

# KC SERIES KCW SERIES

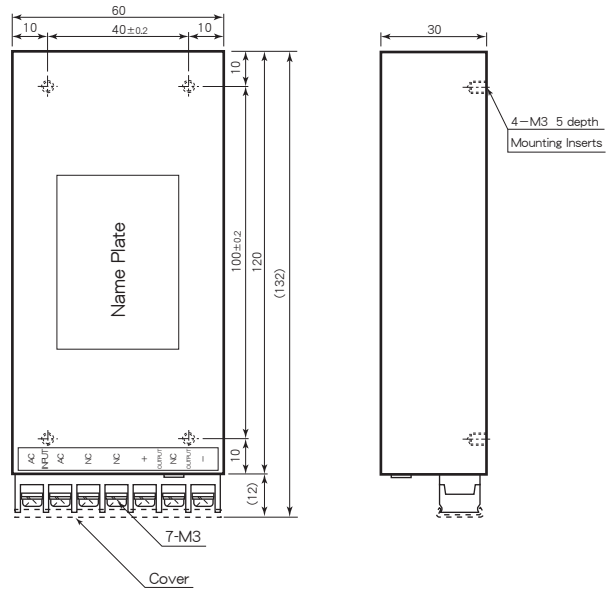
## 50W 36W(Wide Input Voltage Range) AC/DC CONVERTERS

### ■ Terminal Outs & Dimensions (±0.5mm)



H30×W60×L132 (mm)

#### <Top View>

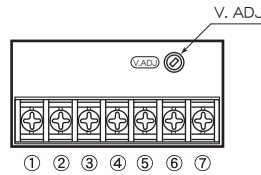


### ■ Features

- Wide Input Voltage Range (KCW) AC85~264V
- Improved Power Factor
- Output Over Voltage Protection
- High Efficiency 83~88%
- Input-Output Isolation (AC1500V)
- Operating Ambient Temperature -25°C~+71°C
- Adjustable Output Volt. ±5%
- Conformity to VCCI Class B
- Conformity to RoHS Directive
- ワイド入力電圧 (KCW) AC85~264V
- 力率改善回路内蔵
- 出力過電圧保護回路内蔵
- 高効率 83~88%
- 入出力間絶縁 (AC1500V)
- 動作周囲温度 -25°C~+71°C
- 出力電圧調整可能 ±5%
- VCCI クラスB 準拠
- RoHS指令対応

### ■ General Characteristics

- Input Voltage, Range (at Ta : 25°C, Full Load, Nominal Vin)  
KC : AC100V (85~132V)  
AC200V (175~264V)  
KCW : AC160V (85~264V)
- Input Frequency 47~440Hz
- Power Factor 0.80 typ. (Vin : 50, 60Hz)  
0.65 typ. (Vin : 400Hz)
- Output Voltage, Current See Table 1
- Output Voltage Adjustment ±5%
- Efficiency See Table 1
- Line Regulation 0.1% max. (at Vin Range)
- Load Regulation 0.5% max.  
1.5% max. (5V Vout only)  
(0~100% Load)
- Output Ripple (0.1% Vout+40mV) p-p max. (Vin : 50, 60Hz)  
(1% Vout+40mV) p-p max. (Vin : 400Hz)
- Output Noise (0.5% Vout+50mV) p-p max. (Vin : 50, 60Hz)  
(1.5% Vout+50mV) p-p max. (Vin : 400Hz)
- Short Circuit Protection Built-in, Auto-restart (See Fig. 2)
- Over Voltage Protection 115~140% Output Voltage
- Temperature Coefficient 0.02%/°C max.
- Operating Ambient Temp. -25°C~+71°C (See Fig. 1)
- Max. Case Temperature +85°C
- Storage Temperature -40°C~+85°C
- Isolation Voltage AC1500V one minute  
(Input-Output-Case)
- Isolation Impedance 100MΩ min. (at DC1000V)  
(Input-Output-Case)
- Weight 550g max.
- Humidity 20~95% RH
- Shock 490m/s<sup>2</sup> (11msec 3directions)
- Vibration 10~55Hz 98m/s<sup>2</sup>  
(30minutes 3directions)
- Surface Structure Aluminum Case
- MTBF 110,000H  
(Ta : 25°C, 80% Load, Nominal Vin)
- Warranty 5 years



#### Terminal Outs

①	AC in
②	AC in
③	No Connection
④	No Connection
⑤	+Vdc out
⑥	No Connection
⑦	-Vdc out

### ■ Selection Guide

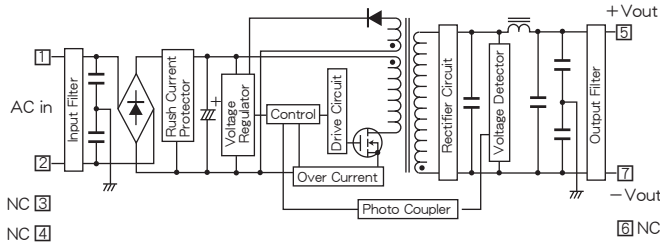
Table 1

Model Number	Input Volt. (Range) (V. AC)	Output Voltage (V. DC)	Output Current (A)	Efficiency 80% Load (%) (typ.)
KC100- 5S 10A	100 (85~132)	5	10	85
KC100- 12S 4.2A		12	4.2	87
KC100- 15S 3.3A		15	3.3	88
KC100- 24S 2.1A		24	2.1	88
KC200- 5S 10A	200 (175~264)	5	10	85
KC200- 12S 4.2A		12	4.2	87
KC200- 15S 3.3A		15	3.3	88
KC200- 24S 2.1A		24	2.1	88
KCW160- 5S 7A	160 (85~264)	5	7	83
KCW160- 12S 3A		12	3	85
KCW160- 15S 2.4A		15	2.4	86
KCW160- 24S 1.5A		24	1.5	86

※ 上記仕様以外にも対応可能ですので お問い合わせ下さい。  
Please consult with us about other specification.

