

Evaluation Data

품 목	SMPS
품 명	RP50-DE
Rev. No.	A

CE CB

ORIENT
ELECTRONICS

경기도 성남시 중원구 갈마치로 322

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RP50-DD

Input Current & Efficiency

Specification : 1.3A / 75.5% @ AC110V , 0.8A / 75.5% @ AC220V

I _o \ V _{in}		AV85V	AC110V	AC220V	AC264V
		0%	Input Current [A]	0.047	0.045
	Efficiency [%]	-	-	-	-
50%	Input Current [A]	0.61	0.487	0.329	0.268
	Efficiency [%]	75.6%	77.6%	76.0%	75.6%
100%	Input Current [A]	0.969	0.921	0.608	0.481
	Efficiency [%]	75.7	77.3	78.6	78.5

Line & Load Regulation

Specification : Line Regulation Ch1. ±25mV / Ch2. ±180mV / Ch3. ±60mV

Load Regulation Ch1. ±50mV / Ch2. ±360mV / Ch3. ±120mV

I _o \ V _{in}		AC85V	AC110V	AC220V	AC264V	Line Regulation [mV]
		0%	CH1	5.00	5.00	5.00
CH2	12.17		12.16	12.16	12.14	30
CH3	12.00		12.00	12.00	12.00	0
50%	CH1	5.00	5.00	5.00	5.00	0
	CH2	12.32	12.30	12.27	12.27	50
	CH3	12.00	12.00	12.00	12.00	0
100%	CH1	5.00	5.00	5.00	5.00	0
	CH2	12.44	12.46	12.35	12.30	160
	CH3	12.00	12.00	12.00	12.00	0
Load Regulation [mV]	CH1	0	0	0	0	-
	CH2	270	300	190	160	
	CH3	0	0	0	0	

