

Evaluation Data

품 목	SMPS
품 명	RP350-S
Rev. No.	A

CE CB

ORIENT
ELECTRONICS

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RP350-05

Input Current & Efficiency

Specification : 6.8A @ AC110V , 3.4A / 83.5% @ AC220V

Io		Vin	AC100V	AC110V	AC120V	AC200V	AC220V	AC240V
		0%	Input Current [A]	0.100	0.060	0.070	0.110	0.110
	Efficiency [%]	-	-	-	-	-	-	
50%	Input Current [A]	3.450	3.090	2.700	1.830	1.600	1.460	
	Efficiency [%]	87.21%	88.24%	87.21%	88.76%	88.76%	87.72%	
100%	Input Current [A]	5.430	5.730	4.790	3.380	3.080	2.790	
	Efficiency [%]	82.76%	83.33%	82.87%	82.87%	84.75%	83.80%	

Line & Load Regulation

Specification : Line Regulation $\pm 25\text{mV}$

Load Regulation $\pm 100\text{mV}$

Vin	AC100V	AC110V	AC120V	AC200V	AC220V	AC240V	Line Regulation [mV]
0%	5.008	5.010	5.000	5.000	5.010	5.010	10mV
50%	4.963	4.997	4.999	4.978	4.990	4.990	27mV
100%	4.960	4.951	4.968	4.950	4.950	4.960	17mV
Load Regulation [mV]	48mV	59mV	32mV	50mV	60mV	50mV	

* Under no load condition, the value of line regulation is stable at the range of 100-120VAC and 200-240VAC.

