ETA-USA
Your power supply experts

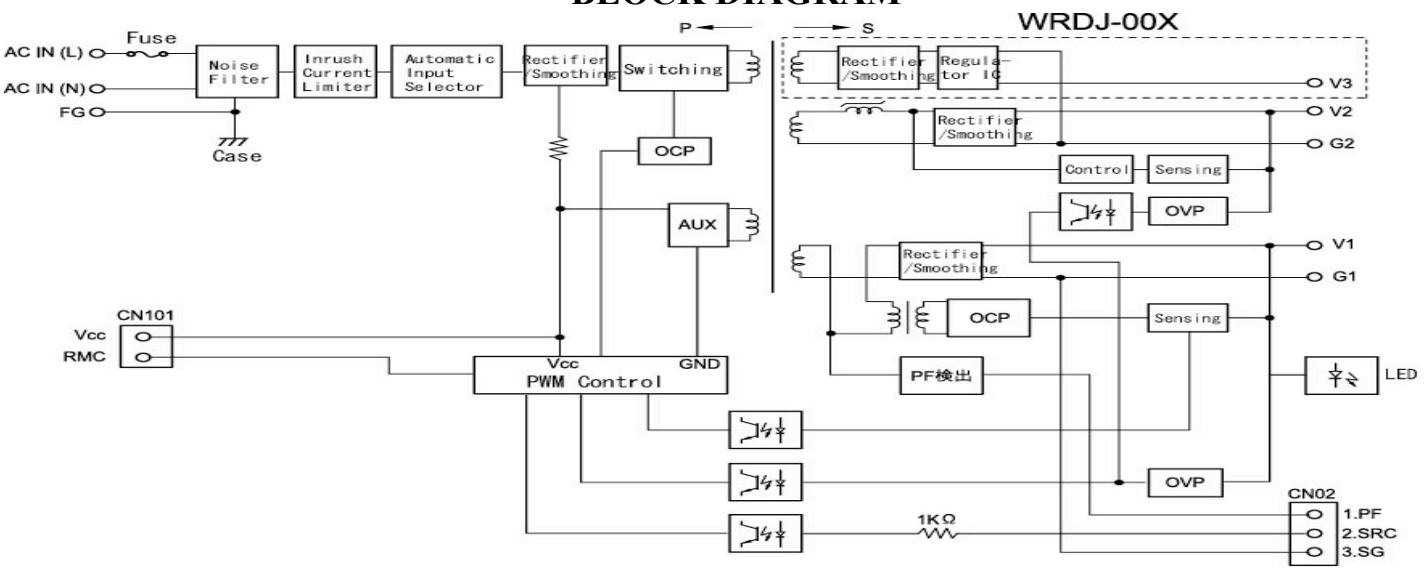
110 WATT
AC-DC CONVERTER

WRDJ-00X Series
3 CHANNEL

RoHS

Specifications<AC/DC>	Model			
WRDJ**X-U 110WATTS/3 OUTPUTS	WRDJ01X	WRDJ03X	WRDJ04X	WRDJ06X
Input Characteristic				
Input Voltage	AC115/230V			
Input Current	2.4A at AC115V/1.4A at AC230V			
Input Range *1	AC85-132/170-264V(DC220-350V)			
Input Frequency	50/60Hz			
Input Frequency Range	47-440Hz			
Phase	Single			
Inrush Current *2	23A(maximum) at AC115/46A(maximum) at AC230V			
Efficiency [%] (typical) *3	72	72	72	72

