

KDD40 SERIES

DC-DC CONVERTER 33 ~ 48W



KDD40 - 12 S 01

WATTAGE

12 : 9~18V IN
24 : 18~36V IN
48 : 36~72V IN

01: 5V or
±5V or
+5V/±12V OUT
02: 12V or
±12V or
+5V/±15V OUT
03: 15V or
±15V or
+5V/+12V/-5V OUT
04: 24V OUT
05: 3.3V OUT

MODEL LIST

MODEL NO.	INPUT VOLTAGE	OUTPUT WATTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	EFF. (MIN.)	CASE
Single Output Models						
KDD40 - 12S01	9~18 VDC	40 WATTS	+ 5 VDC	8000 mA	75%	C
KDD40 - 12S02	9~18 VDC	42 WATTS	+ 12 VDC	3500 mA	78%	C
KDD40 - 12S03	9~18 VDC	45 WATTS	+ 15 VDC	3000 mA	79%	C
KDD40 - 12S04	9~18 VDC	48 WATTS	+ 24 VDC	2000 mA	80%	C
KDD40 - 12S05	9~18 VDC	33 WATTS	+3.3 VDC	10000 mA	73%	C
KDD40 - 24S01	18~36 VDC	40 WATTS	+ 5 VDC	8000 mA	79%	C
KDD40 - 24S02	18~36 VDC	42 WATTS	+ 12 VDC	3500 mA	81%	C
KDD40 - 24S03	18~36 VDC	45 WATTS	+ 15 VDC	3000 mA	81%	C
KDD40 - 24S04	18~36 VDC	48 WATTS	+ 24 VDC	2000 mA	81%	C
KDD40 - 24S05	18~36 VDC	33 WATTS	+3.3 VDC	10000 mA	77%	C
KDD40 - 48S01	36~72 VDC	40 WATTS	+ 5 VDC	8000 mA	79%	C
KDD40 - 48S02	36~72 VDC	42 WATTS	+ 12 VDC	3500 mA	81%	C
KDD40 - 48S03	36~72 VDC	45 WATTS	+ 15 VDC	3000 mA	82%	C
KDD40 - 48S04	36~72 VDC	48 WATTS	+ 24 VDC	2000 mA	84%	C
KDD40 - 48S05	36~72 VDC	33 WATTS	+3.3 VDC	10000 mA	77%	C



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MODEL NO.	INPUT VOLTAGE	OUTPUT WATTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	EFF. (MIN.)	CASE
Dual Output Models						
KDD40 - 12D01	9~18 VDC	37.5 WATTS	± 5 VDC	+7000/-500 mA	75%	C
KDD40 - 12D02	9~18 VDC	42 WATTS	± 12 VDC	+3000/-500 mA	78%	C
KDD40 - 12D03	9~18 VDC	37.5 WATTS	± 15 VDC	+2000/-500 mA	79%	C
KDD40 - 24D01	18~36 VDC	42.5 WATTS	± 5 VDC	+8000/-500 mA	77%	C
KDD40 - 24D02	18~36 VDC	42 WATTS	± 12 VDC	+3000/-500 mA	78%	C
KDD40 - 24D03	18~36 VDC	37.5 WATTS	± 15 VDC	+2000/-500 mA	80%	C
KDD40 - 48D01	36~72 VDC	42.5 WATTS	± 5 VDC	+8000/-500 mA	79%	C
KDD40 - 48D02	36~72 VDC	42 WATTS	± 12 VDC	+3000/-500 mA	81%	C
KDD40 - 48D03	36~72 VDC	37.5 WATTS	± 15 VDC	+2000/-500 mA	82%	C
Triple Output Models						
KDD40 - 12T01	9~18 VDC	42 WATTS	+5V/±12V	+6000/±500 mA	76%	C
KDD40 - 12T02	9~18 VDC	45 WATTS	+5V/±15V	+6000/±500 mA	77%	C
KDD40 - 24T01	18~36 VDC	42 WATTS	+5V/±12V	+6000/±500 mA	77%	C
KDD40 - 24T02	18~36 VDC	45 WATTS	+5V/±15V	+6000/±500 mA	78%	C
KDD40 - 24T03	18~36 VDC	38.5 WATTS	+5V/+12V/-5V	+6A/+0.5A/-0.5A	78%	C
KDD40 - 48T01	36~72 VDC	42 WATTS	+5V/±12V	+6000/±500 mA	78%	C
KDD40 - 48T02	36~72 VDC	45 WATTS	+5V/±15V	+6000/±500 mA	79%	C
KDD40 - 48T03	36~72 VDC	38.5 WATTS	+5V/+12V/-5V	+3000/-500 mA	79%	C