Leakage Current

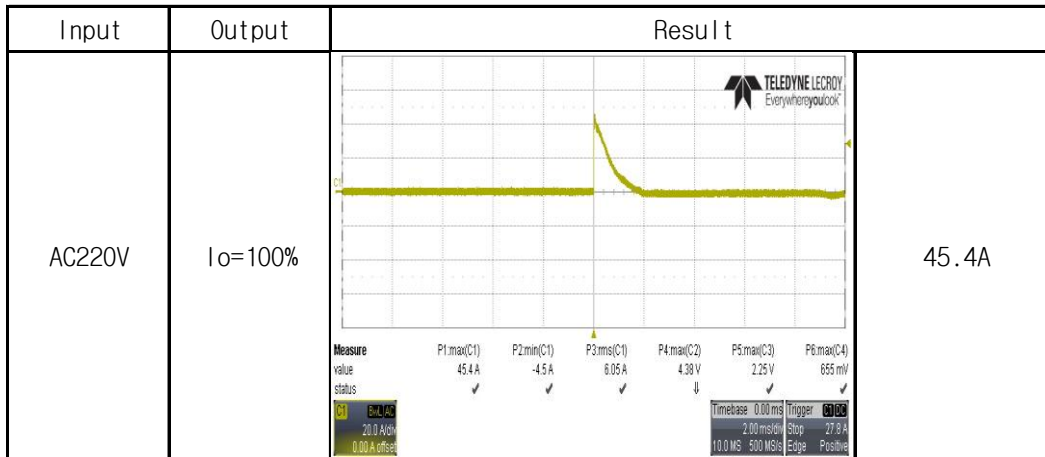
Specification : 2mA

	110V	220V
Line L [mA]	0.22	0.39
Line N [mA]	0.21	0.39

RP50-DD

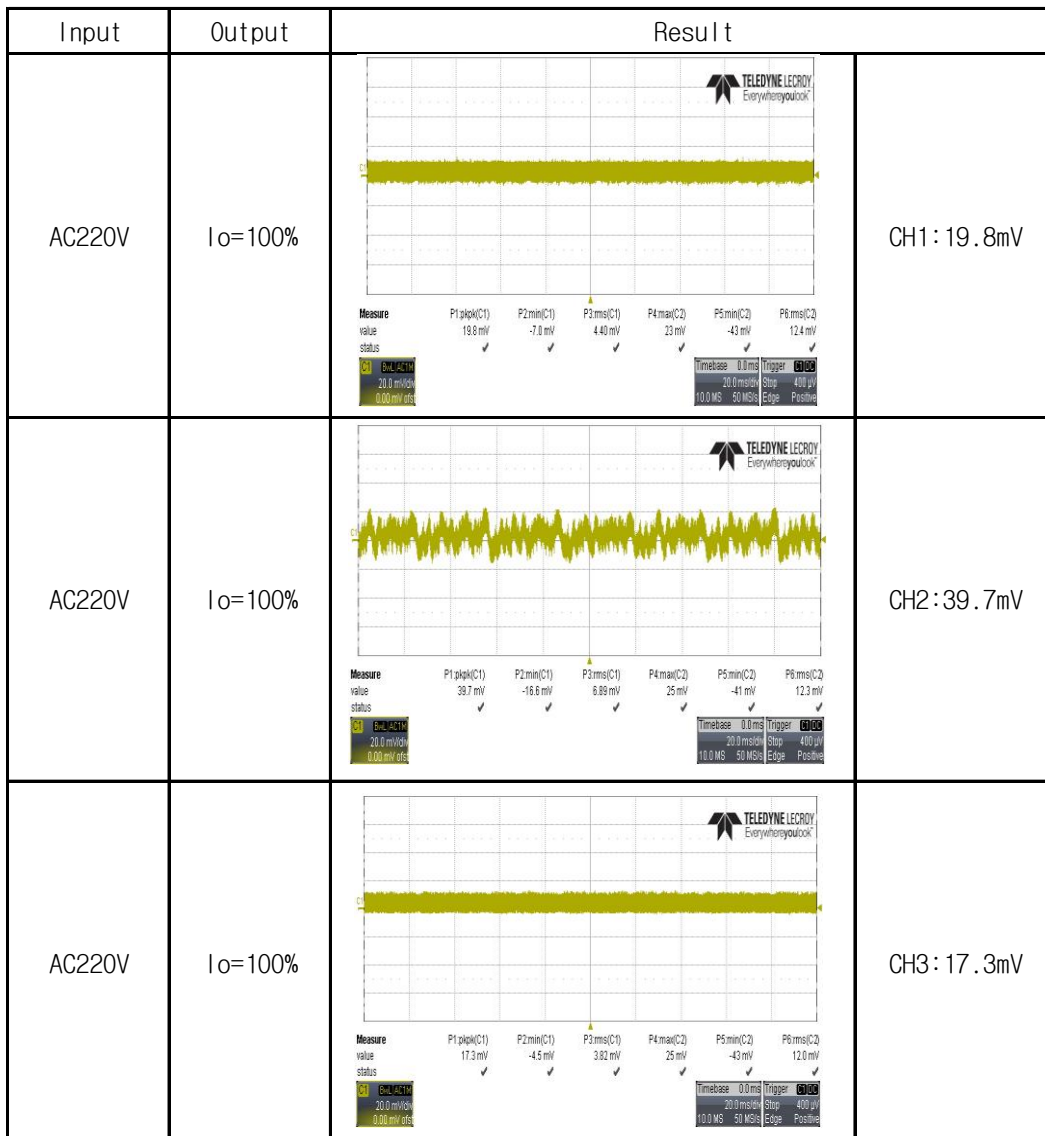
Inrush Current

Specification : 48A



Ripple & Noise

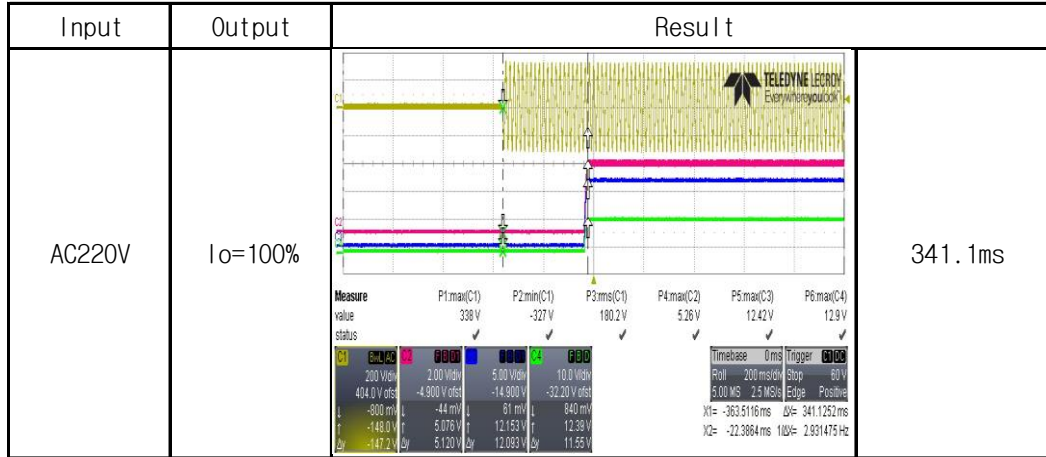
Specification : Ch1. 80mV / Ch2. 120mV / Ch3. 120mV



RP50-DD

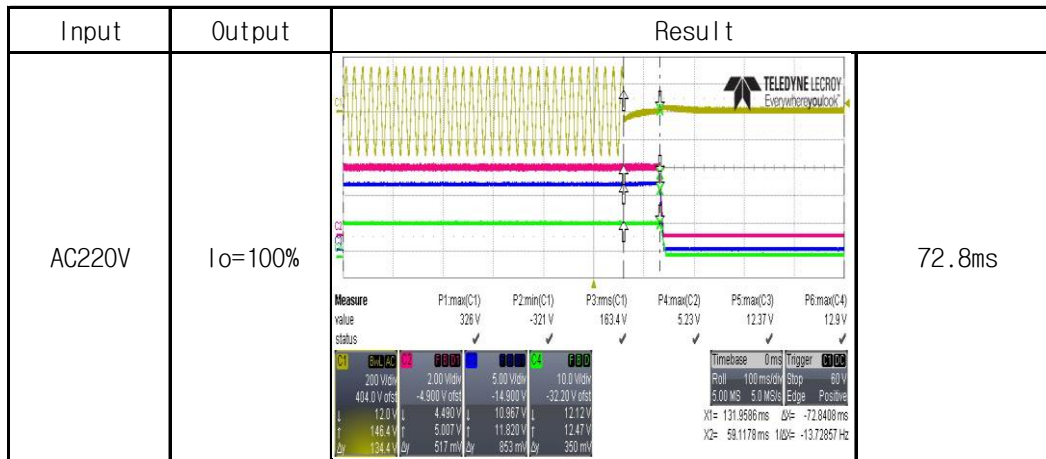
Turn on Time

Specification : 500ms



Hold up Time

Specification : 60ms



Electro Magnetic Compatibility

Item	Standard	Tset Condition	Result
EMI (Conduction/Radiation)	EN55032	AC230V, 50Hz, Full Load	Class B Pass
Harmonic Current	EN61000-3-2	AC230V, 50Hz, Full Load	Class A 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

RP50-EE

Input Current & Efficiency

Specification : 1.3A / 76% @ AC110V , 0.8A / 76% @ AC220V

I _o \ V _{in}		AV85V	AC110V	AC220V	AC264V
		0%	Input Current [A]	0.049	0.047
Efficiency [%]	-		-	-	-
50%	Input Current [A]	0.594	0.472	0.315	0.260
	Efficiency [%]	76.9%	78.8%	77.2%	76.5%
100%	Input Current [A]	0.924	0.888	0.565	0.48
	Efficiency [%]	77.5	78.3	79.1	79.4

