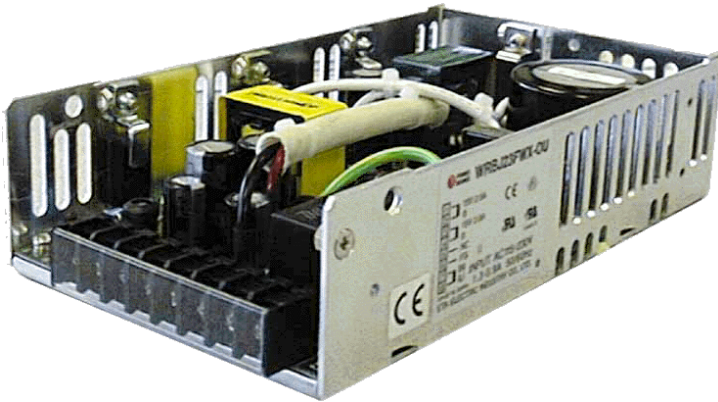


65 WATT AC-DC CONVERTER WRBJ-FWX SERIES

2 CHANNELS



General Description

Universal or auto-ranging inputs for world wide use. Output power from 15 to 600 watts. Up to 4 outputs available. Approved to international safety standards.

**Dimensions: 42.5Wx174Lx97H(mm)
(570g)**



Options

N/A

Features

1. Universal input 85-264VAC
2. EMI: meets EN 55022/B, FCC/B
3. Compact size
4. High efficiency and reliability
5. Output voltage adjustable
6. Over voltage protection

| Specifications WRBJ**FWX-U | Model | | | | | |
|-------------------------------|--|-------------|-------------|-----------|---------------|-----------------|
| | WRBJ21FWX | WRBJ21FWX-B | WRBJ22FWX-B | WRBJ23FWX | WRBJ24F WX | WRBJ24FW X-B |
| 65WATTS/2 OUTPUTS | | | | | | |
| Input Characteristic | | | | | | |
| Input Voltage | AC115-230V | | | | | |
| Input Current | 1.3-0.9A | | | | | |
| Input Range | AC85-264V(DC110-350V) | | | | | |
| Input Frequency | 50/60Hz | | | | | |
| Input Frequency Range | 47-440Hz | | | | | |
| Phase | Single | | | | | |
| Inrush Current *1 | 34.5A(maximum) at AC115/69A(maximum) at AC230V | | | | | |
| Efficiency [%] (typical) *2 | 78 | 80 | 78 | 81 | 77 | 77 |