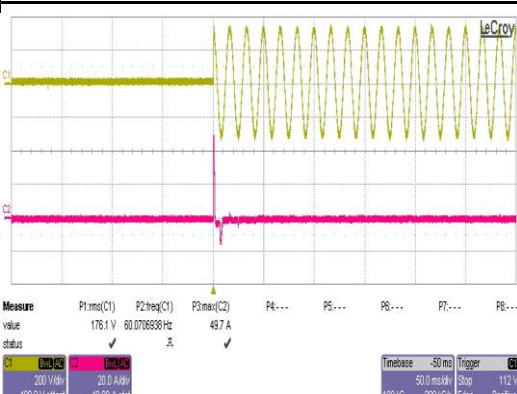
Leakage Current

Specification : 2mA

	110V	220V
Line L [mA]	0.20mA	0.65mA
Line N [mA]	0.41mA	0.70mA

Inrush Current

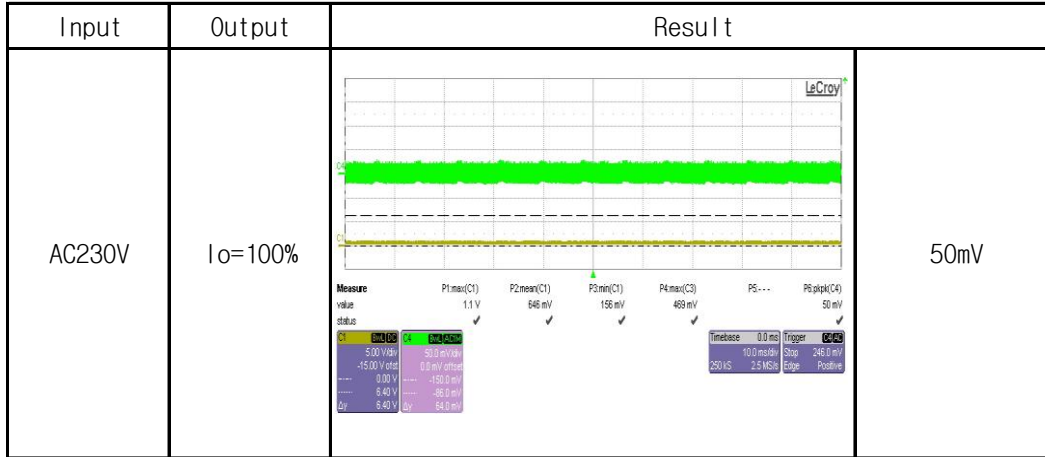
Specification : 60A

Input	Output	Result
AC220V	Io=100%	 <p>48.7A</p>

RP350-05

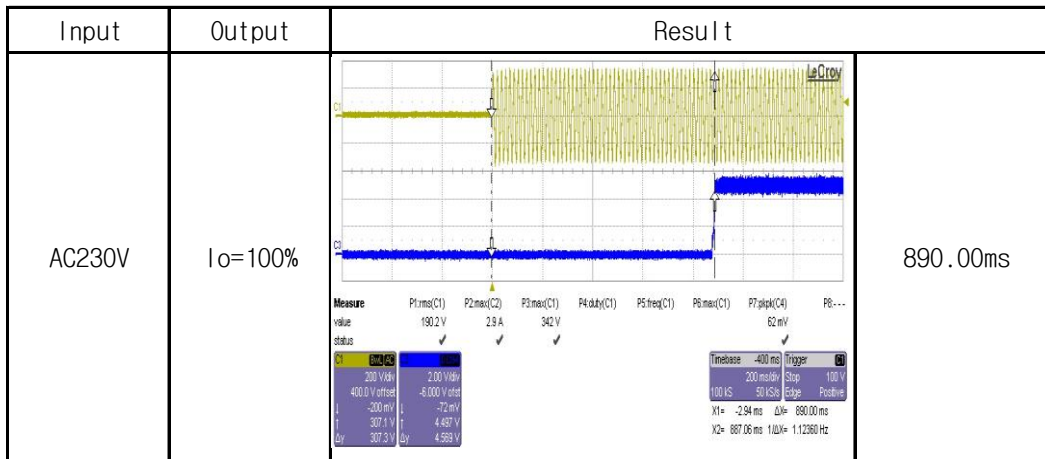
Ripple & Noise

Specification : 150mV



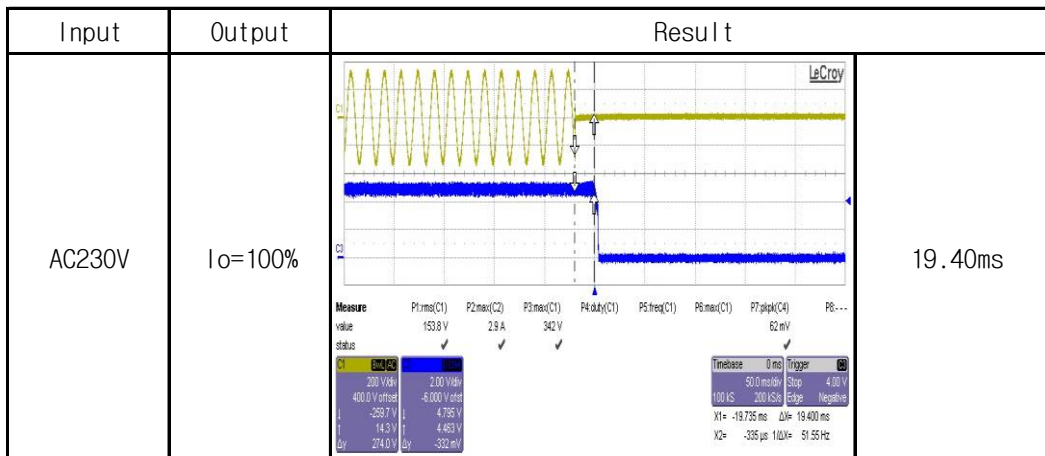
Turn on Time

Specification : 1300ms



Hold up Time

Specification : 16ms



RP350-05

Electro Magnetic Compatibility

Item	Standard	Tset Condition	Result
EMI (Conduction/Radiation)	EN55032	AC230V, 50Hz, Full Load	Class B Pass
Electrostatic Discharge	EN61000-4-2	AC230V, 50Hz, Full Load Ari : 8kV, Contact : 4kV	Criteria A
Electrical Fast Transient	EN61000-4-4	AC230V, 50Hz, Full Load 2kV	Criteria A
Surge	EN61000-4-5	AC230V, 50Hz, Full Load Line-Line : 2kV Line-PE : 4kV	Criteria A

