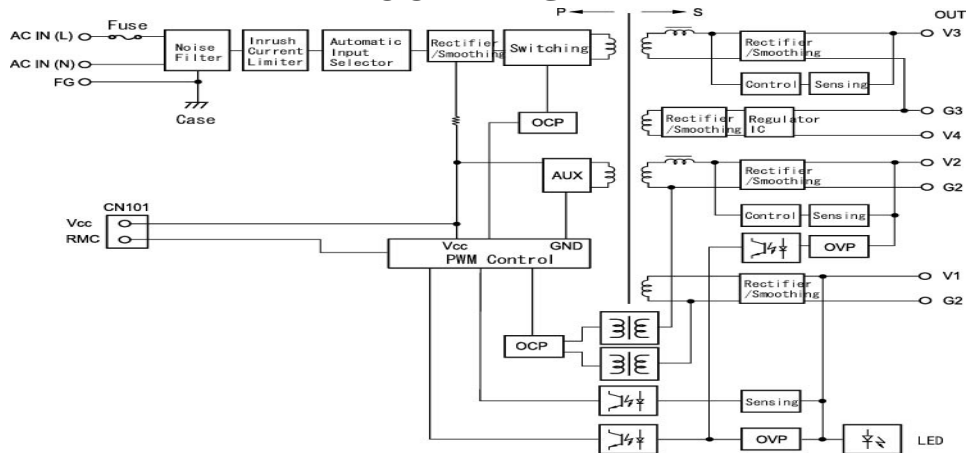


80 WATT AC-DC CONVERTER

WRCQ-00X Series 4 CHANNEL

Specifications<AC/DC> WRCQ**X-U 80WATTS/4 OUTPUTS	Model			Model		
	WRCQ41X-U	WRCQ42X-U	WRCQ43X-U	WRCQ44X-U	WRCQ45X-U	WRCQ46X-U
Input Characteristic						
Input Voltage	AC115/230V					
Input Current	1.5A at AC115V/0.9A at AC230V					
Input Range *1	AC85-132V/170-264V(DC220-350V)					
Input Frequency	50/60Hz					
Input Frequency Range	47-440Hz					
Phase	Single					
Inrush Current *2	20A(maximum) at AC100/40A(maximum) at AC200V					
Efficiency [%] (typical) *3	70	70	70	70	70	70

