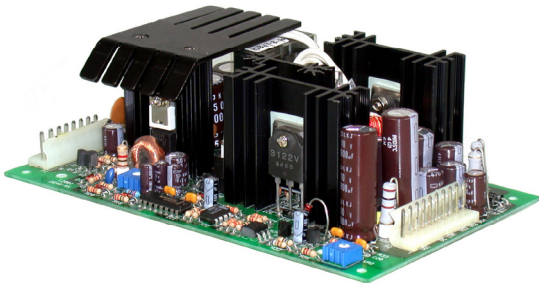


HiTRON

18-36VDC INPUT RANGE DC-DC PCB OPEN FRAME QUAD OUTPUT 50 WATTS INTERNAL SWITCHING POWER CONVERTERS HDB49 SERIES



FEATURES:

- PCB OPRN FRAME FORMAT
- 18-36VDC NOMINAL 24VDC INPUT
- EMI MEET EN 55022 & FCC CLASS A
- CE MARKING COMPLIANCE

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: Typ. 18-36Vdc, nominal input 24Vdc.
Input Connector: Molex V-M connector.
Inrush Current: 36A @ nominal input 24Vdc.
Input Current: 3.1A @ nominal input 24Vdc & full load.
Dielectric Withstand: Meet IEC950 regulation.
EMI: Meet EN55022 & FCC Class A.
Overload Protection (OLP): Fully protected against output overload or short circuit.
Typical 120-150% max. load.
Consult the factory for special OLP setting.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.
Output Current: See Ratings Chart.
Output Wattage: Typ. 50Watts continuous.
Output Connector: Molex V-M connector.
Line Regulation: Typ. 0.5%.
Load Regulation: Main VO1 typ. $\pm 1.0\%$
Aux. VO2 typ. $\pm 2.0-3.0\%$.(PR)
Aux. VO3 typ $\pm 2.0-3.0\%$.(PR)
Aux. VO4 typ $\pm 2.0-3.0\%$.(PR)
Noise & Ripple: Typ. 1% peak to peak.
OVP: Built-in at main VO1.
Adjustability: Available at main VO1.

GENERAL SPECIFICATION

Efficiency: Typ. 70%.
Switching Frequency: 56K Hz.
Circuit Topology: Push-pull Circuit.
Transient Response: Typ. 2 mS following a 25% load change.
Safety Standard: IEC 60950 Class I.
Power Density: 1.0Watts / Cubic Inch.

Operating Temperature: 0 to +50°C at full load,
derating to half @+ 70°C.
Storage Temperature: -40°C to +85°C.
Temperature Coefficient: $\pm 0.04\%/^{\circ}\text{C}$.
Cooling: Convection cooling is adequate.
Construction: PCB open-frame format.

OUTPUT VOLTAGE/CURRENT RATINGS CHART

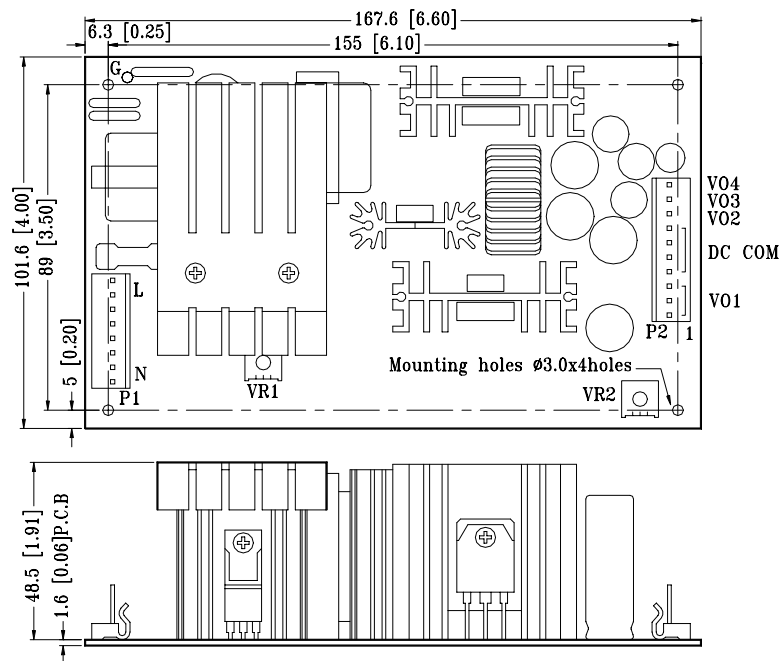
QUAD OUTPUT

MODEL NO.	MAIN +VO1 @★			AUX. VO2●■			AUX. VO3 ●■			AUX. -VO4 ●■		
	Typ.	Volt.	Max.	Typ.	Volt.	Max.	Typ.	Volt.	Max.	Typ.	Volt.	Max.
HDB49-24B-Q056HIE	4.2A	+5.6V	7.0A	1.4A	+12V	2.0A	0.6A	-12V	1.2A	0.6A	-5V	1.2A
HDB49-24B-Q033HIE	5.0A	+3.3V	6.0A	1.4A	+12V	2.0A	0.6A	-12V	1.2A	0.6A	-5V	1.2A

Symbol: "★" OVP built-in. "@" Adjustable. "■" Coupled common choke. "●" Installed with Post Regulator (PR).

MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 480.0g (16.90 Oz.)



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

ASSIGNMENT	DC INPUT			QUAD OUTPUT				
	+Vin	-Vin	Gnd.	VO1	VO2	VO3	VO4	DC COM
CNTR & PIN #	P1-1~P1-4	P1-5~P1-8	GND	P2-1~P2-3	P2-8	P2-9	P2-10	P2-4~P2-7

Mating connector: Molex 5195 or 5239 series.