

# AKC SERIES

## 25~35W AC/DC CONVERTERS Single, Dual & Triple Outputs



H30×W60×L130 (mm)

### Features

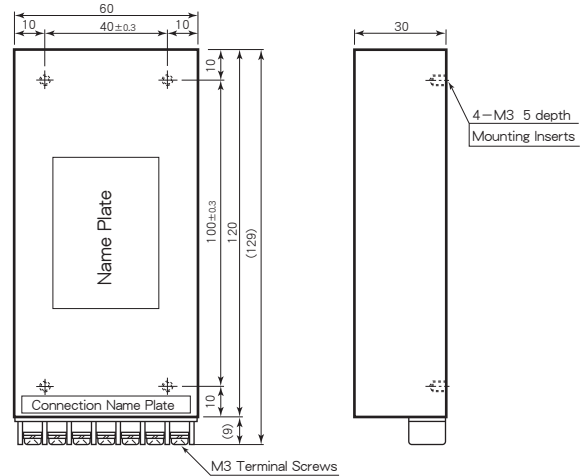
- Input-Output Isolation
- Completely Molding Device
- High Efficiency 75~80%
- Long Life by Mounting on Chassis or Using Heat Sink
- Output Over Voltage Protection (Single and Dual Output only)
- Operating Ambient Temperature -25°C~+71°C
- Conformity to RoHS Directive
- 入出力間絶縁
- 完全モールド製品
- 高効率 75~80%
- シャーシや放熱板への取付けにより長寿命化
- 出力過電圧保護回路内蔵 (単出力、2出力のみ)
- 動作周囲温度 -25°C~+71°C
- RoHS指令対応

### General Characteristics

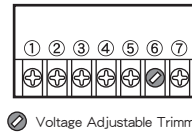
- Input Voltage, Range AC100V, 200V (See Table 1)
- Input Frequency 47~440Hz
- Output Voltage, Current See Table 1
- Output Voltage Single, Dual : ±5% Adjustable
- Output Voltage Adjustment, Accuracy Triple : ±2% (5V Vout : ±3%)
- Efficiency See Table 1
- Line Regulation 0.1% max. (at Vin Range)
- Load Regulation Single, Dual : 0.5% max.
- Load Regulation 1% max. (5V Vout only) (0~100% Load)
- Load Regulation Triple : 1% max. (5V Vout) (0~100% Load)
- Load Regulation ±3% max. (±12V, ±15V Vout) (10~100% Load)
- Output Ripple (0.1%Vout+40mV)p-p max.
- Output Noise (0.5%Vout+50mV)p-p max.
- Short Circuit Protection Built-in, Auto-restart (See Fig 2)
- Over Voltage Protection 115~140% Output Voltage (Single and Dual Output only)
- 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 Single : 110,000H, Dual : 90,000H
- MTBF Triple : 80,000H (Ta:25°C, 80%Load, Nominal Vin)
- Warranty 5 years

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

<Top View>



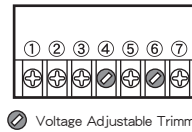
#### Single Output



#### Terminal Outs

①	AC in
②	AC in
③	No Connection
④	No Connection
⑤	+Vdc out
⑥	Vout Adjustment
⑦	0Vdc out

#### Dual Outputs



#### Terminal Outs

①	AC in
②	AC in
③	+Vdc out
④	+Vout Adjustment
⑤	Common
⑥	-Vout Adjustment
⑦	-Vdc out

#### Triple Outputs



#### Terminal Outs

①	AC in
②	AC in
③	+5V out
④	0Vdc out
⑤	+Vdc out
⑥	Common
⑦	-Vdc out

### Selection Guide

Table 1

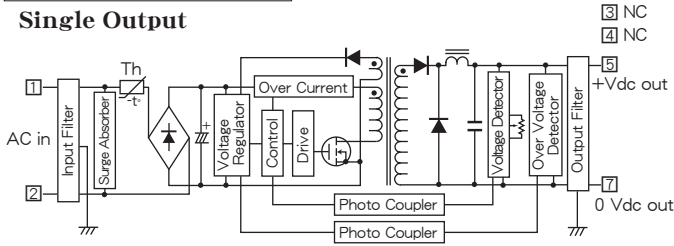
Model Number	Input Volt. (Range) (V. AC)	Output Voltage (V. DC)	Output Current (A)	Efficiency (Typical) (%)
AKC100-5S 5A	100 (85~132)	5	5	75
AKC100-12S 3A		12	3	79
AKC100-15S 2.4A		15	2.4	80
AKC100-24S 1.5A		24	1.5	80
AKC100-12W1.5A		±12	±1.5	78
AKC100-15W1.2A		±15	±1.2	79
AKC100-5S 12W		5, ±12	3, ±0.35	75
AKC100-5S 15W	5, ±15	3, ±0.3	75	
AKC200-5S 5A	200 (175~264)	5	5	75
AKC200-12S 3A		12	3	79
AKC200-15S 2.4A		15	2.4	80
AKC200-24S 1.5A		24	1.5	80
AKC200-12W1.5A		±12	±1.5	78
AKC200-15W1.2A		±15	±1.2	79
AKC200-5S 12W		5, ±12	3, ±0.35	75
AKC200-5S 15W	5, ±15	3, ±0.3	75	

(注) ワイド入力電圧範囲 (AC85V~264V) の仕様製品も製作いたします。  
Note : We can offer wide Vin range (AC85V~264V) device.