RP350-12

Input Current & Efficiency

Specification : 6.8A @ AC110V , 3.4A / 90% @ AC220V

Io		Vin	AC100V	AC110V	AC120V	AC200V	AC220V	AC240V
		0%	Input Current [A]	0.090	0.100	0.070	0.100	0.120
	Efficiency [%]	-	-	-	-	-	-	
50%	Input Current [A]	3.820	3.280	2.950	2.000	1.810	1.610	
	Efficiency [%]	89.69%	91.58%	92.06%	91.10%	93.05%	92.55%	
100%	Input Current [A]	6.044	6.140	5.340	3.750	3.340	2.910	
	Efficiency [%]	85.14%	87.44%	89.69%	84.88%	90.63%	90.39%	

Line & Load Regulation

Specification : Line Regulation $\pm 60\text{mV}$

Load Regulation $\pm 120\text{mV}$

Vin	AC100V	AC110V	AC120V	AC200V	AC220V	AC240V	Line Regulation [mV]
0%	12.011	12.017	12.025	12.021	12.017	12.025	14mV
50%	12.020	12.021	12.019	12.020	12.027	12.020	8mV
100%	11.950	12.024	12.021	11.920	12.024	12.022	102mV
Load Regulation [mV]	70mV	7mV	6mV	101mV	7mV	5mV	

* Under no load condition, the value of line regulation is stable at the range of 100-120VAC and 200-240VAC.

