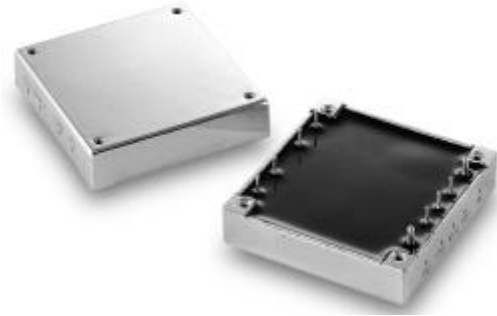




33 to 50 Watt Wide Input DC/DC Converters Series DV504H



Features

- 33 – 50 Watt Isolated Output
- Regulated Output
- 4 : 1 Wide Input Range
- 300 KHz Switching Frequency
- CE Mark Meets 2004/108/EC
- UL60950-1 Approved
- Efficiency to 87%
- Continuous Short Circuit Protection
- Five-Sided Shield Metal Case
- Industry Standard Half-Brick Package
- Safety Meets UL60950-1, EN60950-1 & IEC60950-1

MODEL NUMBER	INPUT VOLTAGE [VDC]	OUTPUT VOLTAGE [VDC]	OUTPUT CURRENT MIN. [A]	OUTPUT CURRENT MAX. [A]	INPUT CURRENT NO LOAD [mA]	INPUT CURRENT MAX. LOAD [mA]	EFF. [%]	CAP. LOAD MAX. [μF]	CASE
DV9-36-3,3S10000H	9 – 36	3,3	0	10	50	1740	79	10000	H
DV9-36-05S10000H		5		10	50	2570	81	10000	
DV9-36-12S4160H		12		4,16	50	2510	83	4160	
DV9-36-15S3330H		15		3,33	50	2448	85	3330	
DV9-36-24S2080H		24		2,08	50	2476	84	2080	
DV9-36-48S1040H		48		1,04	50	2506	83	4700	
DV18-75-3,3S10000H	18 – 75	3,3	0	10	50	848	81	10000	H
DV18-75-05S10000H		5		10	50	1255	83	10000	
DV18-75-12S4160H		12		4,16	50	1223	85	4160	
DV18-75-15S3330H		15		3,33	50	1196	87	3330	
DV18-75-24S2080H		24		2,08	50	1209	86	2080	
DV18-75-48S1040H		48		1,04	50	1238	84	4700	

NOTE: 1. Nominal Input Voltage 24V & 48 Vdc

INPUT SPECIFICATIONS:

Input Voltage Range.....		See Table
Input Surge Voltage(100ms max.)	24V	50Vdc max.
	48V	100Vdc max.
Undervoltage lockout:	24Vin power up	8,8V
	24Vin power down	8V
	48Vin power up	17V
	48Vin power down	16V
Input Filter		Pi Type
Positive Logic Remote ON/OFF (Note 2.):		
Logic Compatibility		Open Collector Ref. To -Input
Module ON		Open Circuit
Module OFF		< 0,8Vdc

OUTPUT SPECIFICATION:

Voltage Accuracy		±1,0%max.
Transient Response 25% Step Load Change		<500µ sec.
External Trim Adj. Range		±10%
Ripple and Noise, 20 MHz BW	3,3V & 5V	40mV RMS / 100mV pk-pk max
	12V & 15V	60mV RMS / 150mV pk-pk max
	24V	100mV RMS / 240mV pk-pk max
	48V	200mV RMS / 480mV pk-pk max
Temperature Coefficient		±0,03%/°C max.
Short Circuit Protection.....		Continuous
Line Regulation (From High Line to Low Line)		±0,2% max.
Load Regulation (From Full Load to Zero Load)		±0,2% max.
Over Voltage Protection trip Range, % Vo nom		115-140%
Current Limit.....		110-160% Nominal Output
Start-up Time		5ms typ

GENERAL SPECIFICATIONS:

