GENESYS™ 2.7kW

EVALUATION DATA

APPD	CHK	DWG
22/08/19	ASAF. A 22/08/19	PAVEL. G. 22/08/19

TDK-LAMBDA

INDEX PAGE

TERMINOLOGY USED

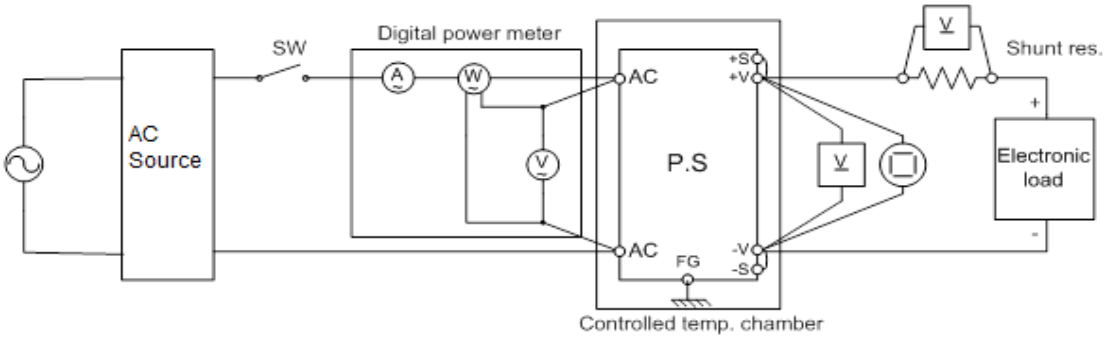
Definition

Vin	Input voltage
Vout	Output voltage
Iin	Input current
Iout	Output current
Ta	Ambient temperature
C.V	Constant voltage mode
C.C	Constant current mode

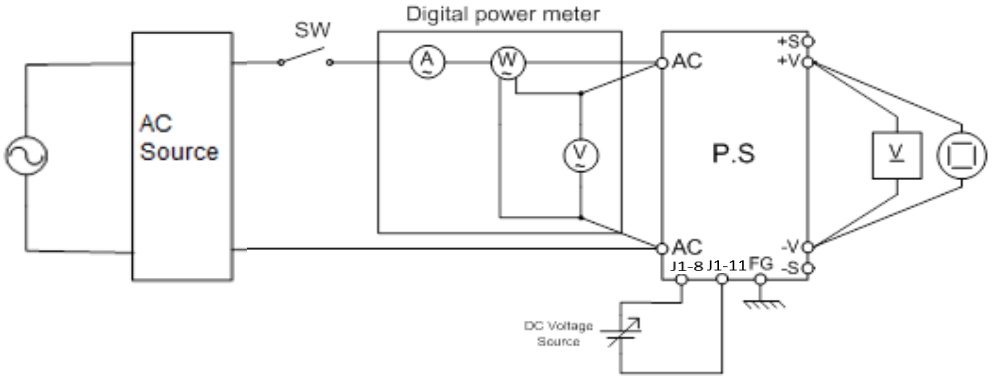
1. EVALUATION METHOD

1.1 Circuit used for determination

(1) Steady state data

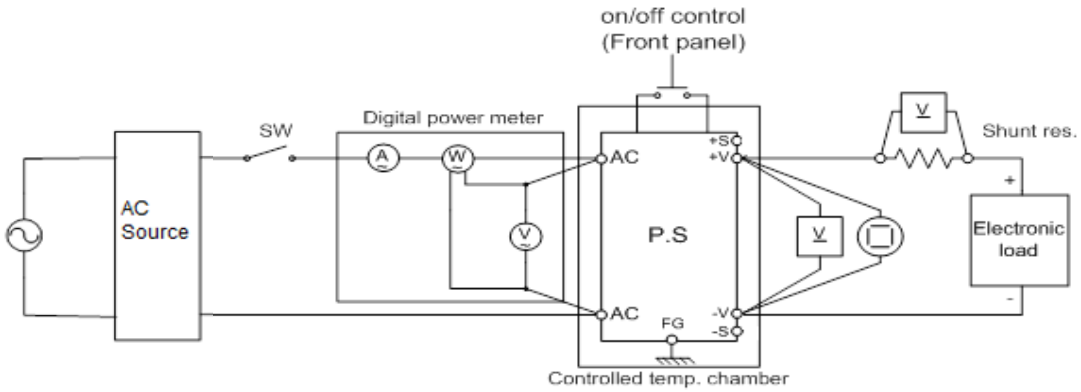


(2) Over voltage protection (OVP) characteristics

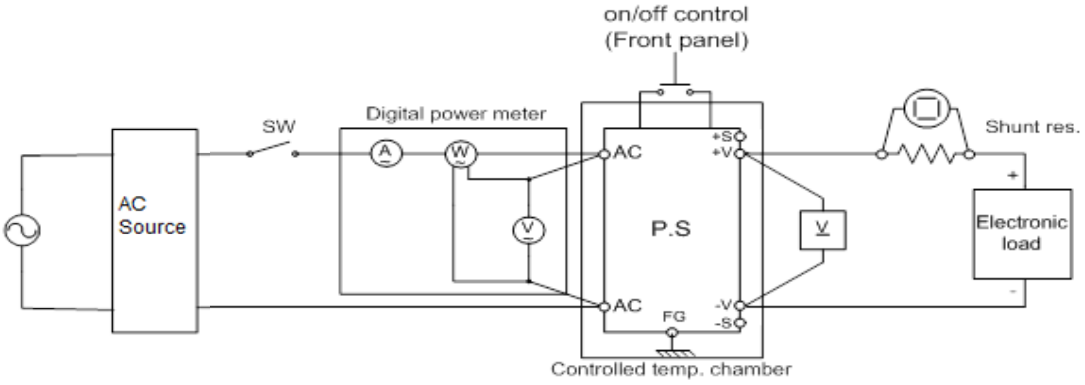


(3) Output rise/fall characteristics

Constant Voltage mode

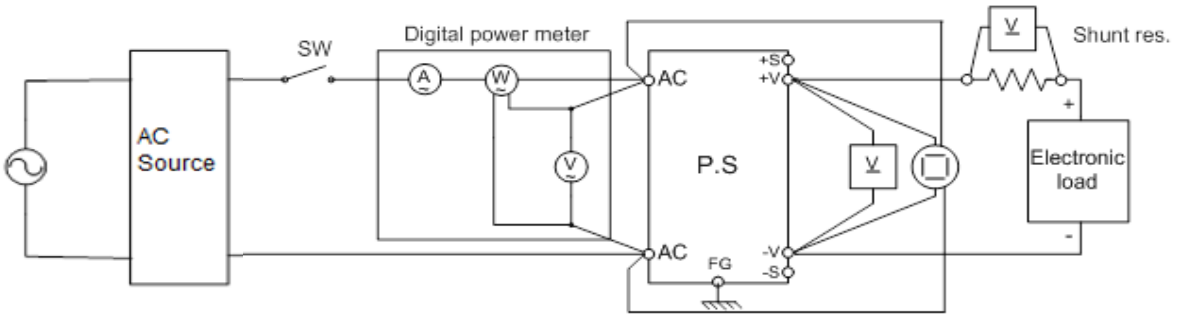


Constant Current mode

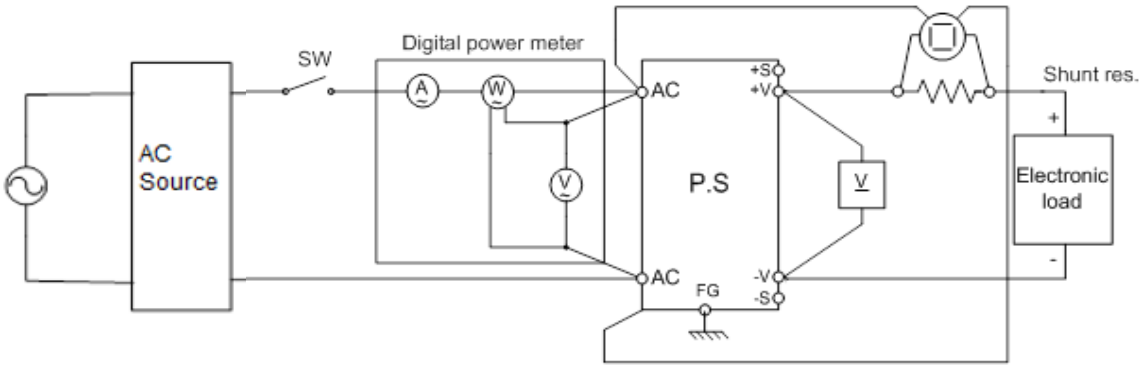


(4) Dynamic line response characteristics

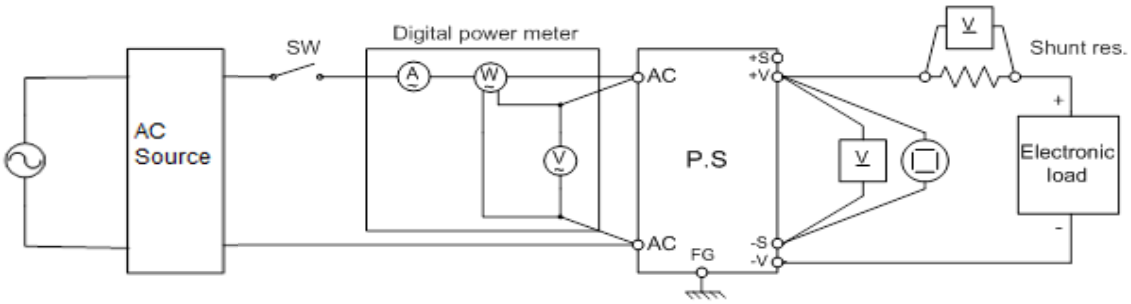
Constant Voltage mode



Constant Current mode

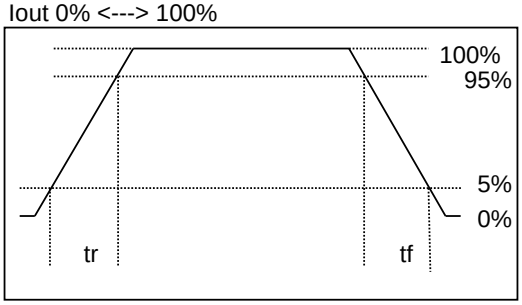


(5) Dynamic load response characteristics



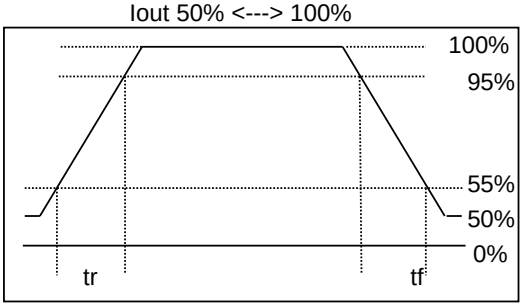
Output current waveform

Iout 0% <---> 100%



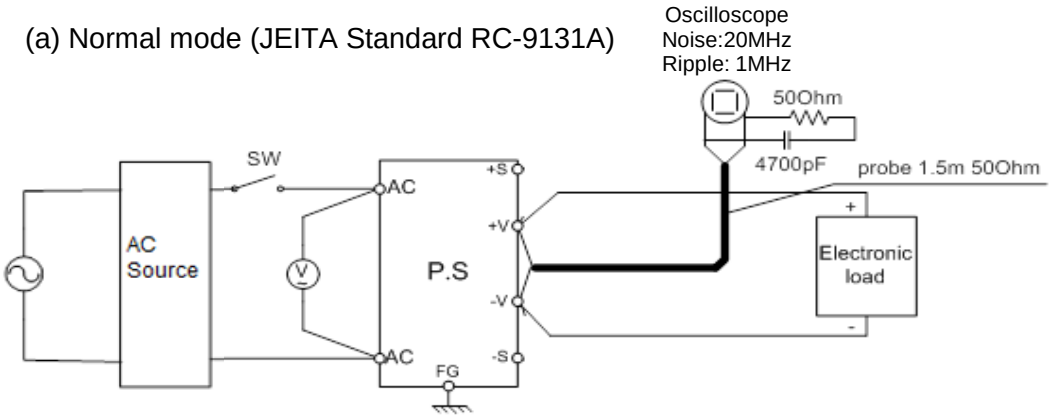
Output current waveform

Iout 50% <---> 100%

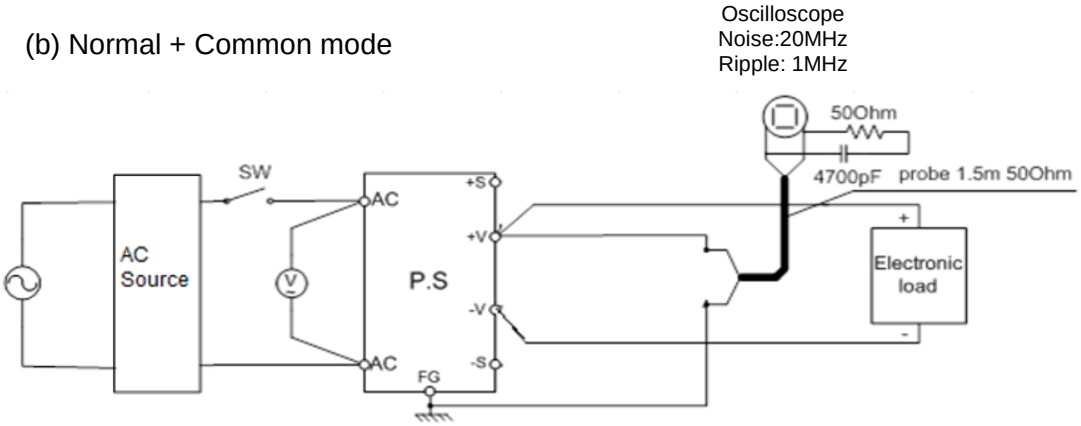


(6) Output ripple & noise waveform (10V to 300V models)

(a) Normal mode (JEITA Standard RC-9131A)

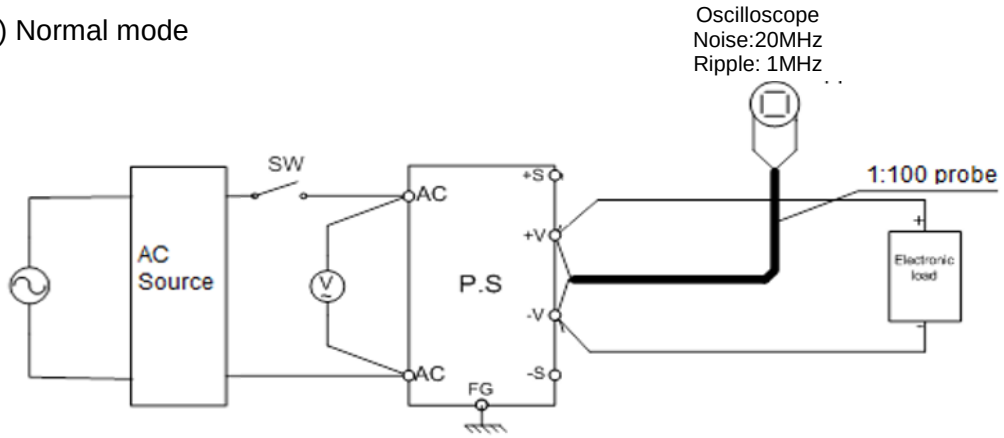


(b) Normal + Common mode

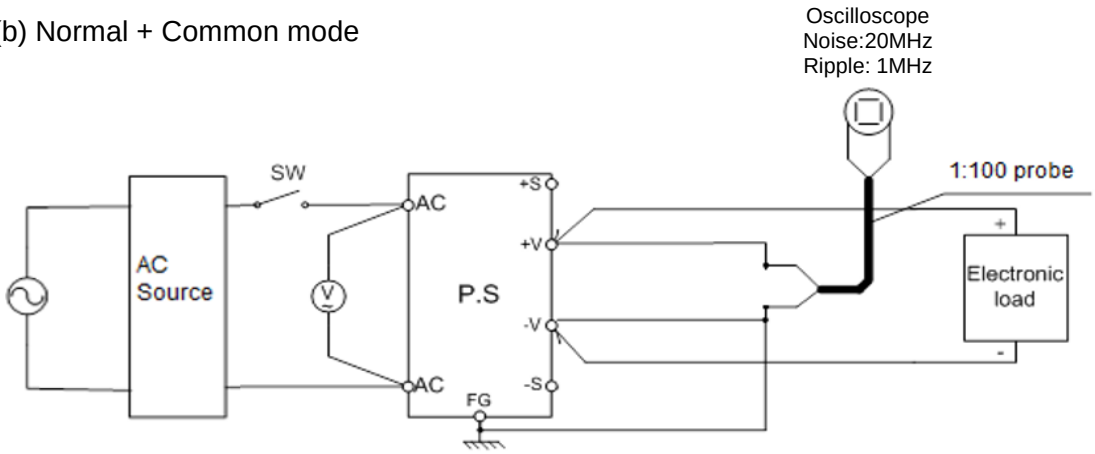


(7) Output ripple & noise waveform (600V models)

(a) Normal mode



(b) Normal + Common mode



1.2 List of equipment used

	EQUIPMENT USED	MANUFACTURER	MODEL No.
1	Storage oscilloscope	YOKOGAWA	DLM2034
2	Storage oscilloscope	YOKOGAWA	DLM4038
3	Digital multimeter	KEYSIGHT	2001
3	Digital multimeter	AGILENT	34401A
4	Digital power meter	YOKOGAWA	WT230
5	Digital power meter	YOKOGAWA	WT110
6	Digital power meter	YOKOGAWA	WT330
7	Digital power meter	YOKOGAWA	WT333E
8	Digital power meter	CHROMA	66203
9	AC Source	CHROMA	6560
10	AC Source	CHROMA	6590
11	Electronic load	H&H	ZS4260
12	Electronic load	H&H	ZS1880
13	Electronic load	H&H	ZS7060
15	Electronic load	CHROMA	63203
17	Electronic load	CHROMA	63206A
18	Controlled temp. chamber	THERMOTRON	SM-16-3800
19	Controlled temp. chamber	THERMOTRON	SE-600-5-5
20	Controlled temp. chamber	THERMOTRON	SE-600-6-6
21	Leakage current tester	KIKUSUI	TOS3200
22	Current probe	YOKOGAWA	701939
23	Current probe	AGILENT	N2782B
24	Transducer	LEM	IT700-SB
25	Transducer	LEM	IN 200-S
26	Transducer	LEM	IT60-S
27	Differential Voltage Probe	YOKOGAWA	700924

(1). Regulation - Line & Load, Temperature drift

G10-265

Conditions: Ta = 25°C

1. Regulation - Line & Load, C.V mode 1Φ200

	Vin					
Io	170VAC	200VAC	230VAC	265VAC	Line Regulation	
0%	9.9999	9.9999	9.9999	9.9999	0.0	0.000%
25%	9.9990	9.9990	9.9990	9.9991	0.1	0.001%
50%	9.9984	9.9984	9.9984	9.9984	0.0	0.000%
75%	9.9978	9.9978	9.9978	9.9978	0.0	0.000%
100%	9.9971	9.9971	9.9971	9.9971	0.0	0.000%
Load	2.8	2.8	2.8	2.8	ΔV(mV)	
Regulation	0.028%	0.028%	0.028%	0.028%		

2. Regulation - Line & Load, C.V mode 3Φ200

	Vin						
Io	170VAC	200VAC	208VAC	230VAC	265VAC	Line Regulation	
0%	10.0008	10.0008	10.0008	10.0008	10.0008	0.0	0.000%
25%	10.0001	10.0001	10.0001	10.0001	10.0001	0.0	0.000%
50%	9.9995	9.9995	9.9995	9.9995	9.9995	0.0	0.000%
75%	9.9989	9.9989	9.9989	9.9989	9.9989	0.0	0.000%
100%	9.9983	9.9982	9.9982	9.9983	9.9983	0.1	0.001%
Load	2.5	2.6	2.6	2.5	2.5	ΔV(mV)	
Regulation	0.025%	0.026%	0.026%	0.025%	0.025%		

3. Regulation - Line & Load, C.V mode 3Φ400

	Vin							
Io	342VAC	380VAC	400VAC	415VAC	432VAC	460VAC	Line Regulation	
0%	9.9996	9.9997	9.9997	9.9997	9.9997	9.9996	0.1	0.001%
25%	9.9990	9.9990	9.9990	9.9990	9.9990	9.9990	0.0	0.000%
50%	9.9984	9.9983	9.9984	9.9984	9.9983	9.9984	0.1	0.001%
75%	9.9977	9.9977	9.9977	9.9977	9.9977	9.9977	0.0	0.000%
100%	9.9971	9.9971	9.9971	9.9971	9.9971	9.9971	0.0	0.000%
Load	2.5	2.6	2.6	2.6	2.6	2.5	ΔV(mV)	
Regulation	0.025%	0.026%	0.026%	0.026%	0.026%	0.025%		

4. Regulation - Line & Load, C.V mode 3Φ480

	Vin							
Io	342VAC	380VAC	400VAC	415VAC	480VAC	520VAC	Line Regulation	
0%	10.0001	10.0001	10.0001	10.0001	10.0001	10.0001	0.0	0.000%
25%	9.9994	9.9994	9.9994	9.9994	9.9994	9.9994	0.0	0.000%
50%	9.9988	9.9988	9.9988	9.9988	9.9988	9.9988	0.0	0.000%
75%	9.9982	9.9982	9.9982	9.9982	9.9982	9.9982	0.0	0.000%
100%	9.9976	9.9976	9.9975	9.9975	9.9976	9.9975	0.1	0.001%
Load	2.5	2.5	2.6	2.6	2.5	2.6	ΔV(mV)	
Regulation	0.025%	0.025%	0.026%	0.026%	0.025%	0.026%		

5. Temperature drift, C.V mode

Conditions Vin:230V 1Φ
Iout:100%

Ta	0°C	25°C	50°C	Temp. Coefficient (0˚C~50˚C)			
Vout	9.9981	9.9972	9.9958	2.216	mV	4.4	ppm/˚C

(1). Regulation - Line & Load, Temperature drift

G60-45

Conditions: Ta = 25°C

1. Regulation - Line & Load, C.V mode 1Φ200

	Vin					
Io	170VAC	200VAC	230VAC	265VAC	Line Regulation	
0%	60.0027	60.0027	60.0028	60.0027	0.1	0.000%
25%	60.0024	60.0024	60.0024	60.0025	0.1	0.000%
50%	60.0024	60.0023	60.0023	60.0023	0.1	0.000%
75%	60.0020	60.0021	60.0020	60.0020	0.1	0.000%
100%	60.0018	60.0017	60.0018	60.0017	0.1	0.000%
Load	0.9	1.0	1.0	1.0	ΔV(mV)	
Regulation	0.001%	0.002%	0.002%	0.002%		

2. Regulation - Line & Load, C.V mode 3Φ200

	Vin						
Io	170VAC	200VAC	208VAC	230VAC	265VAC	Line Regulation	
0%	60.0032	60.0031	60.0032	60.0032	60.0031	0.1	0.001%
25%	60.0026	60.0028	60.0027	60.0028	60.0028	0.2	0.002%
50%	60.0026	60.0027	60.0027	60.0026	60.0027	0.1	0.001%
75%	60.0025	60.0026	60.0026	60.0027	60.0026	0.2	0.002%
100%	60.0022	60.0023	60.0023	60.0023	60.0023	0.1	0.001%
Load	1.0	0.8	0.9	0.9	0.8	ΔV(mV)	
Regulation	0.002%	0.001%	0.002%	0.002%	0.001%		

3. Regulation - Line & Load, C.V mode 3Φ400

	Vin							
Io	342VAC	380VAC	400VAC	415VAC	432VAC	460VAC	Line Regulation	
0%	60.0031	60.0031	60.0030	60.0030	60.0031	60.0030	0.1	0.000%
25%	60.0026	60.0027	60.0026	60.0027	60.0027	60.0027	0.1	0.000%
50%	60.0026	60.0026	60.0026	60.0025	60.0026	60.0026	0.1	0.000%
75%	60.0025	60.0025	60.0024	60.0025	60.0025	60.0025	0.1	0.000%
100%	60.0023	60.0022	60.0021	60.0022	60.0022	60.0022	0.2	0.000%
Load	0.8	0.9	0.9	0.8	0.9	0.8	ΔV(mV)	
Regulation	0.001%	0.002%	0.002%	0.001%	0.002%	0.001%		

4. Regulation - Line & Load, C.V mode 3Φ480

	Vin							
Io	342VAC	380VAC	400VAC	415VAC	480VAC	520VAC	Line Regulation	
0%	60.0049	60.0048	60.0049	60.0049	60.0048	60.0049	0.1	0.000%
25%	60.0045	60.0046	60.0046	60.0046	60.0046	60.0045	0.1	0.000%
50%	60.0044	60.0046	60.0045	60.0045	60.0045	60.0045	0.2	0.000%
75%	60.0043	60.0044	60.0044	60.0044	60.0044	60.0042	0.2	0.000%
100%	60.0039	60.0040	60.0040	60.0040	60.0040	60.0040	0.1	0.000%
Load	1.0	0.8	0.9	0.9	0.8	0.9	ΔV(mV)	
Regulation	0.002%	0.001%	0.002%	0.002%	0.001%	0.002%		

5. Temperature drift, C.V mode

Conditions: Vin:230V 1Φ
Iout:100%

Ta	0°C	25°C	50°C	Temp. Coefficient (0˚C~50˚C)			
Vout	59.9992	60.0056	60.0097	10.55	mV	3.5	ppm/˚C

(1). Regulation - Line & Load, Temperature drift

G150-18

Conditions: Ta = 25°C

1. Regulation - Line & Load, C.V mode 1Φ200

	Vin					
Io	170VAC	200VAC	230VAC	265VAC	Line Regulation	
0%	150.0043	150.0044	150.0045	150.0045	0.2	0.000%
25%	150.0044	150.0044	150.0045	150.0045	0.1	0.000%
50%	150.0044	150.0046	150.0044	150.0048	0.4	0.000%
75%	150.0046	150.0046	150.0047	150.0046	0.1	0.000%
100%	150.0048	150.0048	150.0050	150.0046	0.4	0.000%
Load	0.5	0.4	0.6	0.3	ΔV(mV)	
Regulation	0.000%	0.000%	0.000%	0.000%		

2. Regulation - Line & Load, C.V mode 3Φ200

	Vin						
Io	170VAC	200VAC	208VAC	230VAC	265VAC	Line Regulation	
0%	150.0153	150.0154	150.0155	150.0154	150.0157	0.4	0.000%
25%	150.0153	150.0152	150.0153	150.0153	150.0152	0.1	0.000%
50%	150.0152	150.0153	150.0152	150.0155	150.0153	0.3	0.000%
75%	150.0152	150.0153	150.0155	150.0155	150.0150	0.5	0.000%
100%	150.0146	150.0152	150.0151	150.0152	150.0147	0.6	0.000%
Load	0.7	0.2	0.4	0.3	1.0	ΔV(mV)	
Regulation	0.000%	0.000%	0.000%	0.000%	0.001%		

3. Regulation - Line & Load, C.V mode 3Φ400

	Vin							
Io	342VAC	380VAC	400VAC	415VAC	432VAC	460VAC	Line Regulation	
0%	150.0097	150.0098	150.0101	150.0098	150.0100	150.0099	0.4	0.000%
25%	150.0097	150.0093	150.0096	150.0096	150.0098	150.0096	0.5	0.000%
50%	150.0093	150.0096	150.0095	150.0095	150.0096	150.0097	0.4	0.000%
75%	150.0097	150.0097	150.0098	150.0099	150.0097	150.0098	0.2	0.000%
100%	150.0097	150.0100	150.0097	150.0099	150.0100	150.0100	0.3	0.000%
Load	0.4	0.7	0.6	0.4	0.4	0.4	ΔV(mV)	
Regulation	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%		

4. Regulation - Line & Load, C.V mode 3Φ480

	Vin							
Io	342VAC	380VAC	400VAC	415VAC	480VAC	520VAC	Line Regulation	
0%	150.0137	150.0139	150.0137	150.0142	150.0139	150.0140	0.5	0.000%
25%	150.0138	150.0138	150.0134	150.0138	150.0136	150.0136	0.4	0.000%
50%	150.0134	150.0134	150.0134	150.0138	150.0141	150.0139	0.7	0.000%
75%	150.0136	150.0139	150.0138	150.0140	150.0141	150.0139	0.5	0.000%
100%	150.0138	150.0139	150.0139	150.0138	150.0139	150.0139	0.1	0.000%
Load	0.4	0.5	0.5	0.4	0.5	0.4	ΔV(mV)	
Regulation	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%		

5. Temperature drift, C.V mode

Conditions Vin:230V 1Φ
Iout:100%

Ta	0°C	25°C	50°C	Temp. Coefficient (0˚C~50˚C)			
Vout	149.9846	149.9795	149.9563	28.335	mV	3.8	ppm/˚C

(1). Regulation - Line & Load, Temperature drift

G600-4.5

Conditions: Ta = 25°C

1. Regulation - Line & Load, C.V mode 1Φ200

	Vin					
Io	170VAC	200VAC	230VAC	265VAC	Line Regulation	
0%	599.9924	599.9936	599.9920	599.9911	2.5	0.000%
25%	599.9877	599.9871	599.9866	599.9866	1.1	0.000%
50%	599.9851	599.9850	599.9851	599.9859	0.9	0.000%
75%	599.9838	599.9839	599.9848	599.9831	1.7	0.000%
100%	599.9838	599.9832	599.9828	599.9834	1.0	0.000%
Load	8.6	10.4	9.2	8.0	ΔV(mV)	
Regulation	0.001%	0.002%	0.002%	0.001%		

2. Regulation - Line & Load, C.V mode 3Φ200

	Vin						
Io	170VAC	200VAC	208VAC	230VAC	265VAC	Line Regulation	
0%	599.9976	599.9978	599.9975	599.9969	599.9969	0.9	0.000%
25%	599.9935	599.9943	599.9947	599.9947	599.9944	1.2	0.000%
50%	599.9934	599.9941	599.9941	599.9948	599.9937	1.4	0.000%
75%	599.9930	599.9932	599.9937	599.9931	599.9920	1.7	0.000%
100%	599.9909	599.9917	599.9924	599.9917	599.9912	1.5	0.000%
Load	6.7	6.1	5.1	5.2	5.7	ΔV(mV)	
Regulation	0.001%	0.001%	0.001%	0.001%	0.001%		

3. Regulation - Line & Load, C.V mode 3Φ400

	Vin							
Io	342VAC	380VAC	400VAC	415VAC	432VAC	460VAC	Line Regulation	
0%	599.9856	599.9861	599.9867	599.9864	599.9854	599.9848	1.9	0.000%
25%	599.9814	599.9814	599.9817	599.9816	599.9818	599.9815	0.4	0.000%
50%	599.9815	599.9814	599.9809	599.9817	599.9807	599.9810	1.0	0.000%
75%	599.9801	599.9806	599.9807	599.9808	599.9803	599.9816	1.5	0.000%
100%	599.9797	599.9801	599.9793	599.9799	599.9802	599.9802	0.9	0.000%
Load	5.9	6.0	7.4	6.5	5.2	4.6	ΔV(mV)	
Regulation	0.001%	0.001%	0.001%	0.001%	0.001%	0.001%		

4. Regulation - Line & Load, C.V mode 3Φ480

	Vin							
Io	342VAC	380VAC	400VAC	415VAC	480VAC	520VAC	Line Regulation	
0%	599.9714	599.9712	599.9706	599.9713	599.9709	599.9704	1.0	0.000%
25%	599.9675	599.9669	599.9670	599.9671	599.9666	599.9666	0.9	0.000%
50%	599.9658	599.9664	599.9666	599.9667	599.9666	599.9671	1.3	0.000%
75%	599.9659	599.9657	599.9657	599.9651	599.9644	599.9650	1.5	0.000%
100%	599.9646	599.9646	599.9655	599.9648	599.9655	599.9652	0.9	0.000%
Load	6.8	6.6	5.1	6.5	6.5	5.4	ΔV(mV)	
Regulation	0.001%	0.001%	0.001%	0.001%	0.001%	0.001%		

5. Temperature drift, C.V mode

Conditions: Vin:230V 1Φ
Iout:100%

Ta	0°C	25°C	50°C	Temp. Coefficient (0˚C~50˚C)			
Vout	599.9703	599.9385	599.8386	131.7	mV	4.4	ppm/˚C

(1). Regulation - Line & Load, Temperature drift

G10-265

Conditions: Ta = 25°C

1. Regulation - Line & Load, C.C mode 1Φ200 (*)

	Vin					
Vo	170VAC	200VAC	230VAC	265VAC	Line Regulation	
0%	264.9868	264.9868	264.9869	264.9869	0.1	0.000%
25%	264.9863	264.9856	264.9865	264.9857	0.9	0.000%
50%	264.9842	264.9850	264.9847	264.9836	1.4	0.001%
75%	264.9858	264.9857	264.9854	264.9864	1.0	0.000%
100%	264.9809	264.9800	264.9800	264.9807	0.9	0.000%
Load	5.9	6.8	6.9	6.2	ΔI(mA)	
Regulation	0.002%	0.003%	0.003%	0.002%		

2. Regulation - Line & Load, C.C mode 3Φ200 (*)

	Vin						
Io	170VAC	200VAC	208VAC	230VAC	265VAC	Line Regulation	
0%	264.7253	264.7257	264.7238	264.7228	264.7246	2.9	0.001%
25%	264.7180	264.7163	264.7159	264.7145	264.7151	3.5	0.001%
50%	264.7040	264.7033	264.7033	264.7018	264.7034	2.2	0.001%
75%	264.7068	264.7042	264.7024	264.7031	264.7039	4.4	0.002%
100%	264.7052	264.7023	264.7022	264.7013	264.7033	3.9	0.001%
Load	21.3	23.4	21.6	21.5	21.3	ΔI(mA)	
Regulation	0.008%	0.009%	0.008%	0.008%	0.008%		

3. Regulation - Line & Load, C.C mode 3Φ400 (*)

	Vin							
Io	342VAC	380VAC	400VAC	415VAC	432VAC	460VAC	Line Regulation	
0%	264.7803	264.7810	264.7804	264.7799	264.7803	264.7798	1.2	0.000%
25%	264.7750	264.7756	264.7758	264.7756	264.7756	264.7760	1.0	0.000%
50%	264.7650	264.7641	264.7647	264.7640	264.7651	264.7656	1.6	0.001%
75%	264.7652	264.7643	264.7649	264.7646	264.7649	264.7656	1.3	0.000%
100%	264.7643	264.7639	264.7639	264.7637	264.7645	264.7646	0.9	0.000%
Load	16.0	17.1	16.5	16.2	15.8	15.2	ΔI(mA)	
Regulation	0.006%	0.006%	0.006%	0.006%	0.006%	0.006%		

4 Regulation - Line & Load, C.C mode 3Φ480 (*)

	Vin							
Io	342VAC	380VAC	400VAC	415VAC	480VAC	520VAC	Line Regulation	
0%	264.8907	264.8919	264.8917	264.8907	264.8912	264.8913	1.2	0.000%
25%	264.8870	264.8872	264.8863	264.8855	264.8866	264.8868	1.7	0.001%
50%	264.8735	264.8738	264.8738	264.8725	264.8735	264.8730	1.3	0.000%
75%	264.8713	264.8733	264.8740	264.8730	264.8732	264.8742	2.9	0.001%
100%	264.8736	264.8734	264.8731	264.8730	264.8720	264.8734	1.6	0.001%
Load	19.4	18.6	18.6	18.2	19.2	18.3	ΔI(mA)	
Regulation	0.007%	0.007%	0.007%	0.007%	0.007%	0.007%		

5. Temperature drift, C.C mode

Conditions: Vin:230V 1Φ
Iout:100%

Ta	0°C	25°C	50°C	Temp. Coefficient (0˚C~50˚C)	
Iout	264.9835	264.9398	264.9907	51 mA	3.8 ppm/˚C

Notes: (*) Not including load regulation thermal drift effect.