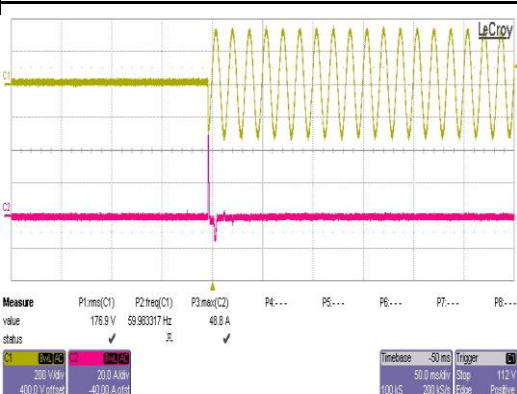
Leakage Current

Specification : 2mA

	110V	220V
Line L [mA]	0.40mA	0.83mA
Line N [mA]	0.75mA	0.86mA

Inrush Current

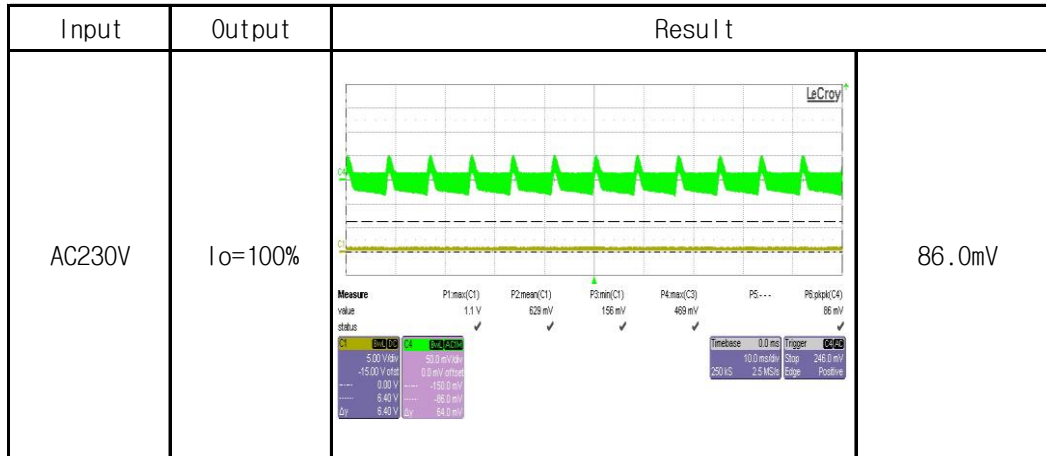
Specification : 60A

Input	Output	Result
AC220V	Io=100%	 <p>48.8A</p>

RP350-12

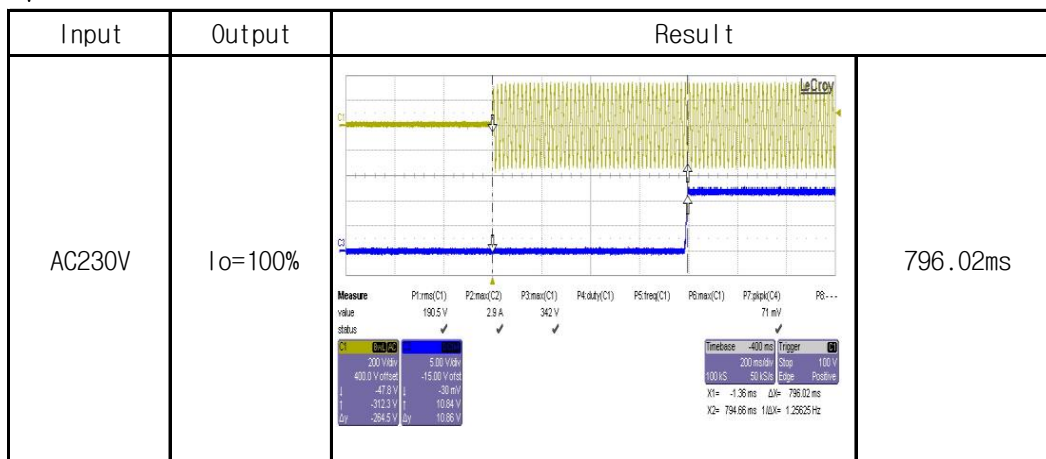
Ripple & Noise

Specification : 150mV



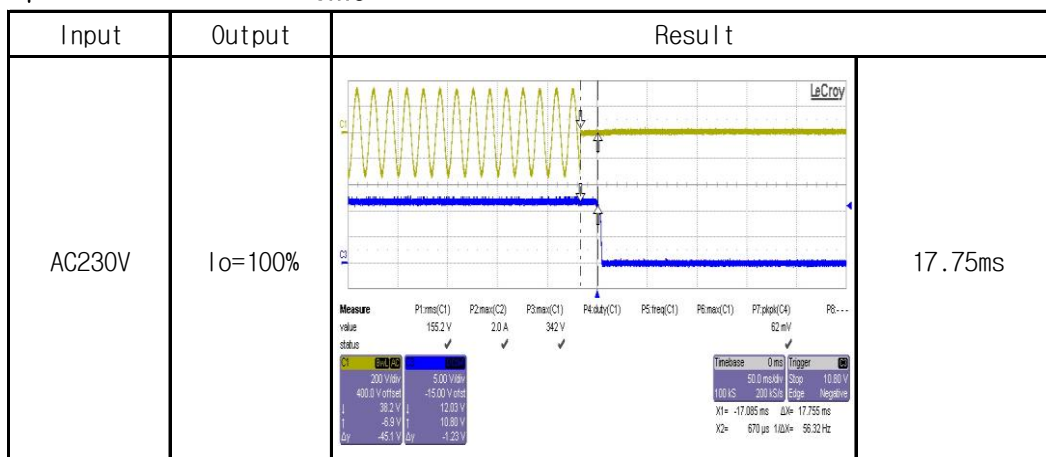
Turn on Time

Specification : 1300ms



Hold up Time

Specification : 16ms



RP350-12

Electro Magnetic Compatibility

Item	Standard	Tset Condition	Result
EMI (Conduction/Radiation)	EN55032	AC230V, 50Hz, Full Load	Class B Pass
Electrostatic Discharge	EN61000-4-2	AC230V, 50Hz, Full Load Ari : 8kV, Contact : 4kV	Criteria A
Electrical Fast Transient	EN61000-4-4	AC230V, 50Hz, Full Load 2kV	Criteria A
Surge	EN61000-4-5	AC230V, 50Hz, Full Load Line-Line : 2kV Line-PE : 4kV	Criteria A