| Output WRBJ**FWX-U(65WATTS/2 OUTPUTS) | Model | | | | | | | | | | | |
|---|---|-------|-------------|------|-------------|------|-----------|------|-----------|-------|-------------|------|
| | WRBJ21FWX | | WRBJ21FWX-B | | WRBJ22FWX-B | | WRBJ23FWX | | WRBJ24FWX | | WRBJ24FWX-B | |
| Output Voltage [V] | 5 | 24 | 24 | 5 | 12 | 12 | 15 | 15 | 5 | 12 | 12 | 5 |
| Output Current [A] | 7.5 | 1.1 | 1.8 | 4.5 | 3.5 | 2.0 | 2.5 | 2.0 | 7.5 | 2.3 | 3.5 | 4.5 |
| | | P1.5 | P2.3 | | P4.5 | | | | | P2.8 | P4.5 | |
| Voltage Adjust Range | +/-10% of Rated Output Voltage(at no load within the input range) | | | | | | | | | | | |
| Ripple and Noise[mVp-p](maximum) *3 | 100 | 290 | 290 | 100 | 170 | 170 | 200 | 200 | 100 | 170 | 170 | 100 |
| Regulation | | | | | | | | | | | | |
| a.StatisticLine Regulation [mV](maximum) | 25 | 120 | 120 | 25 | 60 | 60 | 75 | 75 | 25 | 60 | 60 | 25 |
| b.StatisticLoad Regulation [mV](maximum) | 50 | 240 | 240 | 50 | 120 | 120 | 150 | 150 | 50 | 120 | 120 | 50 |
| c.Temperature Coefficient *4 | 0.03%/°C | | | | | | | | | | | |
| d.Drift[mV](maximum) *5 | 40 | 135 | 135 | 40 | 75 | 75 | 90 | 90 | 40 | 75 | 75 | 40 |
| e.Dynamic Load Regulation [mV](typical) *6 | not specified | | | | | | | | | | | |
| f.Recovery Time *6 | not specified | | | | | | | | | | | |
| Rise up time | 200mS(maximum) at 25°C and rated input/output | | | | | | | | | | | |
| Hold up time | 12mS(minimum) at 25°C and rated input/output | | | | | | | | | | | |
| Functions | | | | | | | | | | | | |
| Over current Protection | Current Limiting with automatic recovery | | | | | | | | | | | |
| ≥110% of Rated Output Current[A] | 8.25 | ≥Peak | ≥Peak | 4.95 | ≥Peak | 2.2 | 2.75 | 2.2 | 8.25 | ≥Peak | ≥Peak | 4.95 |
| Over voltage Protection | Output shutdown(to reset, leave 1minute after shut-off) | | | | | | | | | | | |
| ≥110% of Rated Output Voltage[V] | 5.5 | 26.4 | 26.4 | 5.5 | 13.2 | 13.2 | 16.5 | 16.5 | 5.5 | 13.2 | 13.2 | 5.5 |
| Remote Sense | not available | | | | | | | | | | | |
| Remote On/Off | not available | | | | | | | | | | | |
| Power Fail Detection | not available | | | | | | | | | | | |
| Parallel/series Operation | not available | | | | | | | | | | | |
| Environmental | | | | | | | | | | | | |
| Operating Temperature *7 | -5 to +40°C | | | | | | | | | | | |
| Operating Humidity | 30 to 85%RH(non-condensing) | | | | | | | | | | | |
| Storage Temperature | -20 to +85°C | | | | | | | | | | | |
| Storage Humidity | 10 to 85%RH(non-condensing) | | | | | | | | | | | |
| Withstanding Voltage | Primary-Secondary AC3,000V for 1minute | | | | | | | | | | | |
| | Primary-Frame Ground AC2,500V for 1minute | | | | | | | | | | | |
| | Secondary-Frame Ground AC500V for 1minute | | | | | | | | | | | |
| Isolation Resistance | Primary-Secondary-Frame Ground 100MΩ(minimum) by DC500V insulation tester | | | | | | | | | | | |
| Vibration | 5-10Hz:10mm double amplitude,10-55Hz:19.6m/s ² ,20minutes' period for 60minutes each along X,Y,Z axes(non-operating) | | | | | | | | | | | |
| Shock | 294m/s ² | | | | | | | | | | | |
| Cooling | Convection | | | | | | | | | | | |
| Leakage Current | 1mA(maximum) at 25°C, rated input/output and rated input frequency | | | | | | | | | | | |
| Line Conducted Noise | | | | | | | | | | | | |
| Safety | N/A | | | | | | | | | | | |
| □ Weight (typical) | 570g /open frame type:490g | | | | | | | | | | | |
| □ MTBF [H] | 350,000 | | | | | | | | | | | |
| □ Switching Frequency[kHz](typical) *8 | 60 | 40 | 60 | 40 | 80 | 50 | 50 | 40 | 60 | 40 | 80 | 40 |

Conditions:

*1 at cold start

*2 at DC130V input and rated output

*3 measured by a bayonet probe at output connector at a 0 to 100MHz bandwidth

*4 at -5 to +40°C/open frame type: -5 to +50°C

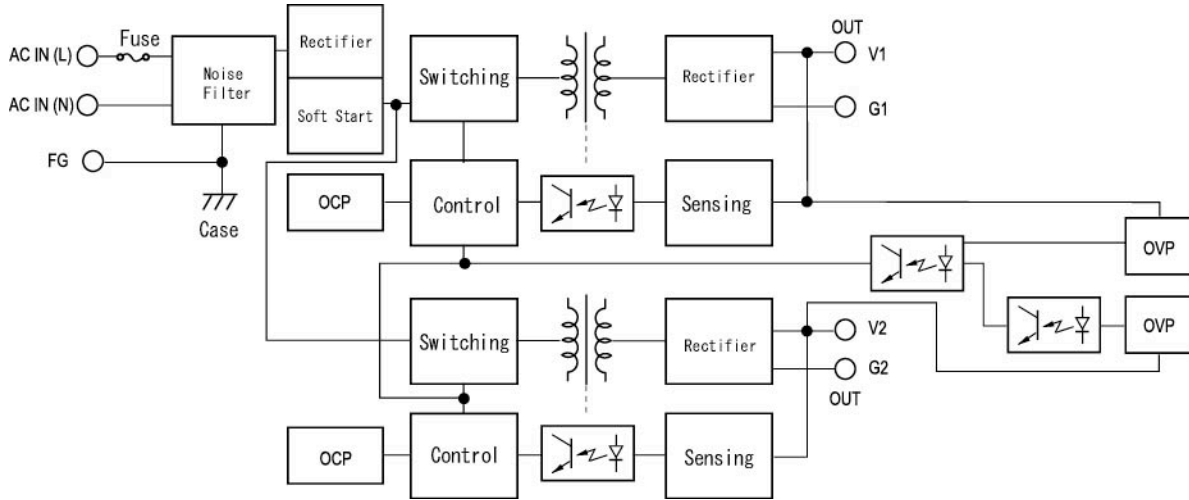
*5 for 7hour period after 1hour warm-up at 25°C and rated input/output

*6 when output current changed from 25% to 75% of rated output current rapidly at AC115/230V input