(1). Regulation - Line & Load, Temperature drift

G60-45

Conditions: Ta = 25°C

1. Regulation - Line & Load, C.C mode 1Φ200 (*)

	Vin					
Vo	170VAC	200VAC	230VAC	265VAC	Line Regulation	
0%	44.9996	44.9995	44.9994	44.9992	0.4	0.001%
25%	45.0008	45.0008	45.0007	45.0007	0.1	0.000%
50%	45.0026	45.0024	45.0025	45.0024	0.2	0.000%
75%	45.0043	45.0043	45.0043	45.0042	0.1	0.000%
100%	45.0042	45.0041	45.0039	45.0039	0.3	0.001%
Load	4.7	4.8	4.9	5.0	ΔI(mA)	
Regulation	0.010%	0.011%	0.011%	0.011%		

2. Regulation - Line & Load, C.C mode 3Φ200 (*)

	Vin						
Io	170VAC	200VAC	208VAC	230VAC	265VAC	Line Regulation	
0%	45.0083	45.0081	45.0081	45.0082	45.0076	0.7	0.002%
25%	45.0085	45.0090	45.0091	45.0092	45.0089	0.7	0.002%
50%	45.0102	45.0105	45.0107	45.0108	45.0103	0.6	0.001%
75%	45.0110	45.0117	45.0119	45.0119	45.0112	0.9	0.002%
100%	45.0115	45.0120	45.0122	45.0122	45.0114	0.8	0.002%
Load	3.2	3.9	4.1	4.0	3.8	ΔI(mA)	
Regulation	0.007%	0.009%	0.009%	0.009%	0.008%		

3. Regulation - Line & Load, C.C mode 3Φ400 (*)

	Vin							
Io	342VAC	380VAC	400VAC	415VAC	432VAC	460VAC	Line Regulation	
0%	45.0104	45.0107	45.0108	45.0108	45.0107	45.0109	0.5	0.001%
25%	45.0108	45.0108	45.0106	45.0106	45.0106	45.0106	0.2	0.000%
50%	45.0118	45.0117	45.0116	45.0115	45.0114	45.0113	0.5	0.001%
75%	45.0122	45.0122	45.0123	45.0122	45.0121	45.0123	0.2	0.000%
100%	45.0123	45.0124	45.0123	45.0122	45.0123	45.0124	0.2	0.000%
Load	1.9	1.7	1.7	1.6	1.7	1.8	ΔI(mA)	
Regulation	0.004%	0.004%	0.004%	0.004%	0.004%	0.004%		

4. Regulation - Line & Load, C.C mode 3Φ480 (*)

	Vin							
Io	342VAC	380VAC	400VAC	415VAC	480VAC	520VAC	Line Regulation	
0%	45.0074	45.0073	45.0074	45.0074	45.0072	45.0074	0.2	0.000%
25%	45.0083	45.0083	45.0083	45.0083	45.0084	45.0084	0.1	0.000%
50%	45.0098	45.0099	45.0100	45.0100	45.0100	45.0102	0.4	0.001%
75%	45.0112	45.0111	45.0111	45.0112	45.0113	45.0113	0.2	0.000%
100%	45.0112	45.0115	45.0113	45.0114	45.0114	45.0115	0.3	0.001%
Load	3.8	4.2	3.9	4.0	4.2	4.1	ΔI(mA)	
Regulation	0.008%	0.009%	0.009%	0.009%	0.009%	0.009%		

5. Temperature drift, C.C mode

Conditions: Vin:230V 1Φ
Iout:100%

Ta	0°C	25°C	50°C	Temp. Coefficient (0˚C~50˚C)	
Iout	44.9980	45.0113	45.0786	80.64 mA	35.8 ppm/˚C

Notes: (*) Not including load regulation thermal drift effect.

(1). Regulation - Line & Load, Temperature drift

G150-18

Conditions: Ta = 25°C

1. Regulation - Line & Load, C.C mode 1Φ200 (*)

	Vin					
Vo	170VAC	200VAC	230VAC	265VAC	Line Regulation	
0%	17.9751	17.9750	17.9749	17.9749	0.2	0.001%
25%	17.9745	17.9748	17.9747	17.9747	0.3	0.002%
50%	17.9753	17.9754	17.9754	17.9754	0.1	0.001%
75%	17.9752	17.9751	17.9750	17.9752	0.2	0.001%
100%	17.9750	17.9752	17.9751	17.9752	0.2	0.001%
Load	0.8	0.6	0.7	0.7	ΔI(mA)	
Regulation	0.004%	0.003%	0.004%	0.004%		

2. Regulation - Line & Load, C.C mode 3Φ200 (*)

	Vin						
Io	170VAC	200VAC	208VAC	230VAC	265VAC	Line Regulation	
0%	17.9735	17.9736	17.9736	17.9736	17.9733	0.3	0.002%
25%	17.9729	17.9733	17.9733	17.9733	17.9730	0.4	0.002%
50%	17.9735	17.9738	17.9739	17.9738	17.9735	0.4	0.002%
75%	17.9731	17.9735	17.9737	17.9737	17.9733	0.6	0.003%
100%	17.9727	17.9731	17.9732	17.9732	17.9730	0.5	0.003%
Load	0.8	0.7	0.7	0.6	0.5	ΔI(mA)	
Regulation	0.004%	0.004%	0.004%	0.003%	0.003%		

3. Regulation - Line & Load, C.C mode 3Φ400 (*)

	Vin							
Io	342VAC	380VAC	400VAC	415VAC	432VAC	460VAC	Line Regulation	
0%	17.9929	17.9929	17.9929	17.9929	17.9929	17.9929	0.0	0.000%
25%	17.9929	17.9929	17.9929	17.9929	17.9929	17.9929	0.0	0.000%
50%	17.9929	17.9929	17.9939	17.9939	17.9939	17.9939	1.0	0.006%
75%	17.9939	17.9939	17.9939	17.9939	17.9939	17.9939	0.0	0.000%
100%	17.9929	17.9939	17.9939	17.9939	17.9939	17.9939	1.0	0.006%
Load	1.0	1.0	1.0	1.0	1.0	1.0	ΔI(mA)	
Regulation	0.006%	0.006%	0.006%	0.006%	0.006%	0.006%		

3. Regulation - Line & Load, C.C mode 3Φ480 (*)

	Vin							
Io	342VAC	380VAC	400VAC	415VAC	480VAC	520VAC	Line Regulation	
0%	17.9919	17.9919	17.9919	17.9919	17.9919	17.9919	0.0	0.000%
25%	17.9919	17.9919	17.9919	17.9919	17.9919	17.9919	0.0	0.000%
50%	17.9929	17.9929	17.9929	17.9929	17.9929	17.9929	0.0	0.000%
75%	17.9929	17.9929	17.9929	17.9929	17.9929	17.9929	0.0	0.000%
100%	17.9929	17.9929	17.9929	17.9929	17.9929	17.9929	0.0	0.000%
Load	1.0	1.0	1.0	1.0	1.0	1.0	ΔI(mA)	
Regulation	0.006%	0.006%	0.006%	0.006%	0.006%	0.006%		

4. Temperature drift, C.C mode

Conditions: Vin:230V 1Φ
Iout:100%

Ta	0°C	25°C	50°C	Temp. Coefficient (0˚C~50˚C)	
Iout	18.0209	18.0214	18.0405	19.69 mA	21.9 ppm/˚C

Notes: (*) Not including load regulation thermal drift effect.

(1). Regulation - Line & Load, Temperature drift

G600-4.5

Conditions: Ta = 25°C

1. Regulation - Line & Load, C.C mode 1Φ200 (*)

	Vin					
Vo	170VAC	200VAC	230VAC	265VAC	Line Regulation	
0%	4.4973	4.4973	4.4973	4.4973	0.0	0.000%
25%	4.4972	4.4972	4.4972	4.4972	0.0	0.000%
50%	4.4975	4.4975	4.4975	4.4976	0.1	0.002%
75%	4.4977	4.4977	4.4977	4.4977	0.0	0.000%
100%	4.4977	4.4977	4.4977	4.4977	0.0	0.000%
Load	0.5	0.5	0.5	0.5	ΔI(mA)	
Regulation	0.011%	0.011%	0.011%	0.011%		

2. Regulation - Line & Load, C.C mode 3Φ200 (*)

	Vin						
Io	170VAC	200VAC	208VAC	230VAC	265VAC	Line Regulation	
0%	4.4980	4.4978	4.4979	4.4981	4.4980	0.3	0.007%
25%	4.4976	4.4978	4.4978	4.4978	4.4977	0.2	0.004%
50%	4.4979	4.4980	4.4980	4.4980	4.4979	0.1	0.002%
75%	4.4980	4.4981	4.4982	4.4982	4.4979	0.3	0.007%
100%	4.4978	4.4980	4.4981	4.4982	4.4978	0.4	0.009%
Load	0.4	0.3	0.4	0.4	0.3	ΔI(mA)	
Regulation	0.009%	0.007%	0.009%	0.009%	0.007%		

3. Regulation - Line & Load, C.C mode 3Φ400 (*)

	Vin							
Io	342VAC	380VAC	400VAC	415VAC	432VAC	460VAC	Line Regulation	
0%	4.4966	4.4966	4.4966	4.4966	4.4966	4.4966	0.0	0.000%
25%	4.4966	4.4966	4.4966	4.4966	4.4966	4.4966	0.0	0.000%
50%	4.4969	4.4969	4.4969	4.4969	4.4969	4.4969	0.0	0.000%
75%	4.4971	4.4971	4.4971	4.4970	4.4971	4.4970	0.1	0.002%
100%	4.4970	4.4970	4.4971	4.4971	4.4971	4.4971	0.1	0.002%
Load	0.5	0.5	0.5	0.5	0.5	0.5	ΔI(mA)	
Regulation	0.011%	0.011%	0.011%	0.011%	0.011%	0.011%		

3. Regulation - Line & Load, C.C mode 3Φ480 (*)

	Vin							
Io	342VAC	380VAC	400VAC	415	480VAC	520VAC	Line Regulation	
0%	4.4969	4.4969	4.4969	4.4969	4.4969	4.4969	0.0	0.000%
25%	4.4969	4.4968	4.4968	4.4969	4.4968	4.4968	0.1	0.002%
50%	4.4971	4.4971	4.4971	4.4971	4.4971	4.4972	0.1	0.002%
75%	4.4973	4.4973	4.4973	4.4973	4.4973	4.4973	0.0	0.000%
100%	4.4973	4.4973	4.4973	4.4973	4.4973	4.4973	0.0	0.000%
Load	0.4	0.5	0.5	0.4	0.5	0.5	ΔI(mA)	
Regulation	0.009%	0.011%	0.011%	0.009%	0.011%	0.011%		

4. Temperature drift, C.C mode

Conditions: Vin:230V 1Φ
Iout:100%

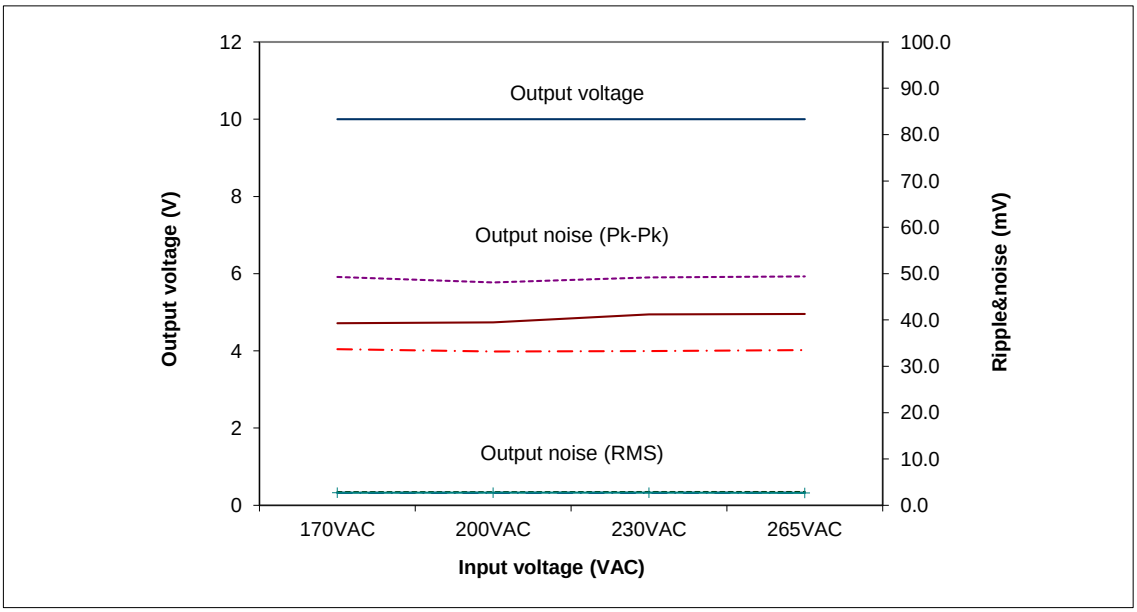
Ta	0°C	25°C	50°C	Temp. Coefficient (0˚C~50˚C)	
Iout	4.5006	4.4997	4.5008	1.13 mA	5.0 ppm/˚C

Notes: (*) Not including load regulation thermal drift effect.

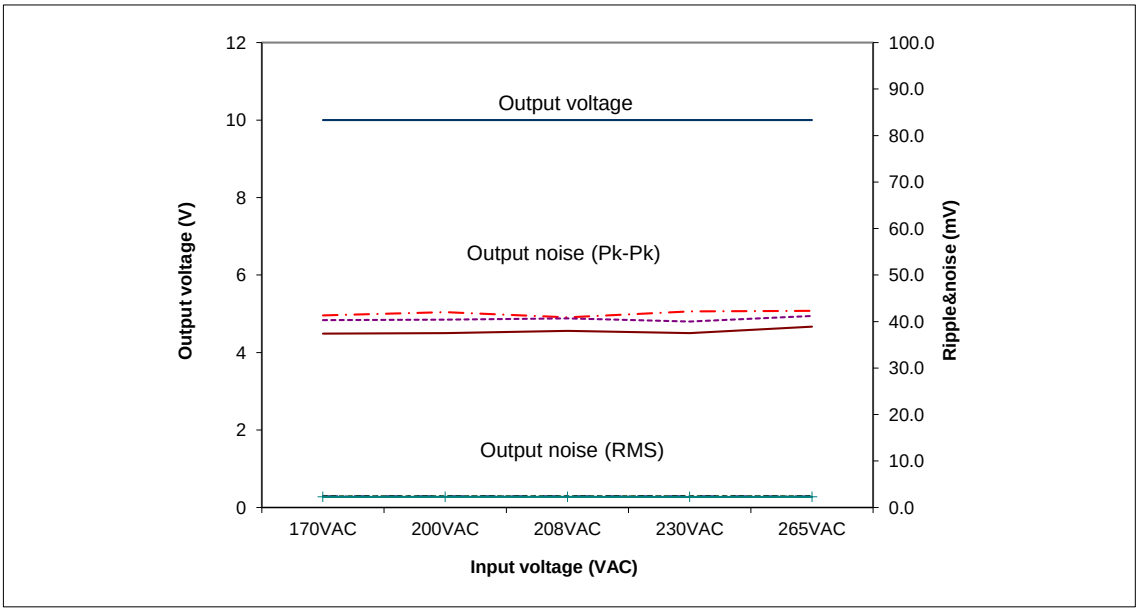
(2). Output voltage and ripple voltage vs. input voltage
C.V mode

Conditions: Iout:100%
Ta: 0˚C
25˚C
50˚C

G10-265 1Φ200



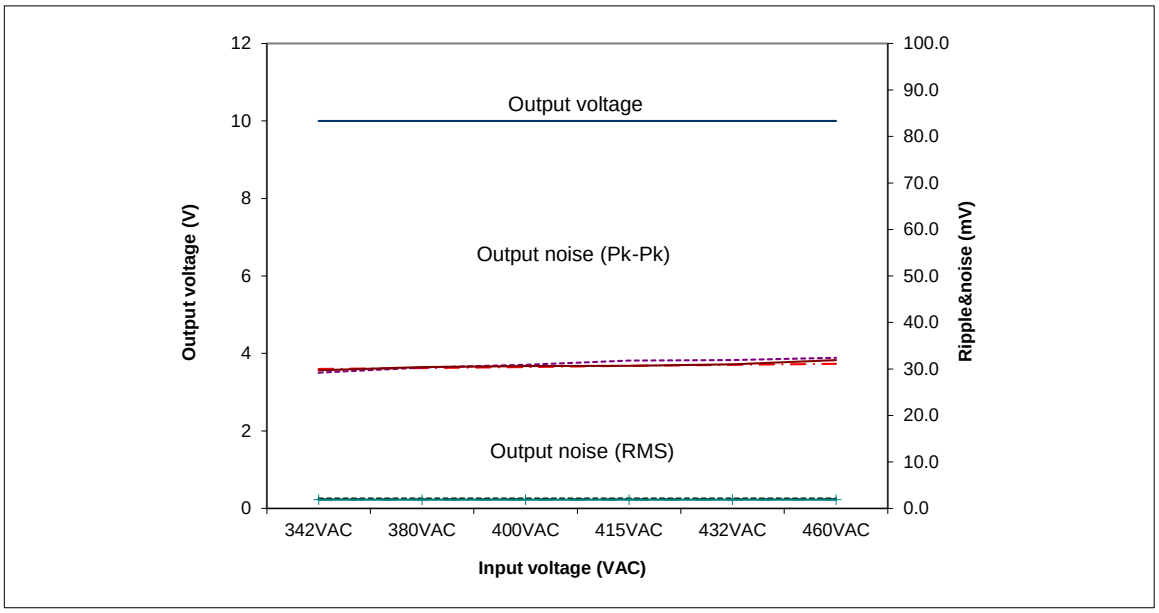
G10-265 3Φ200



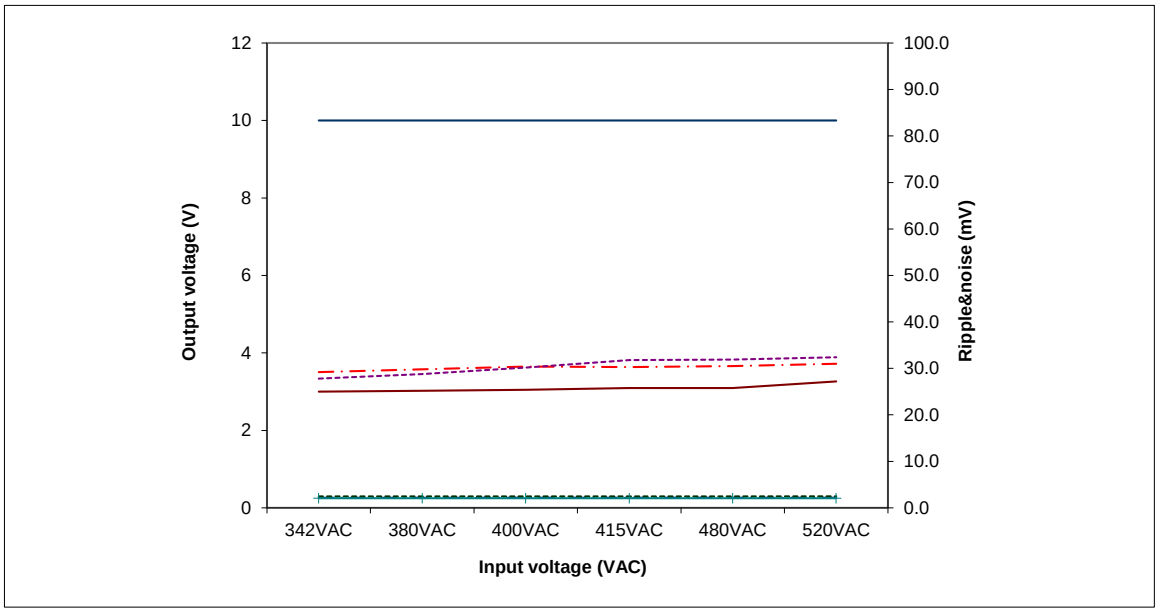
(2). Output voltage and ripple voltage vs. input voltage
C.V mode

Conditions: Iout:100%
Ta: 0˚C
25˚C
50˚C

G10-265 3Φ400



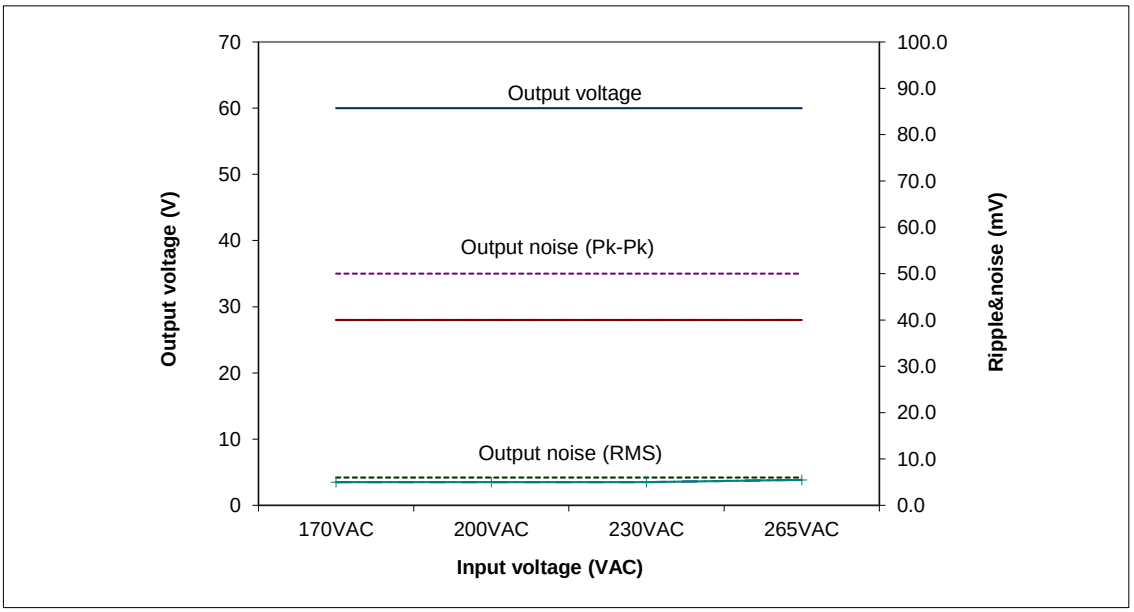
G10-265 3Φ480



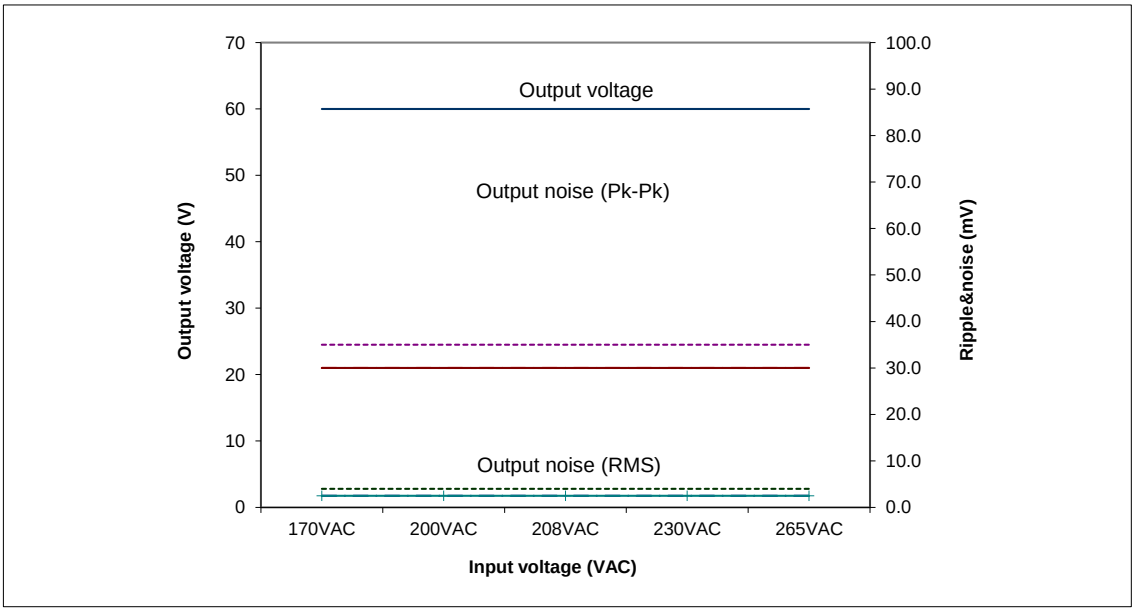
(2). Output voltage and ripple voltage vs. input voltage
C.V mode

Conditions: Iout:100%
Ta: 0˚C
25˚C
50˚C

G60-45 1Φ200



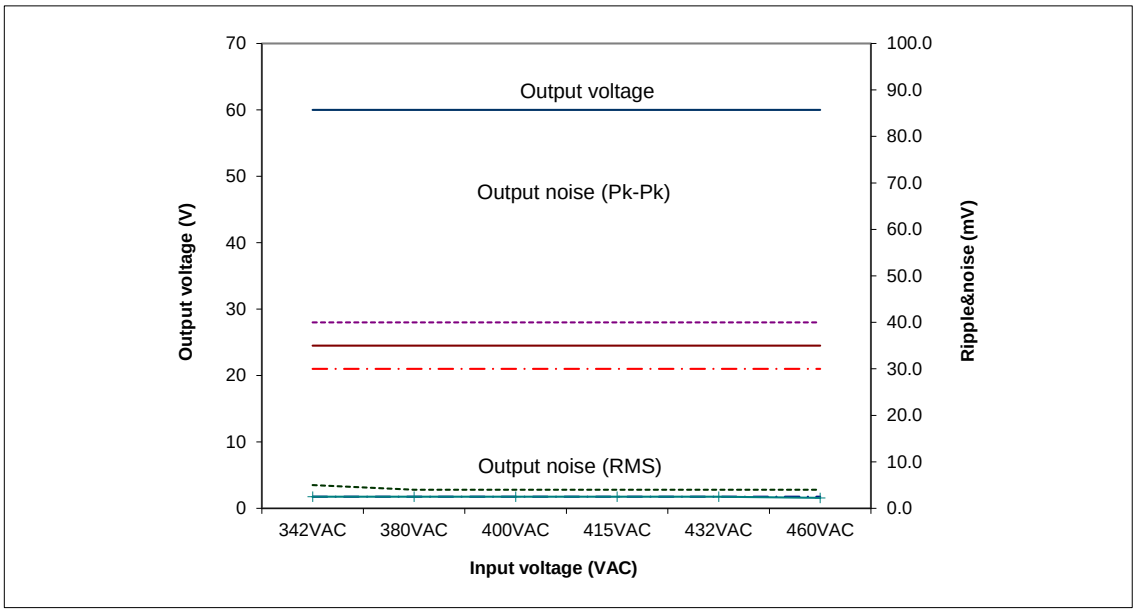
G60-45 3Φ200



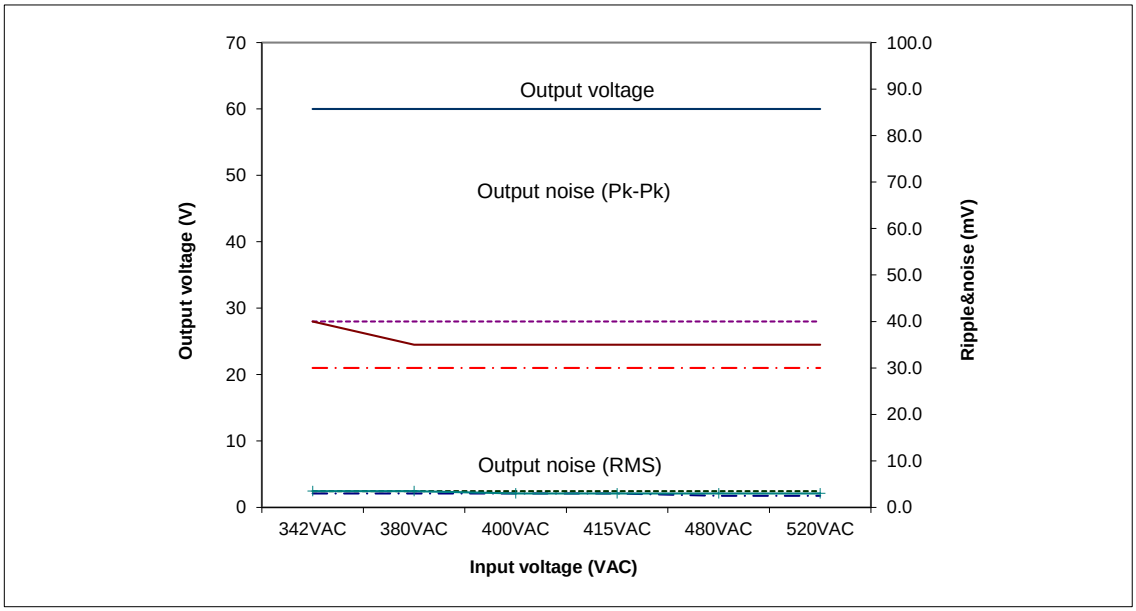
(2). Output voltage and ripple voltage vs. input voltage
C.V mode

