

AKC SERIES

25~35W AC-DC スイッチング電源 Single, Dual & Triple Outputs



H30×W60×L130 (mm)

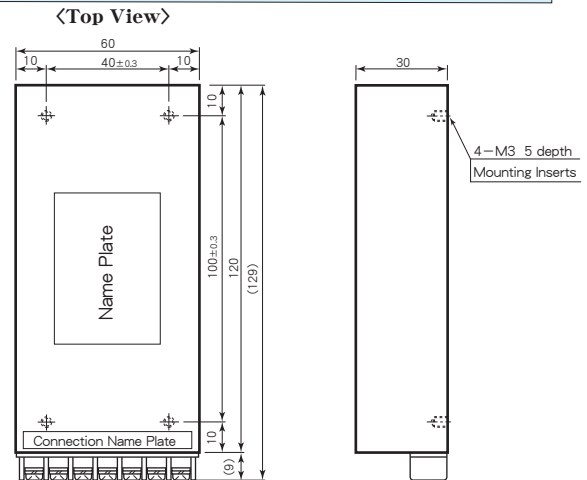
Features

- Input-Output Isolation
- 入出力間絶縁
- Completely Molding Device
- 完全モールド製品
- High Efficiency 75~80%
- 高効率 75~80%
- Long Life by Mounting on Chassis or Using Heat Sink
- シヤーシや放熱板への取付けにより長寿命化
- Output Over Voltage Protection (Single and Dual Output only)
- 出力過電圧保護回路内蔵 (単出力、2出力のみ)
- Operating Ambient Temperature -25°C~+71°C
- 動作周囲温度 -25°C~+71°C
- Conformity to RoHS2 Directive
- RoHS2指令対応

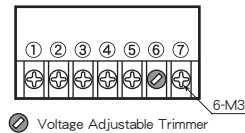
General Characteristics

- Input Voltage, Range (at Ta : 25°C, Full Load, Nominal Vin) AC100, 200V (See Table 1)
- Input Frequency 47~440Hz
- Output Voltage, Current See Table 1
- Output Voltage Adjustment Single, Dual : ±5%
- Output Voltage Accuracy Triple : ±2%
- Efficiency See Table 1
- Line Regulation 0.1% max. (at Vin Range)
- Load Regulation Single, Dual : 0.5% max. 1% max. (5V Vout only) (0~100% Load)
- Output Ripple Triple : 1% max. (5V Vout) (0~100% Load) ±3% max. (±12, ±15V Vout) (10~100% Load)
- Output Noise (0.1% Vout+40mV) p-p max. (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/s² (11msec 3directions)
- Vibration 10~55Hz 98m/s² (30minutes 3directions)
- Surface Structure Aluminum Case
- MTBF Single : 110,000H, Dual : 90,000H Triple : 80,000H (Ta : 25°C, 80% Load, Nominal Vin)
- Warranty 5 years

Terminal Outs & Dimensions (±0.5mm)