BLOCK DIAGRAM

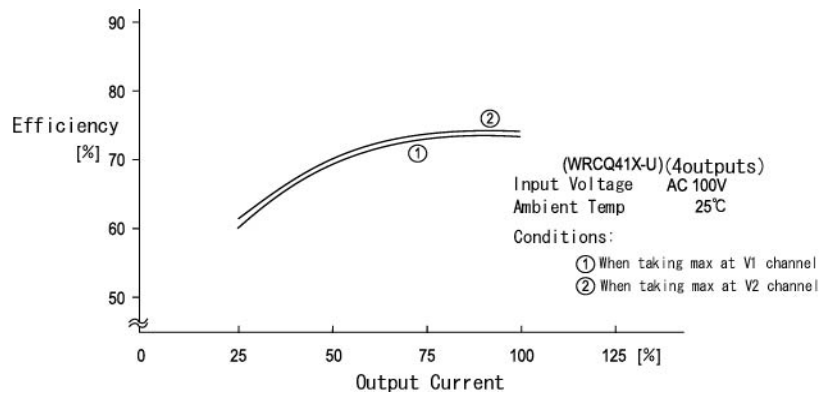


Specifications<AC/DC>	Model																							
WRCQ**X-U	WRCQ41X-U				WRCQ42X-U				WRCQ43X-U				WRCQ44X-U				WRCQ45X-U				WRCQ46X-U			
80WATTS/4 OUTPUTS																								
Output Characteristic																								
Output Voltage [V]	5	5	+12	-12	5	+12	+12	-12	5	24	+12	-12	5	5	+15	-15	5	12	+15	-15	5	24	+15	-15
Output Current [A]	1.0-8.0	5.0	1.0	1.0	1.0-8.0	3.0	1.0	1.0	1.0-8.0	1.5	1.0	1.0	1.0-8.0	5.0	1.0	1.0	1.0-8.0	3.0	1.0	1.0	1.0-8.0	1.5	1.0	1.0
Power [W]	80(maximum)																							
Voltage Adjust Range	V1:+5%/-0% of Rated Output Voltage(at no load within the input range)																							
	V2: +/-5% of Rated Output Voltage(at no load within the input range)																							
	V3,V4:fixed with tolerance of +/-3%(at no load within the input range)																							
Ripple and Noise [mVp-p](maximum) *4	150	150	220	220	150	220	220	220	150	340	220	220	150	150	250	250	150	220	250	250	150	340	250	250
Regulation																								
a.Statistic Line Regulation [mV](maximum)	25	25	60	60	25	60	60	60	25	120	60	60	25	25	75	75	25	60	75	75	25	120	75	75
b.Statistic Load Regulation [mV](maximum)	50	50	120	240	50	120	120	240	50	240	120	240	50	50	150	300	50	120	150	300	50	240	150	300
c.Temperature Coefficient *5	0.03%/°C																							
d.Drift[mV](maximum) *6	50	50	120	120	50	120	120	120	50	240	120	120	50	50	150	150	50	120	150	150	50	240	150	150
e.Dynamic Load Regulation [mV](typical) *7	not specified																							
f.Recovery Time *7	not specified																							
Rise up time	550mS(maximum) at 25°C and rated input/output																							
Hold up time	20mS(minimum) at 25°C and rated input/output																							
Functions																								
Overcurrent Protection	V1,V2,V3:Current Limiting with automatic recovery V4:by the regulator I.C's characteristics																							
	Please refer to individual spec-sheet																							
Overvoltage Protection ≥120% of Rated Output Voltage[V]	V1,V2:Output shutdown(to reset,leave 3 minutes after shut-off) V3,V4:not available																							
	6	6	-	-	6	14.4	-	-	6	28.8	-	-	6	6	-	-	6	14.4	-	-	6	28.8	-	-
Remote Sense	not available																							
Remote On/Off	not available																							
Power Fail Detection	not available																							
Parallel/series Operation	not available																							
Environmental																								
Operating Temperature *8	-5 to +40□/open frame type:-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 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□,rated input/output and rated input frequency																							
□ Line Conducted Noise	Built to meet VDE0871 Class B																							
	Built to meet VCCI Class B																							
	Built to meet FCC Part15-B Class B																							
□ Safety	UL: UL1950																							
	C-UL: CSA C22.2 No.950																							
	VDE:EN60950,IEC950,VDE0805																							
□ Weight (typical)	830g/open frame type:760g																							
□ MTBF [H]	250,000																							
□ Switching Frequency[kHz](typical)	200																							

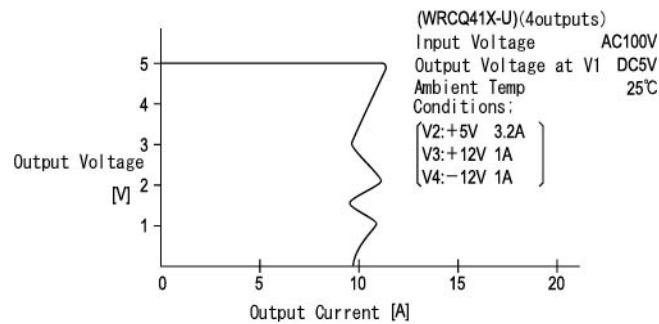
Conditions:

- *1 Automatically selected at AC140V +/-2V
- *2 at cold start
- *3 at AC100V input and output of 80watt
- *4 measured by a probe at the end of a pair of 20cm long wires terminated with a 22uF electrolytic capacitor and a 0.1uF film capacitor in parallel at a 0 to 100MHz bandwidth
- *5 at -5 to +40°C/open frame type:-5 to +50°C
- *6 for 7hour period after 1hour warm-up at 25°C and rated input/output
- *7 when output current changed from 25% to 75% of rated output current rapidly at rated input
- *8 safety approved at 25°C

EFFICIENCY CURVE



OCP CURVE



DIMENSION DIAGRAM