Conditions: Iout:100%
Ta: 0˚C
25˚C
50˚C

G60-45 3Φ400



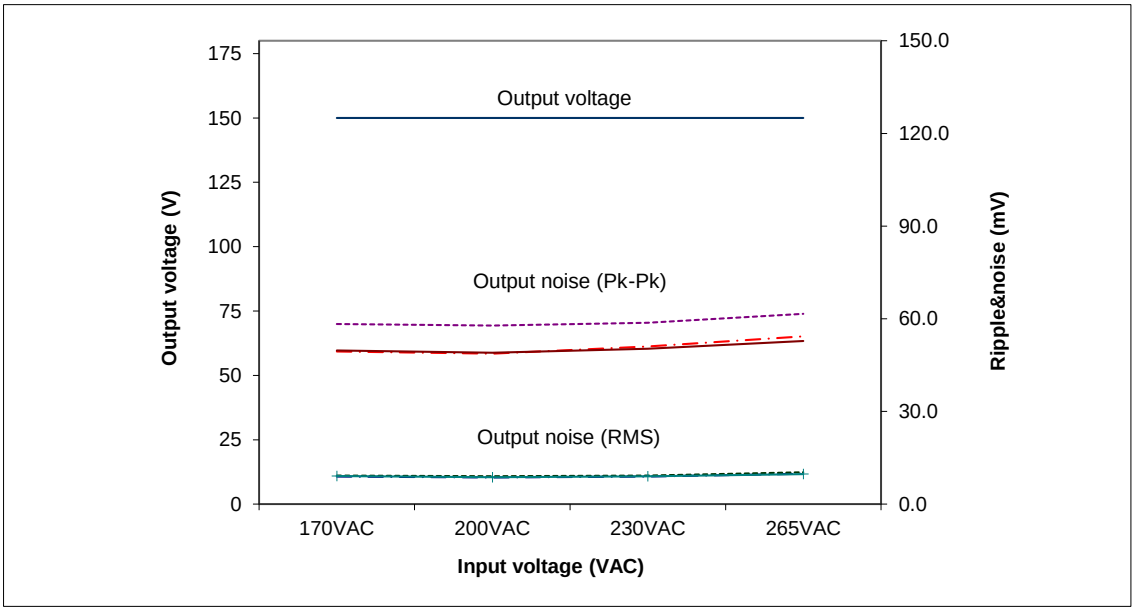
G60-45 3Φ480



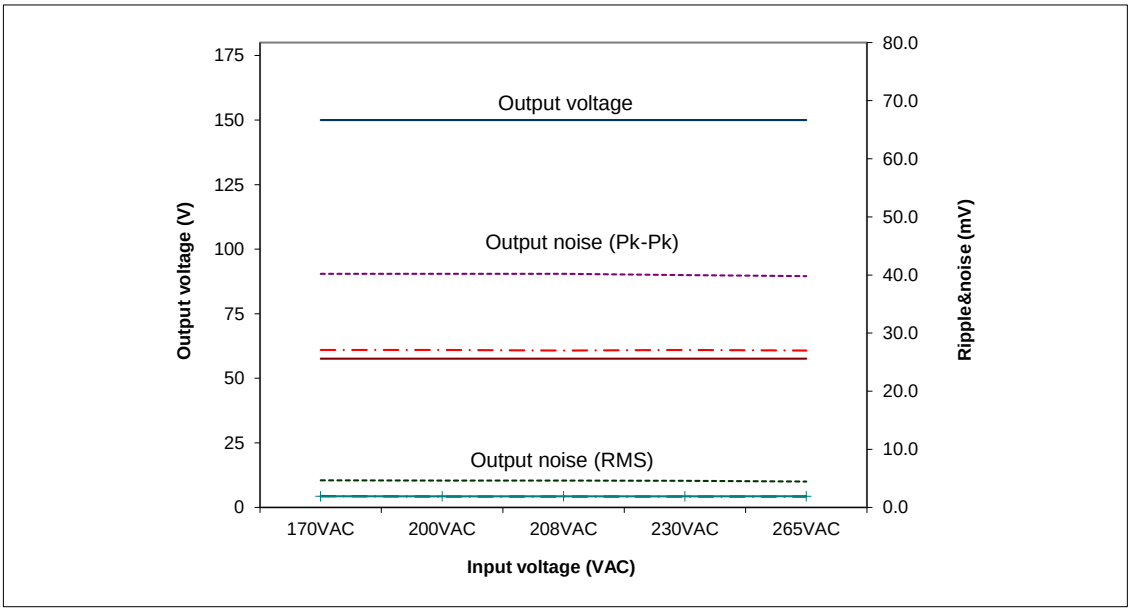
(2). Output voltage and ripple voltage vs. input voltage
C.V mode

Conditions: Iout:100%
Ta: 0˚C
25˚C
50˚C

G150-18 1Φ200



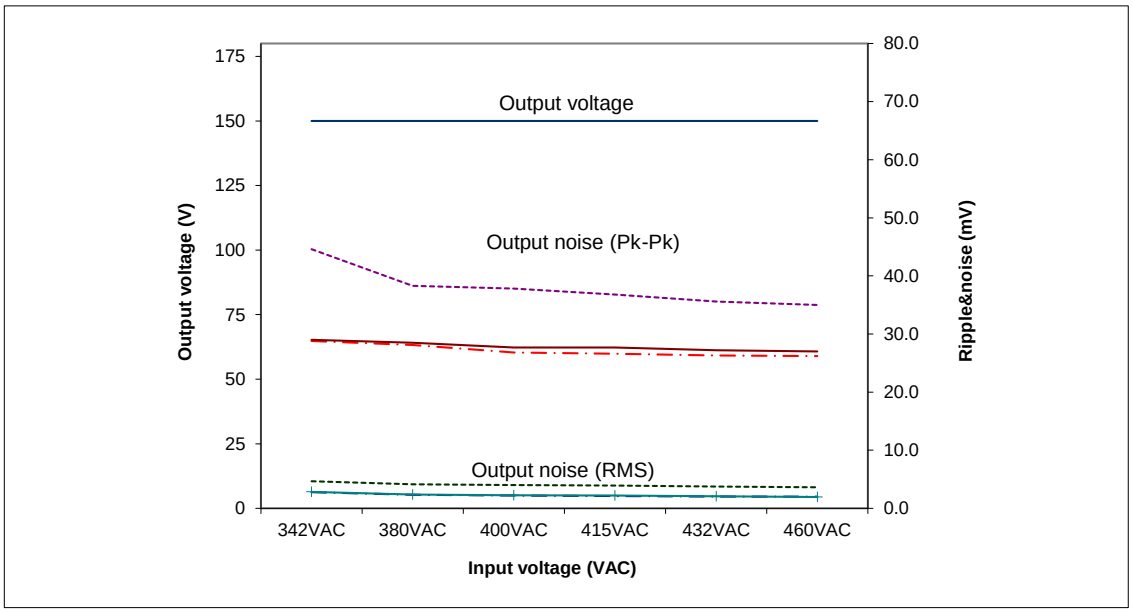
G150-18 3Φ200



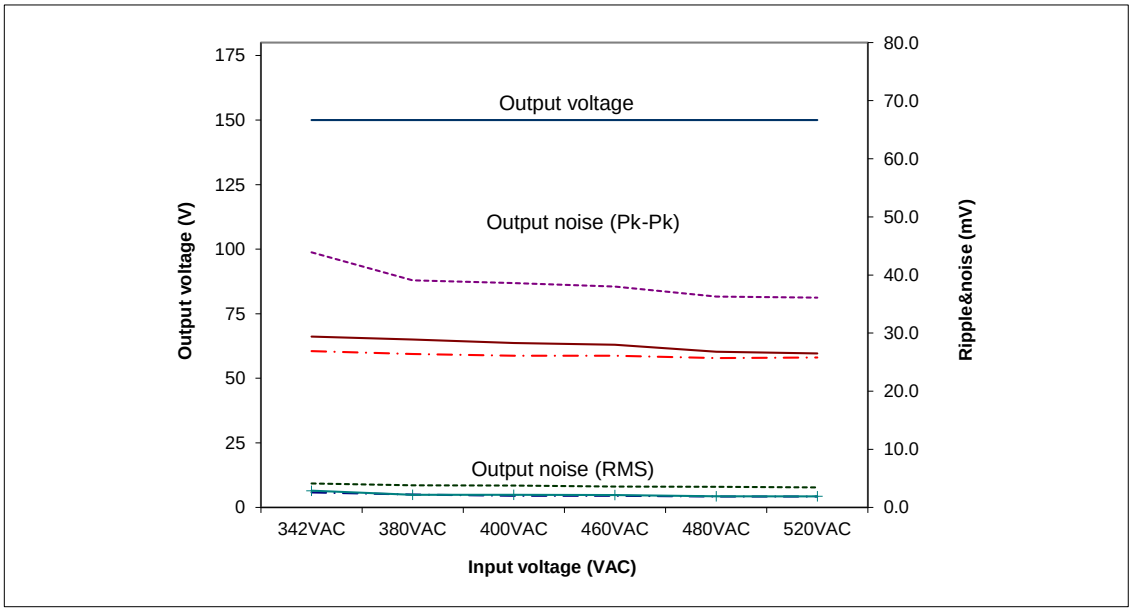
(2). Output voltage and ripple voltage vs. input voltage
C.V mode

Conditions: Iout:100%
Ta: 0˚C
25˚C
50˚C

G150-18 3Φ400



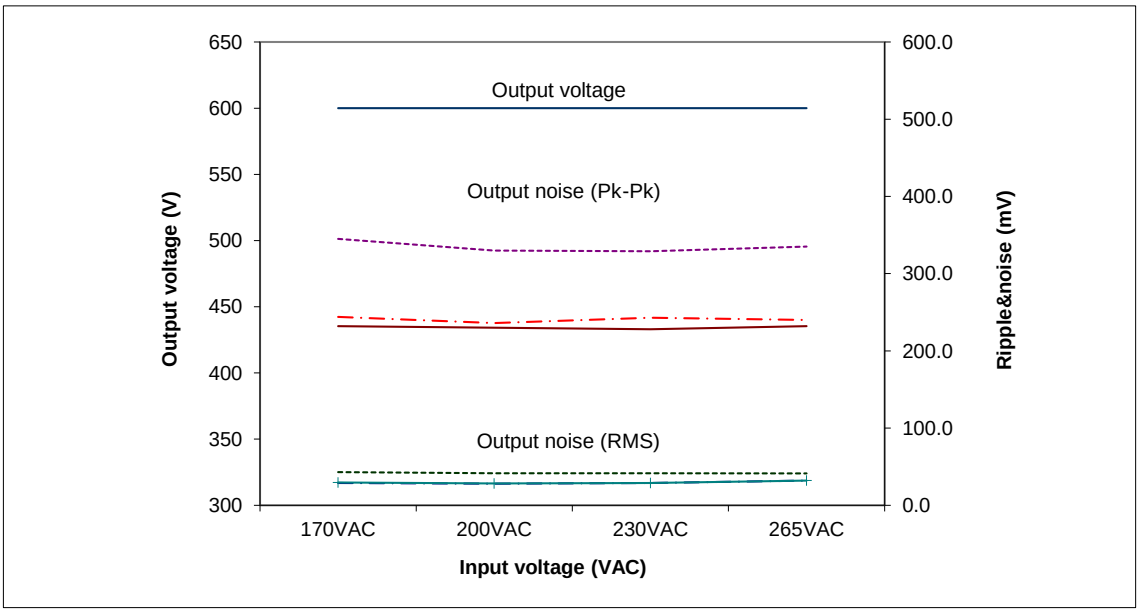
G150-18 3Φ480



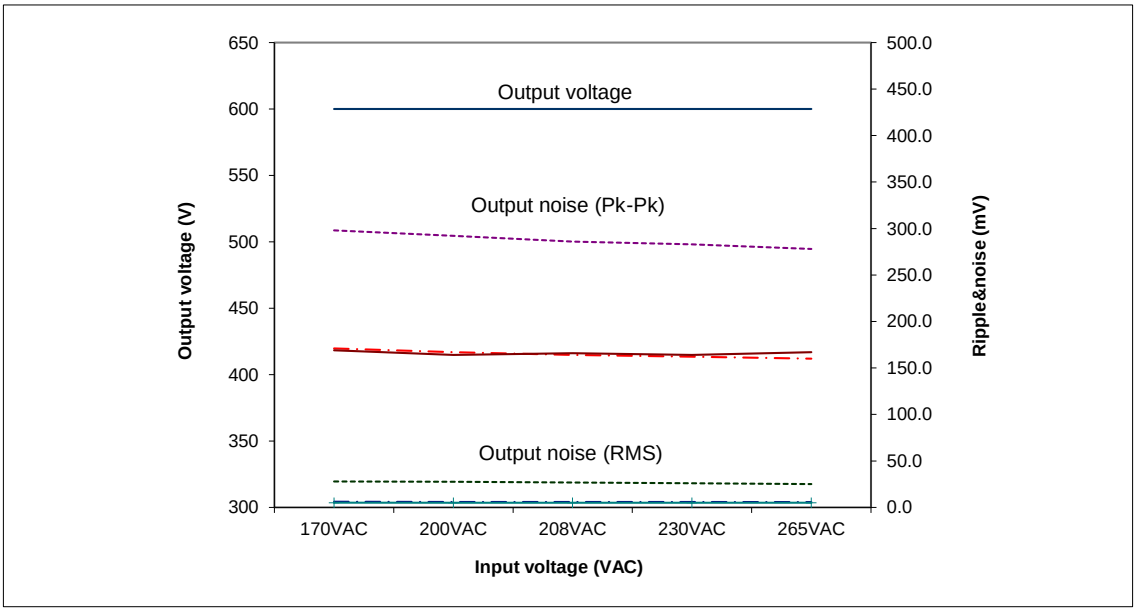
(2). Output voltage and ripple voltage vs. input voltage
C.V mode

Conditions: Iout:100%
Ta: 0˚C
25˚C
50˚C

G600-4.5 1Φ200



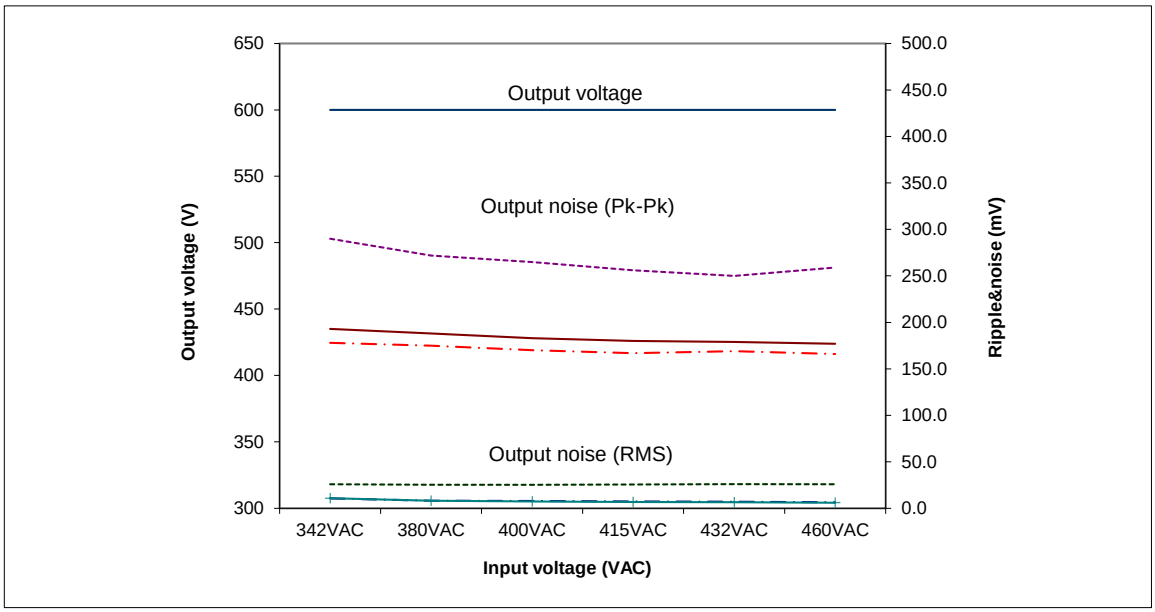
G600-4.5 3Φ200



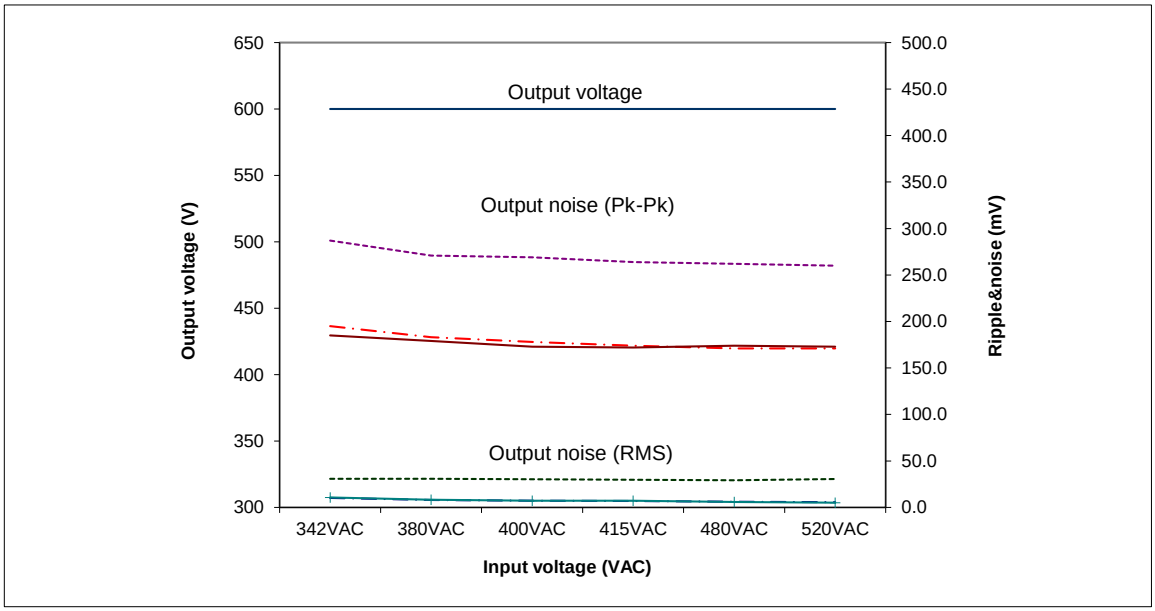
(2). Output voltage and ripple voltage vs. input voltage
C.V mode

Conditions: Iout:100%
Ta: 0˚C
25˚C
50˚C

G600-4.5 3Φ400



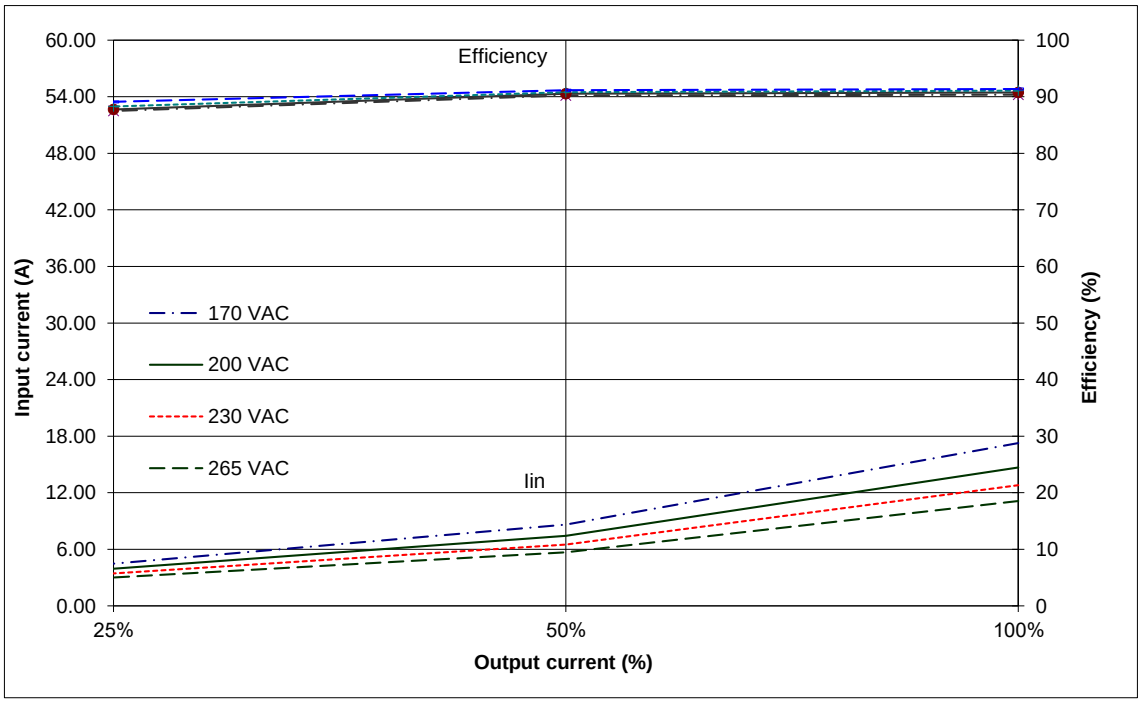
G600-4.5 3Φ480



(3). Efficiency and Input current vs. Output current

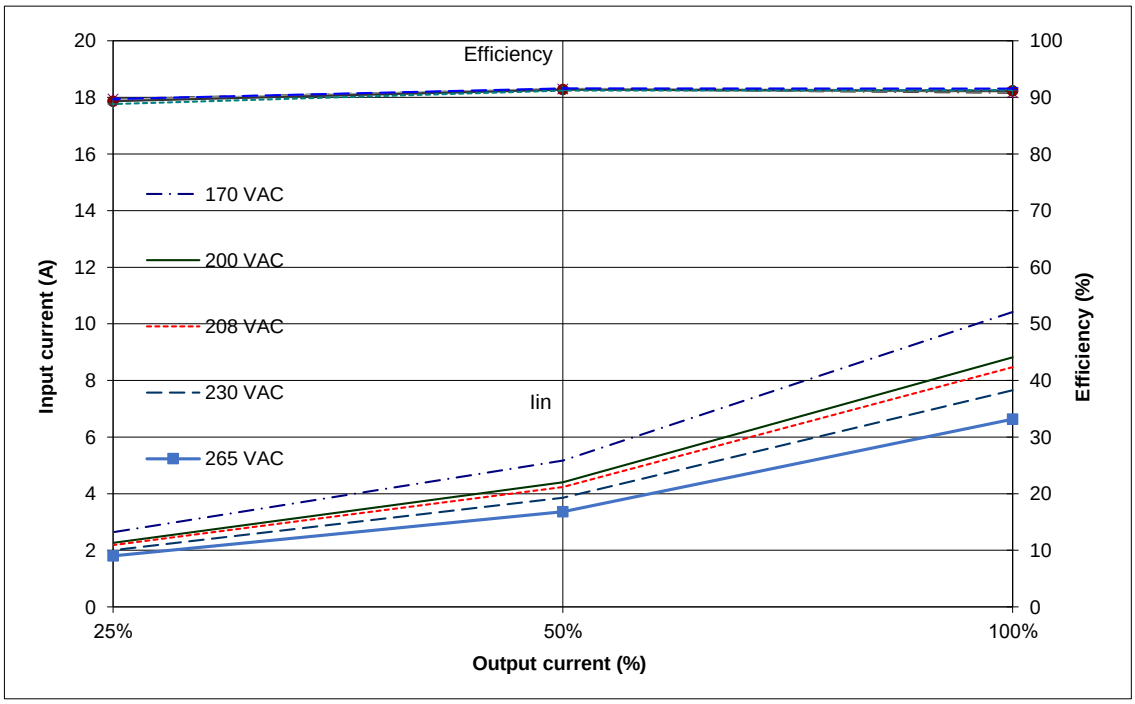
G10-265 1Φ200

Conditions:
Vin: 170~265 VAC
Vout: 100%
Ta: 25˚C



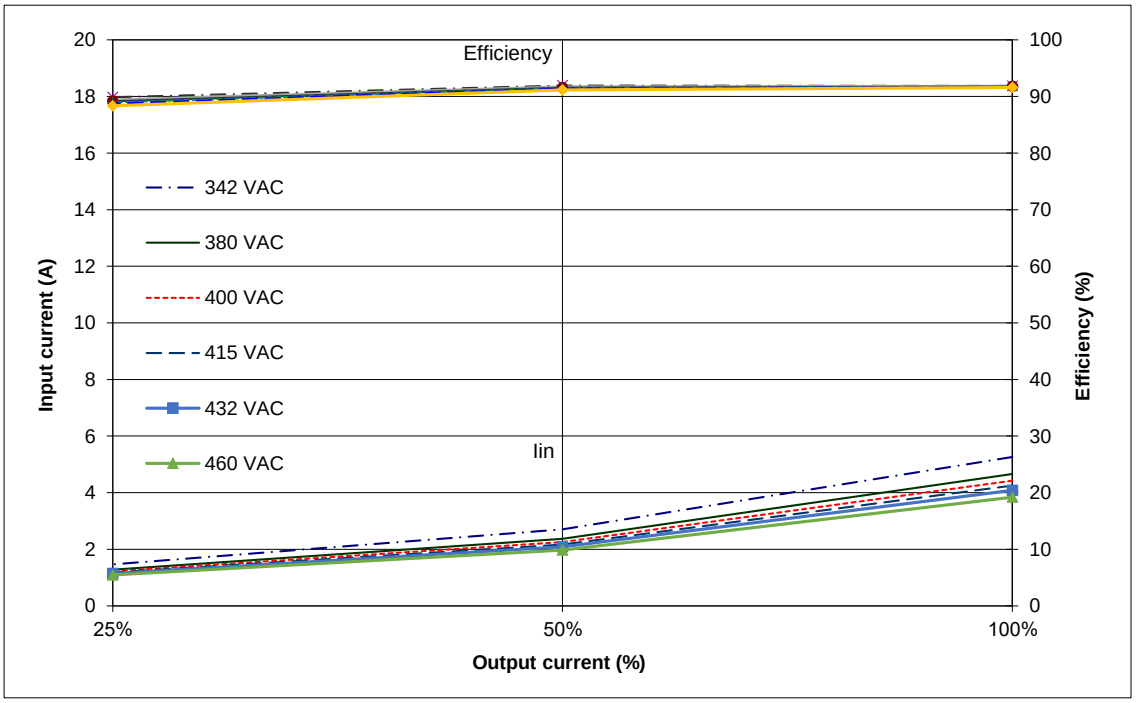
G10-265 3Φ200

Conditions:
Vin: 170~265 VAC
Vout: 100%
Ta: 25˚C



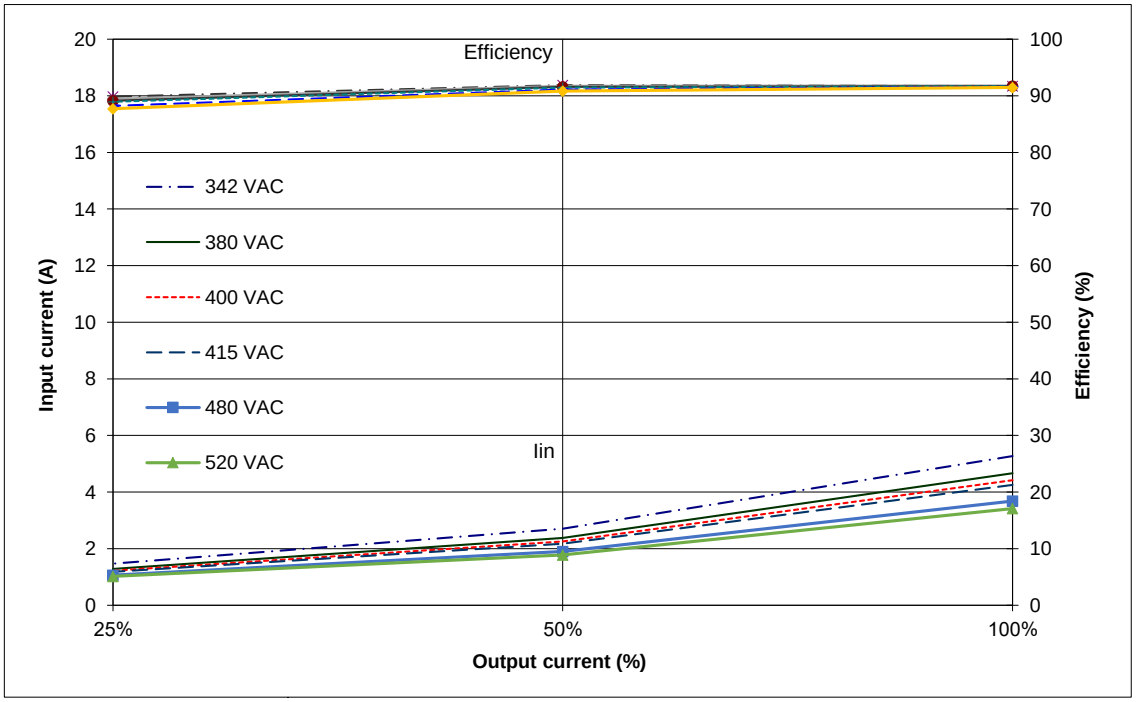
(3). Efficiency and Input current vs. Output current

G10-265 3Φ400



Conditions:
Vin: 342~460 VAC
Vout: 100%
Ta: 25˚C

G10-265 3Φ480

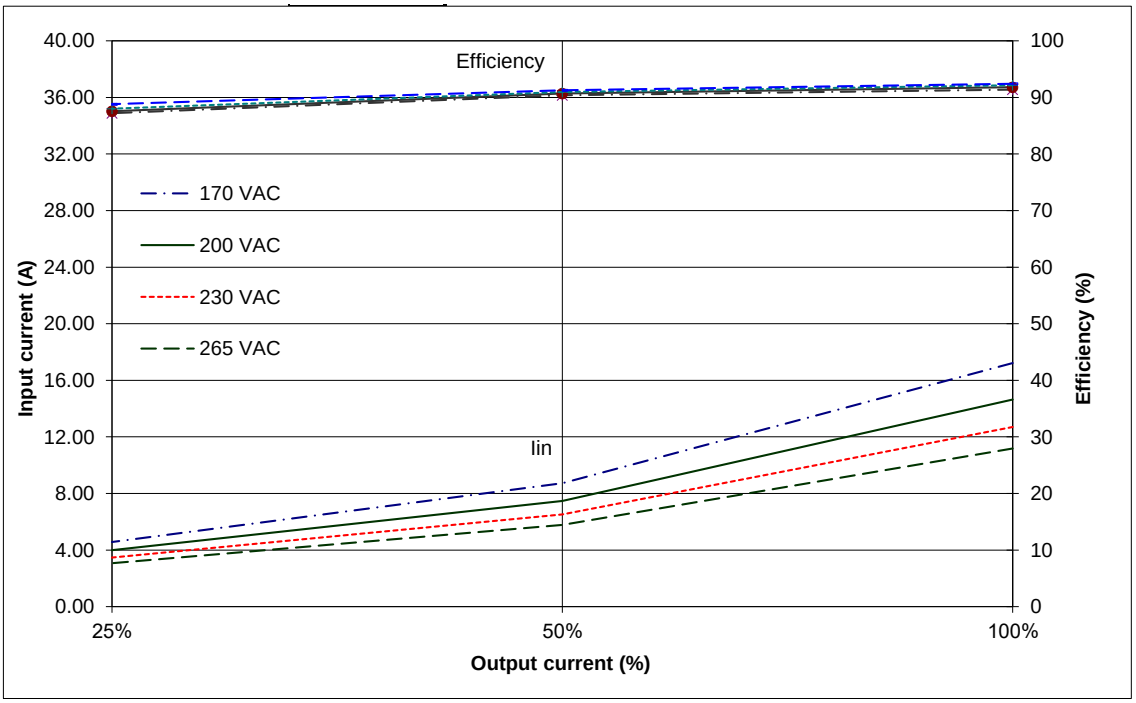


Conditions:
Vin: 342~520 VAC
Vout: 100%
Ta: 25˚C

(3). Efficiency and Input current vs. Output current

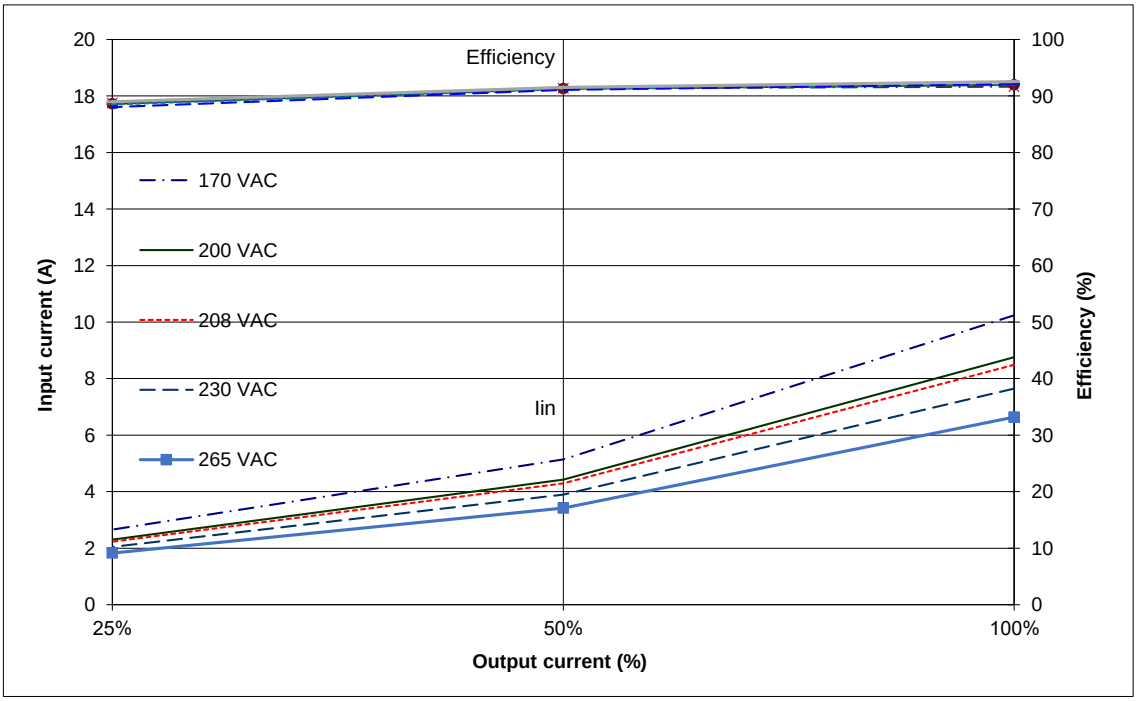
G60-45 1Φ200

Conditions:
Vin: 170~265 VAC
Vout: 100%
Ta: 25˚C



G60-45 3Φ200

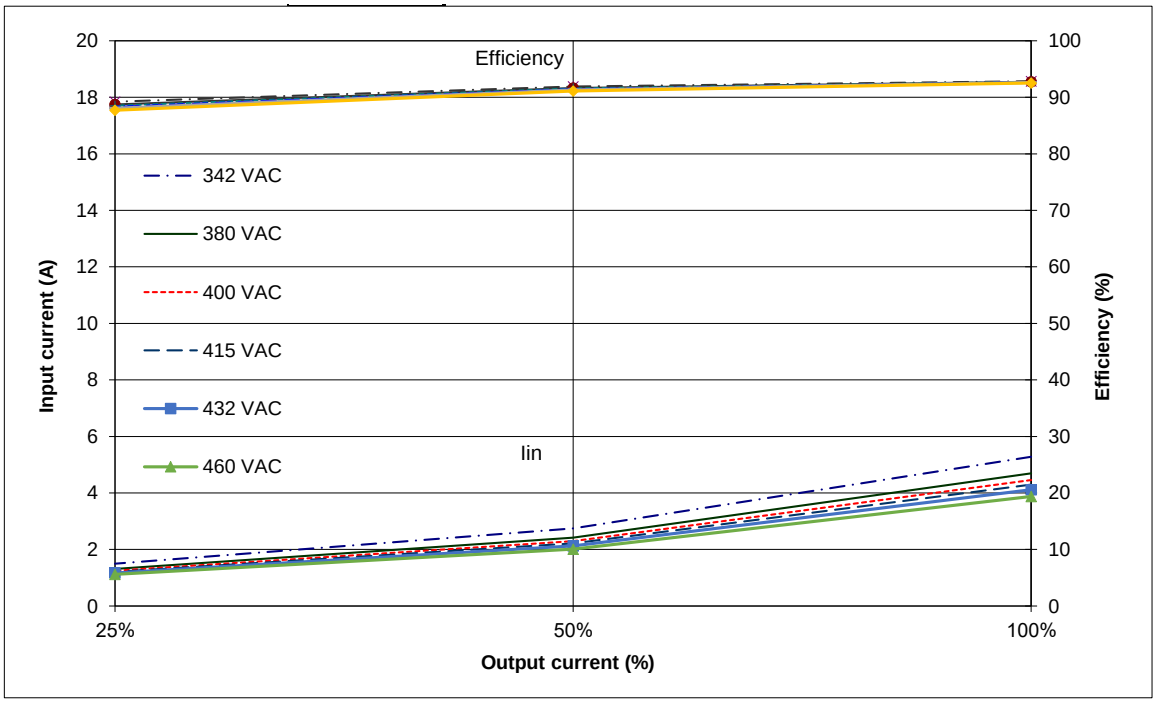
Conditions:
Vin: 170~265 VAC
Vout: 100%
Ta: 25˚C