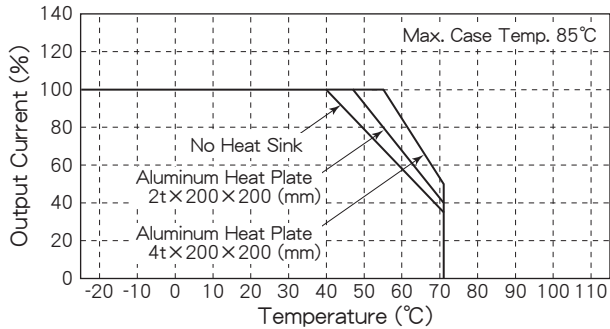
# KC/KCW SERIES DATA SHEET

## Block Diagram

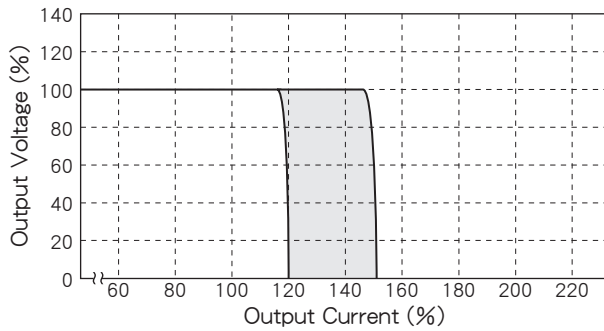


## Characteristic Curves

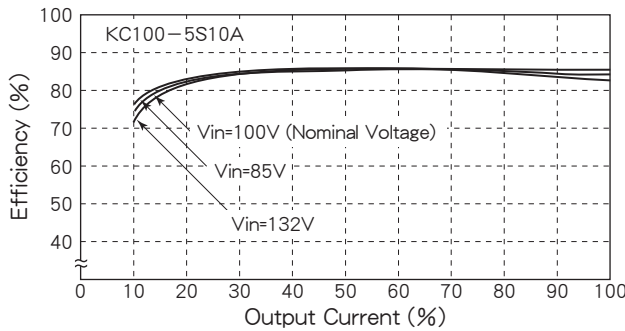
**Fig. 1 Derating Curve**



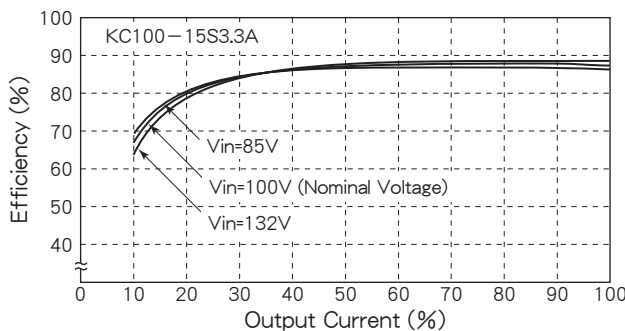
**Fig. 2 Short Circuit Operating Area**



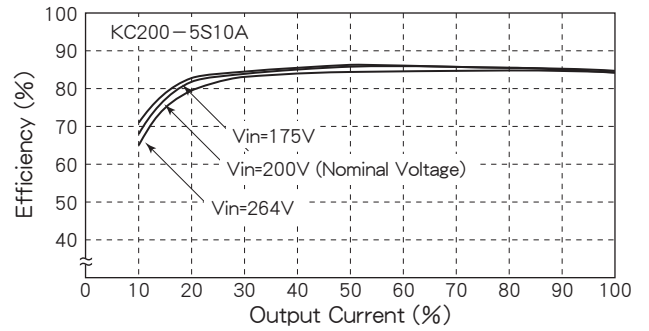
**Fig. 3 Efficiency vs. Output Current**



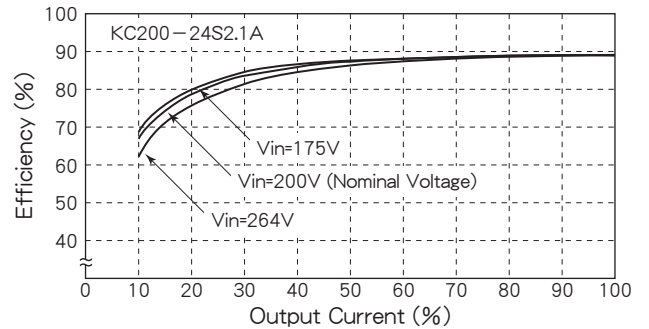
**Fig. 4 Efficiency vs. Output Current**



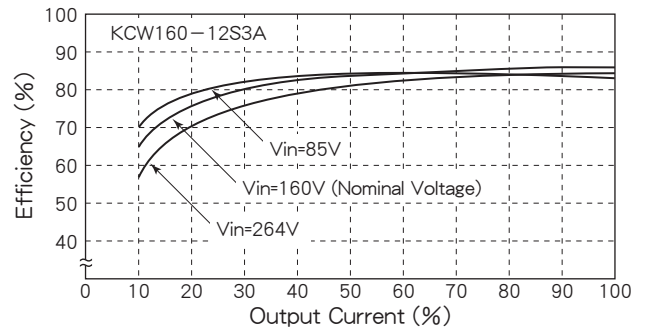
**Fig. 5 Efficiency vs. Output Current**



**Fig. 6 Efficiency vs. Output Current**



**Fig. 7 Efficiency vs. Output Current**



**Fig. 8 Efficiency vs. Output Current**

