



25 to 30 Watt, 2:1 Wide Input DC/DC Converters Series DV302C

CE
E357872



Features

- 25 – 30 Watt Isolated Output
- Regulated Outputs
- 2:1 Input Range
- CE Mark Meets 2004/108/EC
- 2" x 2" Six-Sided Shield Metal Case
- Efficiency to 88%
- Remote ON/OFF Control
- UL60950-1 Approval

MODEL NUMBER	INPUT VOLTAGE [VDC]	OUTPUT VOLTAGE [VDC]	OUTPUT CURRENT [mA (max.)]	INPUT CURRENT NO LOAD [mA (typ.)]	INPUT CURRENT FULL LOAD [mA (typ.)]	EFF. [%]	CASE
DV9-18-05S5000C	9 – 18	5	5000	30	2675	84	C
DV9-18-12S2500C		12	2500	30	3050	88	
DV9-18-15S2000C		15	2000	30	3050	88	
DV9-18-05D2500C		± 5	±2500	35	2675	83	
DV9-18-12D1250C		±12	±1250	35	3050	88	
DV9-18-15D1000C		±15	±1000	35	3050	87	
DV9-18-05/12/12C		5/±12	3500/±310	35	2640	81	
DV9-18-05/15/15C		5/±15	3500/±250	35	2640	82	
DV9-18-3,3S5000C		3,3	5000	30	1860	80	
DV18-36-05S5000C	18 – 36	5	5000	30	1336	83	C
DV18-36-12S2500C		12	2500	30	1525	87	
DV18-36-15S2000C		15	2000	30	1525	87	
DV18-36-05D2500C		± 5	±2500	30	1336	82	
DV18-36-12D1250C		±12	±1250	30	1470	87	
DV18-36-15D1000C		±15	±1000	30	1470	86	
DV18-36-05/12/12C		5/±12	3500/±310	30	1320	82	
DV18-36-05/15/15C		5/±15	3500/±250	30	1320	82	
DV18-36-3,3S5000C		3,3	5000	30	920	79	
DV36-72-05S5000C	36 – 72	5	5000	20	660	83	C
DV36-72-12S2500C		12	2500	20	765	87	
DV36-72-15S2000C		15	2000	20	765	87	
DV36-72-05D2500C		± 5	±2500	25	660	82	
DV36-72-12D1250C		±12	±1250	25	735	87	
DV36-72-15D1000C		±15	±1000	25	735	87	
DV36-72-05/12/12C		5/±12	3500/±310	25	655	83	
DV36-72-05/15/15C		5/±15	3500/±250	25	655	82	
DV36-72-3,3S5000C		3,3	5000	20	460	79	

Note:

1. Nominal Input Voltage 12, 24 or 48Vdc

Technische Änderungen vorbehalten / Technical change reserved

2016-02

1 / 3

INPUT SPECIFICATIONS:

Input Voltage Range.....		see table
Input Surge Voltage.....	12V.....	25Vdc max.
	24V.....	50Vdc max.
	48V.....	100Vdc max.
Input Filter.....		Pi Type

OUTPUT SPECIFICATIONS:

Voltage Accuracy.....	Single Output.....	±2,0%max.
	Dual +Output.....	±2,0%max.
	Dual -Output.....	±3,0%max.
	Triple, 5V.....	±2,0%max.
	Triple 12V/15V.....	±5,0%max.
Voltage Balance, Dual Output.....		±1,0%max.
Transient Response		
Single 25% Step Load Change.....		<500µ sec.
Dual FL-1/2L±1% Error Band.....		<500µ sec.
External Trim Adj. Range.....		±10%
Temperature Coefficient.....		±0,02%/°C
Ripple and Noise, 20 MHz BW.....		10mV RMS max. / 75mV p-p max.
Short Circuit Protection.....		Continuous
Line Regulation (From High Line to Low Line).....	Single/Dual.....	±0,5% max.
	Triple.....	±1,0% max.
Load Regulation (From Full Load to 25% Load).....	Single/Dual.....	±1,0% max.
	Triple.....	±5,0% max.
Start up time.....		900ms typ.

GENERAL SPECIFICATIONS:

Efficiency.....	See Table
Isolation Voltage.....	500VDC min.
Isolation Resistance.....	10 ⁹ ohms
Isolation Capacitance.....	500pF typ.
Switching Frequency.....	300KHz, min.
Case Grounding.....	Connected to Output Common
Operating Temperature Range.....	-25°C to +71°C
Derating above 60°C.....	Linearly to Zero Power at 100°C
Case Temperature.....	100°C max.
Cooling.....	Natural Convection
Storage Temperature Range.....	-55°C to +105°C
Humidity.....	95% RH max. Non condensing
MTBF (MIL-STD-217F,GB,25°C,Full Load).....	900KHrs typ.
EMI / RFI.....	Six-Sided Continuous Shield
Dimensions.....	2 x 2 x 0,4 inches (50,8 x 50,8 x 10,2 mm)
Case Material.....	Black Coated Copper with Non-Conductive Base
Weight.....	65 g