(3). Efficiency and Input current vs. Output current

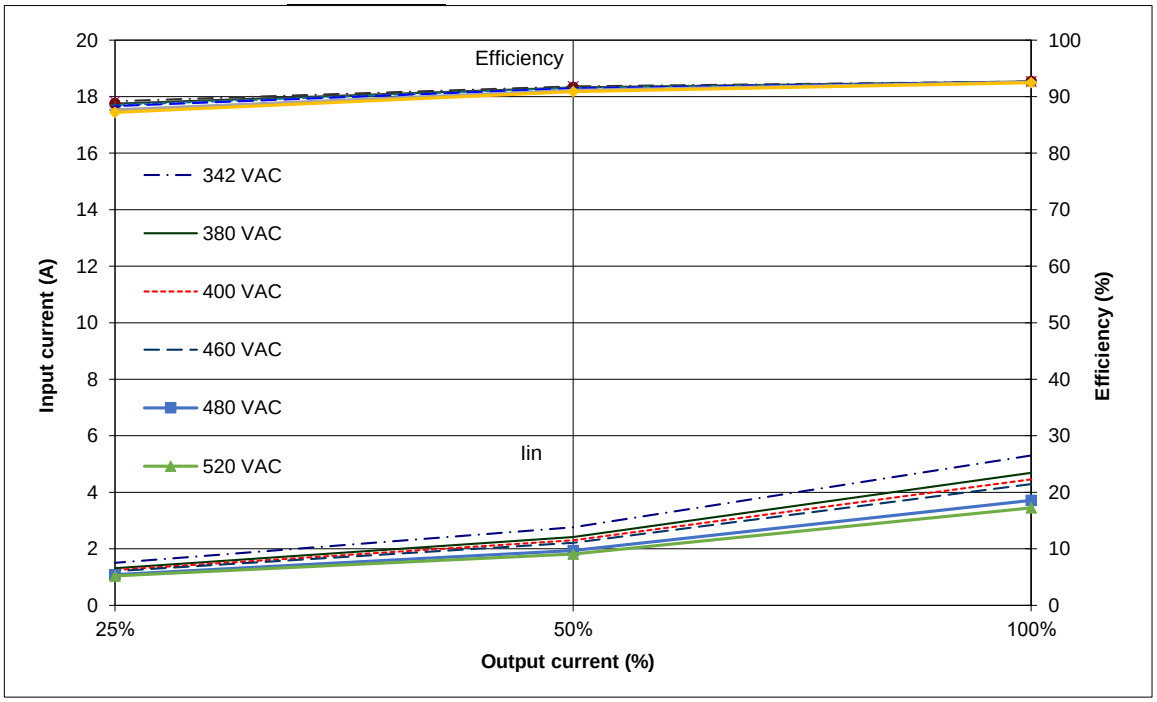
G60-45 3Φ400

Conditions:
Vin: 342~460 VAC
Vout: 100%
Ta: 25˚C



G60-45 3Φ480

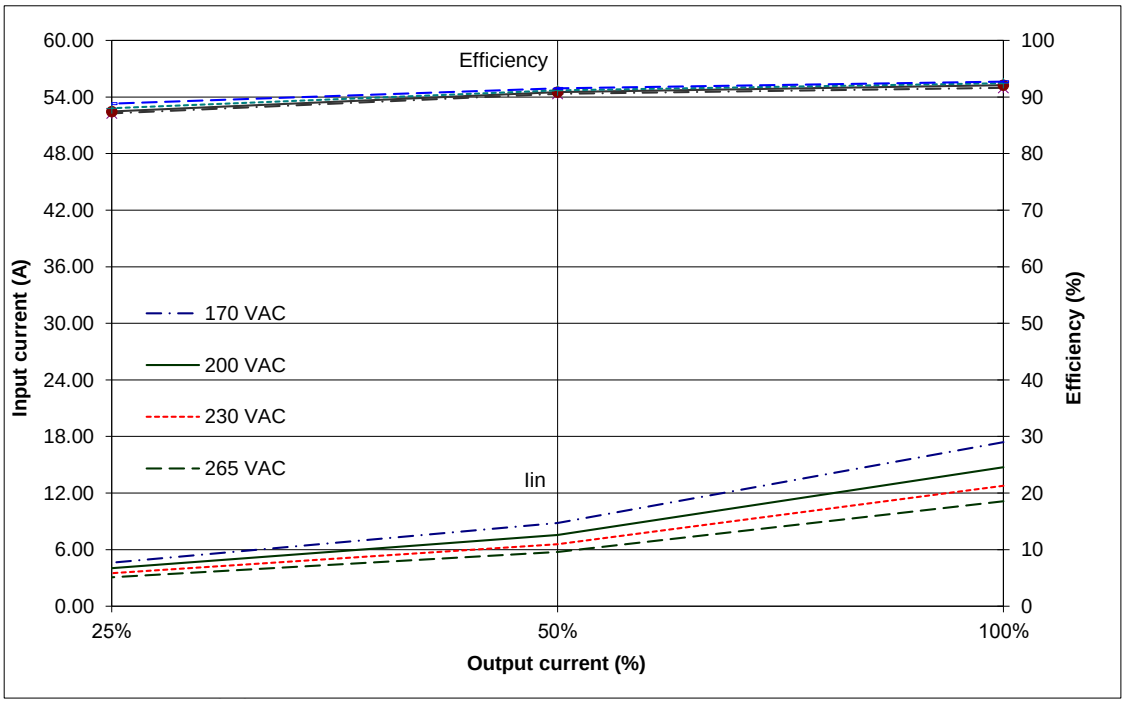
Conditions:
Vin: 342~520 VAC
Vout: 100%
Ta: 25˚C



(3). Efficiency and Input current vs. Output current

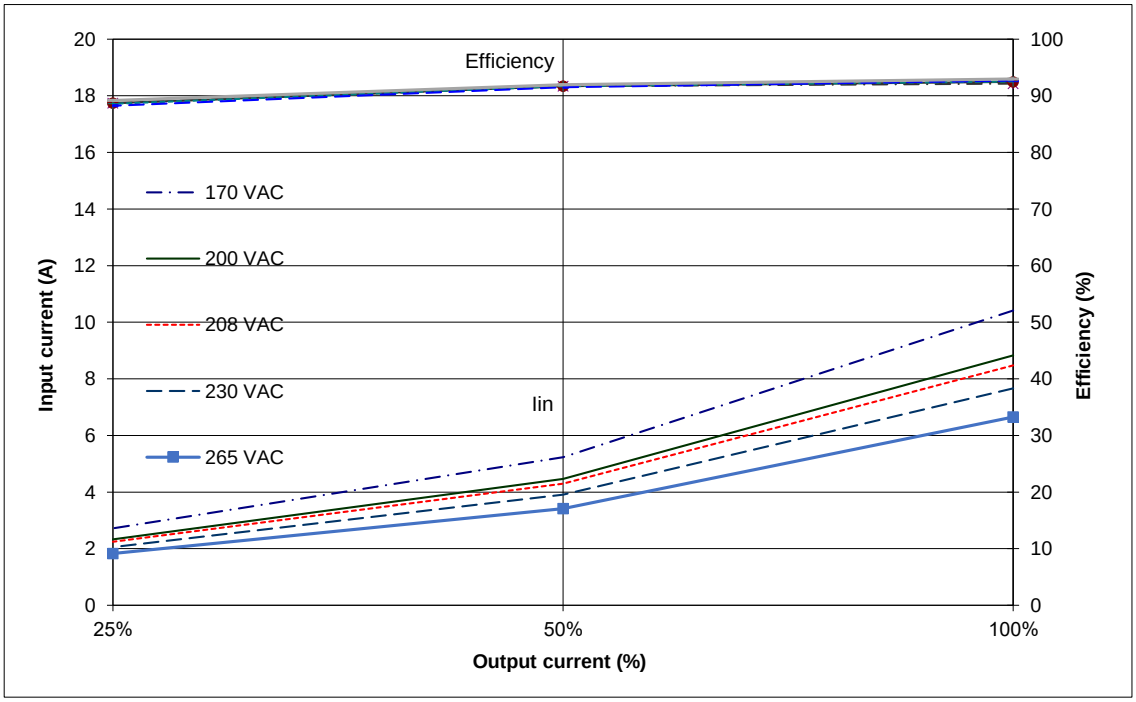
G150-18 1Φ200

Conditions:
Vin: 170~265 VAC
Vout: 100%
Ta: 25˚C



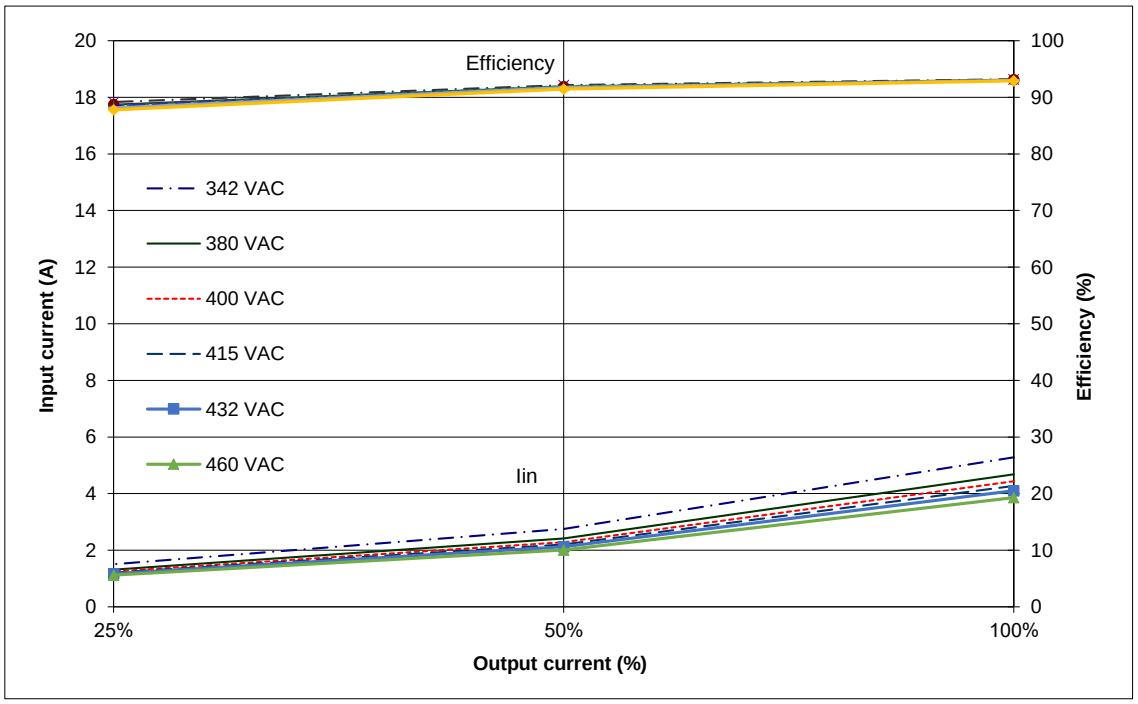
G150-18 3Φ200

Conditions:
Vin: 170~265 VAC
Vout: 100%
Ta: 25˚C



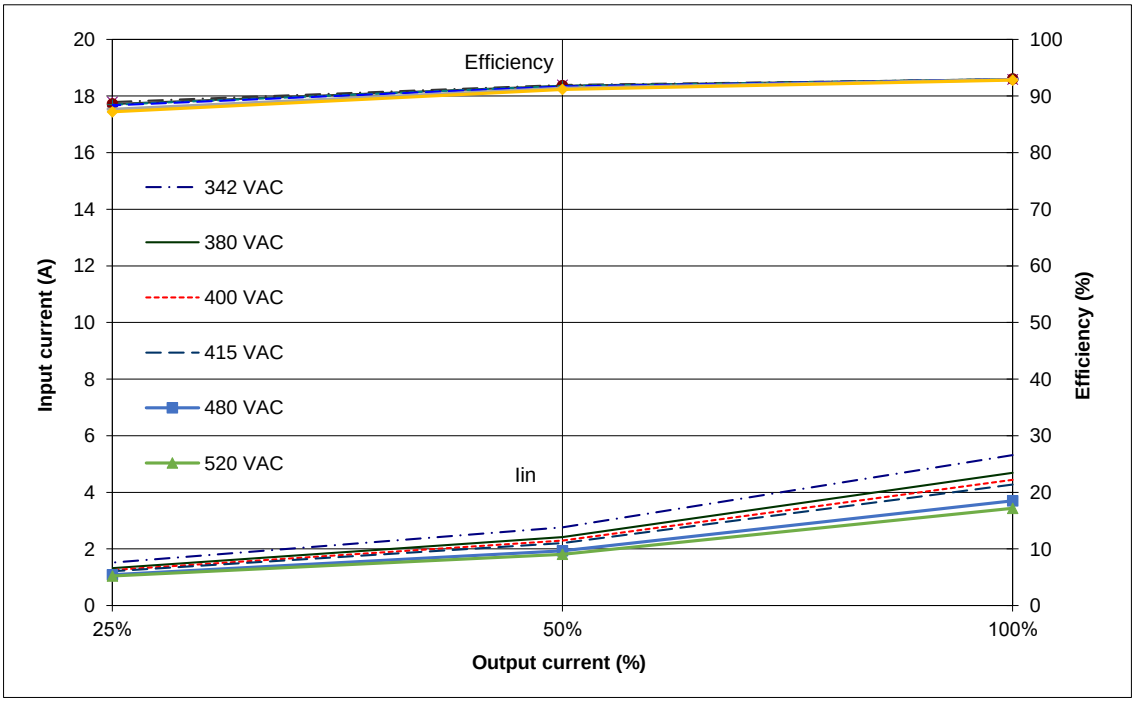
(3). Efficiency and Input current vs. Output current

G150-18 3Φ400



Conditions:
Vin: 342~460 VAC
Vout: 100%
Ta: 25˚C

G150-18 3Φ480

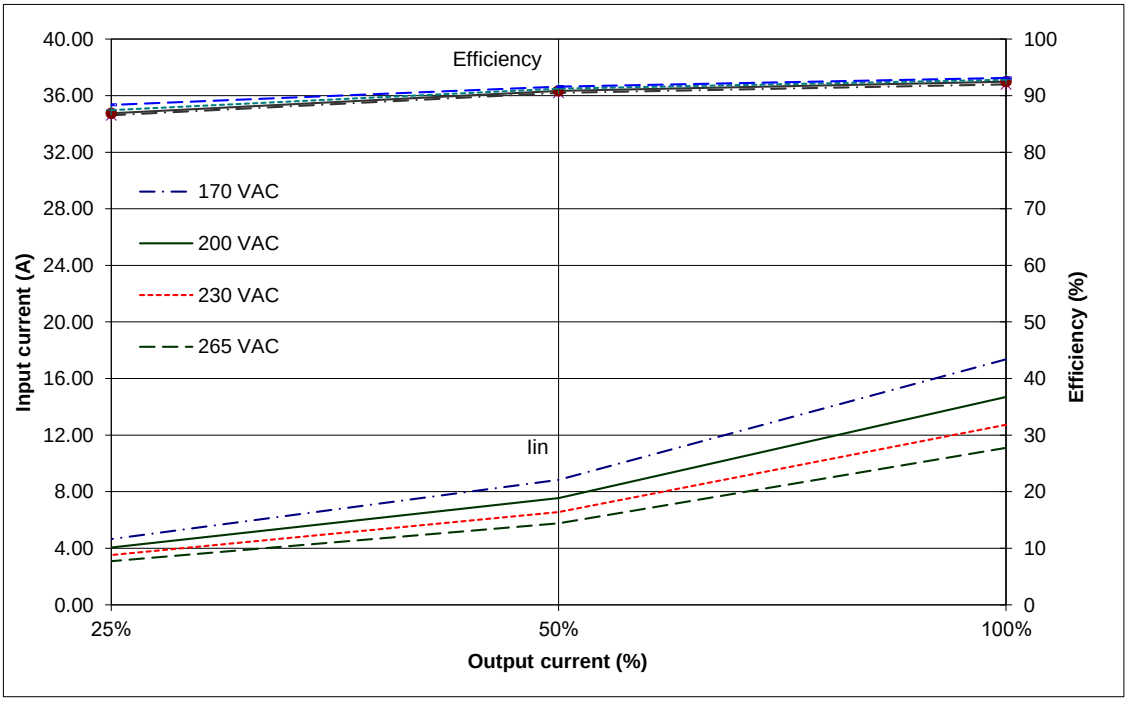


Conditions:
Vin: 342~520 VAC
Vout: 100%
Ta: 25˚C

(3). Efficiency and Input current vs. Output current

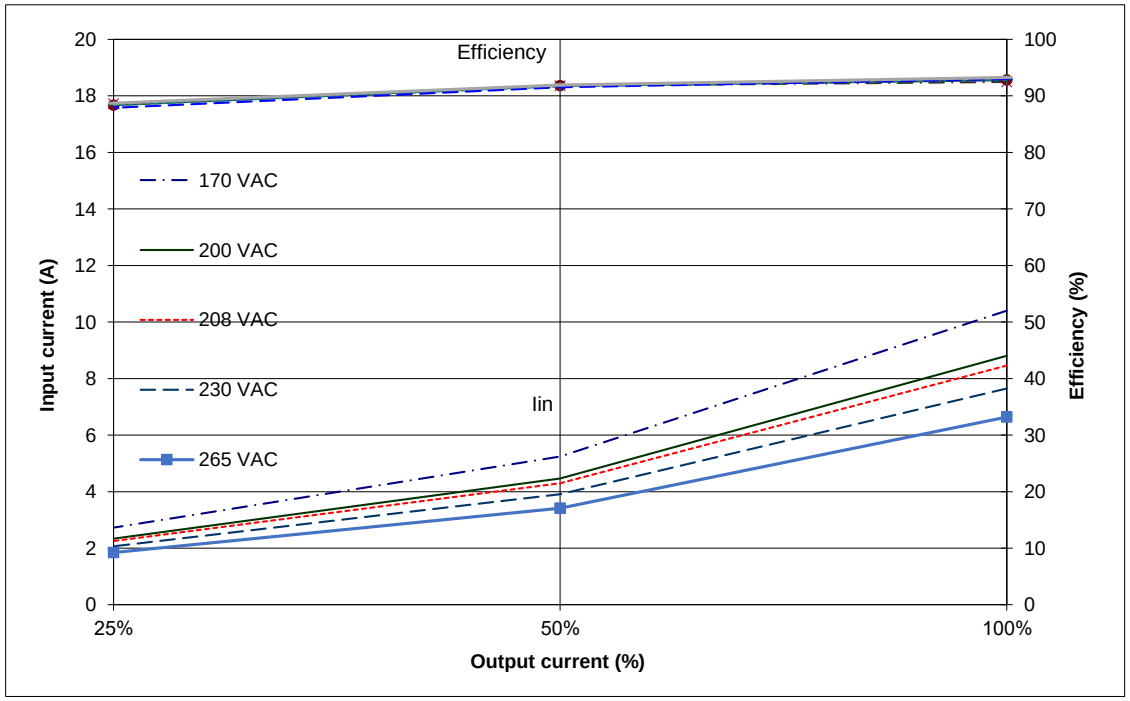
G600-4.5 1Φ200

Conditions:
Vin: 170~265 VAC
Vout: 100%
Ta: 25˚C



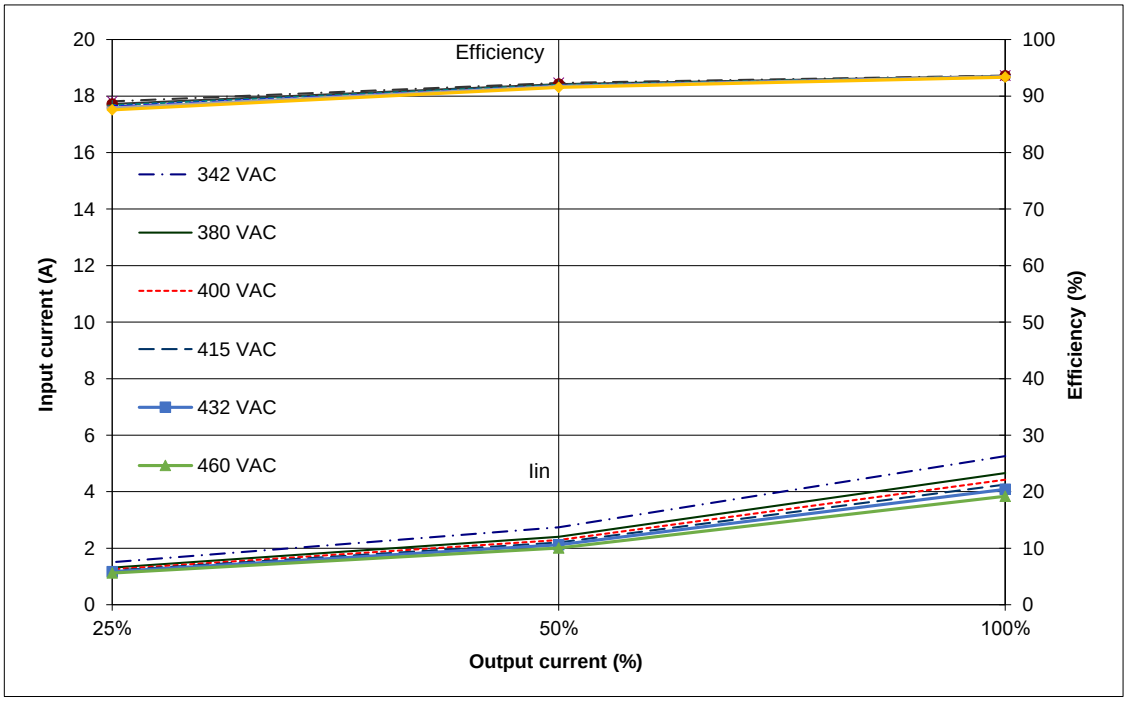
G600-4.5 3Φ200

Conditions:
Vin: 170~265 VAC
Vout: 100%
Ta: 25˚C



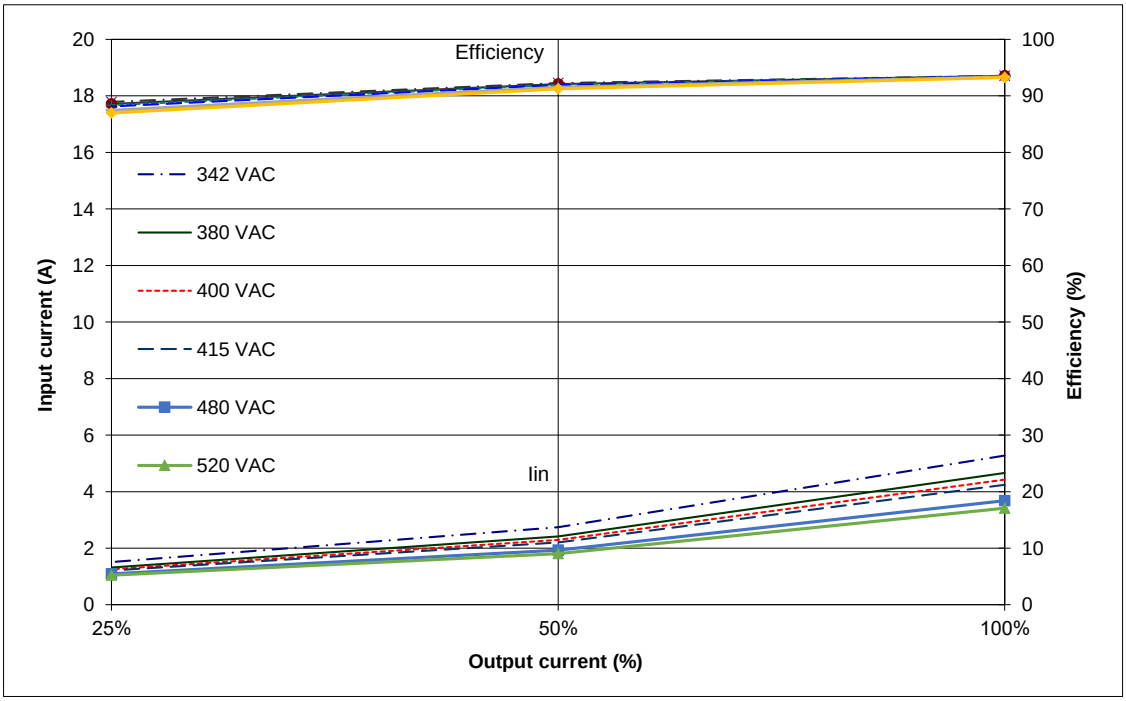
(3). Efficiency and Input current vs. Output current