FEATURES

- * 2:1 INPUT RANGE
- * ISOLATION INPUT AND OUTPUT 1.5KV DC
- * HIGH PERFORMANCE UP TO 84%
- * SHORT CIRCUIT PROTECTION
- * 2 YEARS WARRANTY



SPECIFICATION

All Specifications Typical At Nominal Line, Full Load, 25°C Unless Otherwise Noticed

GENERAL SPECIFICATION

- * Switching frequency: >80KHz
- * Isolation voltage: 1,500VDC
- * Isolation resistance: >1G Ω (min.)
- * Operating ambient temperature: -25 to +71°C
- * Storage temperature: -40 to +85°C
- * Max. Case temperature: 85°C
- * M.T.B.F.: 389,000Hrs at @ GF40, according to MIL-HDBK-217F
- * Cooling: Free air convection
- * Transient recovery time: 500 μ S, 25% load step change
- * Temperature coefficient: $\pm 0.02\%$ / °C
- * Dimension: 70 x 100 x 23mm

INPUT SPECIFICATIONS

- * Input voltage range / frequency: 9 ~ 18VDC for 12V
18 ~ 36VDC for 24V
36 ~ 72VDC for 48V
- * Input filter: Pi type

OUTPUT SPECIFICATIONS

- * Output voltage accuracy: $\pm 1\%$ at V_{o_nom} for single output models
 $\pm 2\%$ at V_{o_nom} for dual output models
 $\pm 2\%$ at V_{o_nom} for triple output models ($\pm 3\%$ for -5V_{out})
- * Minimum load: No load for single output models
 $\pm 20\%$ at V_{o_nom} for dual & triple output models
- * Line regulation: $\pm 1\%$ at V_{o_nom}
- * Load regulation: $\pm 2\%$ at V_{o_nom} for single output models
 $\pm 2\%$ for +V_{out} / $\pm 5\%$ for -V_{out} for dual output models
 $\pm 2\%$ for +5V/ $\pm 5\%$ for $\pm 12V$ & $\pm 15V$ & +12V/ $\pm 15V$ for triple
- * Ripple & noise: 20MHZ BM, $V_{out} \times \pm 1\%$ mV p-p
150mV p-p for -5V_{out} for triple
- * Efficiency: Up to 84%, see model list
- * Derating: See table 1
- * Case material: Metal

CONTROL AND PROTECTION

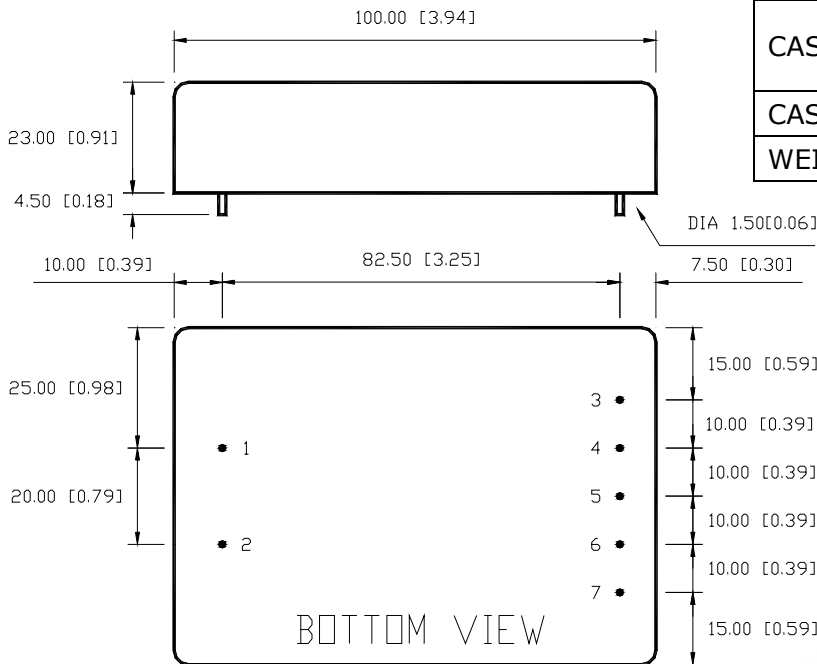
- * Output short circuit: Continuous

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MECHANISM & PIN CONFIGURATION

mm [inch]



PHYSICAL CHARACTERISTICS

CASE SIZE	70 x 100 x 23mm 2.76 x 3.94 x 0.91inches
CASE MATERIAL	Metal
WEIGHT	270 g

PIN ASSIGNMENT

PIN NO.	1	2	3	4	5	6	7
SINGLE	Vi+	Vi-	Vo+	Vo+	Vo-	Vo-	N.C.
DUAL	Vi+	Vi-	Vo+	Vo+	com	com	Vo-
TRIPLE	Vi+	Vi-	+5V OUT	com	Vo+	com	Vo-

Derating:

[TABLE 1]