Line & Load Regulation

Specification : Line Regulation Ch1. ±25mV / Ch2. ±225mV / Ch3. ±75mV

Load Regulation Ch1. ±50mV / Ch2. ±450mV / Ch3. ±150mV

I _o \ V _{in}		AC85V	AC110V	AC220V	AC264V	Line Regulation [mV]
		0%	CH1	5.00	5.00	5.00
CH2	15.02		15.04	14.94	14.93	110
CH3	15.10		15.10	15.10	15.10	0
50%	CH1	5.00	5.00	5.00	5.00	0
	CH2	14.98	14.95	14.90	14.90	80
	CH3	15.00	15.00	15.00	15.00	0
100%	CH1	5.00	5.00	5.00	5.00	0
	CH2	15.12	15.14	14.99	14.97	170
	CH3	15.10	15.10	15.10	15.10	0
Load Regulation [mV]	CH1	0	0	0	0	-
	CH2	140	190	90	70	
	CH3	100	100	100	100	

Leakage Current

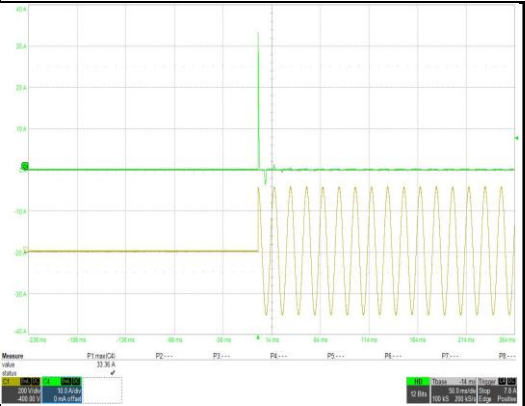
Specification : 2mA

	110V	220V
Line L [mA]	0.19	0.37
Line N [mA]	0.28	0.44

RP50-EE

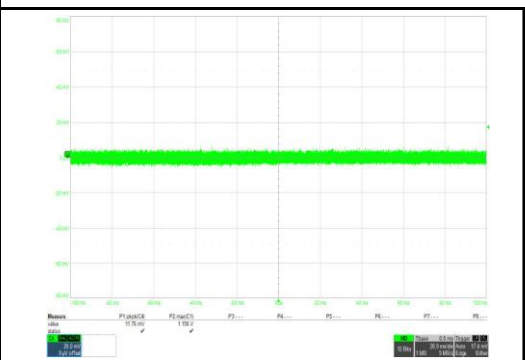
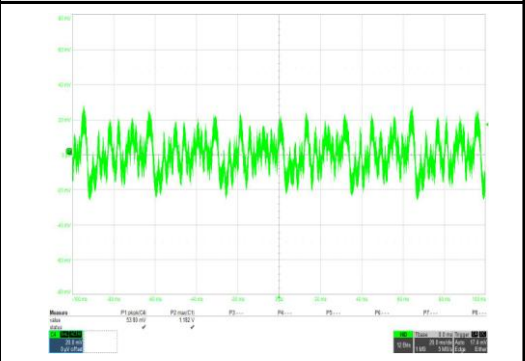
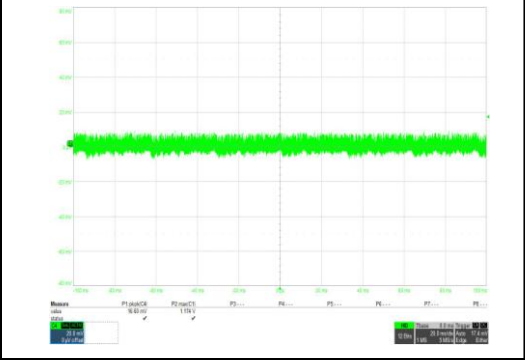
Inrush Current