G600-4.5 3Φ400



Conditions:
Vin: 342~460 VAC
Vout: 100%
Ta: 25˚C

G600-4.5 3Φ480

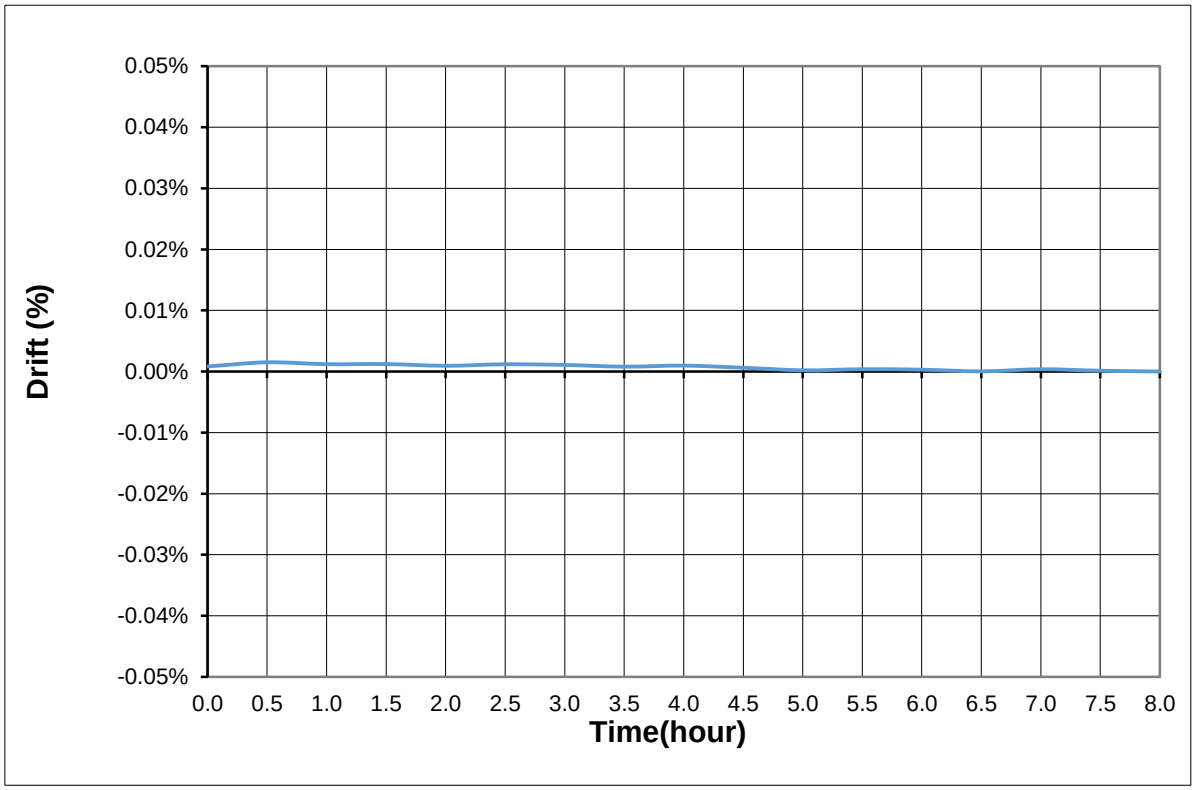


Conditions:
Vin: 342~520 VAC
Vout: 100%
Ta: 25˚C

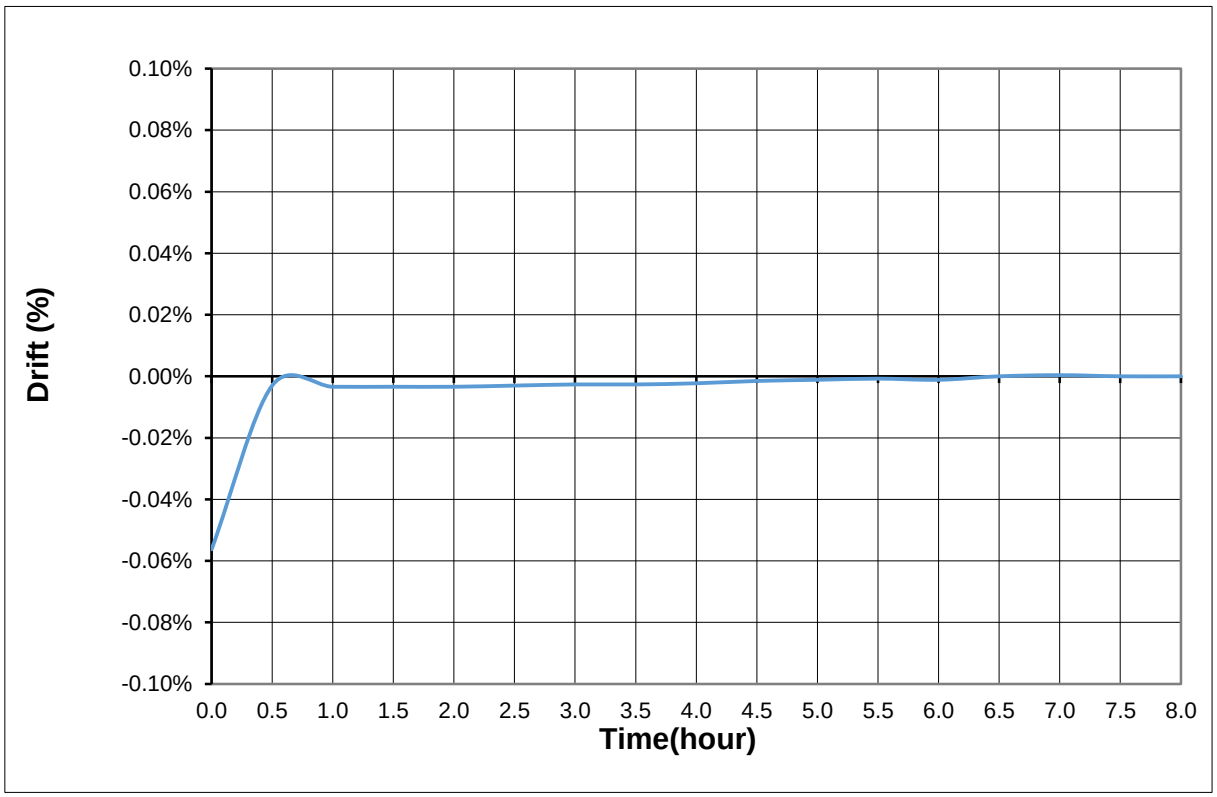
2.2 Warm up drift & stability

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G10-265 C.V mode



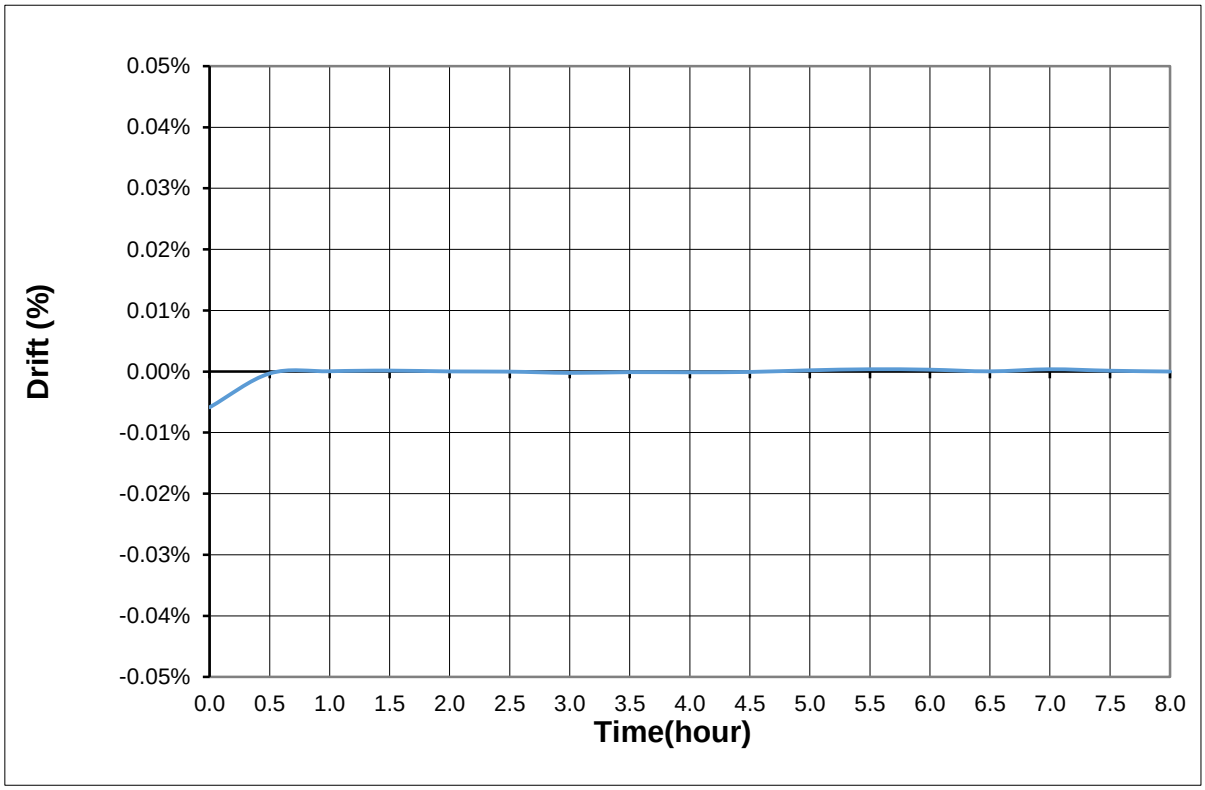
G10-265 C.C mode



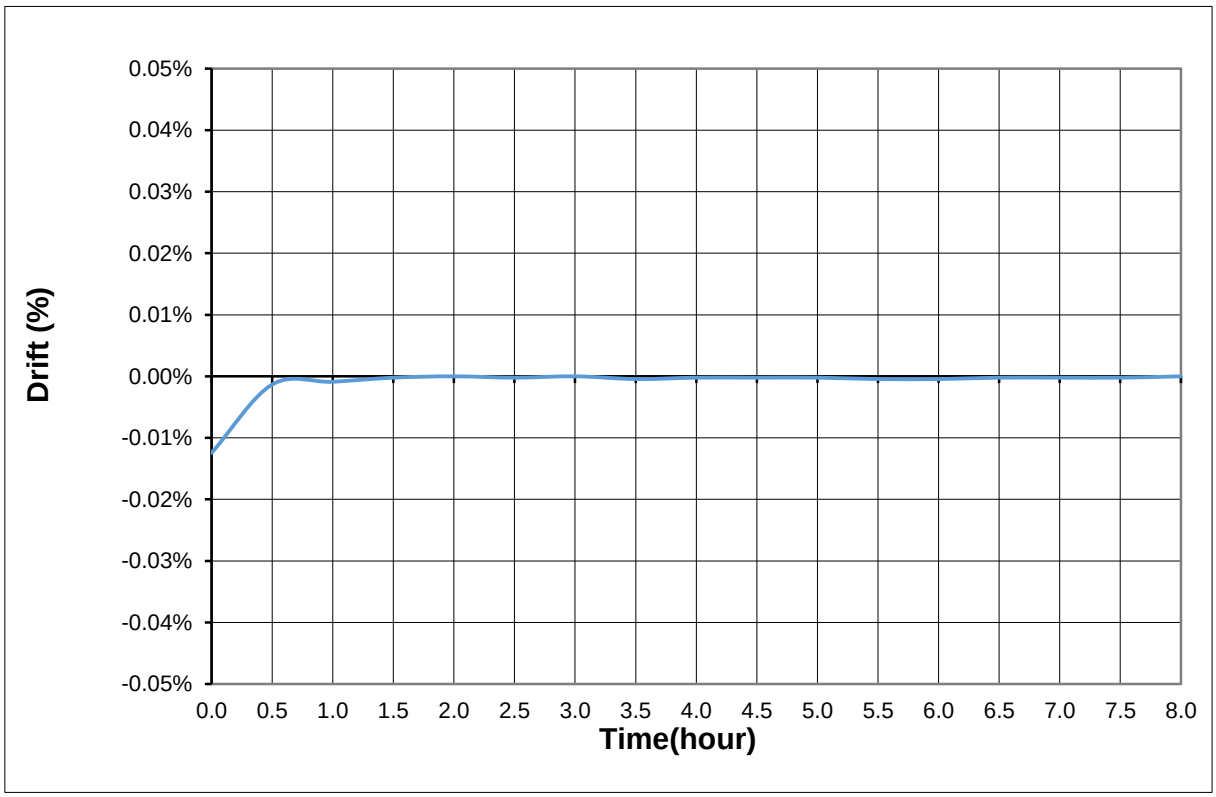
2.2 Warm up drift & stability

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G60-45 C.V mode



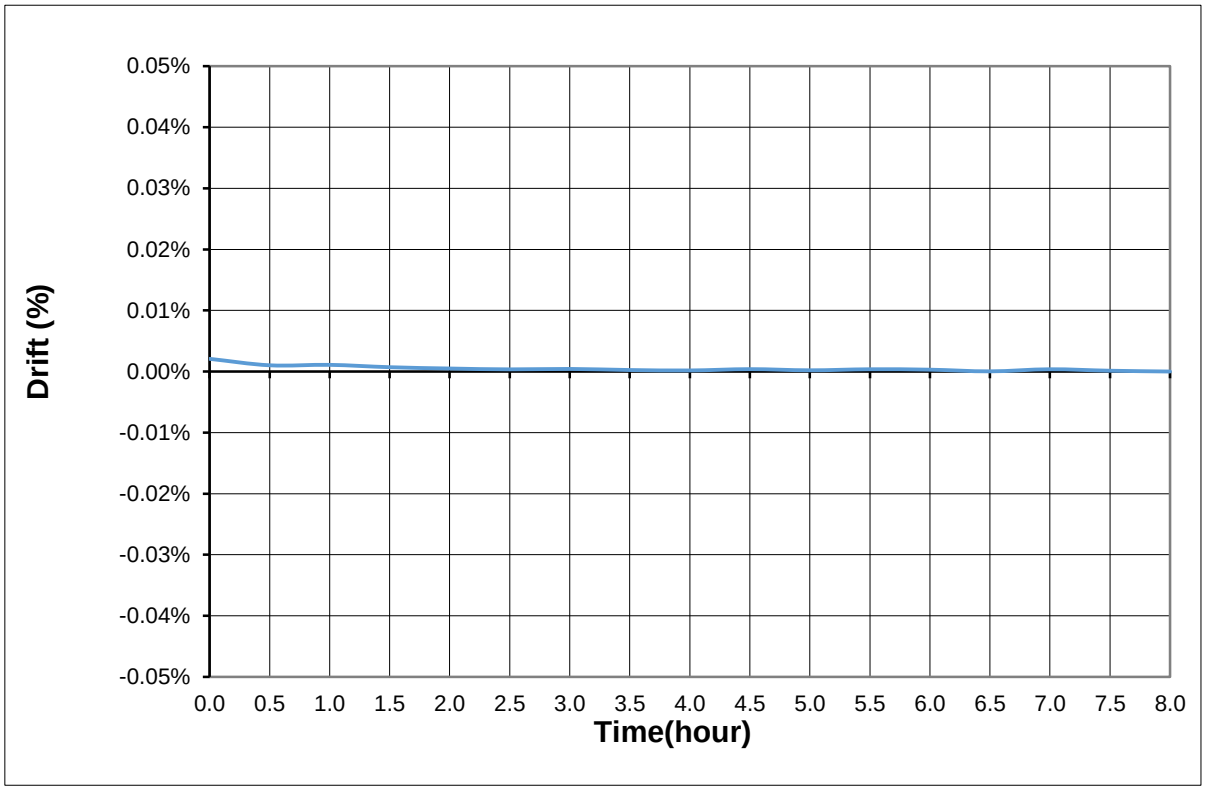
G60-45 C.C mode



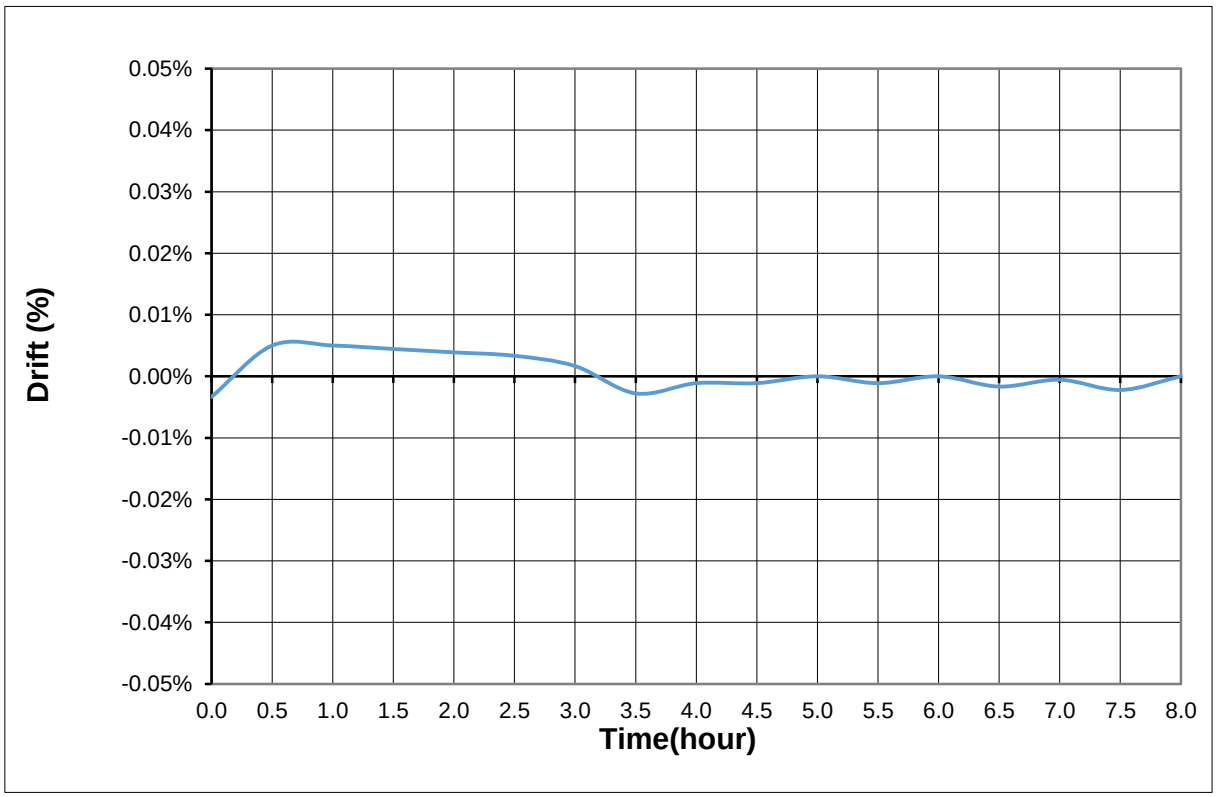
2.2 Warm up drift & stability

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G150-18 C.V mode



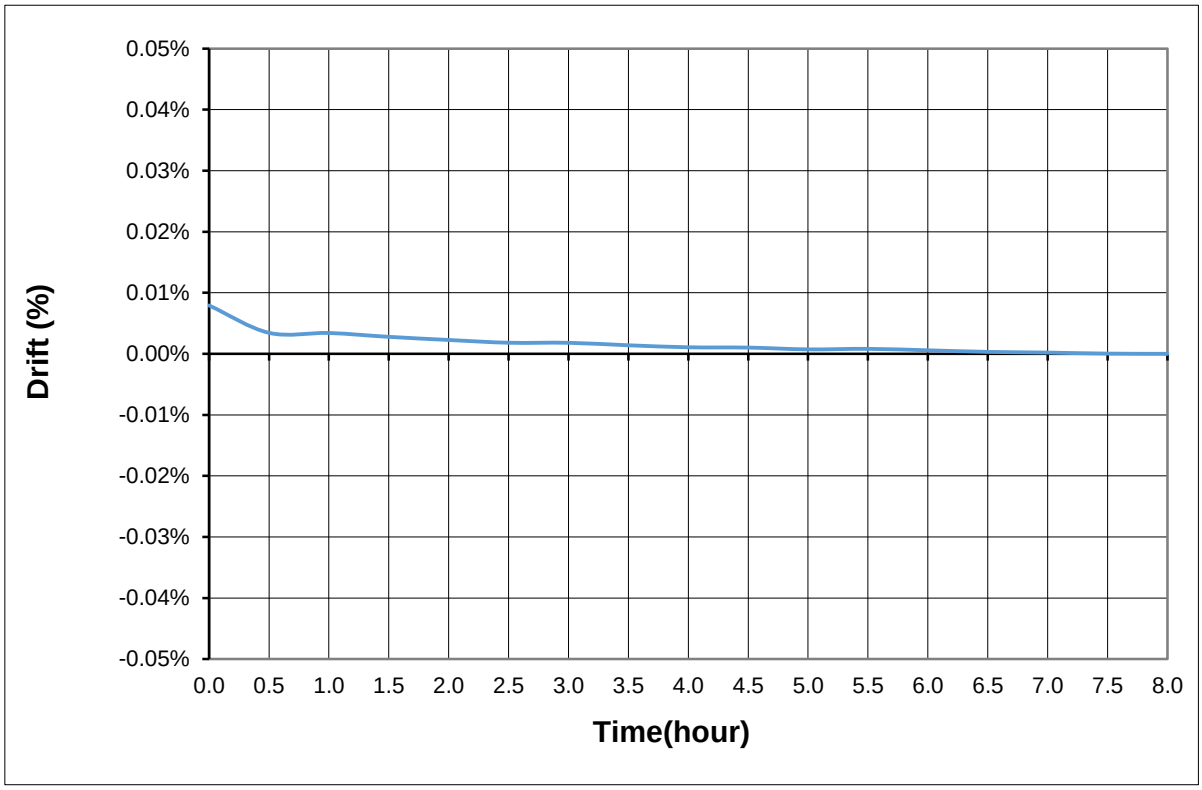
G150-18 C.C mode



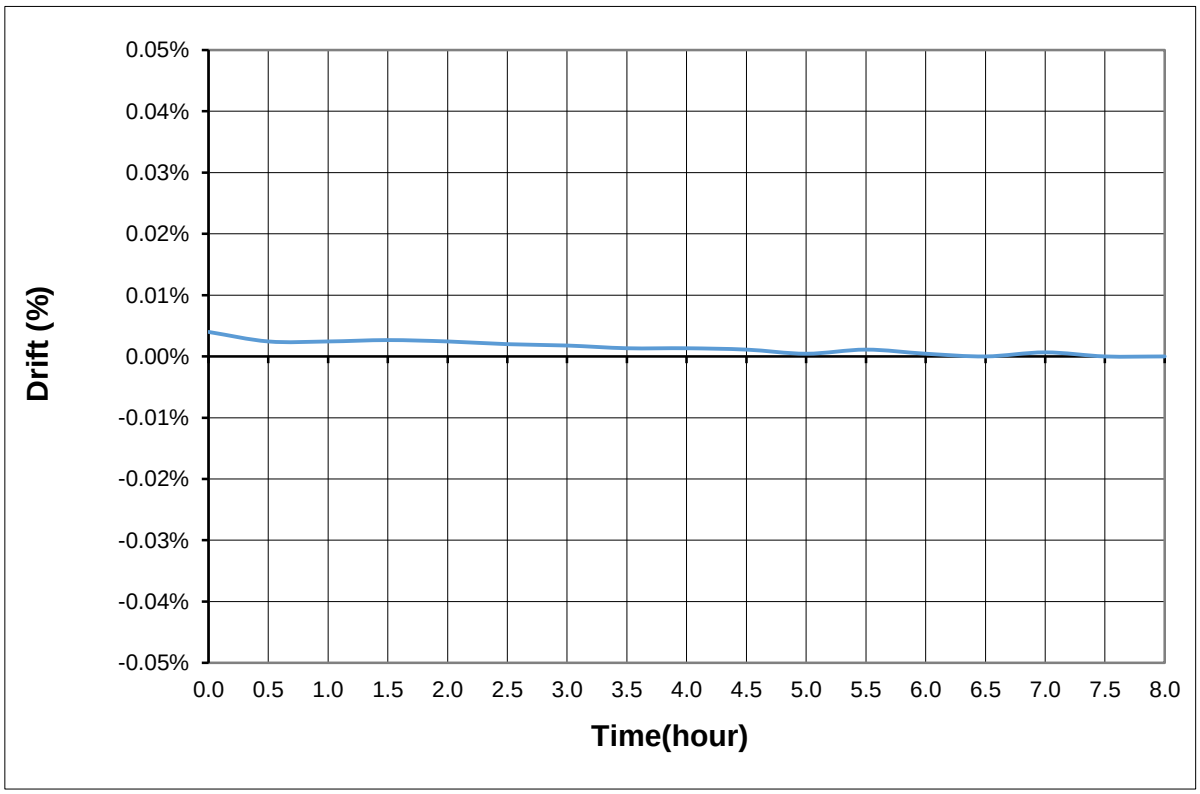
2.2 Warm up drift & stability

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G600-4.5 C.V mode



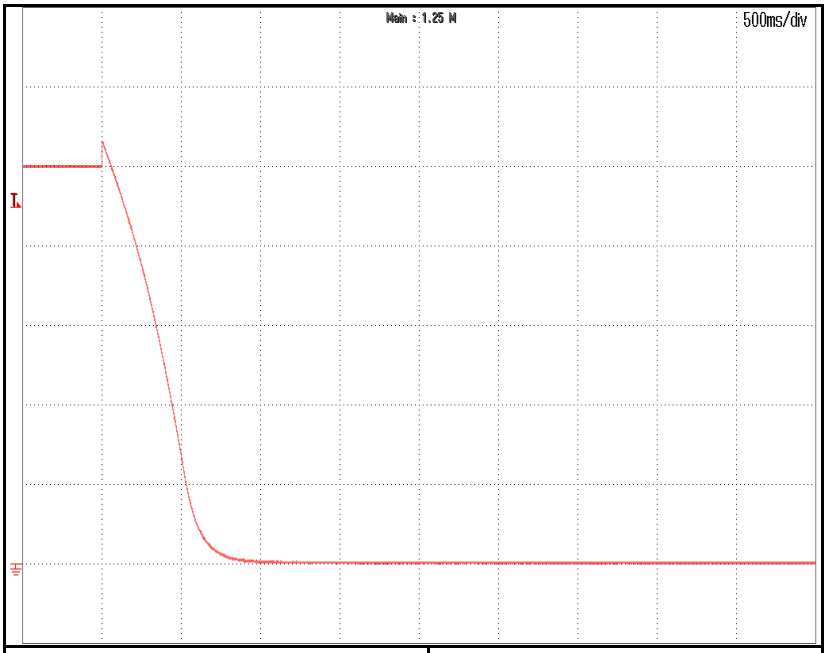
G600-4.5 C.C mode



2.3 Over voltage protection (OVP) characteristic

Conditions: Vset: 100%
Iout: 0%
Ta = 25°C

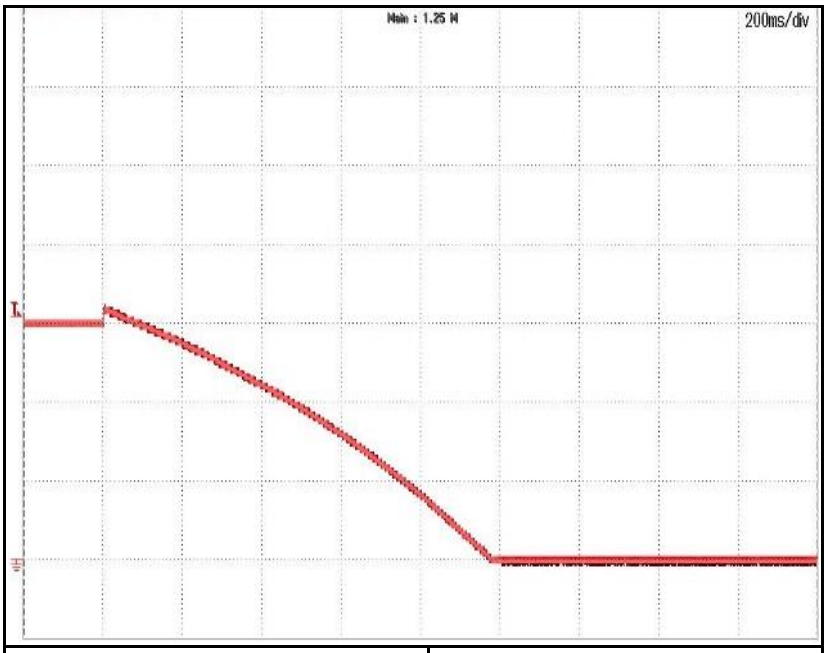
G10-265



$2^{V}/_{DIV}$	$500^{ms}/_{DIV}$

OVP setting:10.5V

G60-45



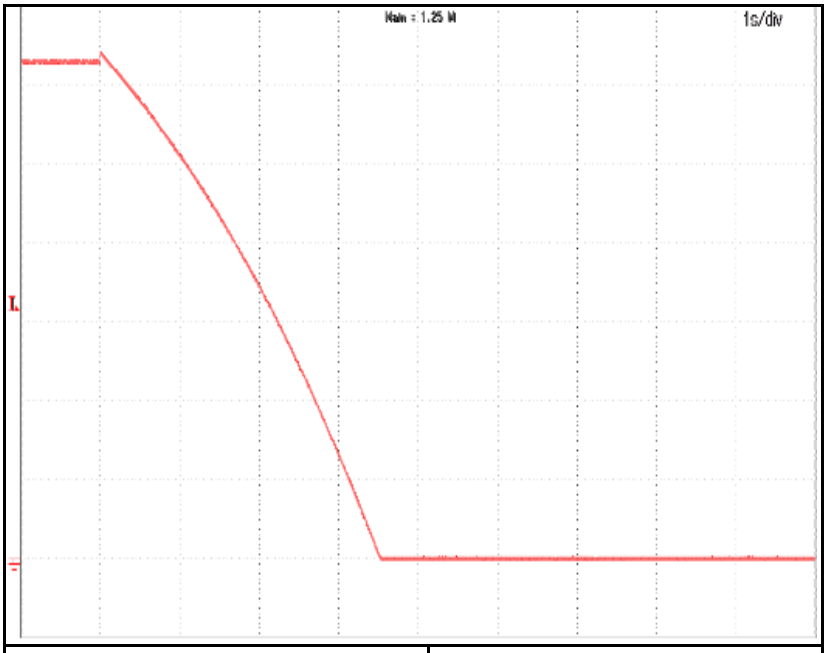
$20^{V}/_{DIV}$	$200^{ms}/_{DIV}$

OVP setting:63V

2.3 Over voltage protection (OVP) characteristic

Conditions: Vset: 100%
Iout: 0%
Ta = 25°C

G600-4.5



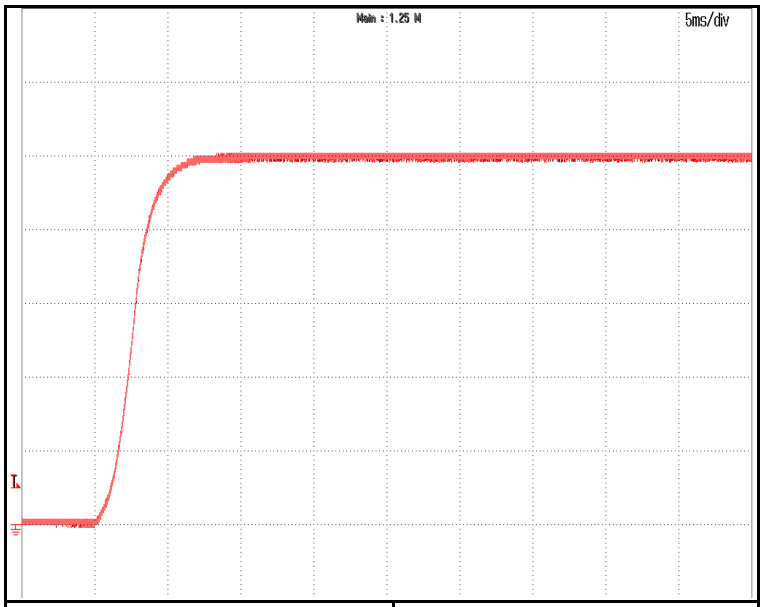
100V/DIV	1Sec/DIV

OVP setting:630V

2.4 ON/OFF Output rise characteristics
C.V mode

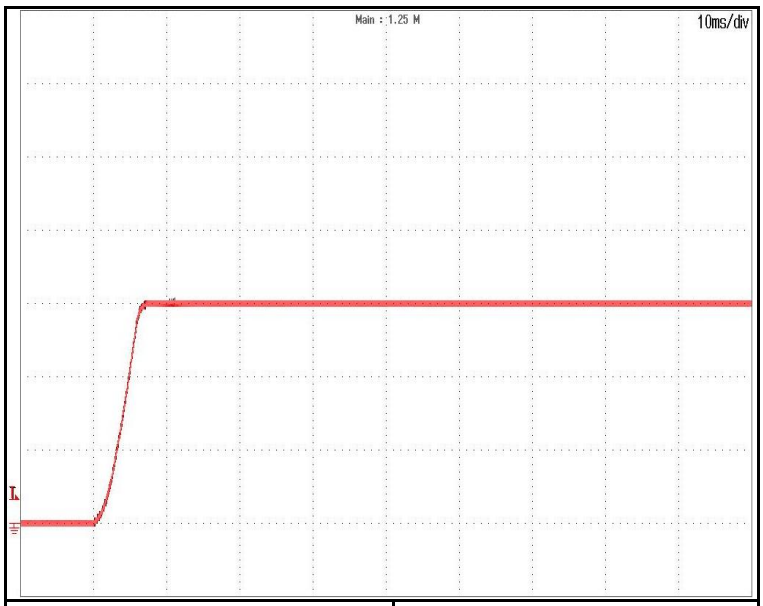
Conditions: Vin:Nominal
Vout: 100%
Iout: 0%
Iset=105%
Ta = 25°C

G10-265



$2^{V}/_{DIV}$	$5^{ms}/_{DIV}$

G60-45

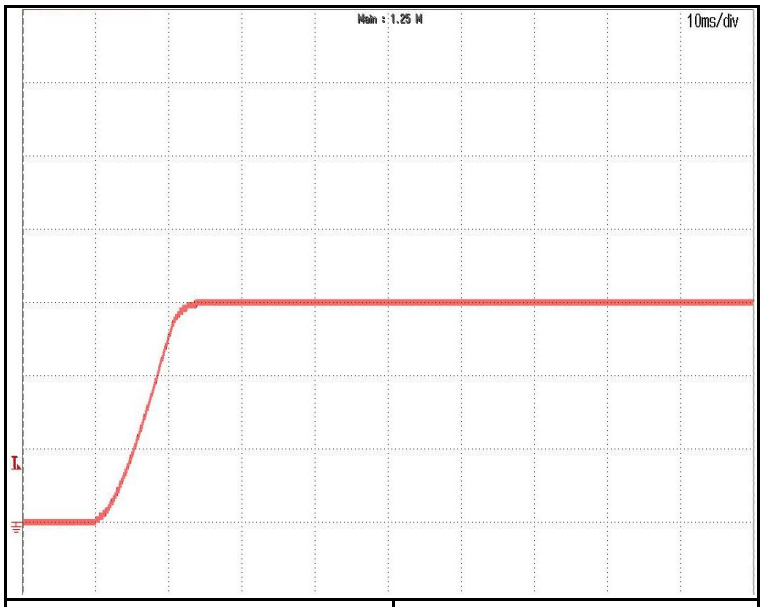


$20^{V}/_{DIV}$	$10^{ms}/_{DIV}$

2.4 ON/OFF Output rise characteristics
C.V mode

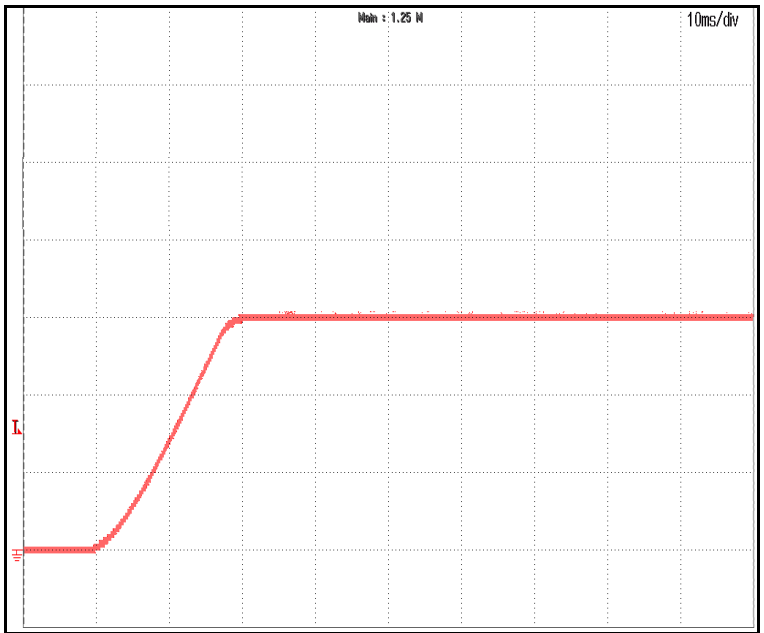
Conditions: Vin:Nominal
Vout: 100%
Iout: 0%
Iset=105%
Ta = 25°C

