

Evaluation Data

품 목	SMPS
품 명	RP35-S
Rev. No.	A

CE CB

ORIENT
ELECTRONICS

경기도 성남시 중원구 갈마치로 322

TEL : (031) 737-0200

FAX : (031) 737-0279

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RP35-05

Input Current & Efficiency

Specification : 0.7A / 79% @ AC110V , 0.55A / 80% @ AC220V

0%	Input Current [A]	-	-	-	-
	Efficiency [%]	-	-	-	-
50%	Input Current [A]	-	-	-	-
	Efficiency [%]	-	-	-	-
100%	Input Current [A]	0.7	0.7	0.35	0.33
	Efficiency [%]	79.7	79.8	80.5	81.0

Line & Load Regulation

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

Load Regulation $\pm 50\text{mV}$

V_{in}	AC85V	AC110V	AC220V	AC264V	Line Regulation [mV]
0%	5.02	5.02	5.02	5.02	0
50%	5.00	5.00	5.00	5.00	0
100%	5.00	5.00	5.00	5.00	0
Load Regulation [mV]	20	20	20	20	


Leakage Current

Specification : $< 0.75\text{mA}$ @ AC220V, Min LOAD

	110V	220V
Line L [mA]	-	0.55
Line N [mA]	-	0.55

Inrush Current

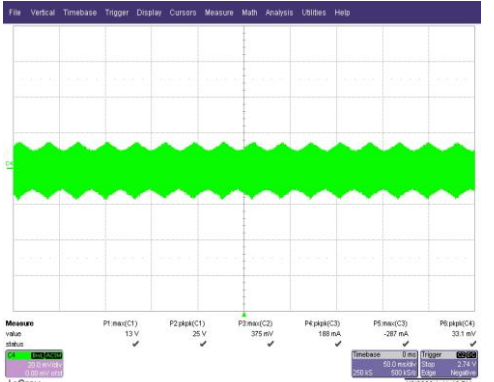
Specification : 40A

Input	Output	Result
AC220V	$I_o=100\%$	 <p>32.64A</p>

RP35-05


Ripple & Noise

Specification : 80mV

Input	Output	Result
AC220V	Io=100%	 <p>33.1 mV</p>

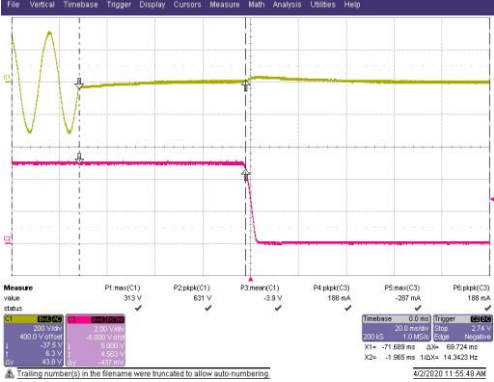
Turn on Time

Specification : 1000ms

Input	Output	Result
AC220V	Io=100%	 <p>900.1 ms</p>

Hold up Time

Specification : 30ms

Input	Output	Result
AC220V	Io=100%	 <p>69.7 ms</p>

RP35-05

Electro Magnetic Compatibility

Item	Standard	Test 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

RP35-12

Input Current & Efficiency

Specification : 0.7A / 80% @ AC110V , 0.55A / 86% @ AC220V

Vin		AV85V	AC110V	AC220V	AC264V
0%	Input Current [A]	-	-	-	-
	Efficiency [%]	-	-	-	-
50%	Input Current [A]	-	-	-	-
	Efficiency [%]	-	-	-	-
100%	Input Current [A]	0.7	0.7	0.34	0.32
	Efficiency [%]	79.7	81.0	86.1	86.7

Line & Load Regulation

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

	AC85V	AC110V	AC220V	AC264V	Line Regulation
0%	11.99	11.99	11.99	11.99	0
50%	11.99	11.99	11.99	11.99	0
100%	11.99	11.99	11.99	11.99	0
Load Regulation	0	0	0	0	

Leakage Current

Specification : $<0.75\text{mA}$ @ AC220V, Min LOAD

	110V	220V
Line L [mA]	-	0.55
Line N [mA]	-	0.55

Inrush Current

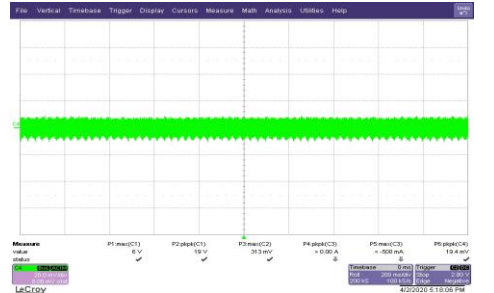
Specification : 40A

Input	Output	Result
AC220V	$I_o=100\%$	 <p>28.76A</p>

RP35-12

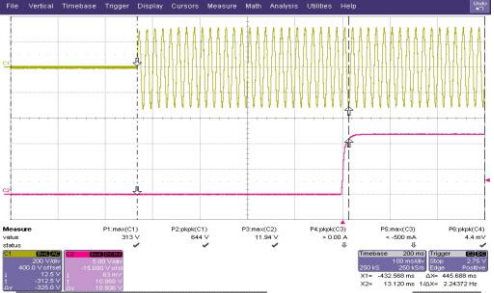
Ripple & Noise

Specification : 120mV

Input	Output	Result
AC220V	I _o =100%	 <p>19.4mV</p>

Turn on Time

Specification : 1000ms

Input	Output	Result
AC220V	I _o =100%	 <p>445.6ms</p>

Hold up Time

Specification : 30ms

Input	Output	Result
AC220V	I _o =100%	 <p>74.6ms</p>

RP35-12

Electro Magnetic Compatibility

Item	Standard	Tset Condition	Result
EMI	EN55032	AC230V, 50Hz, Full Load	Class B Pass
Harmonic Current	EN61000-3-2	AC230V, 50Hz, Full Load	Class A Pass
Electrostatic	EN61000-4-2	AC230V, 50Hz, Full Load	Criteria A
Electrical Fast	EN61000-4-4	AC230V, 50Hz, Full Load	Criteria A
Surge	EN61000-4-5	AC230V, 50Hz, Full Load	Criteria A

