



60 WATT SINGLE/DUAL/TRIPLE OUTPUT

Regulated, 2:1 Input Range
DC/DC Converters



FEATURES

- **500 Vdc Min.
Input/Output Isolation
(3000Vdc Available)**
- **Efficiency to
86% @ FL**
- **100KHz Min.
Switching Frequency**
- **Short Circuit
Protection**
- **6-Sided Shielding
Available**
- **Compact Size**
- **Epoxy Encapsulated**

KW60 Series

Specifications

All specifications are typical at nominal input, full load, and 25°C , unless otherwise noted.

INPUT

Input Voltages.....	Voltage Range
12 Vdc.....	9-18Vdc
24 Vdc.....	18-36 Vdc
48 Vdc.....	36-72 Vdc

OUTPUT

Voltage Accuracy.....	±1.0%
Line Regulation	±0.1%
Load Regulation.....	±0.5%
Ripple Noise (20 MHz BW).....	50mV p-p max.
Temperature Coefficient (at FL).....	±0.02%/°C max.
Transient Response, 25% load step.....	< 250ms

GENERAL

Efficiency.....	86% max. @ FL
Isolation Voltage.....	500 Vdc min. Up to 3000 Vdc min. Optional
Isolation Resistance.....	100MOhms
Switching Frequency.....	100KHz typ.
Protection.....	Over Current Protection Short Circuit Protection

ENVIRONMENTAL

Operating Temperature Range.....	-25 to +71°C
Storage Temperature Range.....	-50 to +105°C
Cooling.....	Free Air Convection
EMI/RFI.....	Five-Sided Shield Six-Sided Shield (optional)

PHYSICAL

Dimensions.....	5.51" x 3.47" x 1.36" (140.0 x 88.0 x 34.7 mm)
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Selection Guide

(Continued)

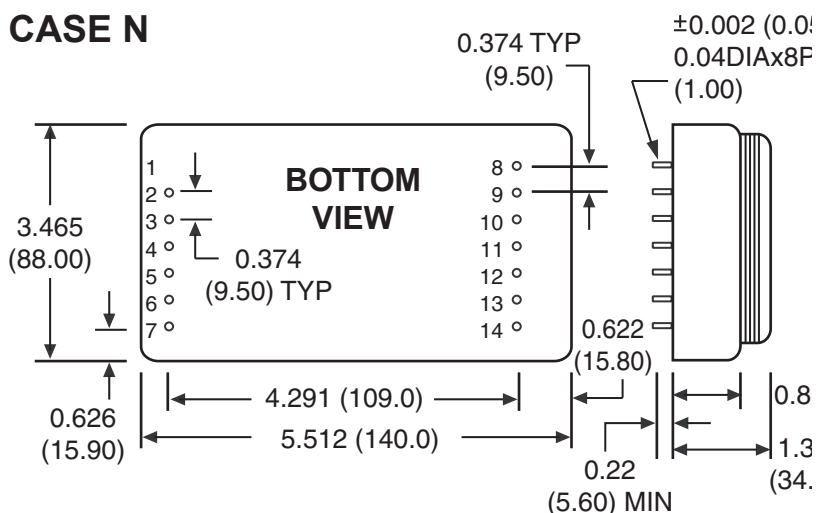
	Input Voltage Nominal (Range) (Vdc)	Output Voltage (Vdc)	Output Current (mA)	Model Number	Case	
SINGLE OUTPUT VOLTAGE	12 (9-18)	5	12000	KW60-12S5	N	
		12	5000	KW60-12S12	N	
		15	4000	KW60-12S15	N	
	24 (18-36)	5	12000	KW60-24S5	N	
		12	5000	KW60-24S12	N	
		15	4000	KW60-24S15	N	
	48 (36-72)	5	12000	KW60-48S5	N	
		12	5000	KW60-48S12	N	
		15	4000	KW60-48S15	N	
DUAL OUTPUTS	12 (9-18)	±5	±6000	KW60-12-5	N	
		±12	±2500	KW60-12-12	N	
		±15	±2000	KW60-12-15	N	
	24 (18-36)	±5	±6000	KW60-24-5	N	
		±12	±2500	KW60-24-12	N	
		±15	±2000	KW60-24-15	N	
	48 (36-72)	±5	±6000	KW60-48-5	N	
		±12	±2500	KW60-48-12	N	
		±15	±2000	KW60-48-15	N	
TRIPLE OUTPUTS	12 (9-18)	5 / +12 / -12	6000 / 2000 / 500	KW60-12S5-12	N	
		5 / +15 / -15	6000 / 1500 / 500	KW60-12S5-15	N	
		±5 / 12	±5500 / 500	KW60-12S12-5	N	
	24 (18-36)	5 / +12 / -12	6000 / 2000 / 500	KW60-24S5-12	N	
		5 / +15 / -15	6000 / 1500 / 500	KW60-24S5-15	N	
		±5 / 12	±5500 / 500	KW60-24S12-5	N	
	48 (36-72)	5 / +12 / -12	6000 / 2000 / 500	KW60-48S5-12	N	
		5 / +15 / -15	6000 / 1500 / 500	KW60-48S5-15	N	
		±5 / 12	±5500 / 500	KW60-48S12-5	N	

Mechanical Specifications

I/O Connections			
Pin	SINGLE	DUAL	TRIPLE *
1	No Pin	No Pin	No Pin
2	-Vin	-Vin	-Vin
3	-Vin	-Vin	-Vin
4	+Vin	+Vin	+Vin
5	+Vin	+Vin	+Vin
6	On/Off	On/Off	On/Off
7	Case	Case	Case
8	-Vout	On	-Sense
9	-Vout	Common	Com1
10	+Vout	+Vout	+5Vdc
11	+Vout	+Vout	+Sense
12	-Sense	Common	+Vout V2
13	Trim	-Vout	Com2
14	+Sense	-Vout	-Vout V3

* For ±5Vdc/12Vdc Triple Voltage Units
V2 = -5Vdc, V3 = +12Vdc

CASE N



All Dimensions are in inches (mm)