G150-18



$50^{V}/_{DIV}$	$10^{ms}/_{DIV}$

G600-4.5

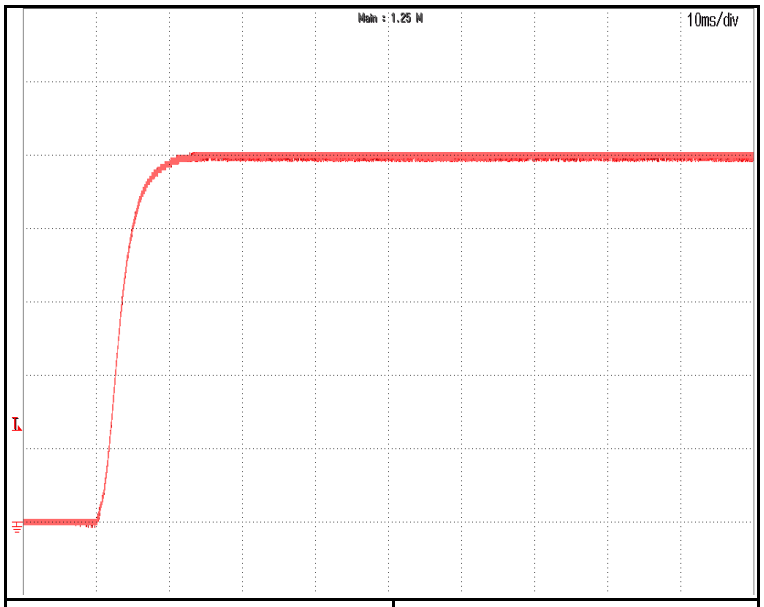


$200^{V}/_{DIV}$	$10^{ms}/_{DIV}$

2.4 ON/OFF Output rise characteristics
C.V mode

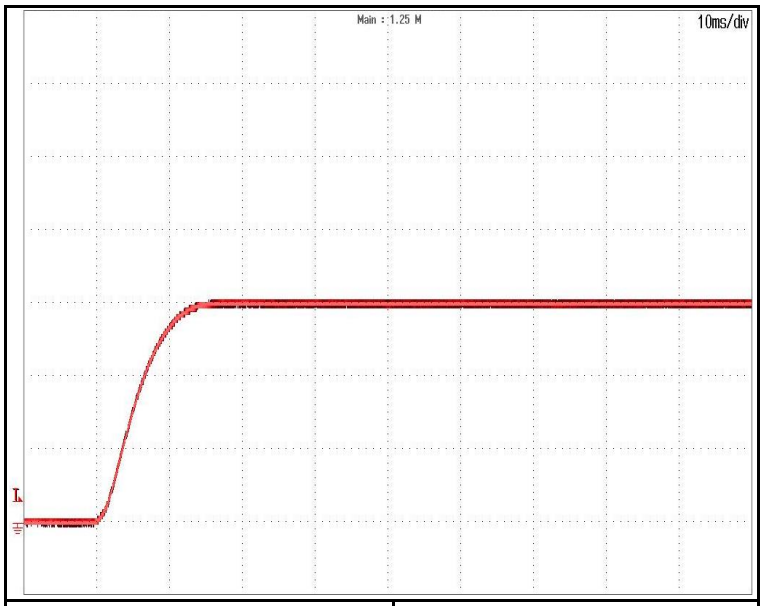
Conditions: Vin:Nominal
Vout: 100%
Iout: 100%
Iset=105%
Load: CR
Ta = 25°C

G10-265



$2^{V}/_{DIV}$	$10^{ms}/_{DIV}$

G60-45

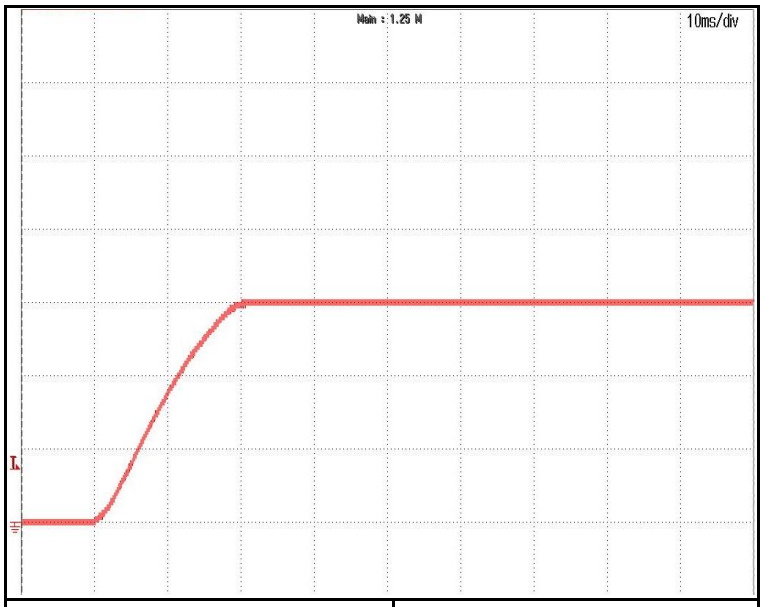


$20^{V}/_{DIV}$	$10^{ms}/_{DIV}$

2.4 ON/OFF Output rise characteristics
C.V mode

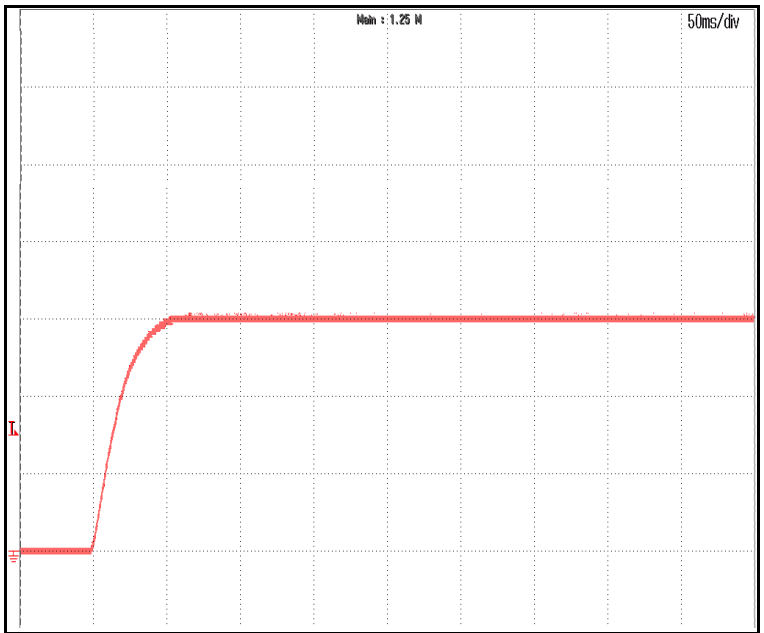
Conditions: Vin:Nominal
Vout: 100%
Iout: 100%
Iset=105%
Load: CR
Ta = 25°C

G150-18



$50^{V}/_{DIV}$	$10^{ms}/_{DIV}$

G600-4.5

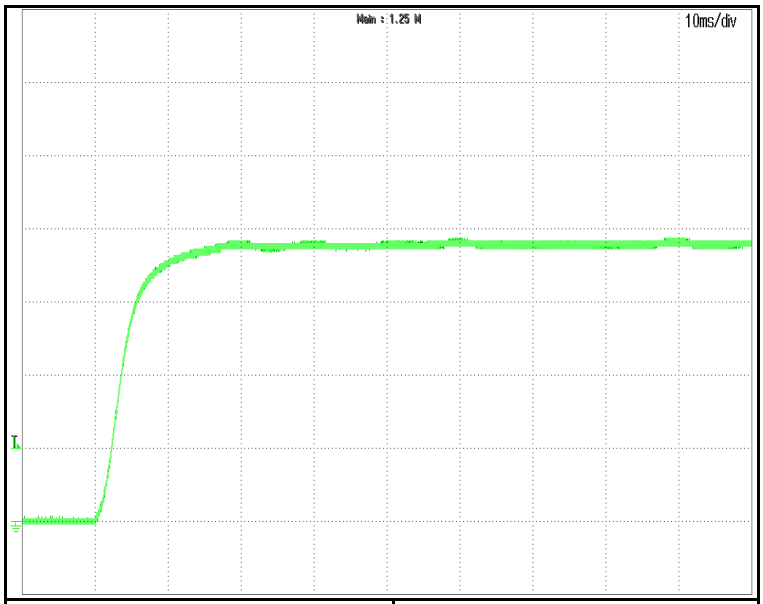


$200^{V}/_{DIV}$	$50^{ms}/_{DIV}$

2.4 ON/OFF Output rise characteristics
C.C mode

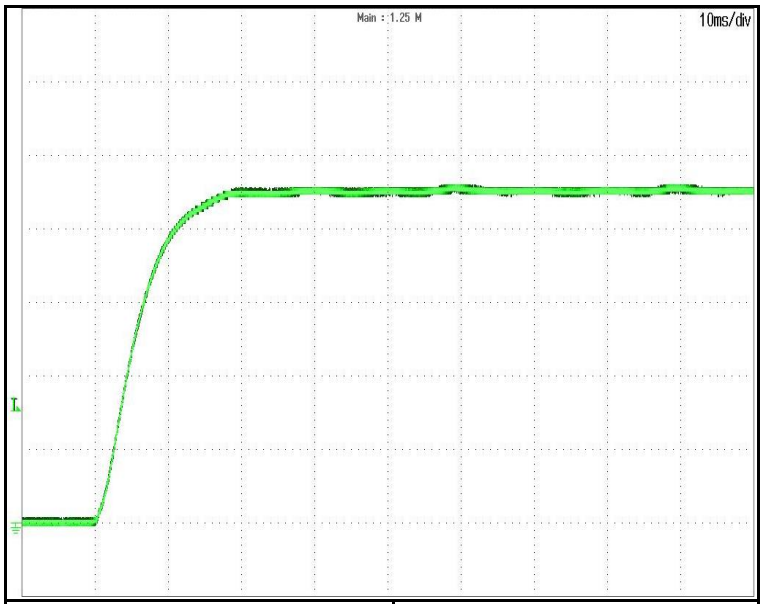
Conditions: Vin:Nominal
Vout: 100%
Iout: 100%
Vset=105%
Load: CR
Ta = 25°C

G10-265



$70^{A}/_{DIV}$	$10^{ms}/_{DIV}$

G60-45

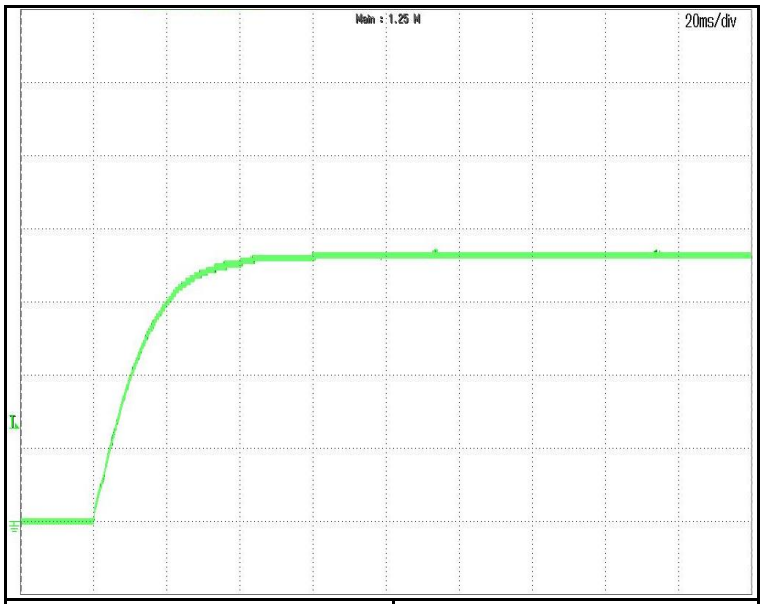


$10^{A}/_{DIV}$	$10^{ms}/_{DIV}$

2.4 ON/OFF Output rise characteristics
C.C mode

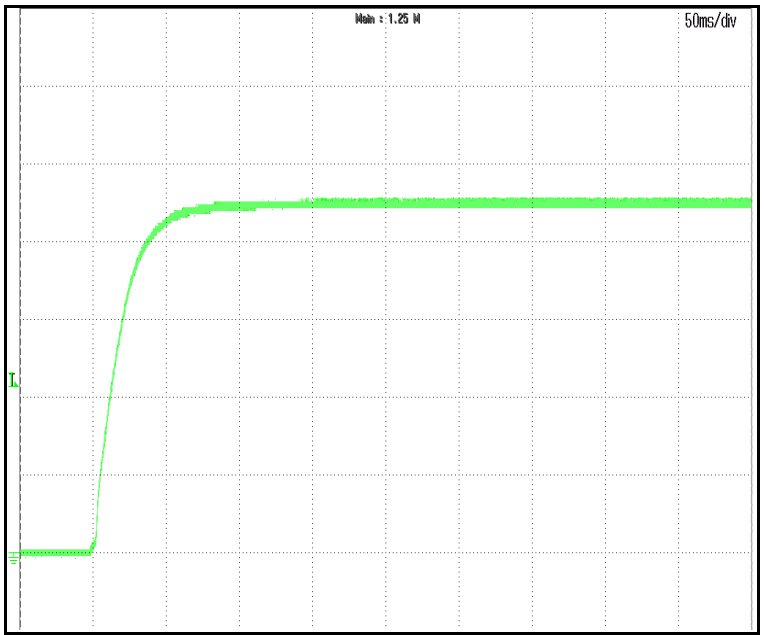
Conditions: Vin:Nominal
Vout: 100%
Iout: 100%
Vset=105%
Load: CR
Ta = 25°C

G150-18



$5^{A}/_{DIV}$	$20^{ms}/_{DIV}$

G600-4.5

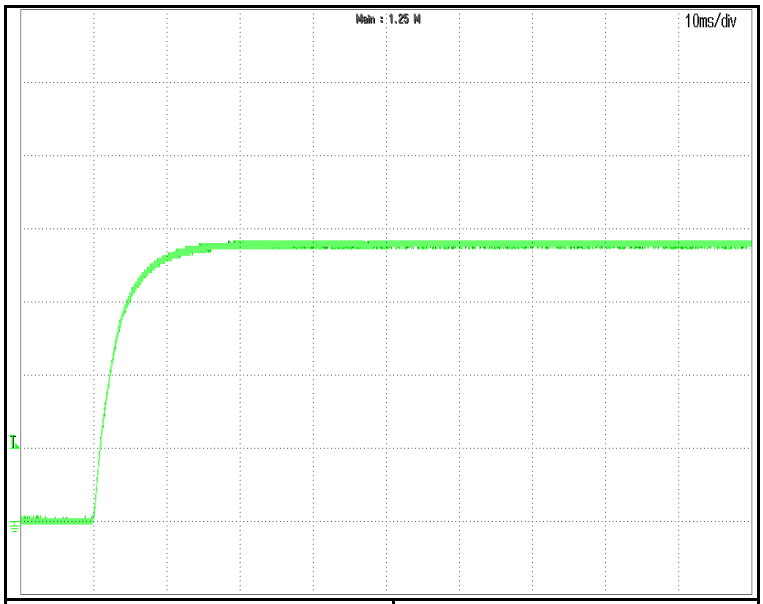


$1^{A}/_{DIV}$	$50^{ms}/_{DIV}$

2.4 ON/OFF Output rise characteristics
C.C mode

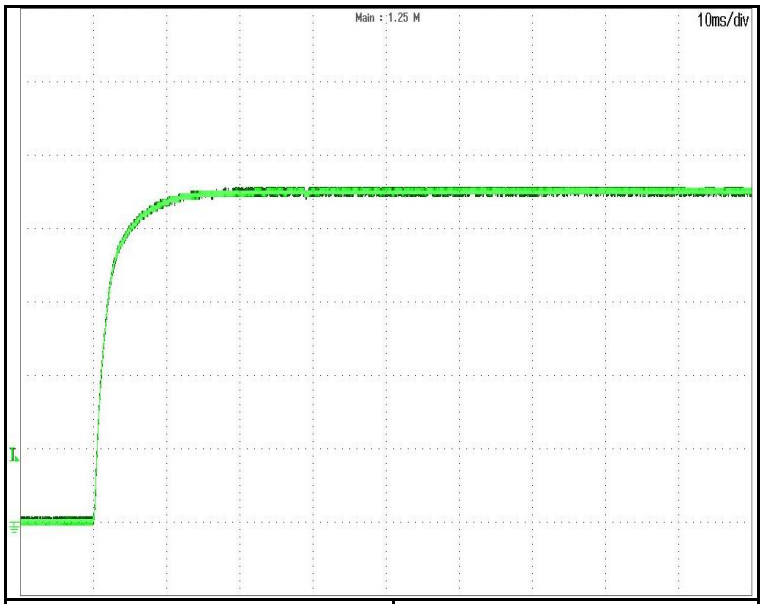
Conditions: Vin:Nominal
Iout: 100%
Vset=105%
shorted output
Ta = 25°C

G10-265



$70^{A}/_{DIV}$	$10^{ms}/_{DIV}$

G60-45

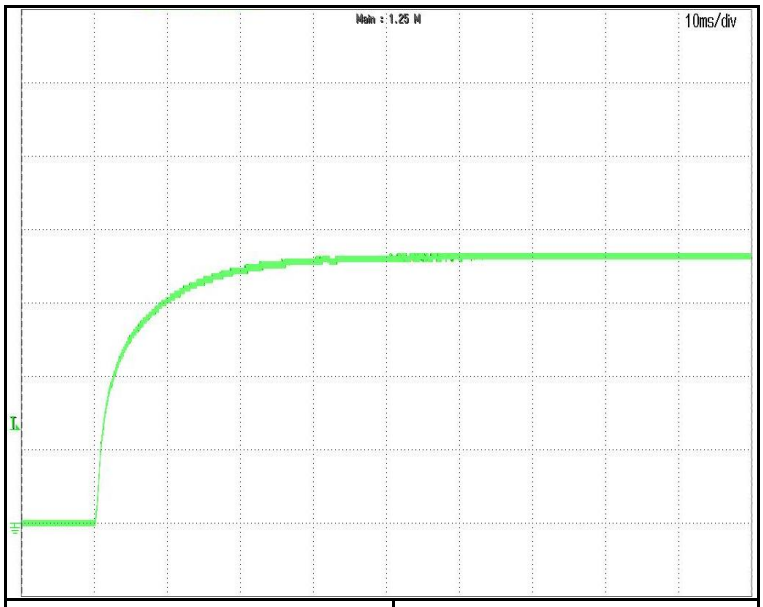


$10^{A}/_{DIV}$	$10^{ms}/_{DIV}$

2.4 ON/OFF Output rise characteristics
C.C mode

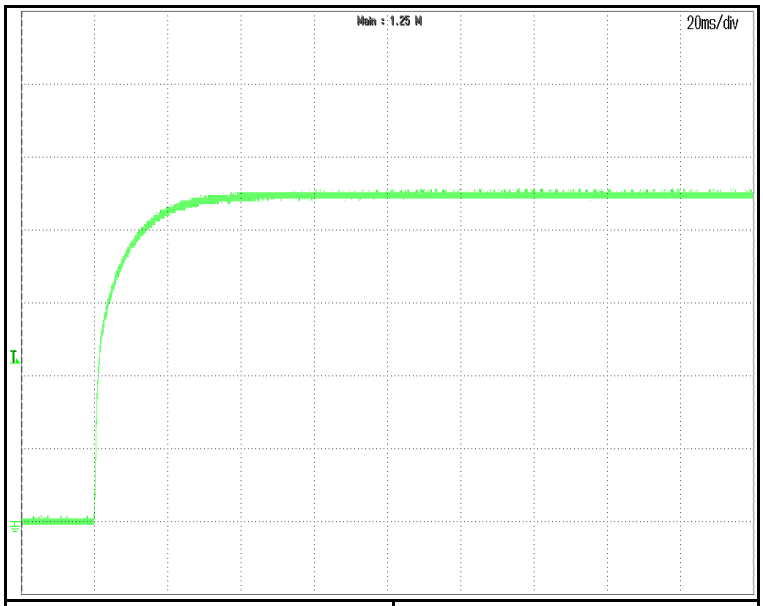
Conditions: Vin:Nominal
Iout: 100%
Vset=105%
shorted output
Ta = 25°C

G150-18



$5^{A}/_{DIV}$	$10^{ms}/_{DIV}$

G600-4.5



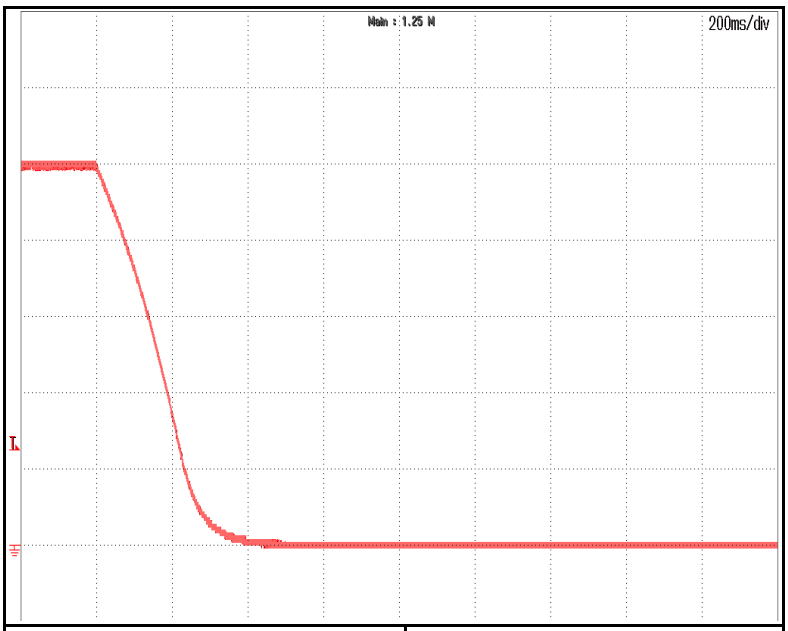
$1^{A}/_{DIV}$	$20^{ms}/_{DIV}$

2.5 ON/OFF Output fall characteristics

C.V mode

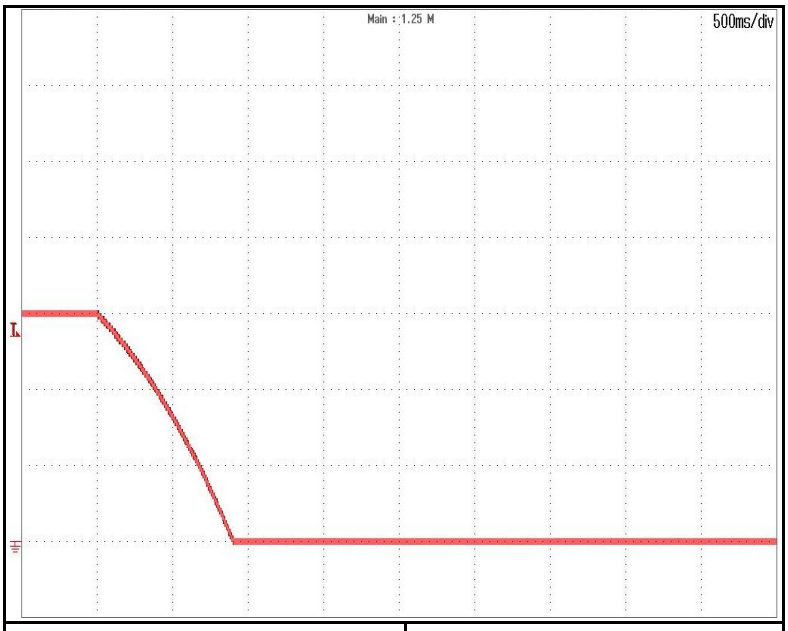
Conditions: Vin:Nominal
Vout: 100%
Iout: 0%
Ta = 25°C

G10-265



$2^{V}/_{DIV}$	$200^{ms}/_{DIV}$

G60-45



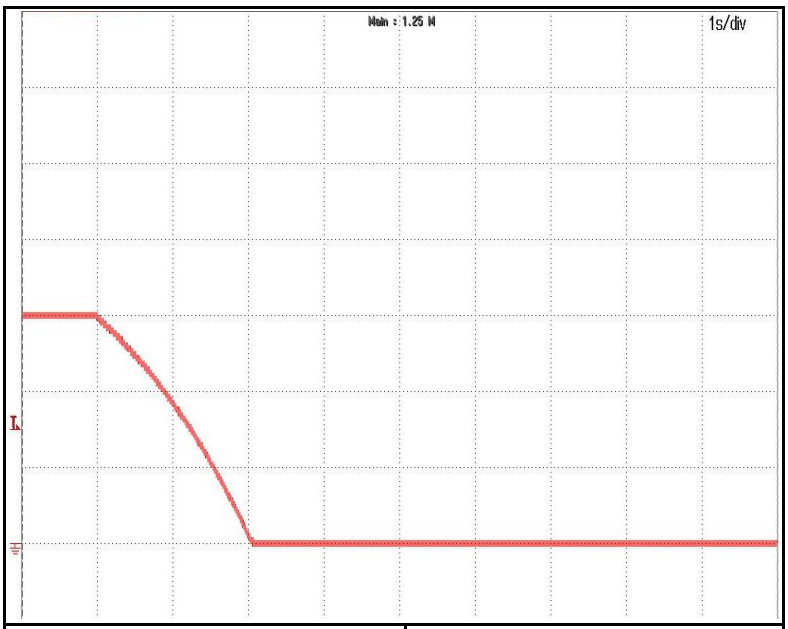
$20^{V}/_{DIV}$	$500^{ms}/_{DIV}$

2.5 ON/OFF Output fall characteristics

C.V mode

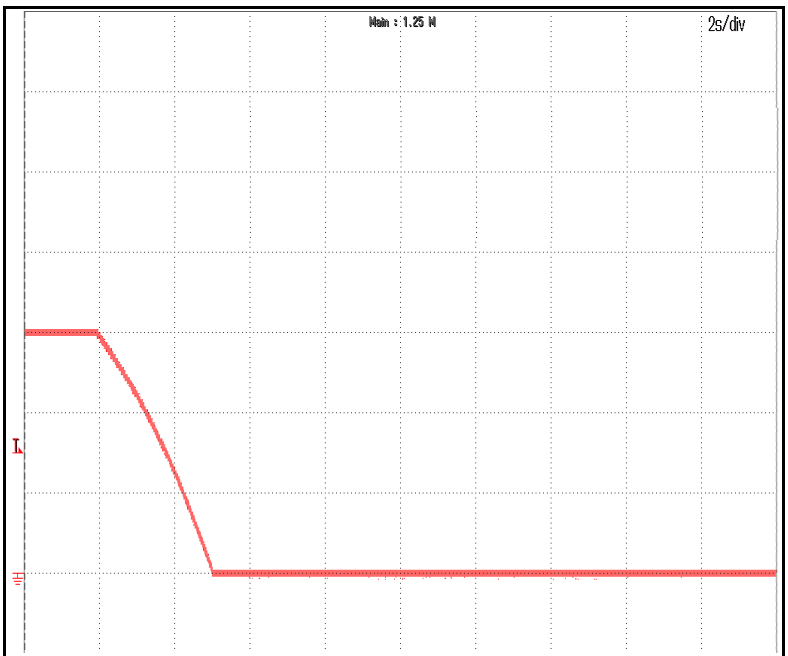
Conditions: Vin:Nominal
Vout: 100%
Iout: 0%
Ta = 25°C

G150-18



50V/DIV	1Sec/DIV

G600-4.5



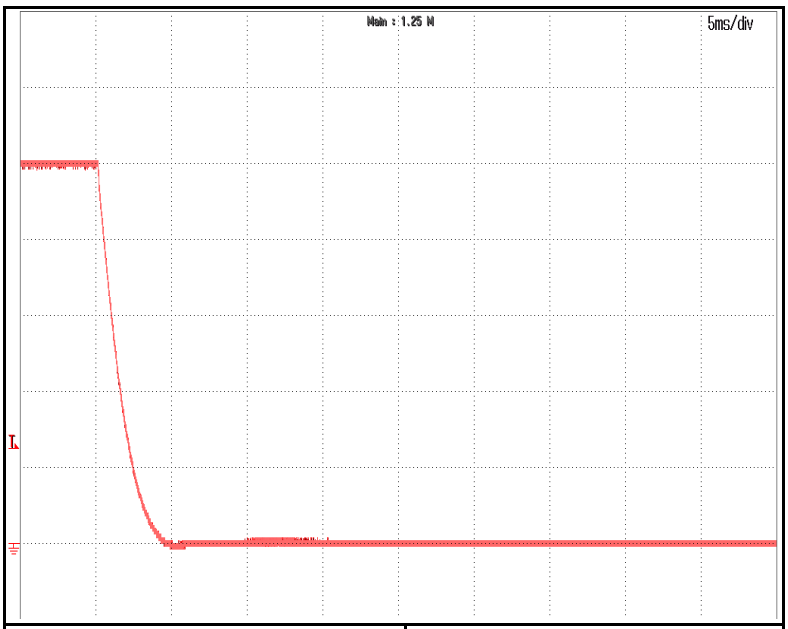
200V/DIV	2Sec/DIV

2.5 ON/OFF Output fall characteristics

C.V mode

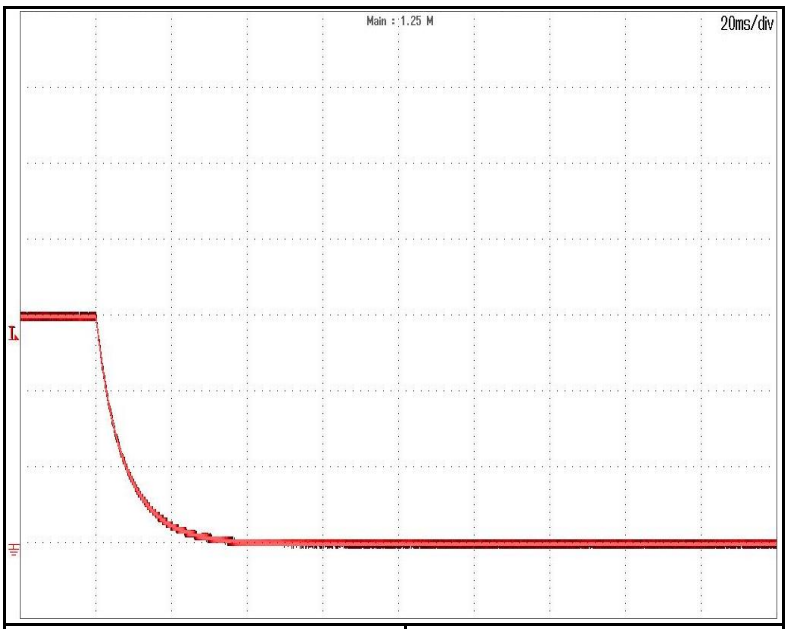
Conditions: Vin:Nominal
Vout: 100%
Iout: 100%
Load: CR
Ta = 25°C

G10-265



$2^{V}/_{DIV}$	$5^{ms}/_{DIV}$

G60-45

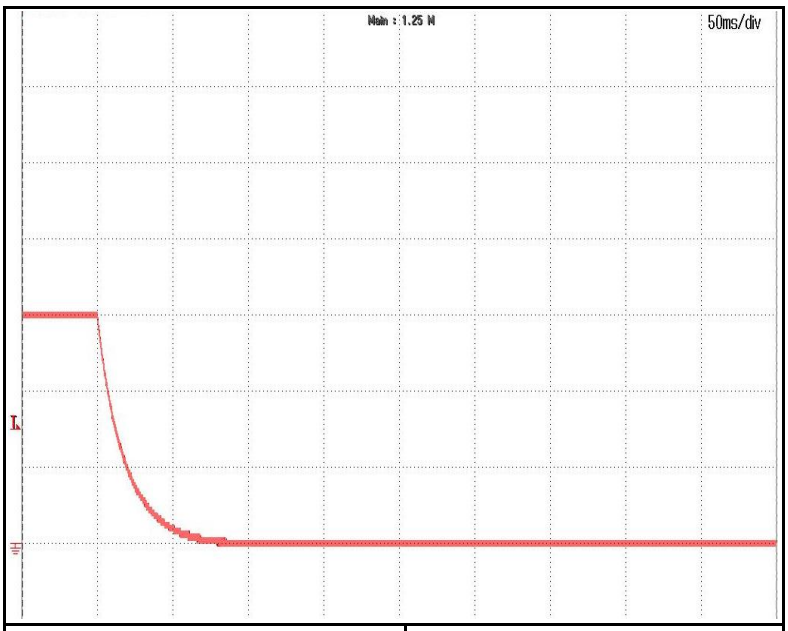


$20^{V}/_{DIV}$	$20^{ms}/_{DIV}$

2.5 ON/OFF Output fall characteristics
C.V mode

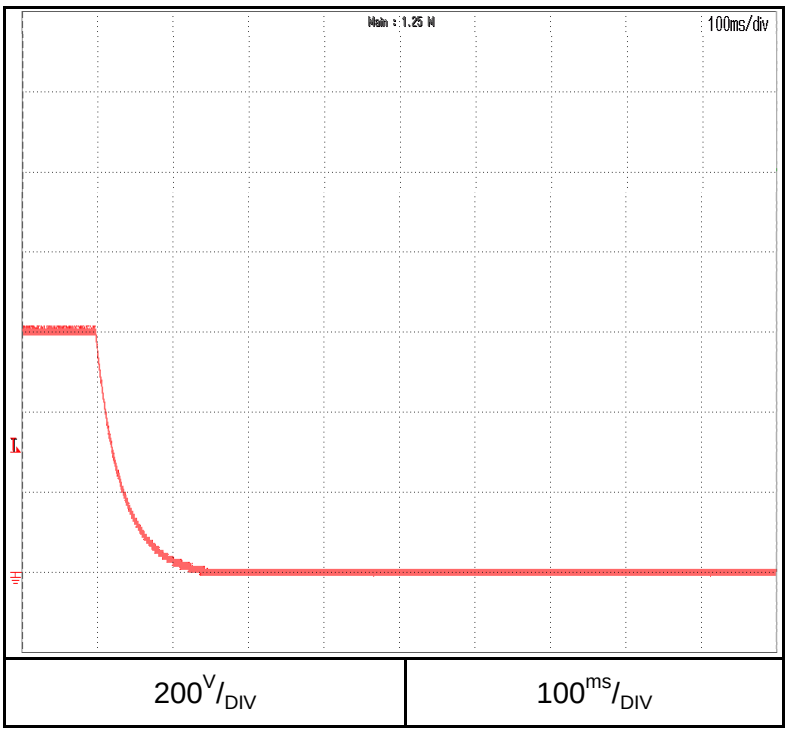
Conditions: Vin:Nominal
Vout: 100%
Iout: 100%
Load: CR
Ta = 25°C

