

QC SERIES

15~24W AC/DC CONVERTERS Single Output & Dual Outputs



H25×W50×L82 (mm)

Features

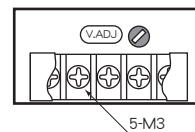
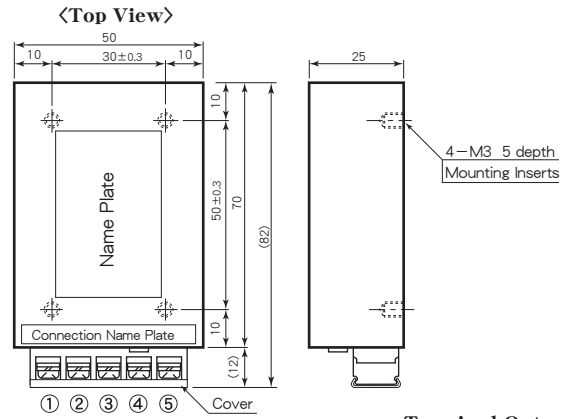
- Input-Output Isolation
- Completely Molding Device
- High Efficiency 75~80%
- Long Life by Mounting on Chassis or Using Heat Sink
- Operating Ambient Temperature -30°C~+71°C
- Conformity to VCCI Class B
- Conformity to RoHS Directive
- 入出力間絶縁
- 完全モールド製品
- 高効率 75~80%
- シャーシや放熱板への取付けにより長寿命化
- 動作周囲温度 -30°C~+71°C
- VCCI Class B 準拠
- RoHS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 : ±5%
- Output Voltage Accuracy Dual : ±2%
- Efficiency See Table 1
- Line Regulation ±0.5% max. (at Vin Range)
- Load Regulation Single : ±0.5% max. (0~100% 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)
- Input Rush Current 40A max.
- Temperature Coefficient 0.02%/°C max.
- Operating Ambient Temp. -30°C~+71°C (See Fig. 1)
- Max. Case Temperature +85°C
- Storage Temperature -40°C~+85°C
- Isolation Voltage AC2000V one minute (Input-Output-Case)
- Isolation Impedance 100MΩ min. (at DC1000V) (Input-Output-Case)
- Weight 210g max.
- Humidity 20~95% RH
- Shock 490m/s² (11msec 3directions)
- Vibration 10~55Hz 98m/s² (30minutes 3directions)
- Surface Structure Aluminum Case
- MTBF Single : 130,000H
Dual : 110,000H (Ta : 25°C, 80% Load, Nominal Vin)
- Warranty 5 years

Terminal Outs & Dimensions (±0.5mm)

Single Output

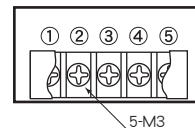
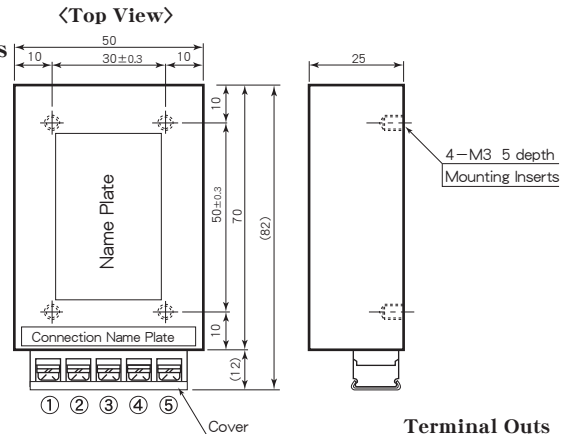


● Voltage Adjustable Trimmer

Terminal Outs

①	AC in
②	AC in
③	+Vdc out
④	No Connection
⑤	0 Vdc out

Dual Outputs



Terminal Outs

①	AC in
②	AC in
③	+Vdc out
④	Common
⑤	-Vdc out

Selection Guide

Table 1

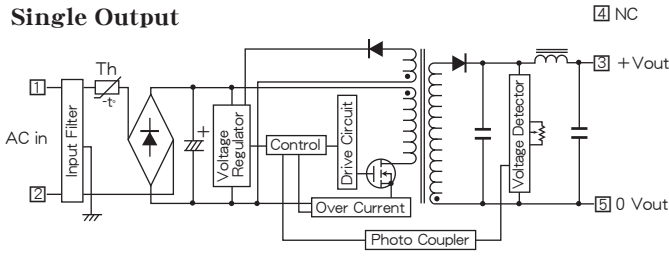
Model Number	Input Volt. (Range) (V. AC)	Output Voltage (V. DC)	Output Current (A)	Efficiency (Typical) (%)
QC100- 5S 3A	100 (85~132)	5	3	75
QC100- 12S 1.8A		12	1.8	79
QC100- 15S 1.6A		15	1.6	80
QC100- 24S 1A		24	1	80
QC100- 5W 1.5A		± 5	±1.5	75
QC100- 12W 0.9A		±12	±0.9	78
QC100- 15W 0.8A		±15	±0.8	79
QC200- 5S 3A	200 (175~264)	5	3	75
QC200- 12S 1.8A		12	1.8	79
QC200- 15S 1.6A		15	1.6	80
QC200- 24S 1A		24	1	80
QC200- 5W 1.5A		± 5	±1.5	75
QC200- 12W 0.9A		±12	±0.9	78
QC200- 15W 0.8A		±15	±0.8	79

※ 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.

