



20 Watt, 4:1 Wide Input DC/DC Converters Series DV204SC



Features

- 20 Watt Isolated Output Regulated
- 4:1 Input Range
- Pi Input Filter
- Meets EN55022 Class A, Conducted
- UL60950-1 Approval
- Efficiency to 84%
- Remote ON/OFF Control
- Continuous Short Circuit Protection
- 2"x1,6" Six-Sided Shield Metal Case
- Meets UL62368-1 / IEC62368-1

MODEL NUMBER	INPUT VOLTAGE [VDC]	OUTPUT VOLTAGE [VDC]	OUTPUT CURRENT [mA]	INPUT CURRENT NO LOAD [mA]	INPUT CURRENT FULL LOAD [mA]	EFF. [%]	Cap. Load Max. [μ F]	CASE
DV9-36-05S4000SC	9 – 36	5	4000	15	1029	81	4000	SC
DV9-36-12S1670SC		12	1670	15	1006	83	1670	
DV9-36-15S1330SC		15	1330	15	1004	83	1330	
DV9-36-12D833SC		± 12	± 833	20	1004	83	833	
DV9-36-15D666SC		± 15	± 666	20	1004	83	666	
DV9-36-05D2000SC		± 5	± 2000	20	1004	83	2000	
DV9-36-3,3S4000SC		3,3	4000	15	705	78	4000	
DV18-72-05S4000SC	18 – 72	5	4000	10	508	82	4000	SC
DV18-72-12S1670SC		12	1670	10	497	84	1670	
DV18-72-15S1330SC		15	1330	10	496	84	1330	
DV18-72-12D833SC		± 12	± 833	15	496	84	833	
DV18-72-15D666SC		± 15	± 666	15	496	84	666	
DV18-72-05D2000SC		± 5	± 2000	15	496	84	2000	
DV18-72-3,3S4000SC		3,3	4000	10	353	78	4000	

Note: 1. Nominal Input Voltage: 24 or 48 Vdc

INPUT SPECIFICATIONS:

Input Voltage Range.....	See Table
Input Surge Voltage (100ms max.)	Vin 24V.....	50Vdc max.
	Vin 48V.....	100Vdc max.
Input Filter.....		Pi Type
Positive Logic Remote On/Off Control:	Logic Compatibility.....	CMOS or Open Collector TTL
	EC-ON.....	>+5,5VDC to 75Vdc or Open Circuit
	EC-OFF.....	<1,8VDC
	Control Common.....	Referenced to Input Minus

OUTPUT SPECIFICATIONS:

Voltage Accuracy	Single Output.....	±1,0%max.
	Dual +Output.....	±1,0%max.
	Dual -Output.....	±2,0%max.
Voltage Balance, Dual Output at Full Load		±1,0%max.
Transient Response		
Single 25% Step Load Change.....		<500µ sec.
Dual-FL-1/2L±1% Error Band		<500µ sec.
Temperature Coefficient.....		±0,02%/°C max.
Ripple and Noise, 20 MHz BW		75mV p-p max. / 20mV RMS, max.
Short Circuit Protection.....		Continuous
Line Regulation, Single / Dual Output..... (From High Line to Low Line)		±0,5% max.
Load Regulation, Single and Dual Output (From Full Load to 25% Load)		±0,5% max.
External Trim Adj. Range		±10%
Start up Time.....		270ms typ.

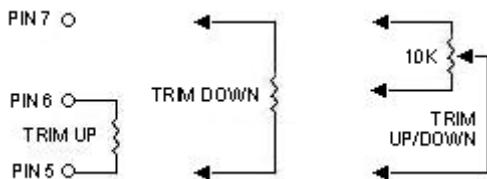
GENERAL SPECIFICATIONS:

Efficiency.....	See Table
Isolation Voltage I/O		1500VDC min.
Isolation Resistance		10 ⁸ ohms min.
Isolation Resistance		1000pF typ.
Switching Frequency		300KHz typ.
Operating Temperature Range.....		-25°C to +71°C
Derating, Above 60°C.....		Linearly to Zero Power at +100°C
Case Temperature (Note 2.)		100°C max.
Storage Temperature Range		-55°C to +105°C
Humidity		95% RH max. Non condensing
MTBF (MIL-STD-217,GB,25°C, Full Load)		1500Khrs typ.
EMI / RFI		Six Sided Continuous Shield
Dimensions2 x 1,6 x 0,45 inches (50,8 x 40,64 x 11,4 mm)
Case Material		Black Coated Copper with Non-Conductive Base
Weight.....		.53 g typ.

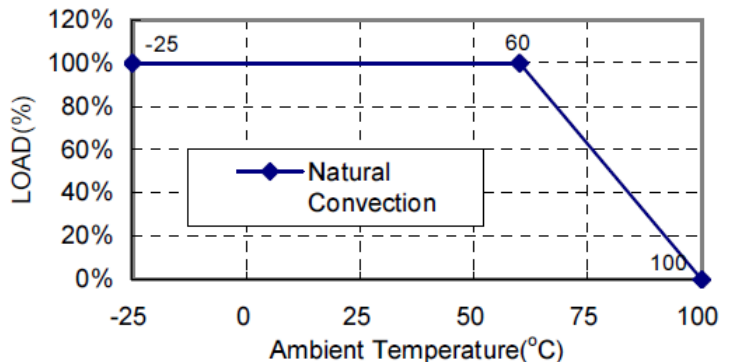
- Note: 2. Maximum case temperature under any operating condition should not be exceeded 100 °C
 3. All Specifications Typical at Nominal Line, Full Load and 25°C. Unless Otherwise Noted

External Output Trimming

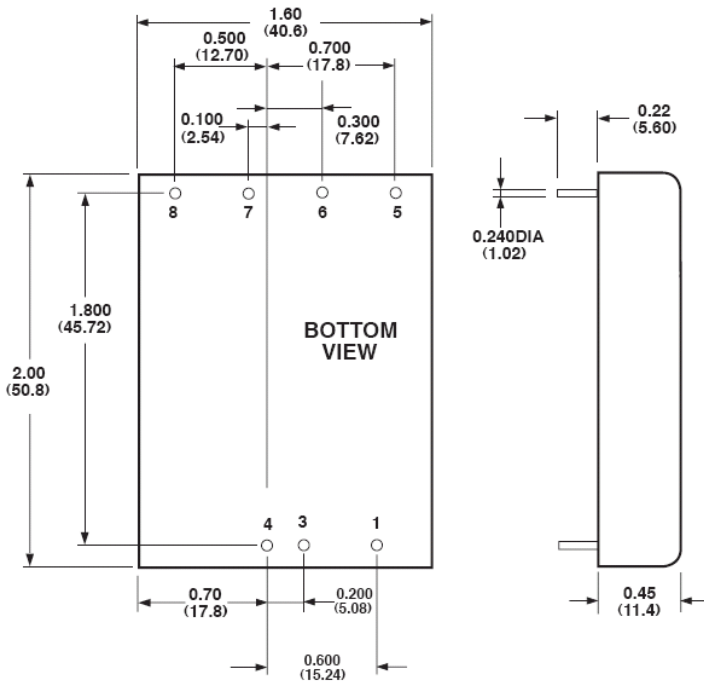
Output may optionally be externally trimmed (±10%) with a fixed resistor or an external trimpot as shown.



Typical Derating curve for Natural Convection



All dimensions in inches (mm) Toleranz: .
 Inches: x.xx = ±0.04, x.xxx = ±0.010
 Millimeters: : x.x = ±1.0, x.xx = ±0.25



PIN CONNECTION		
Pin	Single Output	Dual Output
1	On/Off Control	On/Off Control
3	-V Input	-V Input
4	+V Input	+V Input
5	Trim	Trim
6	-V Output	-V Output
7	+V Output	Common
8	No Pin	+V Output