BLOCK DIAGRAM



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Specifications<AC/DC>	Model											
WRDJ**X-U 110WATTS/3 OUTPUTS	WRDJ01X			WRDJ03X			WRDJ04X			WRDJ06X		
Output Voltage [V]	5	+12	-12	5	+12	-5	5	+15	-15	5	+24	+12
Output Current [A]	1.0-15.0	4.2	1.2	1.0-15.0	4.2	1.5	1.0-15.0	3.6	1.0	1.0-15.0	2.1	1.2
Power [W]	110(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:fixed with tolerance of +/-3%(at no load within the input range)											
Ripple and Noise [mVp-p](maximum) *4	150	220	220	150	220	150	150	250	250	150	340	220
Regulation												
a.Statistic Line Regulation [mV](maximum)	25	60	60	25	60	25	25	75	75	25	120	60
b.Statistic Load Regulation [mV](maximum)	50	120	240	50	120	100	50	150	300	50	240	240
c.Temperature Coefficient *5	0.03%/?											
d.Drift[mV](maximum) *6	50	120	120	50	120	50	50	150	150	50	240	120
e.Dynamic Load Regulation [mV](typical) *7	not specified											
f.Recovery Time *7	not specified											
Rise up time	500mS(maximum) at 25? and rated input/output											
Hold up time	20mS(minimum) at 25? and rated input/output											
Functions												
Overcurrent Protection [A]	V1,V2:Current Limiting with automatic recovery V3:by the regulator I.C's characteristics											
	Please refer to individual spec-sheet											
Overvoltage Protection	V1,V2:Output shutdown(to reset,leave 1 minute after shut-off) V3:not available											
?120% of Rated Output Voltage[V]	6.0	14.4	-	6	14.4	-	6	18	-	6	28.8	-
Remote Sense	not available											
Remote On/Off	available											
Power Fail Detection	not available											
Parallel/series Operation	not available											
Environmental												
Operating Temperature *8	-5 to +40?/open frame type:-5 to +50?											
Operating Humidity	30 to 85%RH(non-condensing)											
Storage Temperature	-20 to +85?											
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												
Safety	N/A											
Weight (typical)	900g/open frame type:830g											
MTBF [H]	280,000											
Switching Frequency[kHz](typical)	200											

Conditions:

*1 Automatically selected at AC140V +/-2V

*2 at cold start

*3 at DC260V input and output of 110watt

*4 measured by a bayonet 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?/open frame type:-5 to +50?

*6 for 7hour period after 1hour warm-up at 25? 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?