G150-18



$50^{V}/_{DIV}$	$50^{ms}/_{DIV}$

G600-4.5



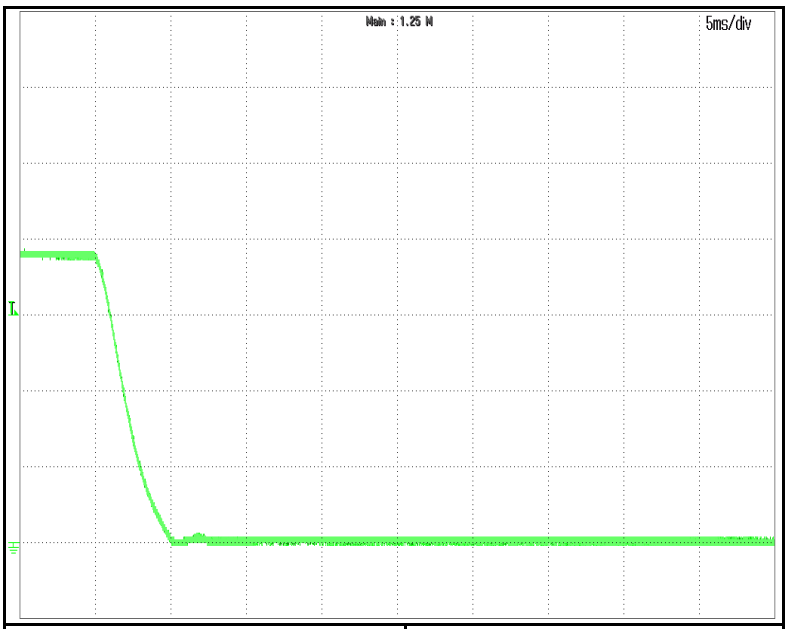
$200^{V}/_{DIV}$	$100^{ms}/_{DIV}$

2.5 ON/OFF Output fall characteristics

C.C mode

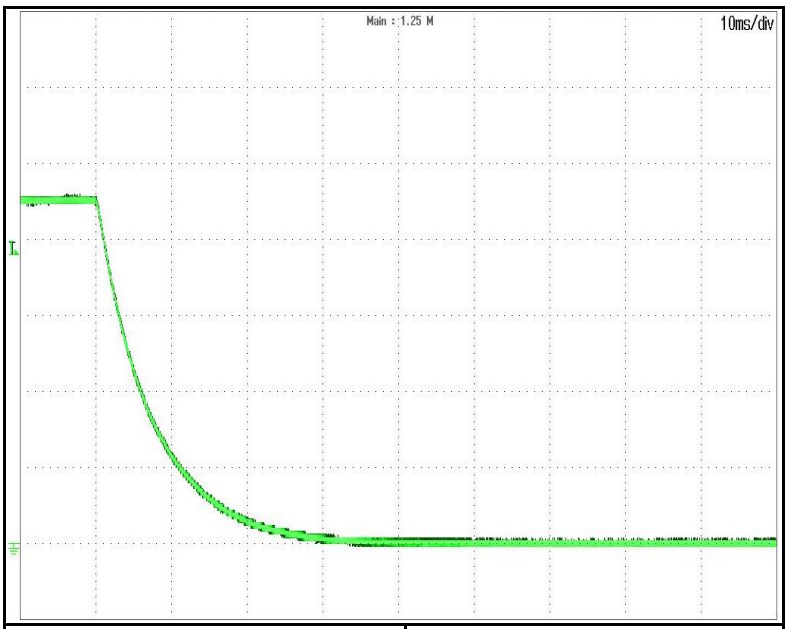
Conditions: Vin:Nominal
Vout: 100%
Iout: 100%
Load: CR
Ta = 25°C

G10-265



$70^{A}/_{DIV}$	$5^{ms}/_{DIV}$

G60-45



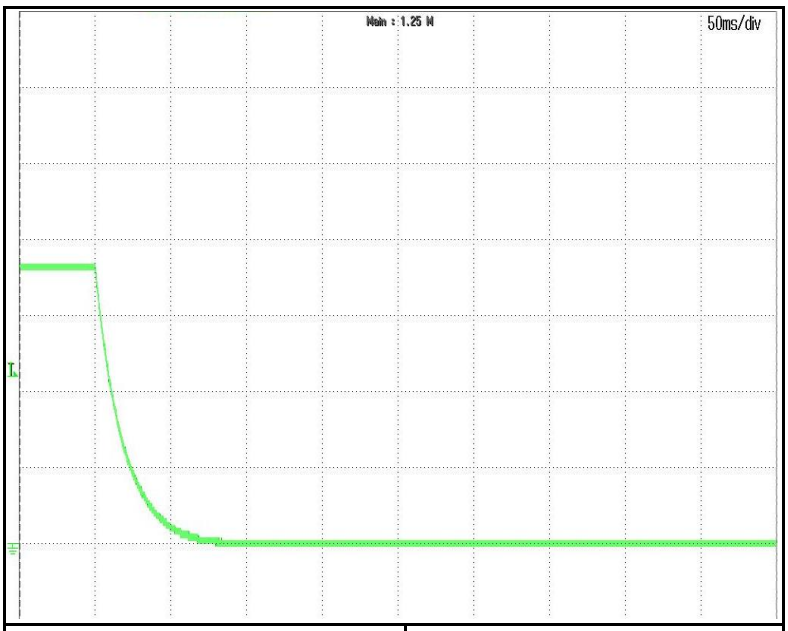
$10^{A}/_{DIV}$	$10^{ms}/_{DIV}$

2.5 ON/OFF Output fall characteristics

C.C mode

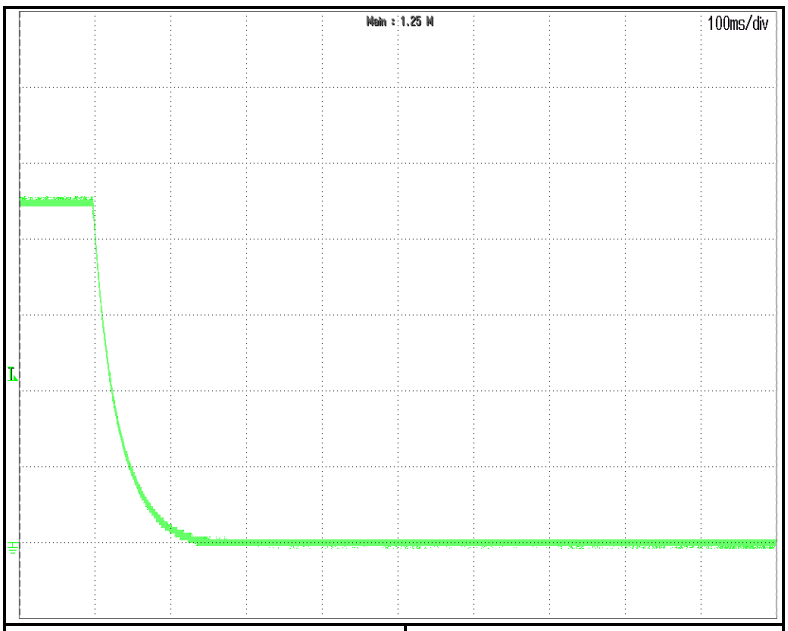
Conditions: Vin:Nominal
Vout: 100%
Iout: 100%
Load: CR
Ta = 25°C

G150-18



$5^{A}/_{DIV}$	$50^{ms}/_{DIV}$

G600-4.5

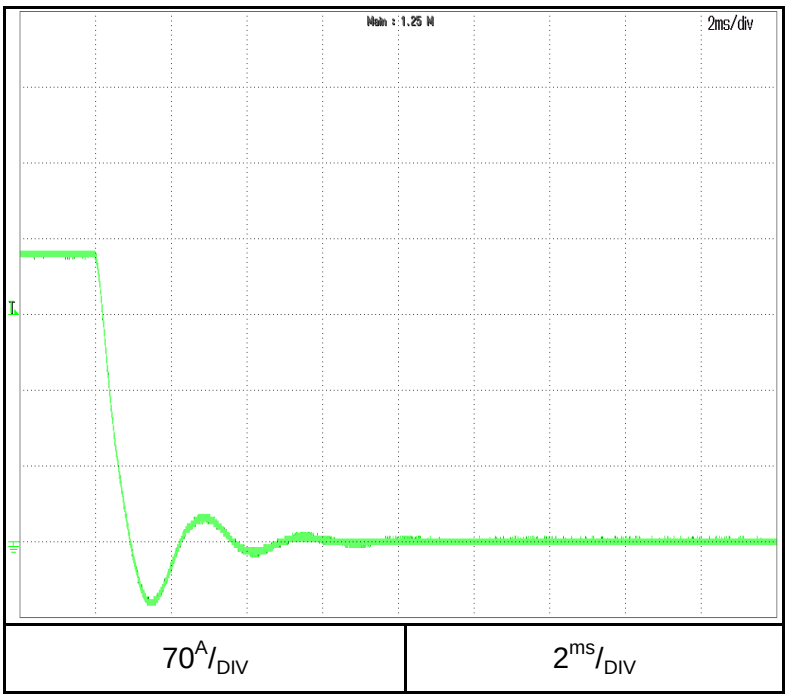


$1^{A}/_{DIV}$	$100^{ms}/_{DIV}$

2.5 ON/OFF Output fall characteristics
C.C mode

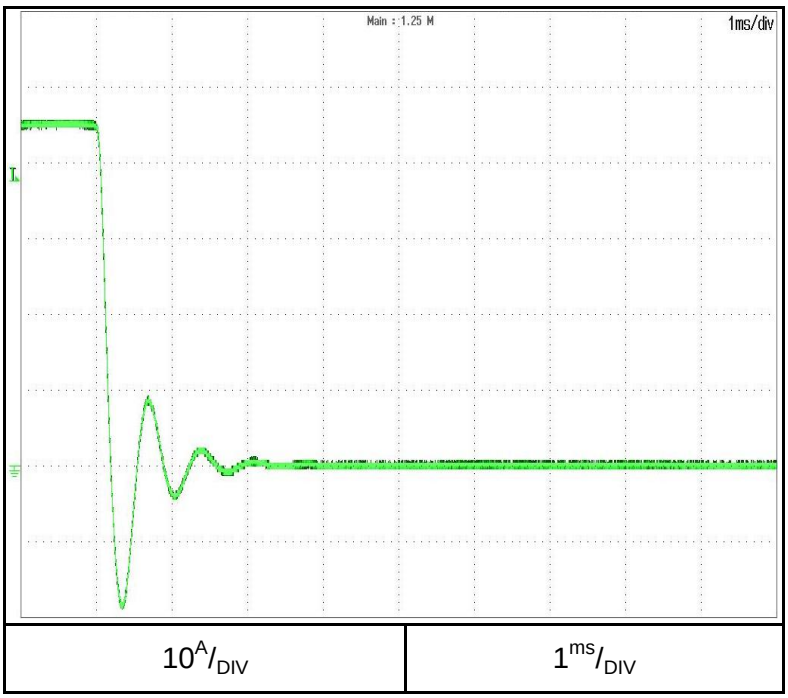
Conditions: Vin:Nominal
Iout: 100%
shorted output
Ta = 25°C

G10-265



70A/DIV	2ms/DIV

G60-45

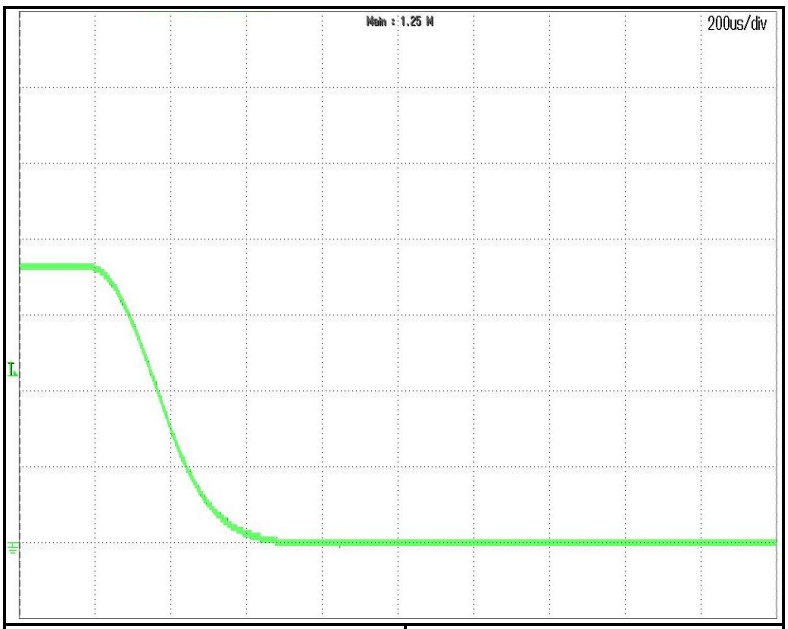


10A/DIV	1ms/DIV

2.5 ON/OFF Output fall characteristics
C.C mode

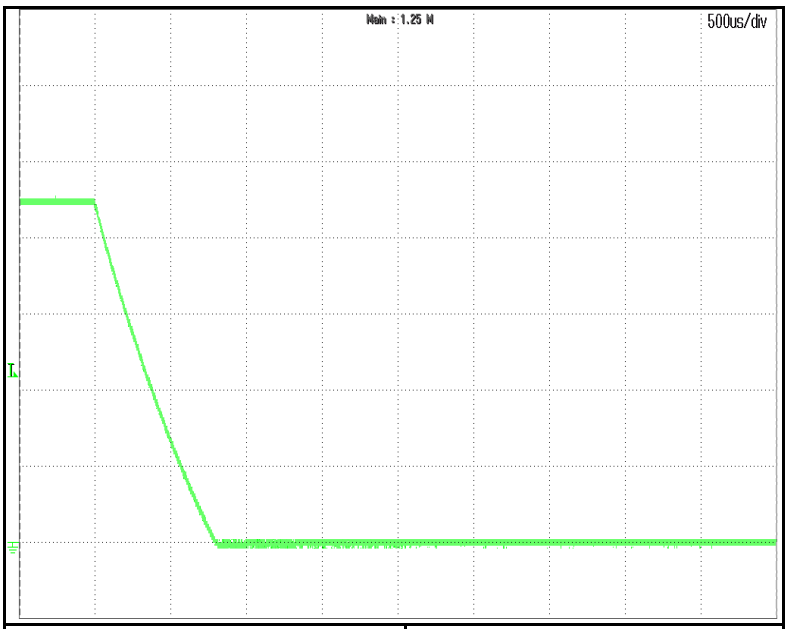
Conditions: Vin:Nominal
Iout: 100%
shorted output
Ta = 25°C