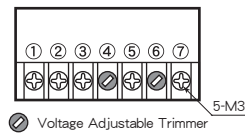
Single Output



Terminal Outs

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

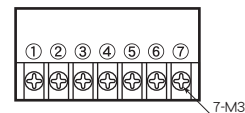
Dual Outputs



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

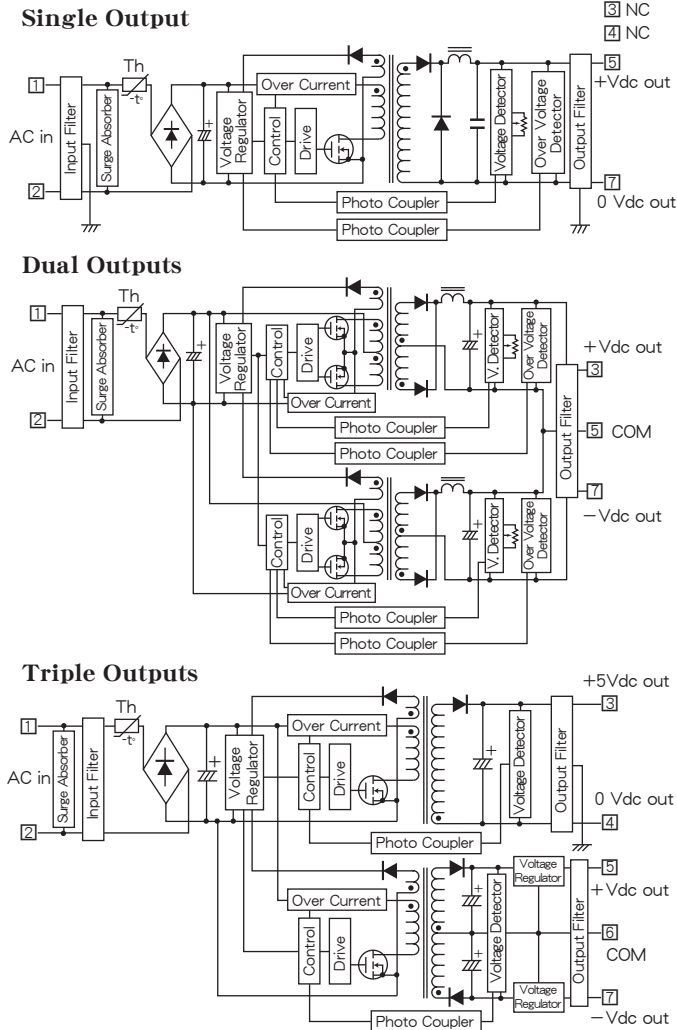
Table 1

| 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 | |
| AKC100-12W 1.5A | | ±12 | ±1.5 | 78 | |
| AKC100-15W 1.2A | | ±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 | |
| AKC200-12W 1.5A | ±12 | | ±1.5 | 78 | |
| AKC200-15W 1.2A | ±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



Characteristic Curves

Fig. 1 Derating Curve

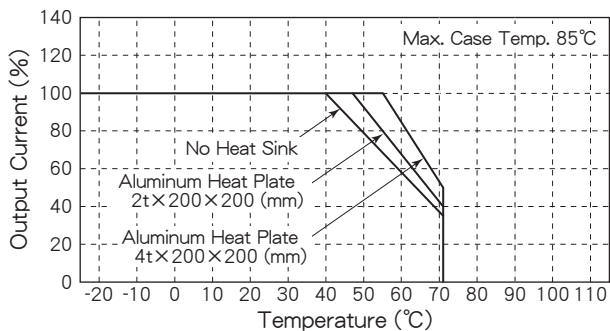


Fig. 2 Short Circuit Operating Area

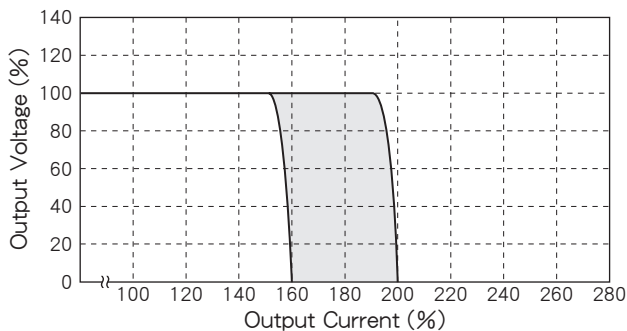


Fig. 3 Temperature Characteristic on Case Surface

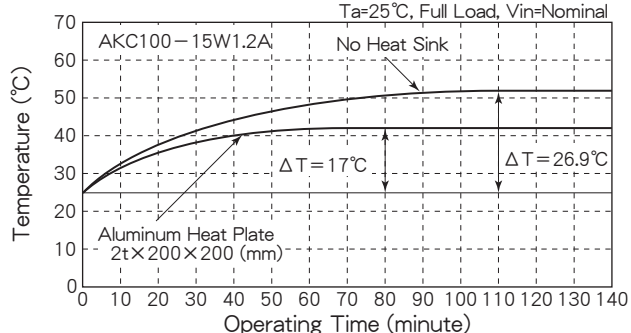


Fig. 4 Efficiency vs. Output Current

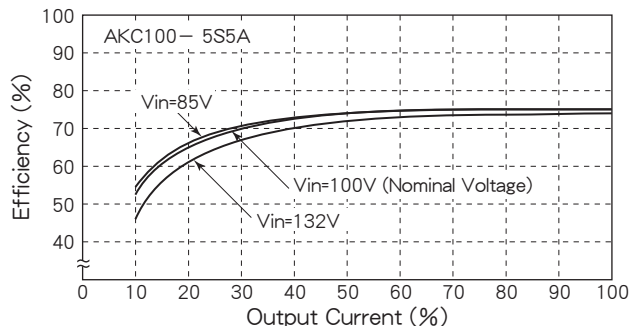


Fig. 5 Efficiency vs. Output Current