Efficiency.....		See Table
Isolation Voltage.....	Input/Output	1500 VDC min.
	Input/Case	1500 VDC min.
	Output/Case	1500 VDC min.
Isolation Resistance		107 Ohm min.
Isolation Capacitance		1000pF typ.
Switching Frequency		300KHz Typ.
Operating Case Temperature Range		-40°C to +100°C
Storage Temperature Range		-55°C to +105°C
Thermal Shutdown, Case Temp.		100°C Typ.
Humidity		96% RH max. Non condensing
MTBF (MIL-STD-217F,GB,25°C,Full Load.....		1000Khrs typ.
Dimensions		2,28 x 2,40 x 0,50 inches / (57,9 x 61,0 x 12,7 mm)
Weight.....		94 g
Case Material		Aluminum

NOTE:

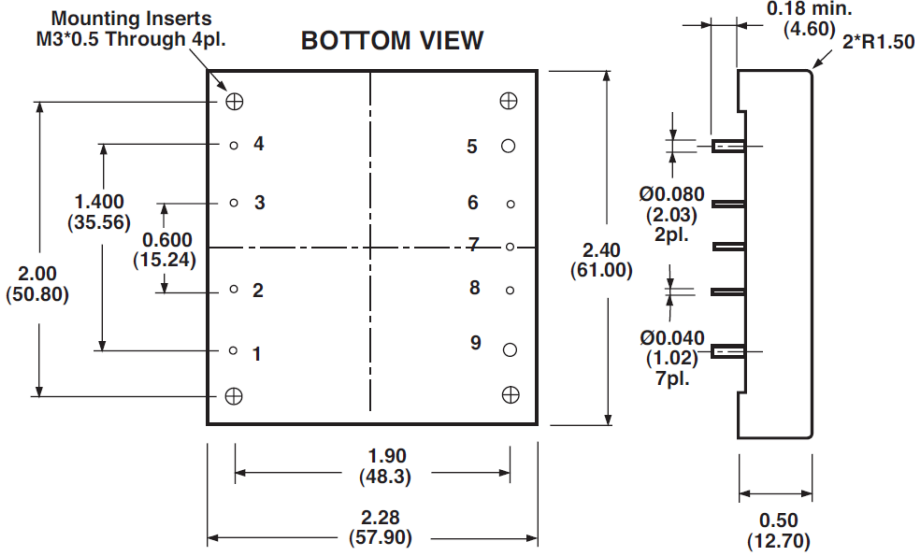
- Suffix "N" to the Model Number with Negative Logic Remote ON/OFF.
 - Output Ripple and Noise measured with 10µF tantalum and 1µF ceramic capacitor across output.
 - Suffix "-C" to the Model Number with Clear Mounting Insert (3.2mm DIA)
 - Require a 47µF Aluminum Capacitor Connected between +Vout and -Vout for 48Vout Models.
- All Specifications Typical at Nominal Line, Full Load and 25°C.

Specifications

Series DV504H

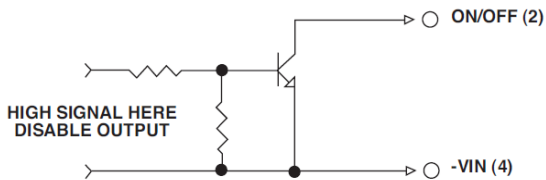
All Dimensions in Inches (mm)

Tolerance Inches x.xx±0.02 x.xxx±0.010
 Millimeters x.x±0.5 x.xx±0.25

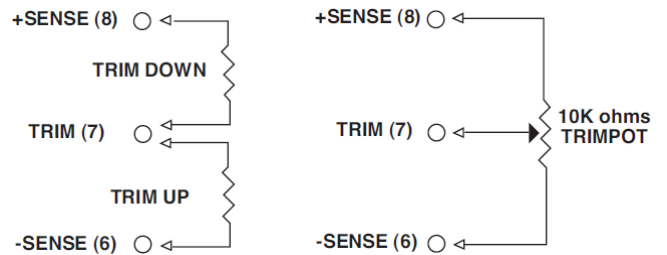


PIN CONNECTION	
Pin	Function
1	+V Input
2	Remote ON/OFF
3	Case
4	-V Input
5	-V Output
6	-Sense
7	Trim
8	+Sense
9	+V Output