RP350-24

Input Current & Efficiency

Specification : 6.8A @ AC110V , 3.4A / 90% @ AC220V

I _o		V _{in}						
		AC100V	AC110V	AC120V	AC200V	AC220V	AC240V	
0%	Input Current [A]	0.090	0.090	0.070	0.100	0.110	0.130	
	Efficiency [%]	-	-	-	-	-	-	
50%	Input Current [A]	3.940	3.380	3.050	2.210	1.870	1.680	
	Efficiency [%]	89.33%	90.78%	90.78%	91.25%	92.21%	91.25%	
100%	Input Current [A]	6.064	6.210	5.470	3.702	3.400	3.080	
	Efficiency [%]	85.46%	87.60%	88.93%	86.31%	90.31%	90.08%	

Line & Load Regulation

Specification : Line Regulation ±120mV

Load Regulation ±120mV

V _{in}	AC100V	AC110V	AC120V	AC200V	AC220V	AC240V	Line Regulation [mV]
0%	24.015	24.026	24.035	24.014	24.025	24.037	23mV
50%	24.056	24.060	24.063	24.056	24.059	24.064	8mV
100%	24.069	24.104	24.106	24.086	24.105	24.107	38mV
Load Regulation [mV]	54mV	78mV	71mV	72mV	80mV	70mV	

※ Under no load condition, the value of line regulation is stable at the range of 100-120VAC and 200-240VAC.