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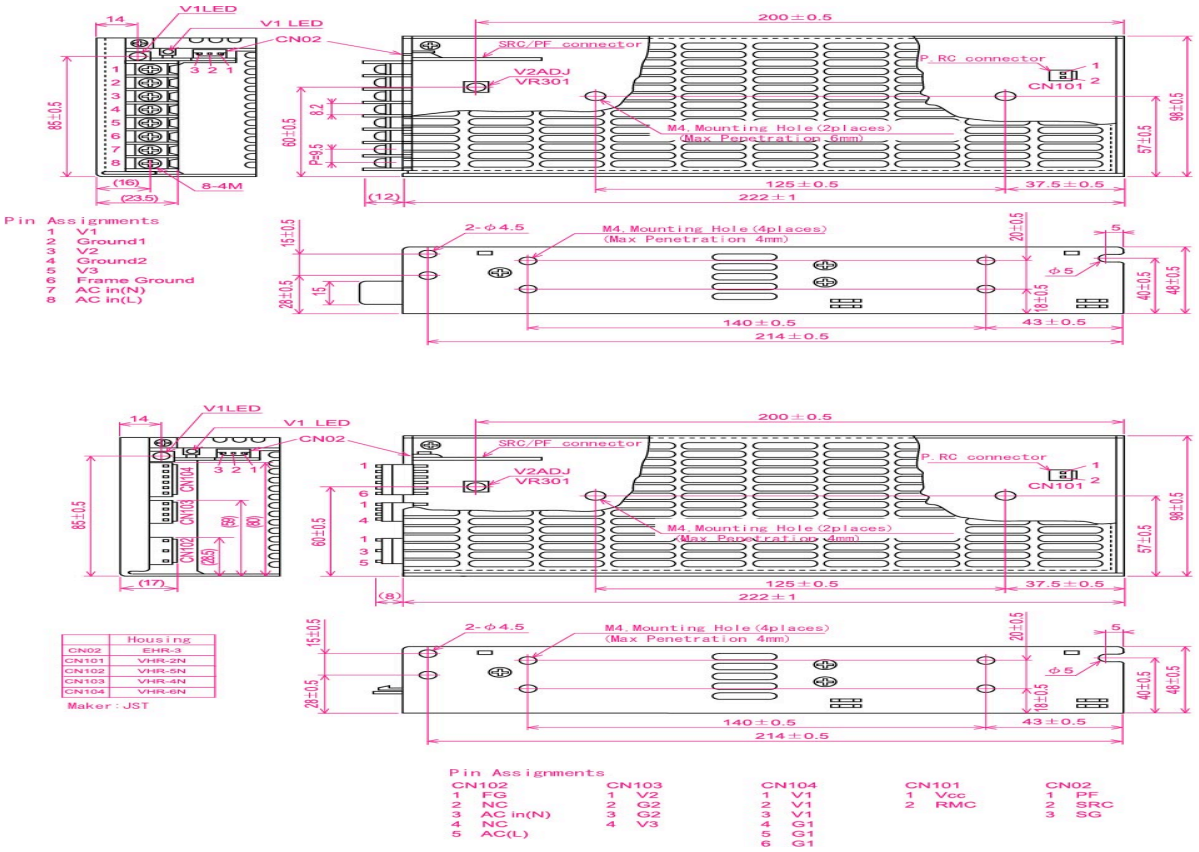
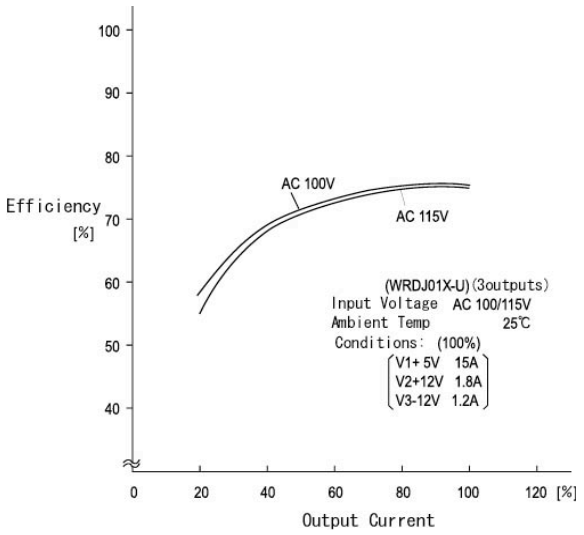
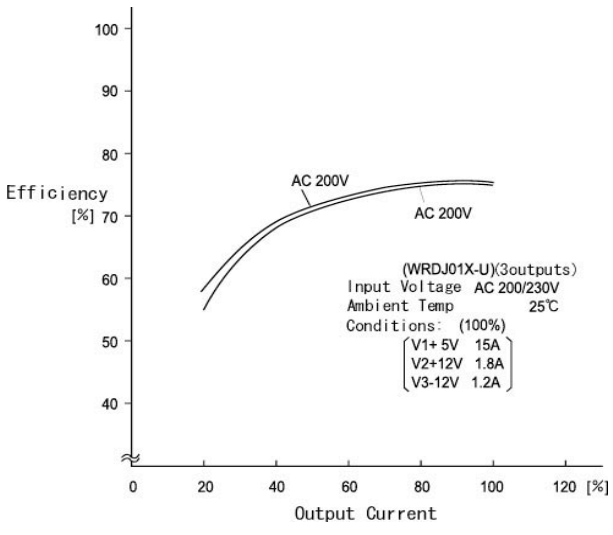
DIMENSION DIAGRAM