RP35-24

Input Current & Efficiency

Specification : 0.7A / 80% @ AC110V , 0.55A / 88% @ AC220V

Vin		AV85V	AC110V	AC220V	AC264V
0%	Input Current [A]	-	-	-	-
	Efficiency [%]	-	-	-	-
50%	Input Current [A]	-	-	-	-
	Efficiency [%]	-	-	-	-
100%	Input Current [A]	0.7	0.7	0.34	0.32
	Efficiency [%]	79.7	81.0	88.1	88.5

Line & Load Regulation

Specification : Line Regulation $\pm 120\text{mV}$

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

	AC85V	AC110V	AC220V	AC264V	Line Regulation
0%	11.99	11.99	11.99	11.99	0
50%	11.99	11.99	11.99	11.99	0
100%	11.99	11.99	11.99	11.99	0
Load Regulation	0	0	0	0	

Leakage Current

Specification : <0.75mA @ AC220V, Min LOAD

	110V	220V
Line L [mA]	-	0.55
Line N [mA]	-	0.55

Inrush Current

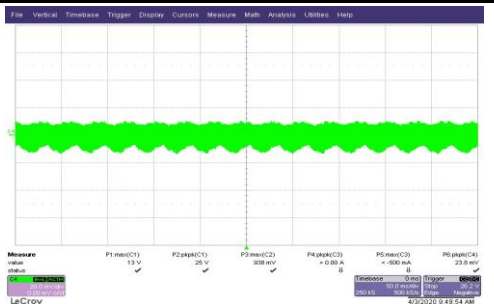
Specification : 40A

Input	Output	Result
AC220V	Io=100%	 <p>26.52A</p>

RP35-24

Ripple & Noise

Specification : 150mV

Input	Output	Result
AC220V	Io=100%	 <p>23.8mV</p>


Turn on Time

Specification : 1000ms

Input	Output	Result
AC220V	Io=100%	 <p>479.8ms</p>

Hold up Time

Specification : 30ms

Input	Output	Result
AC220V	Io=100%	 <p>74.7ms</p>

RP35-24

Electro Magnetic Compatibility

Item	Standard	Tset Condition	Result
EMI	EN55032	AC230V, 50Hz, Full Load	Class B Pass
Harmonic Current	EN61000-3-2	AC230V, 50Hz, Full Load	Class A Pass
Electrostatic	EN61000-4-2	AC230V, 50Hz, Full Load	Criteria A
Electrical Fast	EN61000-4-4	AC230V, 50Hz, Full Load	Criteria A
Surge	EN61000-4-5	AC230V, 50Hz, Full Load	Criteria A

RP35-48

Input Current & Efficiency

Specification : 0.7A / 80% @ AC110V , 0.55A / 89% @ AC220V

Vin		AV85V	AC110V	AC220V	AC264V
0%	Input Current [A]	-	-	-	-
	Efficiency [%]	-	-	-	-
50%	Input Current [A]	-	-	-	-
	Efficiency [%]	-	-	-	-
100%	Input Current [A]	0.7	0.7	0.34	0.31
	Efficiency [%]	79.7	81.0	89.3	89.7

Line & Load Regulation

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

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

	AC85V	AC110V	AC220V	AC264V	Line Regulation
0%	48.02	48.02	48.02	48.02	0
50%	48.01	48.01	48.01	48.01	0
100%	48.01	48.01	48.00	48.00	10
Load Regulation	10	10	20	20	


Leakage Current

Specification : $<0.75\text{mA}$ @ AC220V, Min LOAD

	110V	220V
Line L [mA]	-	0.55
Line N [mA]	-	0.55

Inrush Current

Specification : 40A

Input	Output	Result
AC220V	$I_o=100\%$	 <p>32.04A</p>

RP35-48

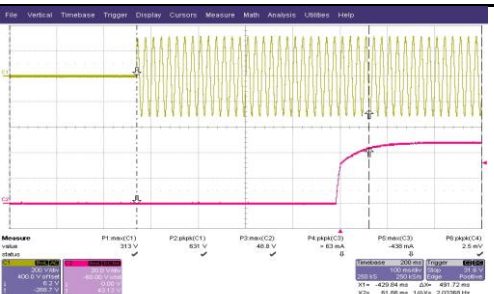
Ripple & Noise

Specification : 200mV

Input	Output	Result
AC220V	I _o =100%	 <p>20.6mV</p>

Turn on Time

Specification : 1000ms

Input	Output	Result
AC220V	I _o =100%	 <p>491.7ms</p>

Hold up Time

Specification : 30ms

Input	Output	Result
AC220V	I _o =100%	 <p>74.1ms</p>

RP35-48

Electro Magnetic Compatibility

Item	Standard	Tset Condition	Result
EMI	EN55032	AC230V, 50Hz, Full Load	Class B Pass
Harmonic Current	EN61000-3-2	AC230V, 50Hz, Full Load	Class A Pass
Electrostatic	EN61000-4-2	AC230V, 50Hz, Full Load	Criteria A
Electrical Fast	EN61000-4-4	AC230V, 50Hz, Full Load	Criteria A
Surge	EN61000-4-5	AC230V, 50Hz, Full Load	Criteria A