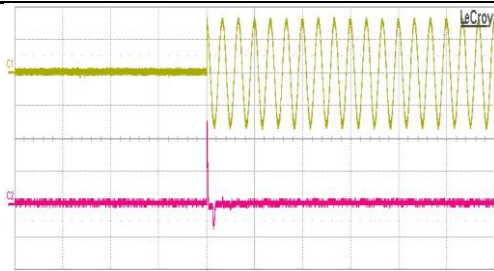
Leakage Current

Specification : 2mA

	110V	220V
Line L [mA]	0.20mA	0.60mA
Line N [mA]	0.40mA	0.66mA

Inrush Current

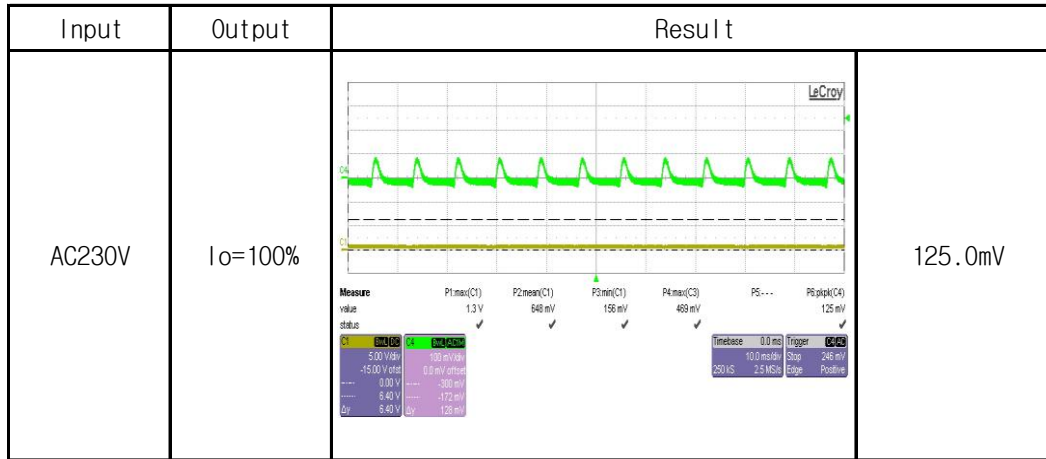
Specification : 60A

Input	Output	Result
AC220V	I _o =100%	 <p>50.5A</p>

RP350-24

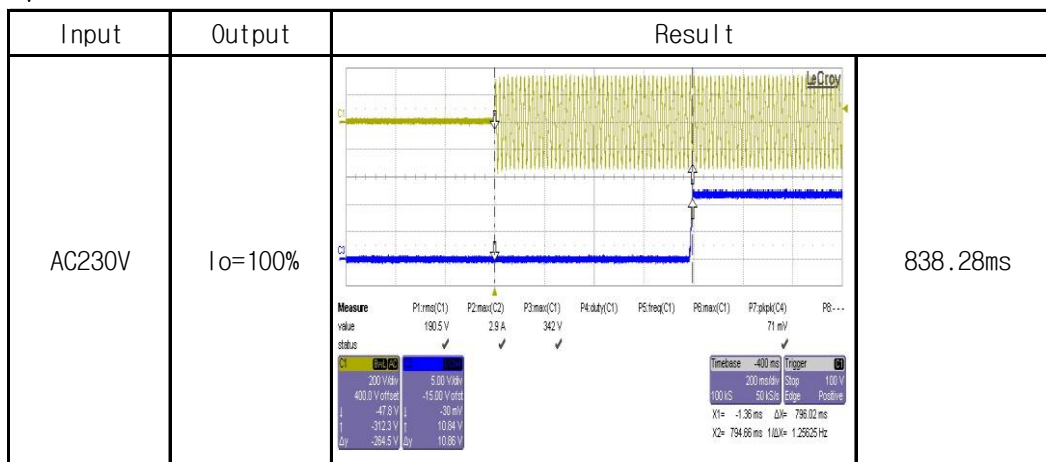
Ripple & Noise

Specification : 200mV



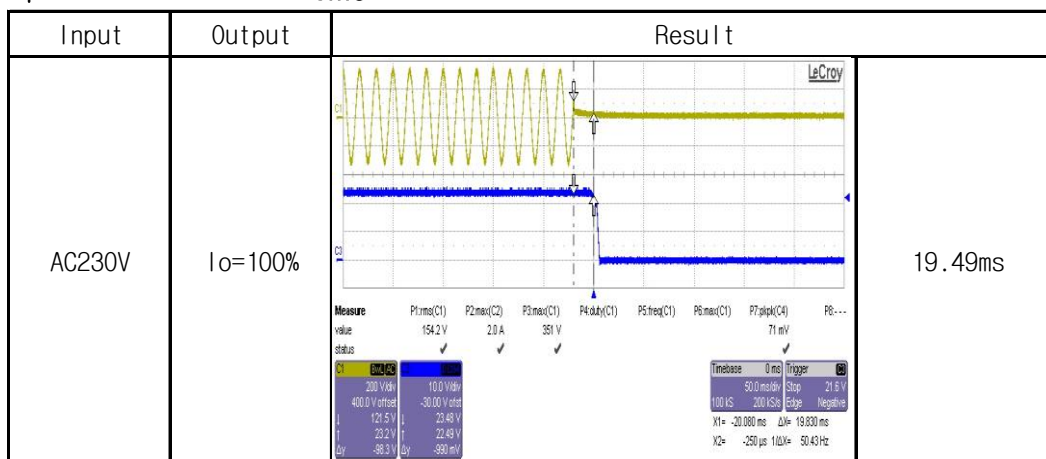
Turn on Time

Specification : 1300ms



Hold up Time

Specification : 16ms



RP350-24

Electro Magnetic Compatibility

Item	Standard	Tset Condition	Result
EMI (Conduction/Radiation)	EN55032	AC230V, 50Hz, Full Load	Class B Pass
Electrostatic Discharge	EN61000-4-2	AC230V, 50Hz, Full Load Ari : 8kV, Contact : 4kV	Criteria A
Electrical Fast Transient	EN61000-4-4	AC230V, 50Hz, Full Load 2kV	Criteria A
Surge	EN61000-4-5	AC230V, 50Hz, Full Load Line-Line : 2kV Line-PE : 4kV	Criteria A

