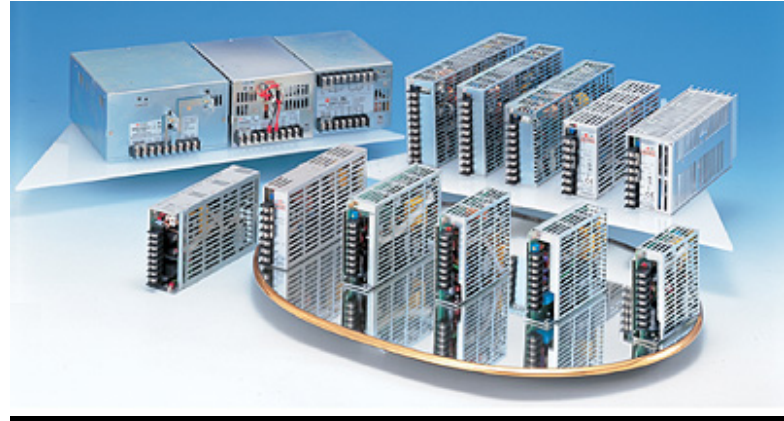


300 WATT AC-DC CONVERTER WRF-SX SERIES

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: 33.5Wx98.5Lx97H (400g)

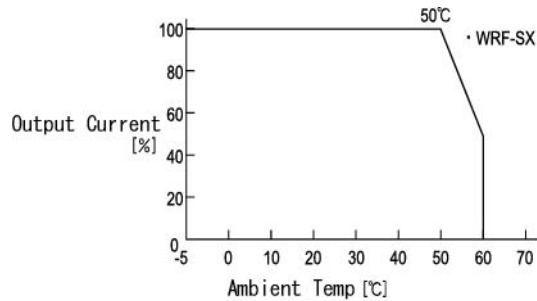


Features

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

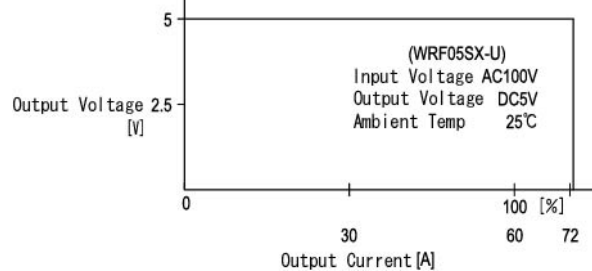
| Specifications<AC/DC> | Model | | | | | | | |
|--------------------------------------|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | WRF05SX-U | WRF06SX-U | WRF12SX-U | WRF15SX-U | WRF24SX-U | WRF30SX-U | WRF36SX-U | WRF48SX-U |
| WRF**SX-U 300WATTS/SINGLE | | | | | | | | |
| Input Characteristic | | | | | | | | |
| Input Voltage | AC115/230V | | | | | | | |
| Input Current | 7.5A | | | | | | | |
| Input Range | AC85-132V/170-264V(DC220-360V) | | | | | | | |
| Input Frequency | 50/60Hz | | | | | | | |
| Input Frequency Range | 47-440Hz | | | | | | | |
| Phase | Single | | | | | | | |
| Inrush Current *1 | 12A(maximum) at AC115/24A(maximum) at AC230V | | | | | | | |
| Efficiency [%] (typical) *2 | 79 | 79 | 82 | 83 | 84 | 84 | 84 | 84 |

DERATING CURVE



※ For safety specification, contact ETA Sales Representative

OCP CURVE



| Output | Model | | | | | | | |
|---|--|--|-----------|-----------|-----------|-----------|-----------|-----------|
| | WRF05SX-U | WRF06SX-U | WRF12SX-U | WRF15SX-U | WRF24SX-U | WRF30SX-U | WRF36SX-U | WRF48SX-U |
| WRF**SX-U (300WATTS/SINGLE) | | | | | | | | |
| Output Voltage [V] | 5 | 6 | 12 | 15 | 24 | 30 | 36 | 48 |
| Output Current [A] | 60.0 | 50.0 | 27.0 | 22.0 | 14.0 | 11.0 | 9.0 | 7.0 |
| Voltage Adjust Range | +/- 10% of Rated Output Voltage(at no load within the input range) | | | | | | | |
| Ripple and Noise [mVp-p](maximum) *3 | 120 | 120 | 150 | 150 | 200 | 250 | 300 | 300 |
| Regulation | | | | | | | | |
| a. Statistic Line Regulation [mV](maximum) | 25 | 30 | 60 | 75 | 120 | 150 | 180 | 240 |
| b. Statistic Load Regulation [mV](maximum) | 50 | 60 | 120 | 150 | 240 | 300 | 360 | 480 |
| c. Temperature Coefficient *4 | 0.03%/°C | | | | | | | |
| d. Drift[mV](maximum) *5 | 40 | 45 | 75 | 90 | 135 | 165 | 195 | 255 |
| e. Dynamic Load Regulation [mV](typical) *6 | not specified | | | | | | | |
| f. Recovery Time *6 | not specified | | | | | | | |
| Rise up time | 300mS(maximum) at 25°C and rated input/output | | | | | | | |
| Hold up time | 10mS(minimum) at 25°C and rated input/output | | | | | | | |
| Functions | | | | | | | | |
| Overcurrent Protection | ≥105% | Current Limiting with automatic recovery | | | | | | |

| | | | | | | | | |
|-------------------------------------|---|------|------|------|------|------|------|------|
| of Rated Output Current[A] | 63.0 | 52.5 | 28.4 | 23.1 | 14.7 | 11.6 | 9.45 | 7.35 |
| Overvoltage Protection $\geq 110\%$ | Output shutdown(to reset,leave 1minute after shut-off) | | | | | | | |
| of Rated Output Voltage[V] | 5.5 | 6.6 | 13.2 | 16.5 | 26.4 | 33.0 | 39.6 | 52.8 |
| Remote Sense | available | | | | | | | |
| Remote On/Off | available | | | | | | | |
| Power Fail Detection | available | | | | | | | |
| Parallel/series Operation | available | | | | | | | |
| Environmental | | | | | | | | |
| Operating Temperature *7 | -5 to +50°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 50MΩ(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 | Forced Air(fan installed) | | | | | | | |
| Leakage Current | 1mA(maximum) at 25°C,rated input/output and rated input frequency | | | | | | | |
| Line Conducted Noise | Built to meet FCC Part15-B Class A | | | | | | | |
| Safety | UL: UL1950 | | | | | | | |
| | C-UL: CSA C22.2 No.234 (Level 5) | | | | | | | |
| □ Weight (typical) | 1800g | | | | | | | |
| □ MTBF [H] | 155,000 | | | | | | | |
| □ Switching Frequency[kHz](typical) | 140 | | | | | | | |

Condition:

*1 at cold start

*2 at DC260V input and rated output

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

*4 at 0 -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% and 75% of rated output current rapidly at AC115/230V input

*7 safety approved at 25°C

DIMENSION DIAGRAM

