



**200 Watt, 43 – 160VDC Wide Input
DC/DC Converters
Series DV200H4-110**



Features

- 200 Watt Isolated Output
- Regulated Outputs
- 4 : 1 Wide Input Range
- Fixed Switching Frequency
- Remote ON/OFF
- Shock & Vibration: EN50155 (EN61373)
- UL60950-1 2nd (Basic Insulation) Approval
- Meet EN50155 with External Circuits
- Efficiency to 91%
- Continuous Short Circuit Protection
- Over Temperature Protection
- Over Voltage / Current Protection
- Input Under Voltage Protection
- Fire & Smoke Meet EN45545-2
- Low No Load Power Consumption
- 5000m Operating Altitude

MODEL NUMBER	INPUT VOLTAGE [VDC]	OUTPUT VOLTAGE [VDC]	OUTPUT CURRENT [A]	INPUT CURRENT NO LOAD [mA]	INPUT CURRENT FULL LOAD [A]	EFF. [%] (Note 2)	CAP. LOAD Max. [μ F]	CASE
DV200H4-110S05	43 – 160	5	40	10	2	89	40000	H
DV200H4-110S12		12	16,7	10	2	91	16700	
DV200H4-110S24		24	8,3	10	2	89	8300	
DV200H4-110S28		28	7,14	10	2	89	7140	
DV200H4-110S48		48	4,2	10	2	91	3000	

NOTE:

1. Nominal Input Voltage 110 VDC.
2. Measure at Nominal Input Voltage.
3. An external input capacitor 220 μ F for all models are Recommended to Reduce Input Ripple Voltage.

INPUT SPECIFICATIONS:

Input Voltage Range.....	110V	43-160Vdc
Input Surge Voltage (100ms max.).....	110V	200Vdc max.
Under Voltage Lockout.....	110Vin power up	42Vdc
	110Vin power down	39Vdc
Positive Logic Remote On/Off (Note 4 & 5)		
Input Filter (Note 6)		PI Filter

OUTPUT SPECIFICATION:

Output Current Min.		0 mA
Voltage Accuracy.....		±1,0%max.
Transient Response: 75%~100% Step Load Change		
Error Band ±5% Vout Nominal, Recover Time		<250µ sec.
External Trim Adj. Range.....		±10%
Ripple and Noise (Note 3), 20 MHz BW	5V	60mV RMS / 120mV pk-pk max.
	12V	80mV RMS / 150mV pk-pk max.
	24V	120mV RMS / 240mV pk-pk max.
	28V	140mV RMS / 280mV pk-pk max.
	48V	220mV RMS / 480mV pk-pk max.
Temperature Coefficient.....		±0,02%/°C max.
Short Circuit Protection		Continuous
Line Regulation (Note 1)		±0,2% max.
Load Regulation (Note 2)		±0,5% max.
Over Voltage Protection Trip Range, % Vo nom.....		115-140%
Current Limit		110-160%
Start up Time		35ms typ.

GENERAL SPECIFICATIONS:

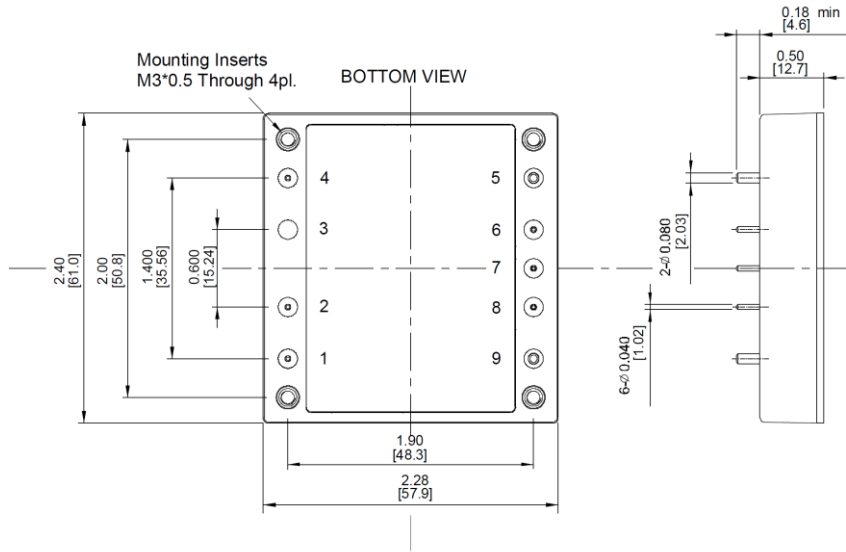
Efficiency		See Table
Isolation Voltage.....	Input/Output.....	3000 VDC min.
	Input/Case.....	3000 VDC min.
	Output/Case.....	500 VAC min.
Isolation Resistance		10 ⁸ Ohm min.
Isolation Capacitance		3000pF typ.
Switching Frequency		300 KHz typ.
Operating Case Temperature		-40°C to +100°C
Storage Temperature		-55°C to +125°C
Thermal Shutdown, Case Temp.		110°C typ.
Humidity		95% RH max. Non condensing
MTBF 25°C (MIL-HDBK-217F, GB, Full Load)	48V	900Khrs typ.
	others	600Khrs typ.
Safety.....		UL60950-1 2 nd (Basic Insulation)
EMC (Note 7).....		Meets EN50155 (EN50121-3-2) with External Filter
Shock/Vibration		Meet EN50155 (EN61373)
Environmental		Meet EN50155 (EN60068-2-1, 2, 30)
Fire & Smoke		Meet EN45545-2
Dimensions		2.28x2.40x0.50 inches (57.9x61.0x12.7 mm)
Case Material		Aluminum Baseplate with Plastic Case
Weight.....		114g

NOTE:

1. Measured from high line to low line.
2. Measured from full load to zero load.
3. Output ripple and noise measured with 10µF aluminum solid capacitor and 1µF ceramic capacitor across output. (5V: 47µF polymer tantalum capacitor and 1µF ceramic capacitor across output).
4. Logic compatibility open collector ref to -Input
 Module on >3.5Vdc to 160Vdc or open circuit
 Module off 0 to <1.2Vdc
5. Suffix "N" to the model number with negative logic remote on/off
 Module on 0 to <1.2Vdc
 Module off >3.5Vdc to 160Vdc or open circuit
6. An external input capacitor 220µF for all models are recommended to reduce input ripple voltage.
7. For information about EN50155 and RIA12, refer to application note.
8. Suffix "-C" to the model number with clear mounting insert. (3.2mm DIA).
9. All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted.

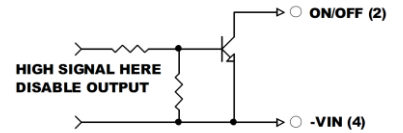
All Dimensions in Inches (mm)

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	On/Off
3	NP
4	-V Input
5	-V Output
6	-Sense
7	Trim
8	+Sense
9	+V Output

Remote On/Off Control



External Output Trim