RP350-48

Input Current & Efficiency

Specification : 6.8A @ AC110V , 3.4A / 91% @ AC220V

Io		Vin	AC100V	AC110V	AC120V	AC200V	AC220V	AC240V
		0%	Input Current [A]	0.086	0.093	0.071	0.099	0.117
	Efficiency [%]	-	-	-	-	-	-	
50%	Input Current [A]	3.741	3.312	2.960	1.978	1.760	1.518	
	Efficiency [%]	91.73%	93.19%	94.19%	93.19%	94.70%	94.70%	
100%	Input Current [A]	5.871	6.179	5.300	3.889	3.350	2.810	
	Efficiency [%]	87.87%	89.39%	91.49%	88.93%	91.97%	92.45%	

Line & Load Regulation

Specification : Line Regulation $\pm 240\text{mV}$

Load Regulation $\pm 240\text{mV}$

Vin	AC100V	AC110V	AC120V	AC200V	AC220V	AC240V	Line Regulation [mV]
0%	48.027	48.042	48.106	48.027	48.042	48.106	22mV
50%	48.070	48.078	48.099	48.071	48.080	48.102	32mV
100%	48.097	48.126	48.140	48.109	48.129	48.140	43mV
Load Regulation [mV]	70mV	84mV	41mV	82mV	87mV	38mV	

※ Under no load condition, the value of line regulation is stable at the range of 100-120VAC and 200-240VAC.