Specification : 48A

Input	Output	Result	
AC220V	$I_o=100\%$		33.36A

Ripple & Noise

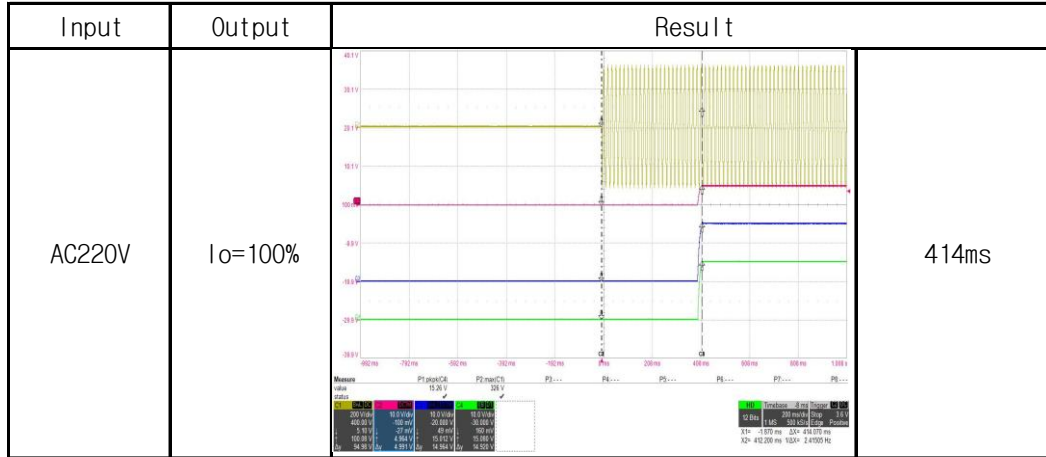
Specification : Ch1. 80mV / Ch2. 120mV / Ch3. 120mV

Input	Output	Result	
AC220V	$I_o=100\%$		CH1: 11.76mV
AC220V	$I_o=100\%$		CH2: 53.80mV
AC220V	$I_o=100\%$		CH3: 16.60mV

RP50-EE

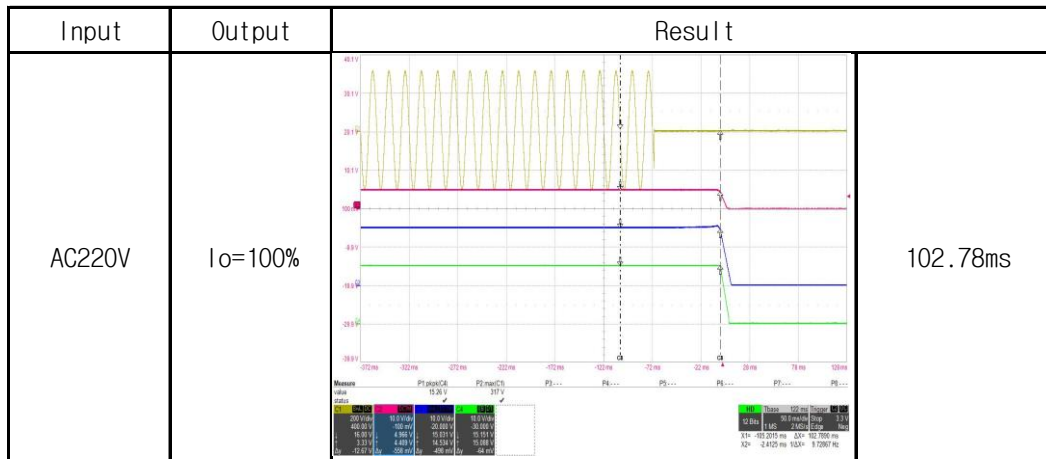
Turn on Time

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Hold up Time

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