Output (Pin No.)	Voltage	Amperes	
		Min.(2)	Nom.
7	+5	0,50	3,5
8 & 5	+12 & -12	0,10	0,31
8 & 5	+15 & -15	0,10	0,25

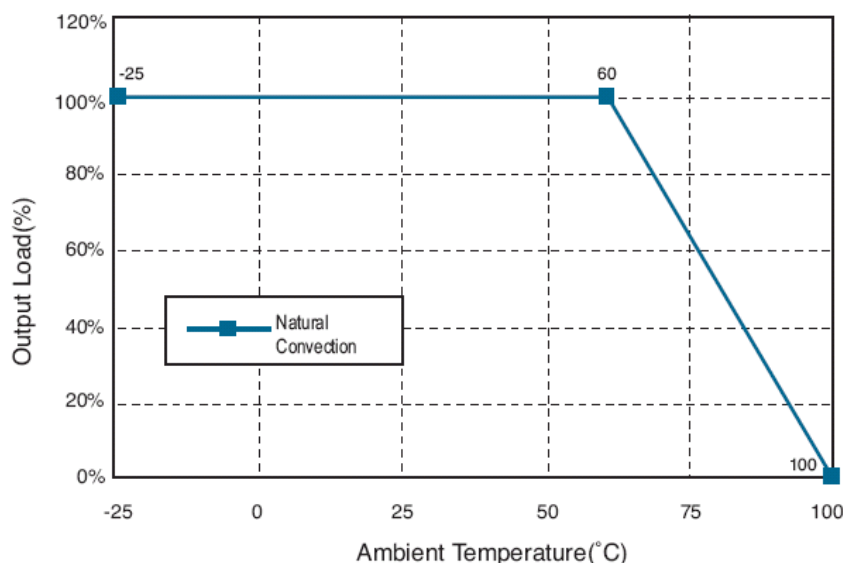
NOTE:

- Maximum total power from all outputs is limited to 25 watts but no output should be allowed to exceed its maximum current.
- Minimum current on each output is required to maintain specified regulation.

Note:

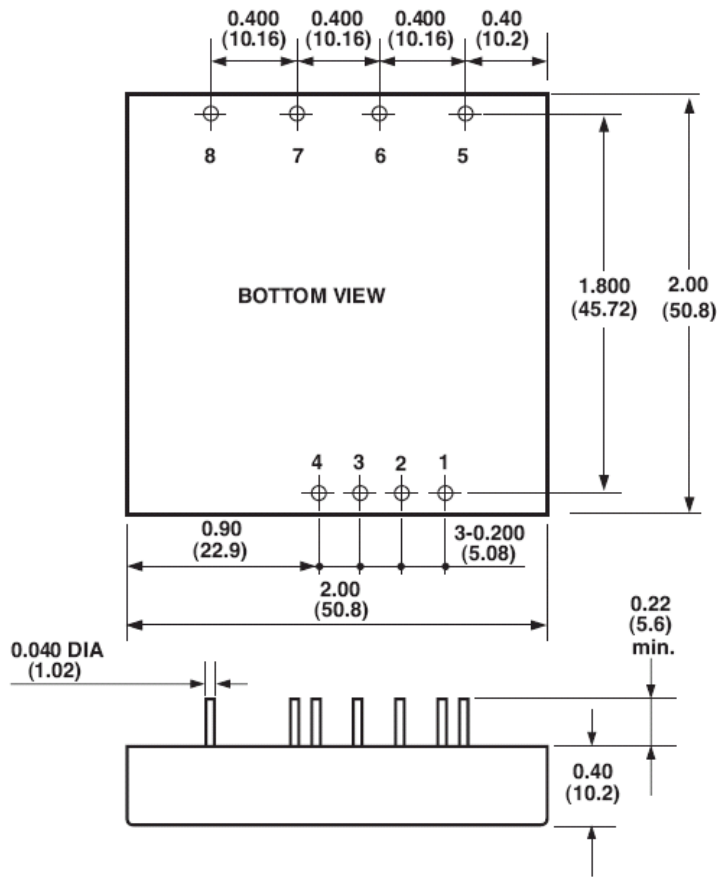
All Specifications Typical at Nominal Line, Full Load and 25°C. Unless Otherwise Noted

DERATING CURVE



Technische Änderungen vorbehalten / Technical change reserved

All dimensions in inches (mm); Toleranz: .xx±.04 (.x=±1.0), .xxx±.010 (.xx=±0.25)



PIN CONNECTION			
Pin	Single Output	Dual Output	Triple Output
1	Remote On/Off Control		
2	No Pin	No Pin	No Pin
3	-Vin	-Vin	-Vin
4	+Vin	+Vin	+Vin
5	Trim	Trim	-Aux. Out
6	-Vout	-Vout	Common
7	+Vout	Common	+5V Out
8	No Pin	+Vout	+Aux. Out

Remote On/Off Control	
Logic Compatibility	CMOS or Open Collector TTL
Ec-On	>+5,5Vdc to 75Vdc or Open Circuit
Ec-Off	<1,8 VDC
Shutdown Idle Current	10mA
Control Common	Referenced to Input Minus

External Output Trimming

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