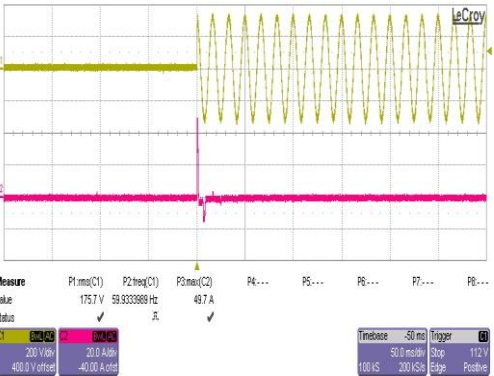
Leakage Current

Specification : 2mA

	110V	220V
Line L [mA]	0.21mA	0.60mA
Line N [mA]	0.40mA	0.61mA

Inrush Current

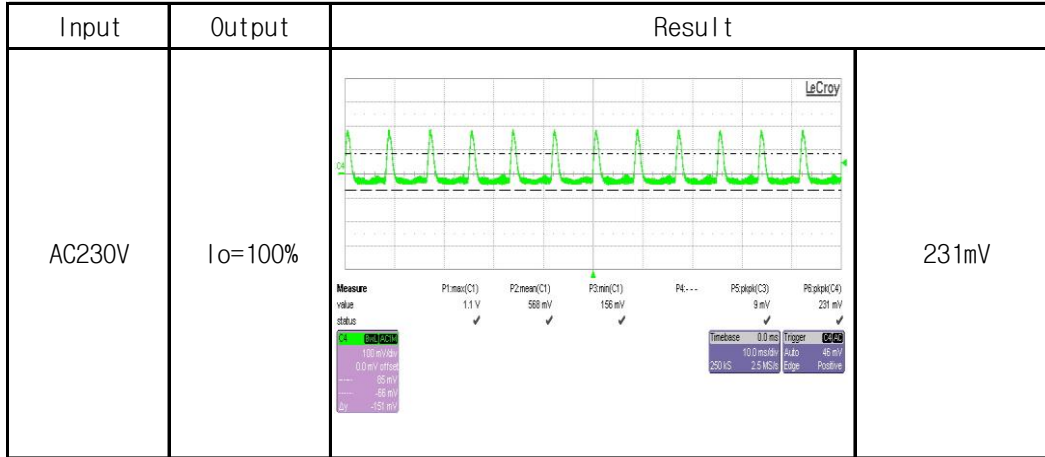
Specification : 60A

Input	Output	Result
AC220V	Io=100%	 <p>49.7A</p>

RP350-48

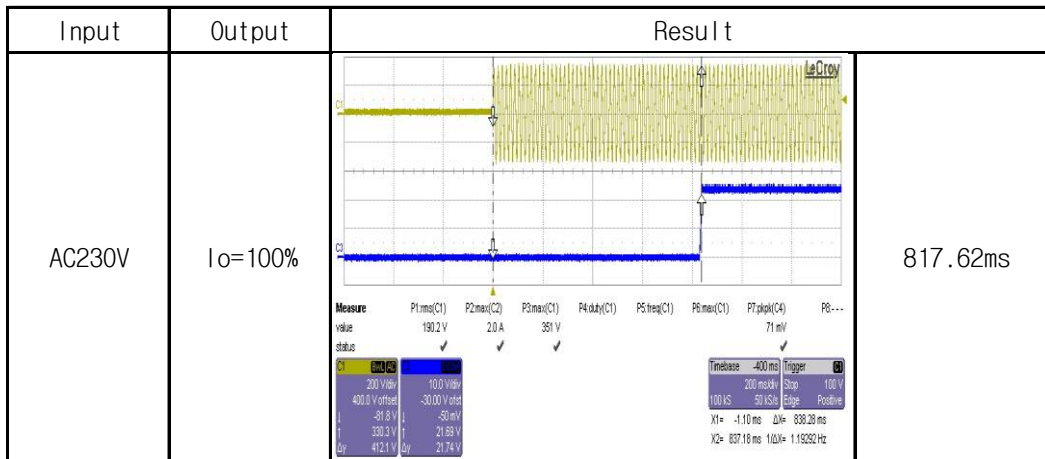
Ripple & Noise

Specification : 250mV



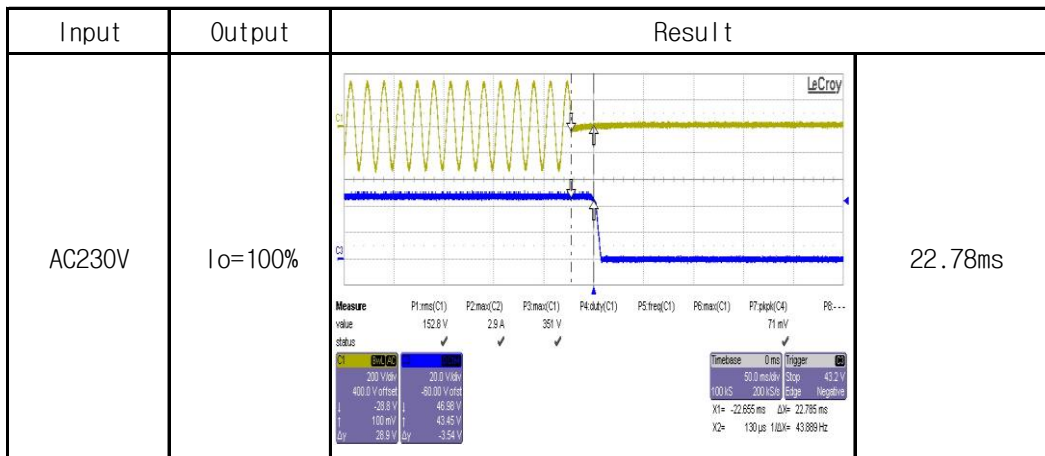
Turn on Time

Specification : 1300ms



Hold up Time

Specification : 16ms



RP350-48

Electro Magnetic Compatibility

Item	Standard	Tset Condition	Result
EMI (Conduction/Radiation)	EN55032	AC230V, 50Hz, Full Load	Class B Pass
Electrostatic Discharge	EN61000-4-2	AC230V, 50Hz, Full Load Ari : 8kV, Contact : 4kV	Criteria A
Electrical Fast Transient	EN61000-4-4	AC230V, 50Hz, Full Load 2kV	Criteria A
Surge	EN61000-4-5	AC230V, 50Hz, Full Load Line-Line : 2kV Line-PE : 4kV	Criteria A