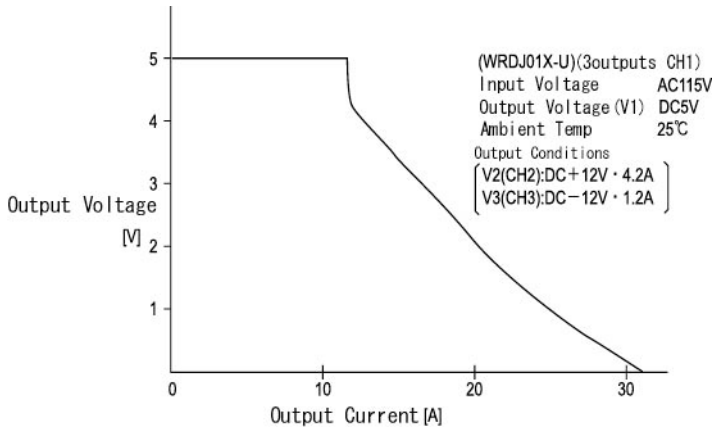


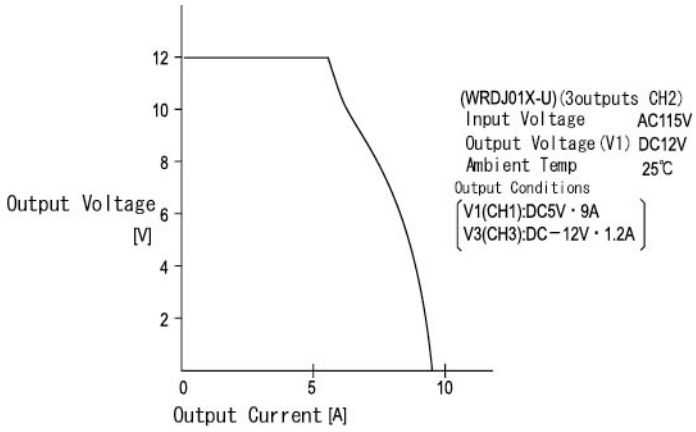
EFFICIENCY CURVE

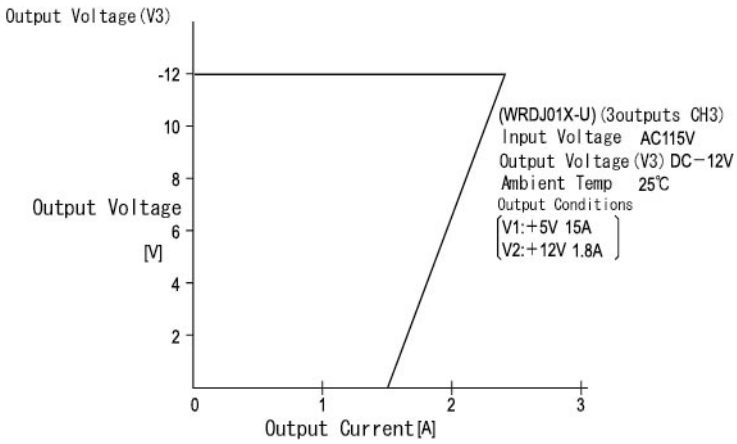




OCP CURVE


(WRDJ01X-U)(3outputs CH1)
Input Voltage AC115V
Output Voltage(V1) DC5V
Ambient Temp 25℃
Output Conditions
V2(CH2):DC+12V・4.2A
V3(CH3):DC−12V・1.2A
Output Voltage [V]
Output Current [A]
0
10
20
30
1
2
3
4
5


(WRDJ01X-U)(3outputs CH2)
Input Voltage AC115V
Output Voltage(V1) DC12V
Ambient Temp 25℃
Output Conditions
V1(CH1):DC5V・9A
V3(CH3):DC−12V・1.2A
Output Voltage [V]
Output Current [A]
0
5
10
2
4
6
8
12


Output Voltage(V3)
(WRDJ01X-U)(3outputs CH3)
Input Voltage AC115V
Output Voltage(V3) DC−12V
Ambient Temp 25℃
Output Conditions
V1:+5V 15A
V2:+12V 1.8A
Output Voltage [V]
Output Current [A]
0
1
2
3
2
4
6
8
10
-12