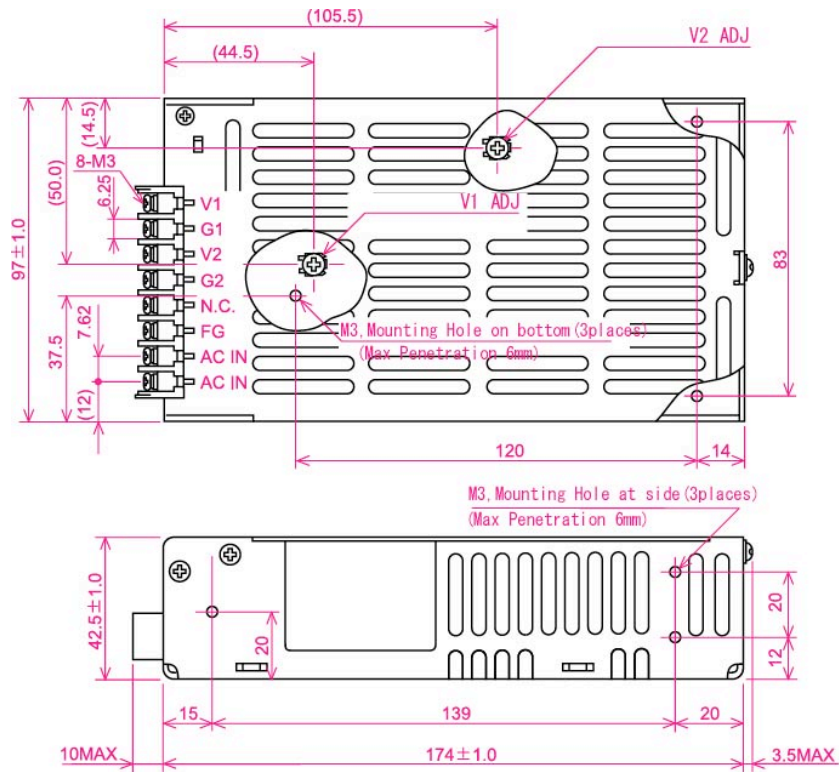
*7 safety approved at 25°C

*8 variable on input voltage and load conditions

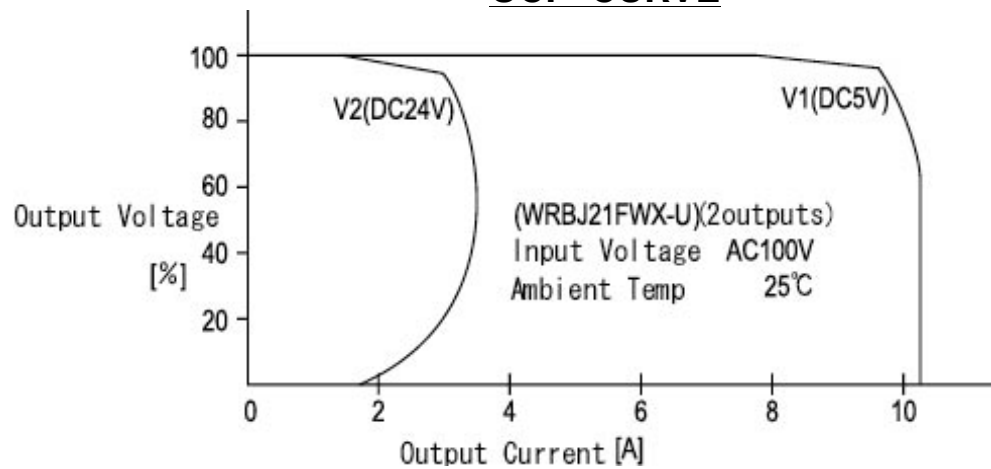
BLOCK DIAGRAM



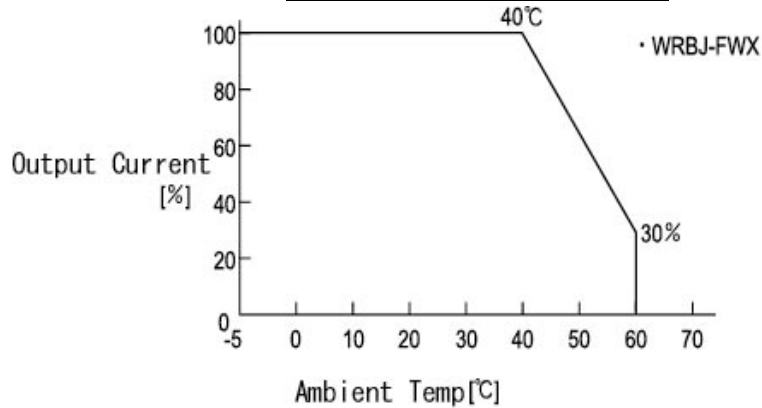
DIMENSION DIAGRAM



OCP CURVE



DERATING CURVE



※For safety specification, contact ETA Sales Representative

EFFICIENCY CURVE

