50mV pk-pk max.
Over Current Protection.....	Foldback mode. Auto recovery	120% min.
Short Circuit Protection.....		Continuous, Auto Recovery
Output Voltage Current Transient: 75% to 100% Step Load Change di/dt=0.1A/us (within 1% Vout nominal)		
Error Band		±6% max.
Recover Time.....		500µ sec. max.
Output Voltage Rise Time.....	10%Vo_set to 90%Vo_set	1,5ms typ.

GENERAL SPECIFICATIONS:

Efficiency.....		See Table
Isolation Voltage.....	1 minute; Input to Output	3000VDC max.
Isolation Resistance	Input to Output	1000 MΩ min.
Isolation Capacitance	Input to Output	45pF typ.
Switching Frequency		100 KHz min.
Operating Ambient Temperature		-40°C to +85°C
Maximum Case Temperature	At the Center Part of Case Plate	+100°C
Derating	24S(D)05HP	above 68°C, see Derating Curve
	Othes	above 71°C, see Derating Curve
Storage Temperature		-55°C to +125°C
MTBF	Io=100% of Io_max; MIL-HDBK - 217F_Notice 1, GB, 25°C, Single	2,8 Mhours typ.
	Io=100% of Io_max; MIL-HDBK - 217F_Notice 1, GB, 25°C, Dual	2,1 Mhours typ.
Shock/Vibration		MIL-STD-810F Compliant
Thermal Shock		MIL-STD-810F
Humidity		95% RH max. Non condensing
Altitude		2000m Operating Altitude
EMI		Meets EN55032 Class A (with External Filter)
Dimensions		21,8 x 9,2 x 11,1 (mm)
Potting Material		UL 94-V0
Case Material		Non-Conductive Plastic, UL-94-V0
Weight.....		4,8g typ.

NOTE: 3. Full load, Tc=25°C, With 0.1uF MLCC across output and Y-cap 470pF

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted.



Case Dimensions

All Dimensions In Inches(mm)
 Tolerances : Inches millimeters
 X.XX±0.02 X.X±0.5
 Pin ±0.002 ±0.05

Pin	Connection	
	Single	Dual
1	-V Input	-V Input
2	+V Input	+V Input
3	Remote ON/OFF	Remote ON/OFF
6	+V Output	+V Output
7	-V Output	Common
8	NC	-V Output

* NC-NO CONNECTION WITH PIN
 * NP-NO PIN