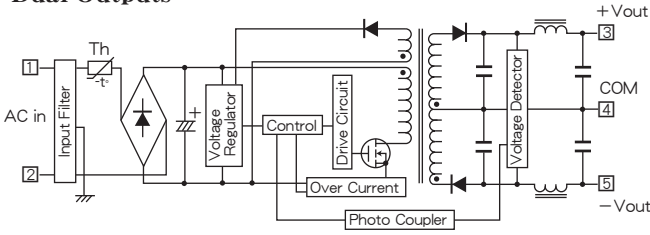
QC SERIES DATA SHEET

Block Diagram

Single Output



Dual Outputs



Characteristic Curves

Fig. 1 Derating Curve

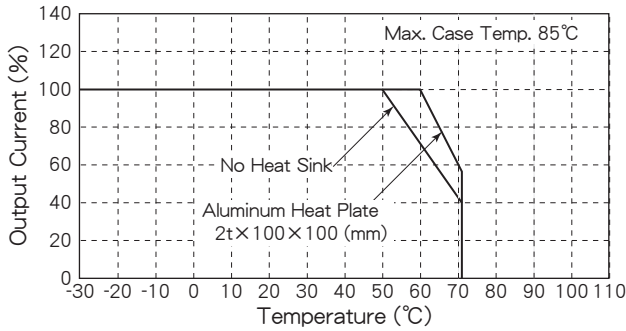


Fig. 2 Short Circuit Operating Area

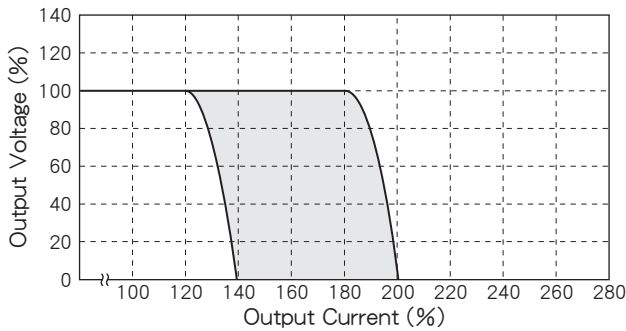


Fig. 3 Temperature Characteristic on Case Surface

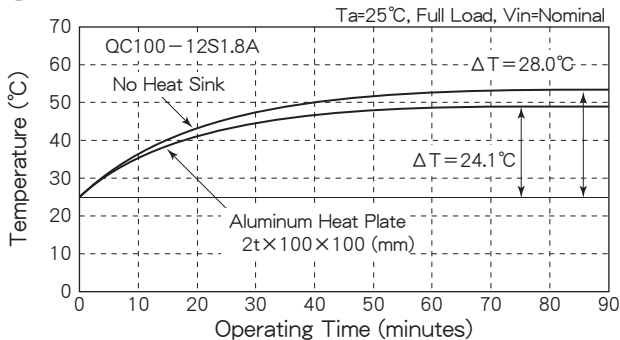


Fig. 4 Efficiency vs. Output Current

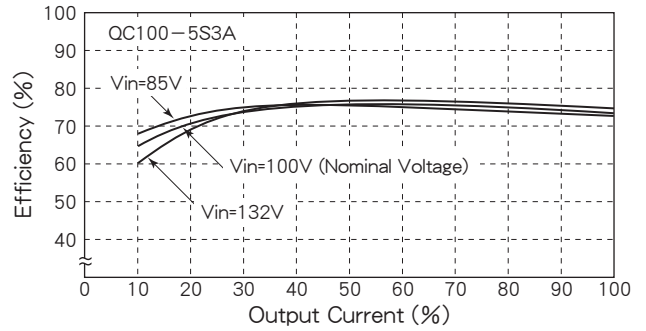


Fig. 5 Efficiency vs. Output Current

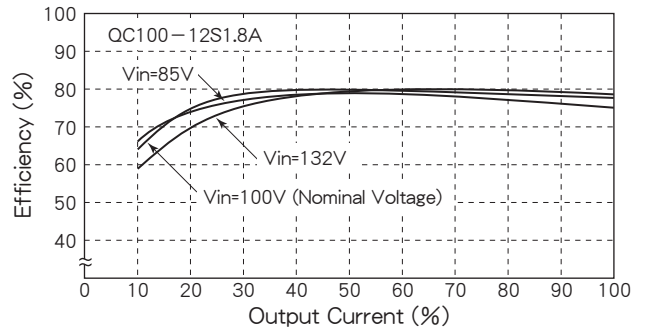


Fig. 6 Efficiency vs. Output Current

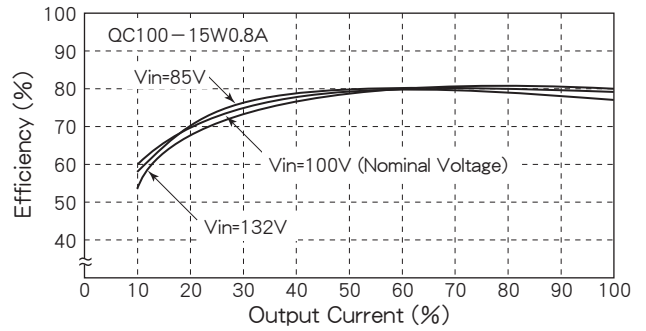


Fig. 7 Efficiency vs. Output Current