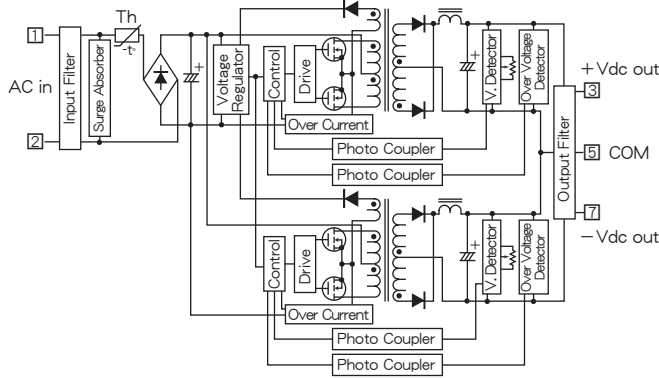
# AKC SERIES DATA SHEET

## Block Diagram

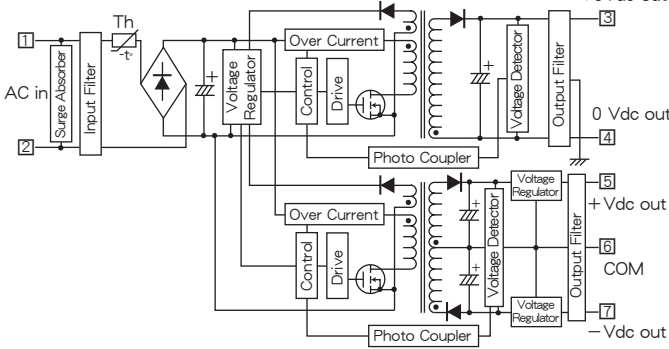
### Single Output



### Dual Outputs



### Triple Outputs



## Characteristic Curves

Fig 1 Derating Curve

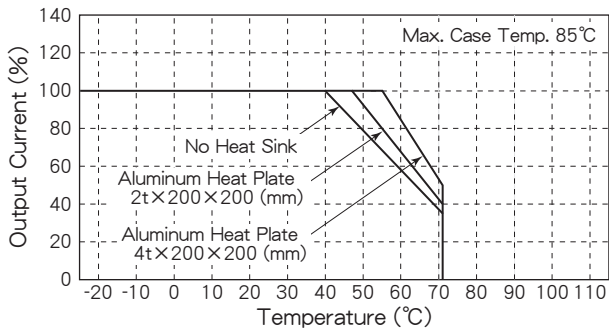


Fig 2 Short Circuit Operating Area

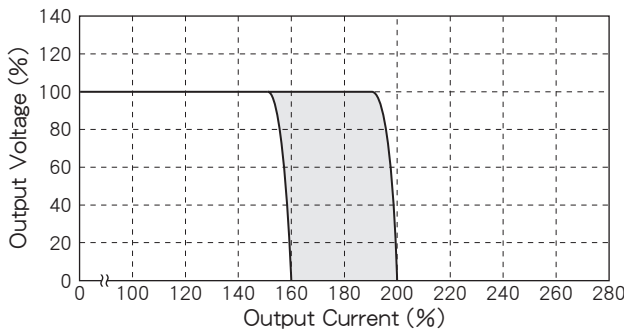


Fig 3 Temperature Characteristic on Case Surface

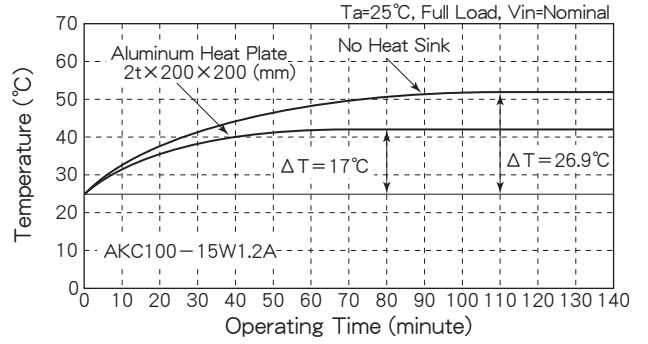


Fig 4 Efficiency vs. Output Current

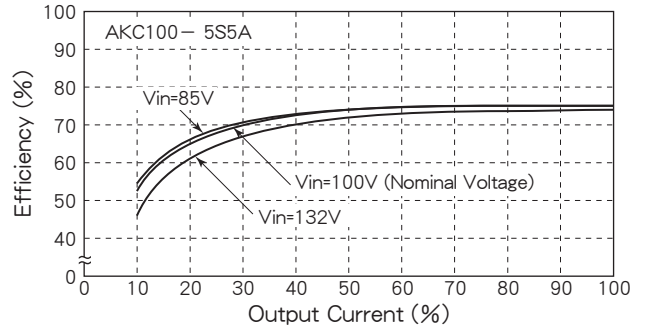


Fig 5 Efficiency vs. Output Current