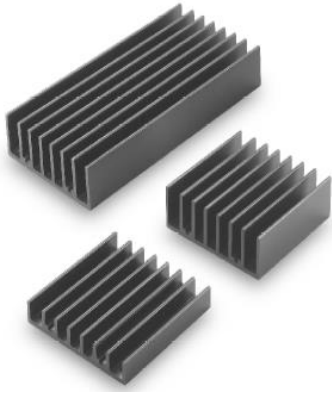
REMOTE CONTROL ON/OFF



External Output Trim



Technical change reserved / Technische Änderungen vorbehalten



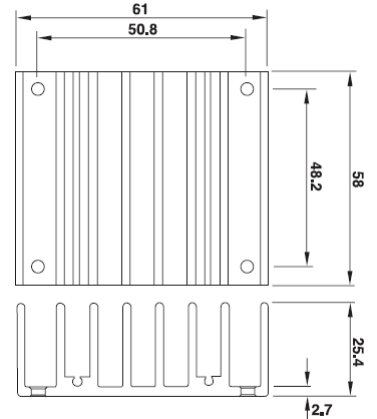
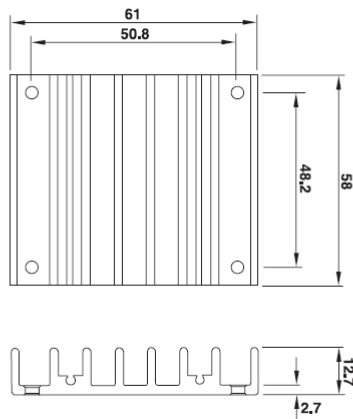
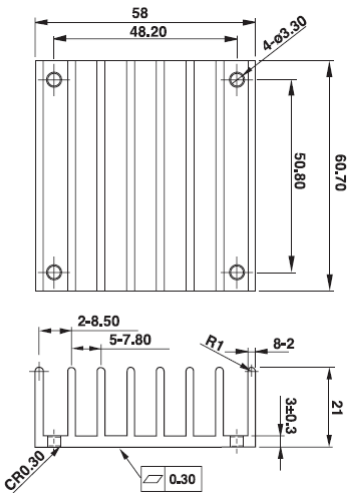
CASE H: HEAT SINK

Vertical Fins
Order No. 17.079.201
Model No. M-C308

Vertical Fins
Order No. 17.079.202
Model No. M-C091

Vertical Fins
Order No. 17.079.203
Model No. M-C092

all dimensions in mm

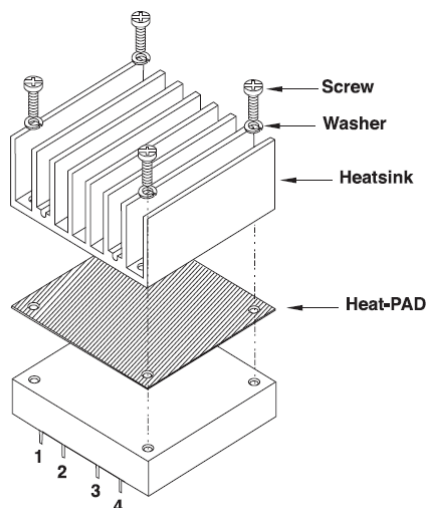


Rca: 3,9°C/W (typ.), At natural convection
 1,74°C/W (typ.), At 100LFM
 1,33°C/W (typ.), At 200LFM
 1,12°C/W (typ.), At 300LFM
 0,97°C/W (typ.), At 400LFM

Rca: 4,7°C/W (typ.), At natural convection
 2,89°C/W (typ.), At 100LFM
 2,30°C/W (typ.), At 200LFM
 1,88°C/W (typ.), At 300LFM
 1,59°C/W (typ.), At 400LFM

Rca: 3°C/W (typ.), At natural convection
 1,44°C/W (typ.), At 100LFM
 1,17°C/W (typ.), At 200LFM
 1,04°C/W (typ.), At 300LFM
 0,95°C/W (typ.), At 400LFM

Heat Sink Assembly example



Screw SMP+SW M3x8L

Thermal pad SZ56,9x60x0,25

Technical change reserved / Technische Änderungen vorbehalten