G150-18



$5^{A}/_{DIV}$	$200^{\mu S}/_{DIV}$

G600-4.5



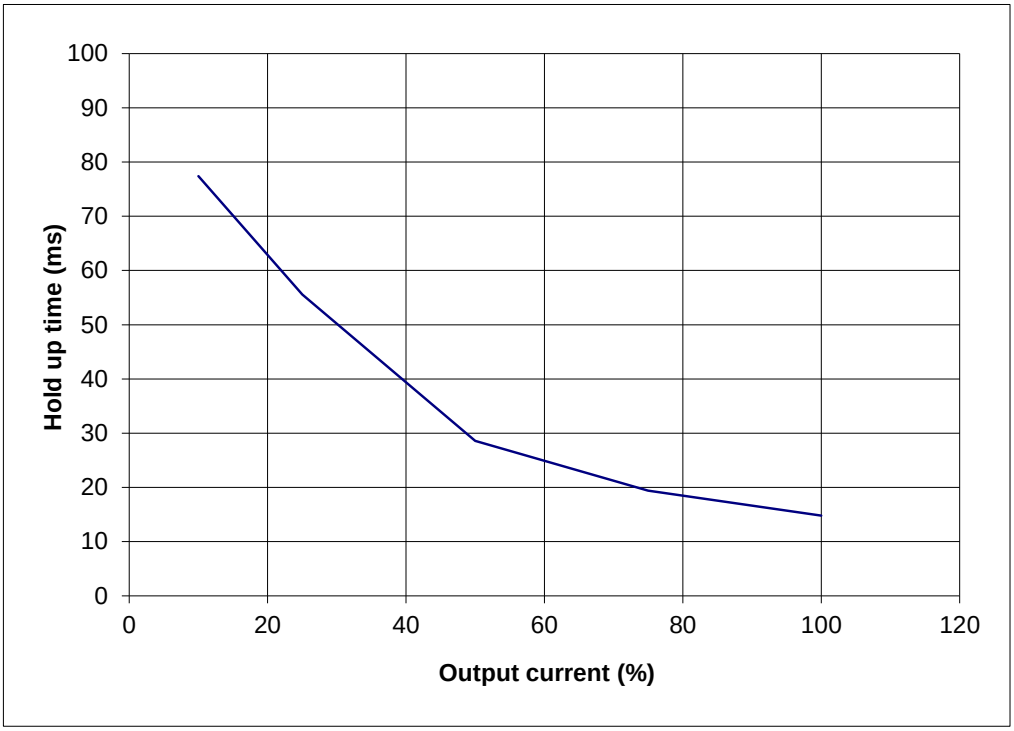
$1^{A}/_{DIV}$	$500^{\mu S}/_{DIV}$

2.6 Holdup time characteristics

Conditions: Ta = 25°C
Vout:100%

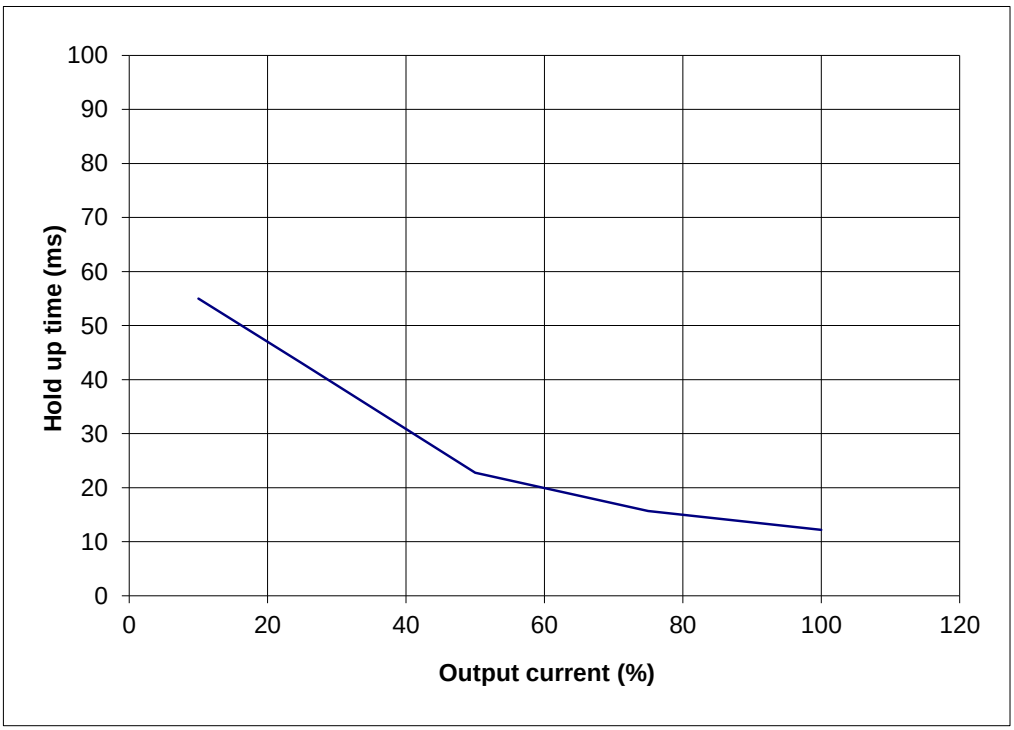
G10-265 1Φ200

Vin:230VAC



G10-265 3Φ200

Vin:200VAC

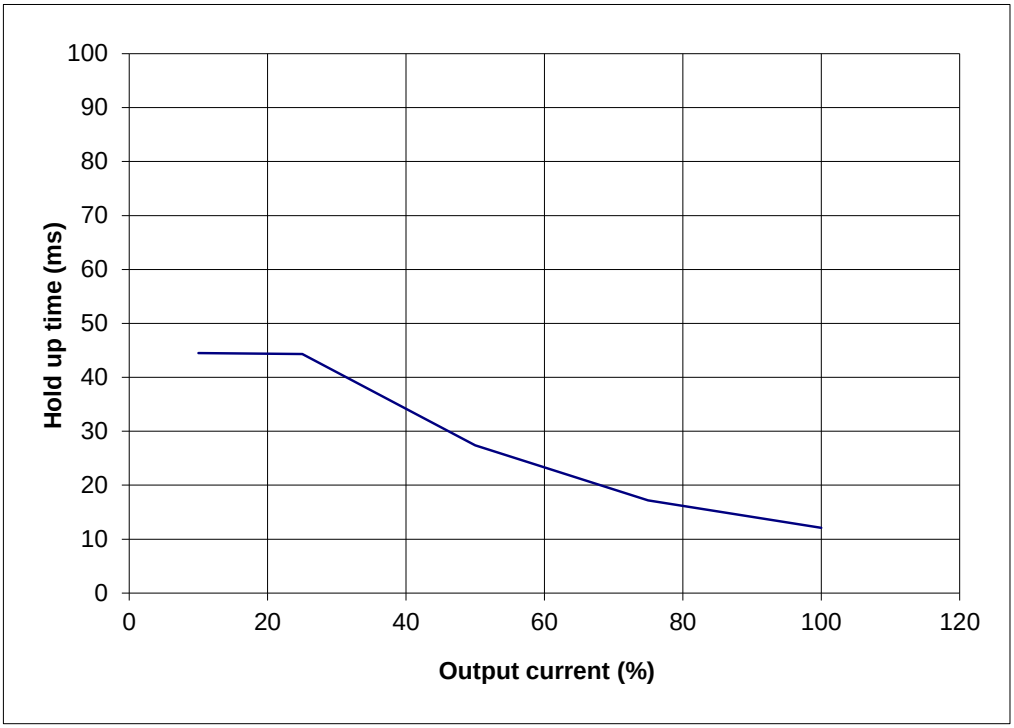


2.6 Holdup time characteristics

Conditions: Ta = 25°C
Vout:100%

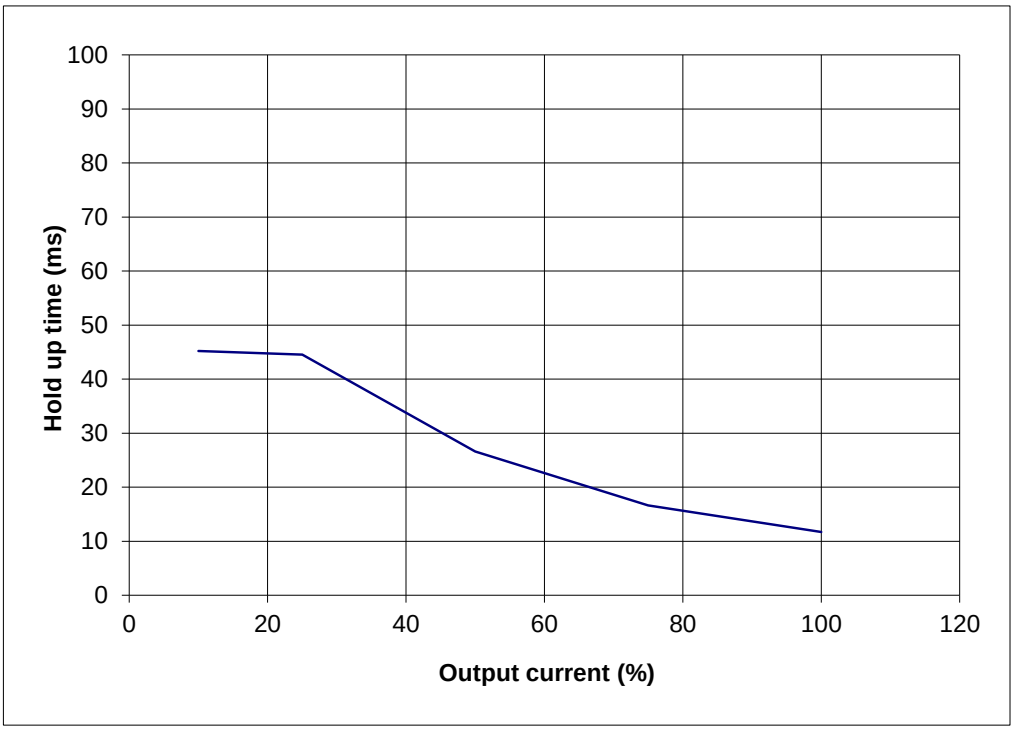
G10-265 3Φ400

Vin:400VAC



G10-265 3Φ480

Vin:480VAC

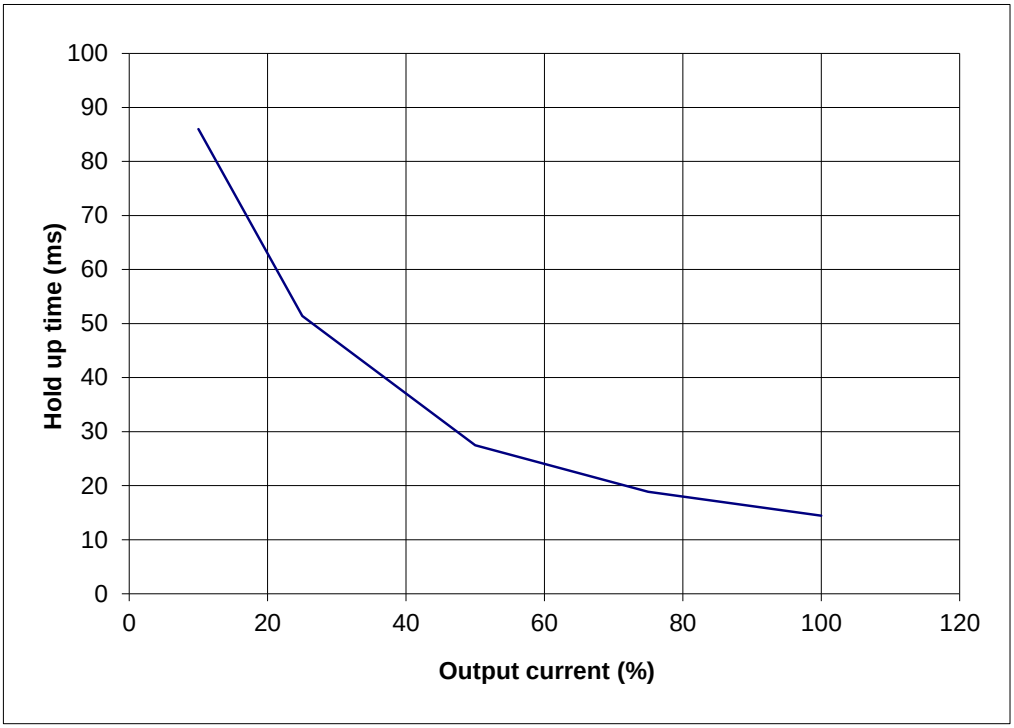


2.6 Holdup time characteristics

Conditions: Ta = 25°C
Vout:100%

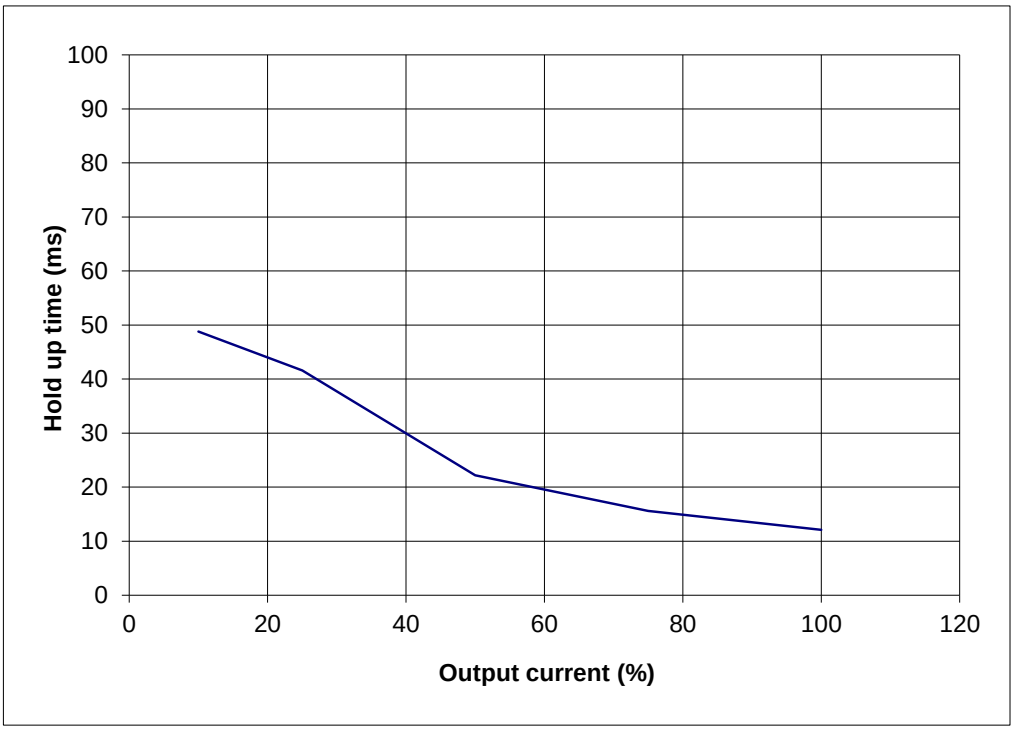
G60-45 1Φ200

Vin:230VAC



G60-45 3Φ200

Vin:200VAC

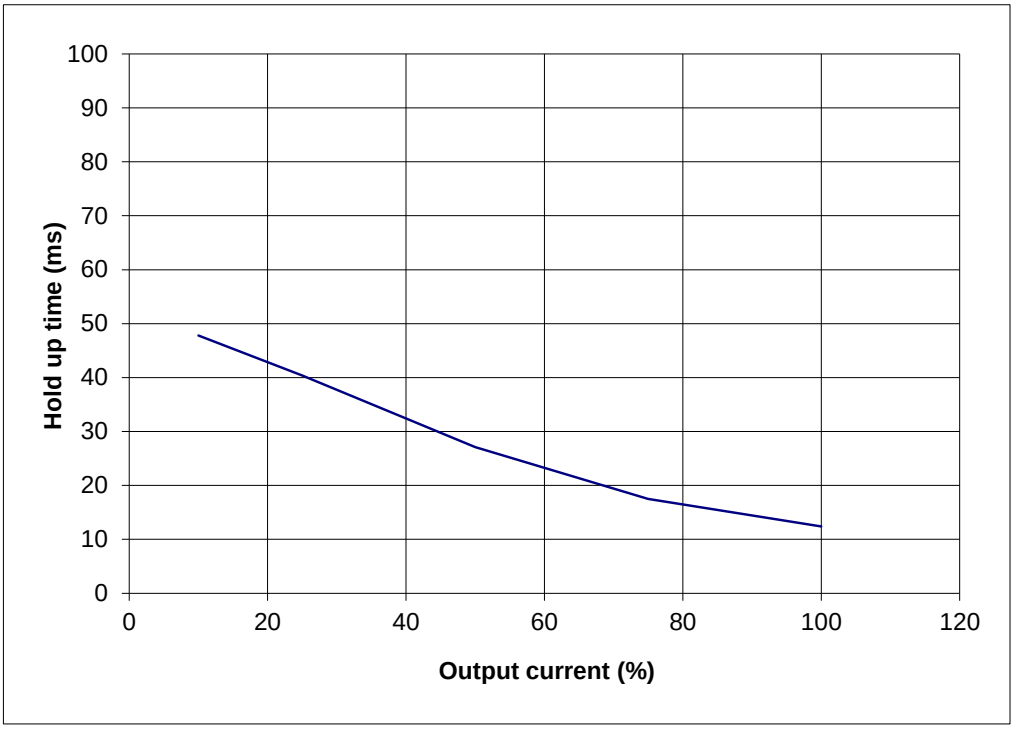


2.6 Holdup time characteristics

Conditions: Ta = 25°C
Vout:100%

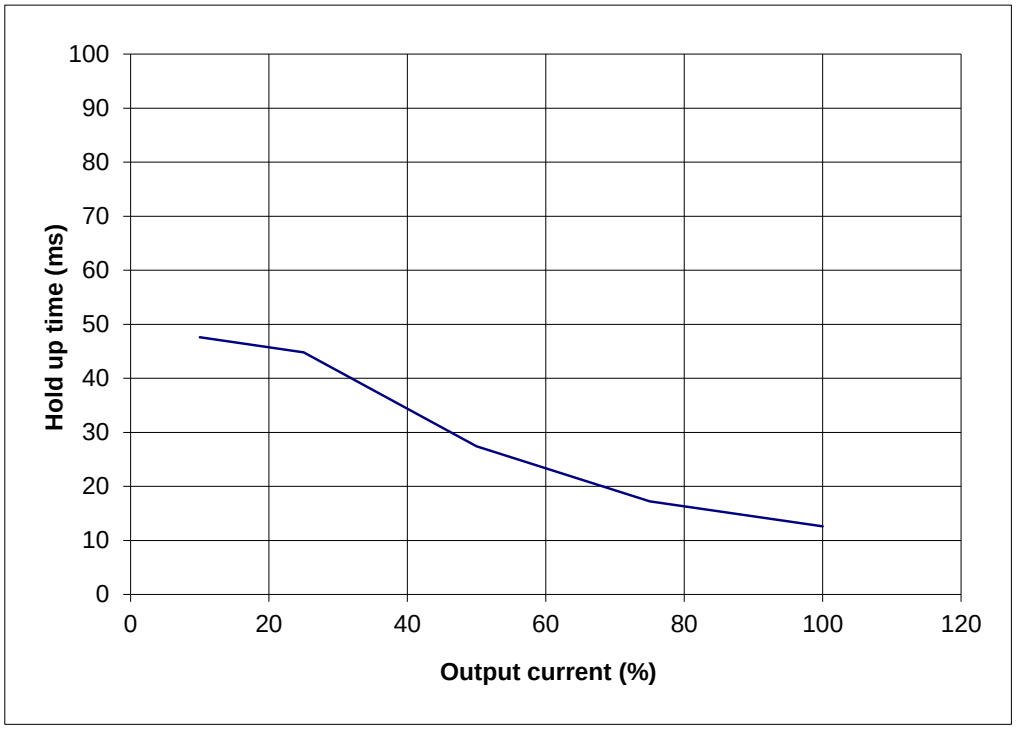
G60-45 3Φ400

Vin:400VAC



G60-45 3Φ480

Vin:480VAC

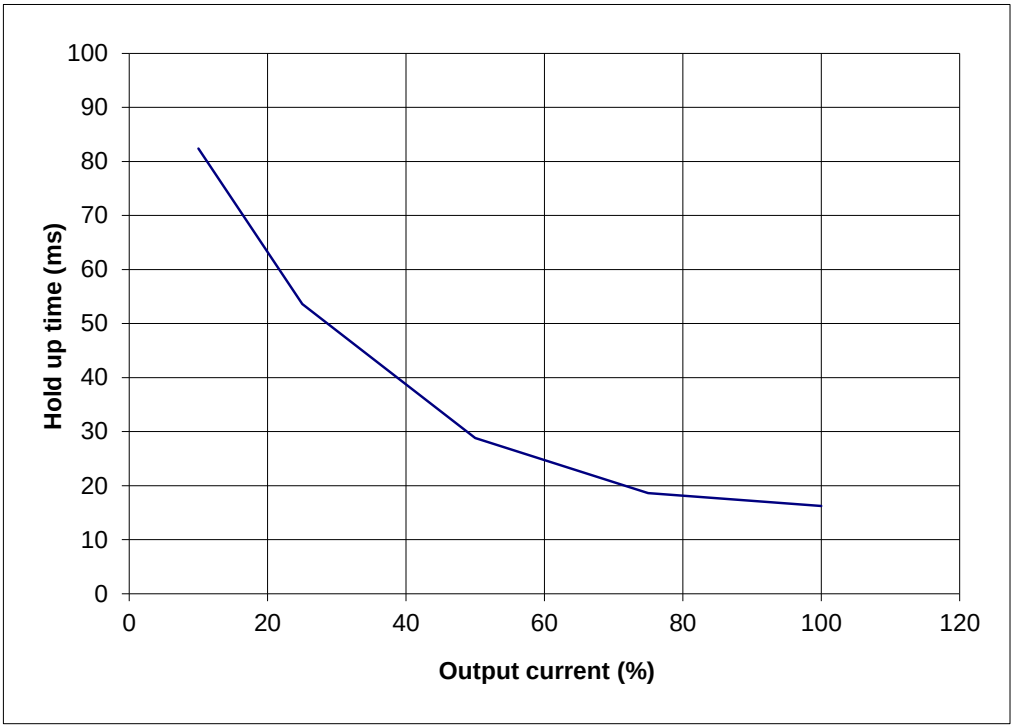


2.6 Holdup time characteristics

Conditions: Ta = 25°C
Vout:100%

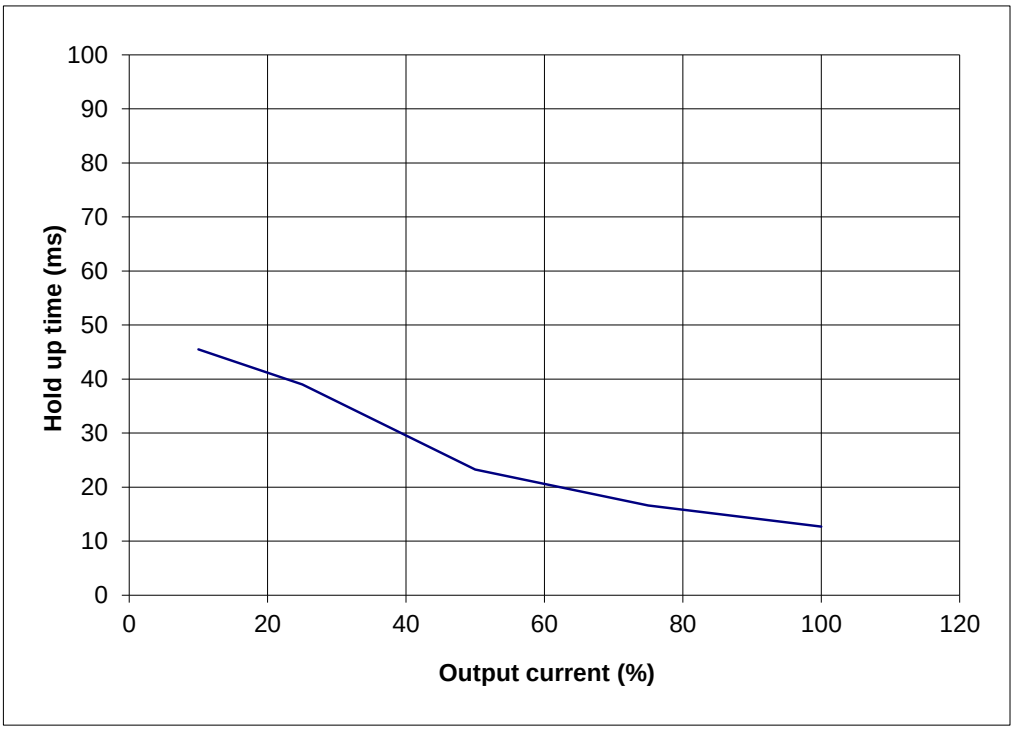
G150-18 1Φ200

Vin:230VAC



G150-18 3Φ200

Vin:200VAC

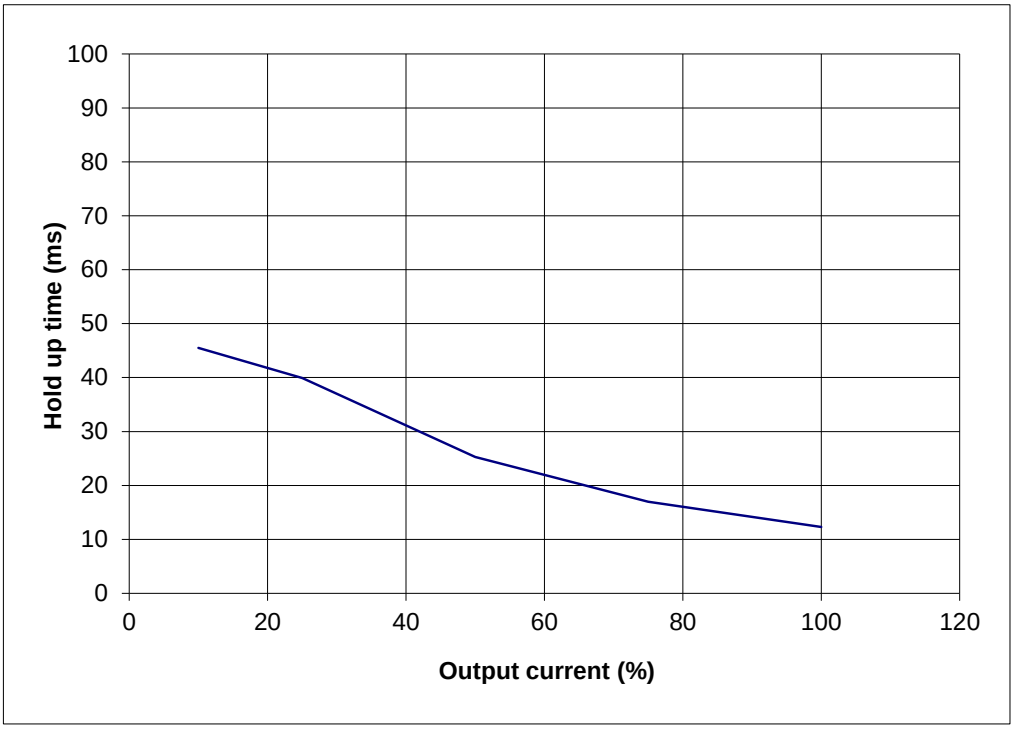


2.6 Holdup time characteristics

Conditions: Ta = 25°C
Vout:100%

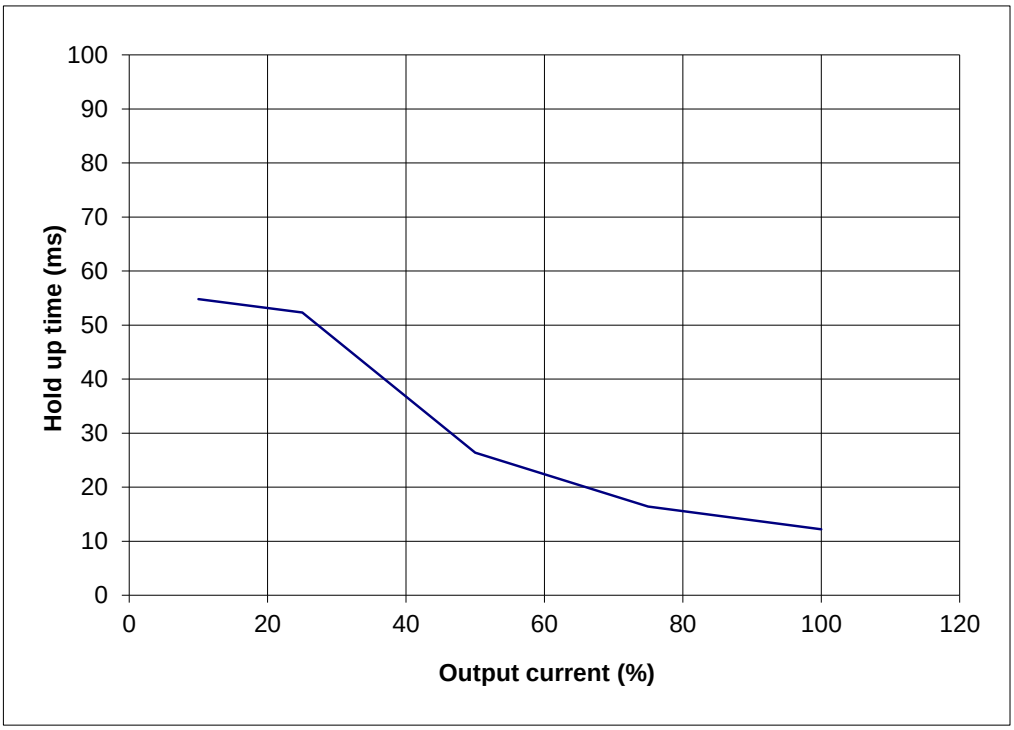
G150-18 3Φ400

Vin:400VAC



G150-18 3Φ480

Vin:480VAC

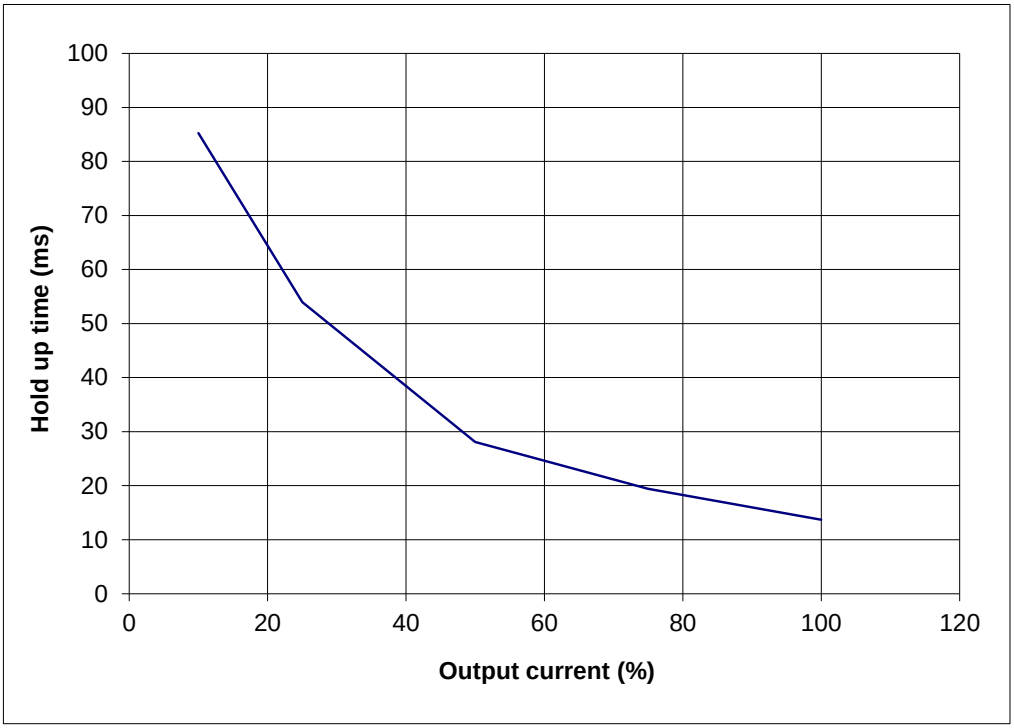


2.6 Holdup time characteristics

Conditions: Ta = 25°C
Vout:100%

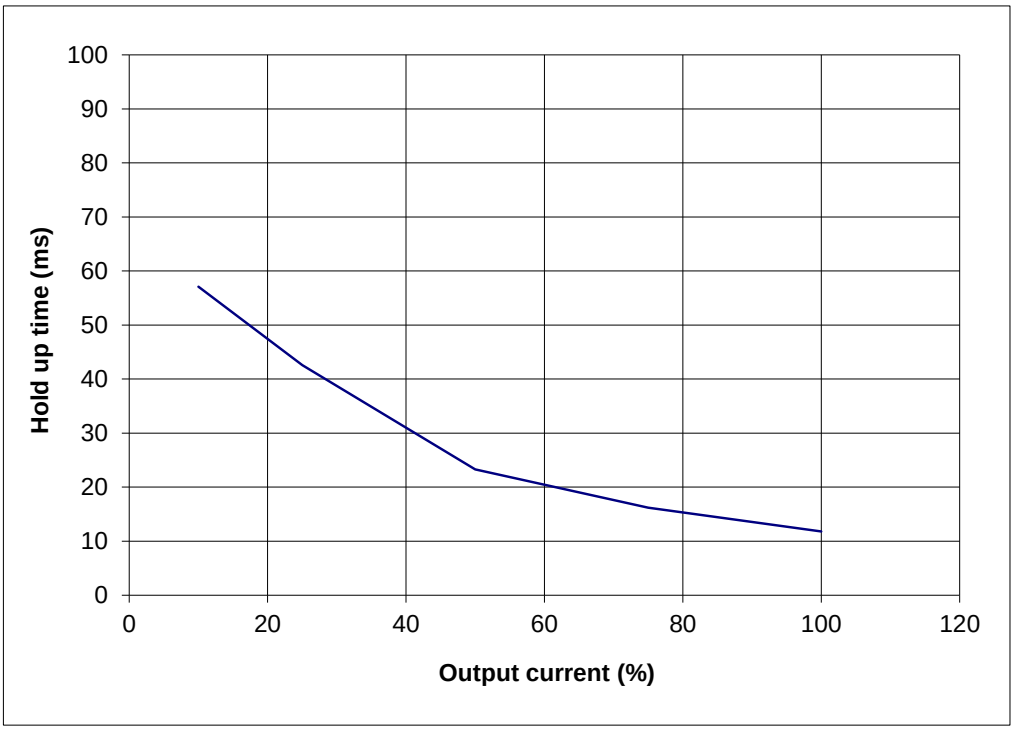
G600-4.5 1Φ200

Vin:230VAC



G600-4.5 3Φ200

Vin:200VAC

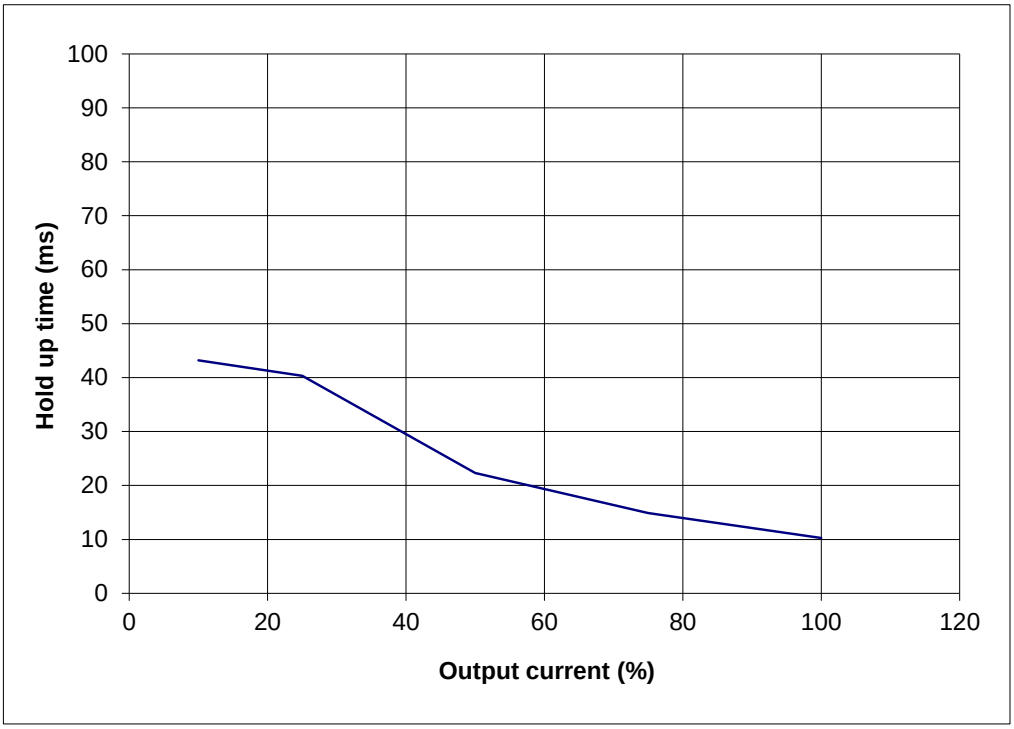


2.6 Holdup time characteristics

Conditions: Ta = 25°C
Vout:100%

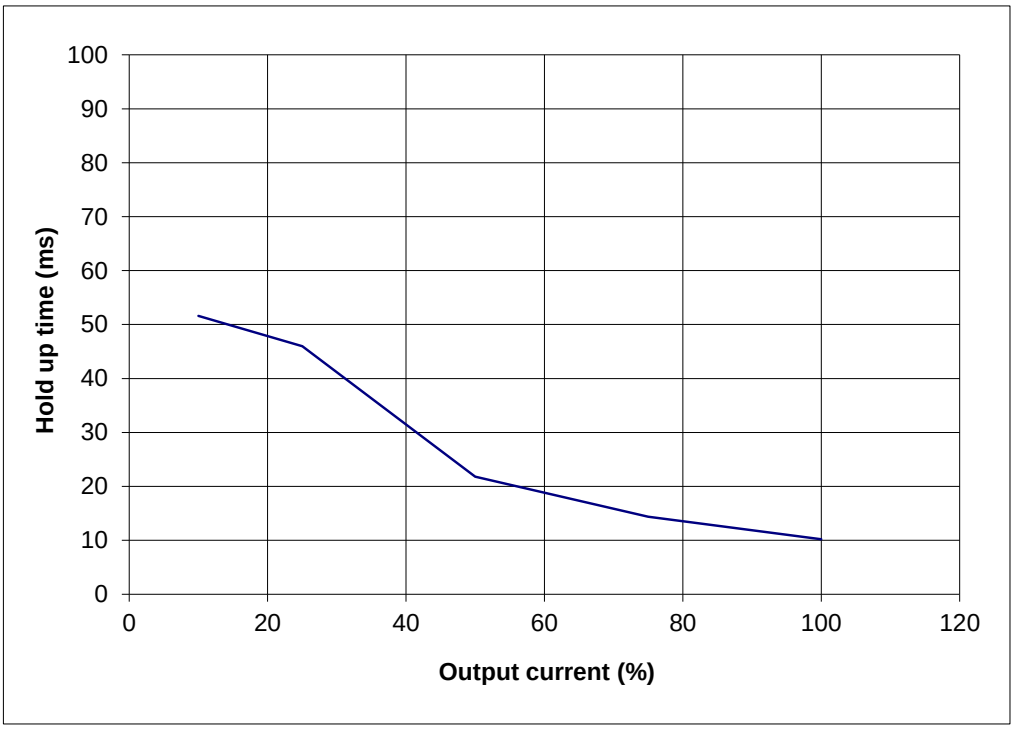
G600-4.5 3Φ400

Vin:400VAC



G600-4.5 3Φ480

Vin:480VAC



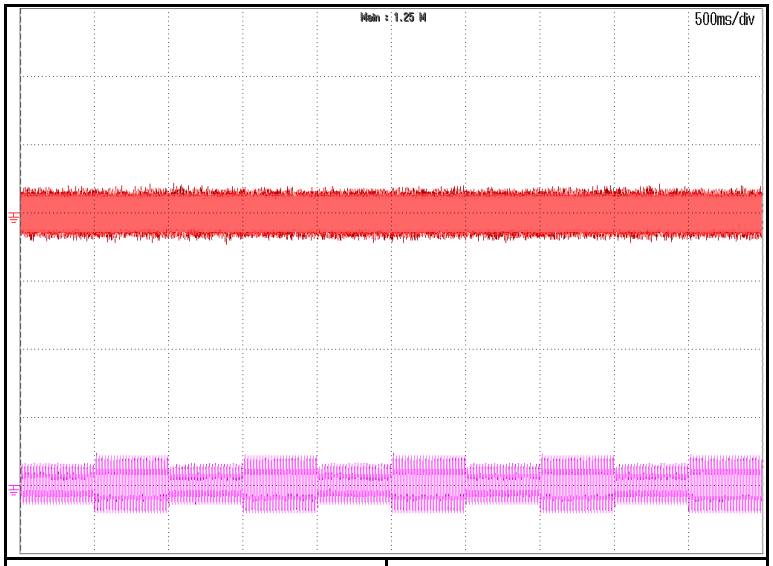
2.7 Dynamic line response characteristics

Ta = 25°C

C.V mode

G10-265 1Φ200

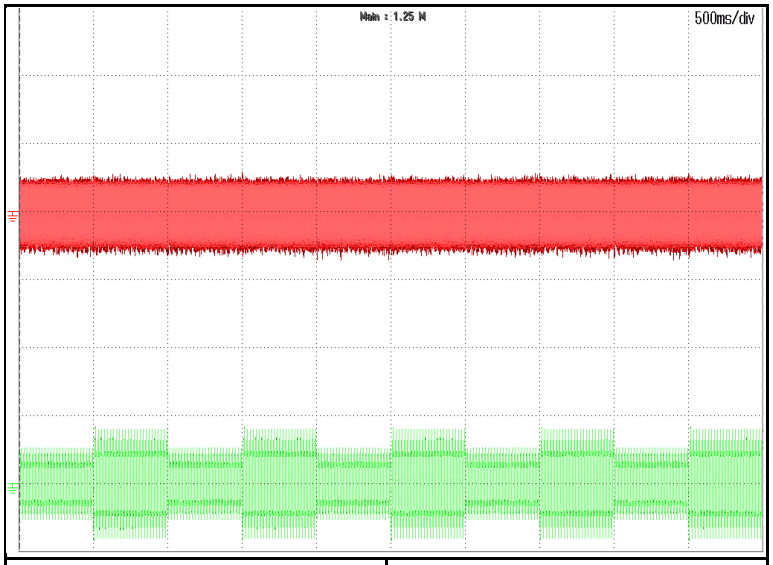
Conditions: Vout: 100%
Iout: 100%
Vin:170↔265V



Vout: 20 mV/DIV	500 ms/DIV
Vin: 1000 V/DIV	

G10-265 3Φ200

Conditions: Vout: 100%
Iout: 100%
Vin:170↔265V



Vout: 10 mV/DIV	500 ms/DIV
Vin: 500 V/DIV	

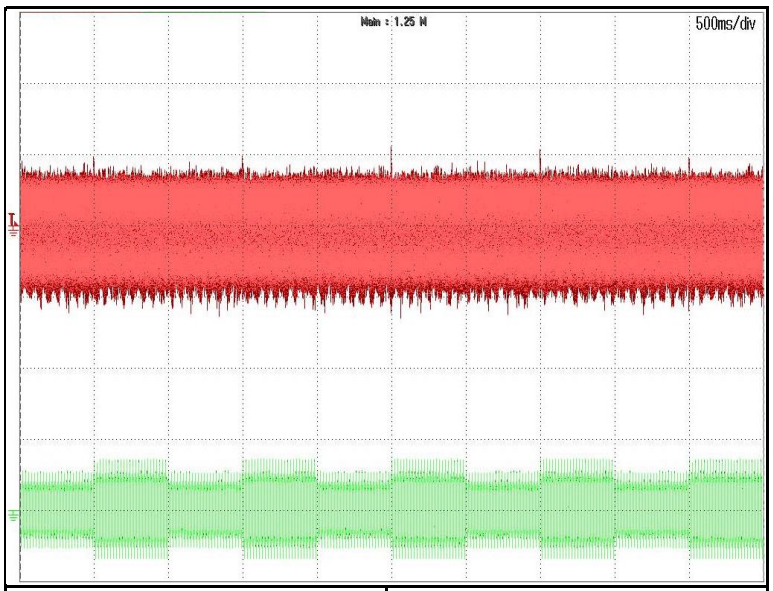
2.7 Dynamic line response characteristics

Ta = 25°C

C.V mode

G10-265 3Φ400

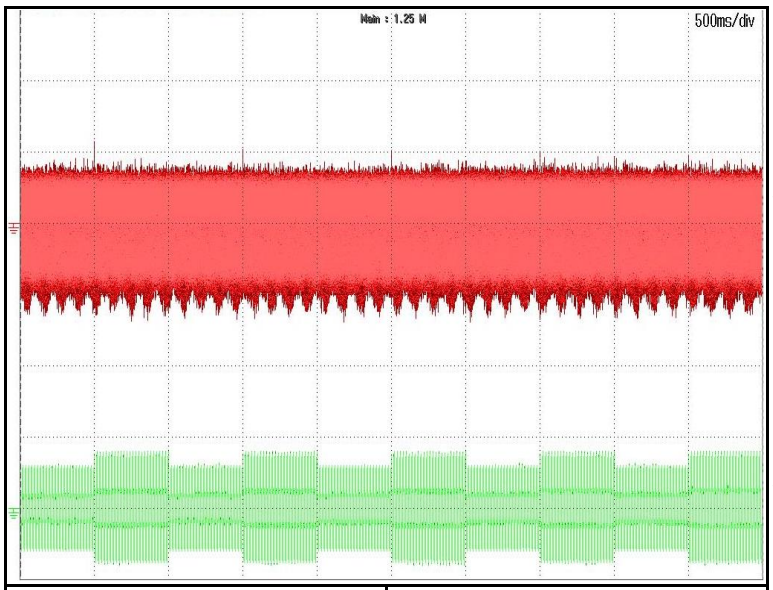
Conditions: Vout: 100%
Iout: 100%
Vin:342↔460V



Vout: 5 mV/DIV	500 ms/DIV
Vin: 1000 V/DIV	

G10-265 3Φ480

Conditions: Vout: 100%
Iout: 100%
Vin:342↔520V



Vout: 5 mV/DIV	500 ms/DIV
Vin: 1000 V/DIV	

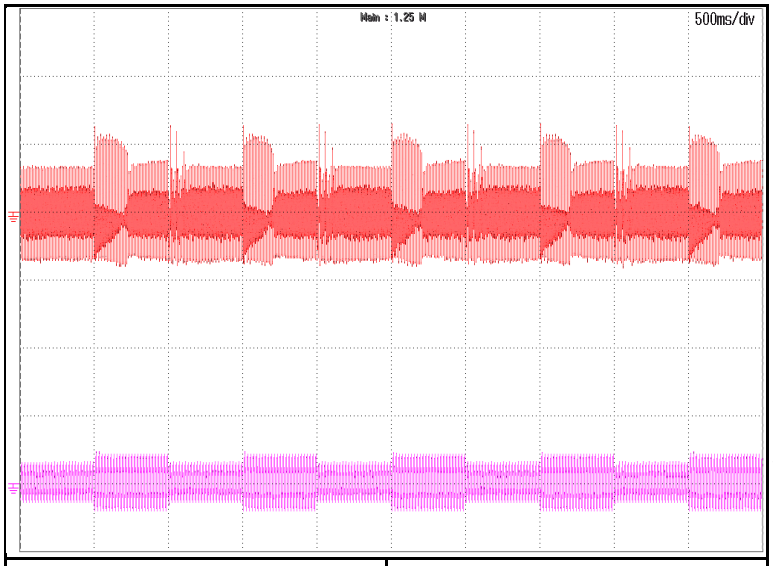
2.7 Dynamic line response characteristics

Ta = 25°C

C.C mode

G10-265 1Φ200

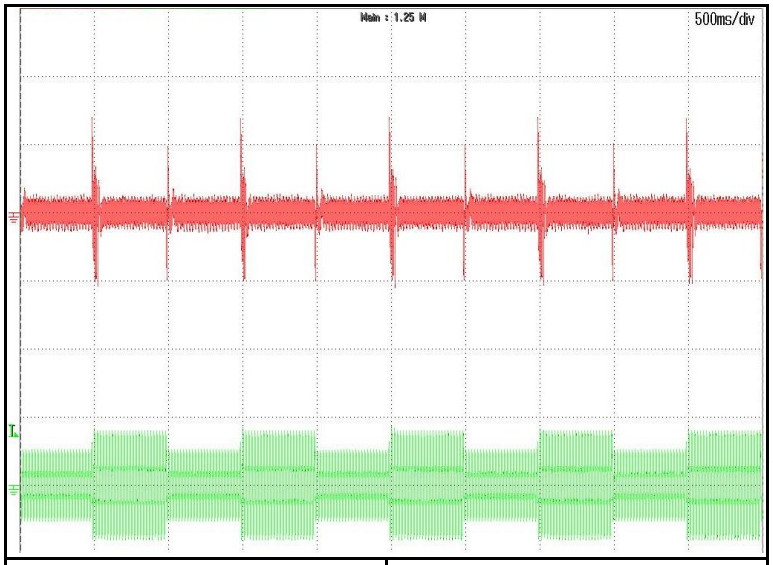
Conditions: Vout: 100%
Iout: 100%
Vin:170↔265V



Iout: 1.325$^{A}/_{DIV}$	500$^{ms}/_{DIV}$
Vin: 1000$^{V}/_{DIV}$	

G10-265 3Φ200

Conditions: Vout: 100%
Iout: 100%
Vin:170↔265V



Iout: 0.7$^{A}/_{DIV}$	500$^{ms}/_{DIV}$
Vin: 500$^{V}/_{DIV}$	

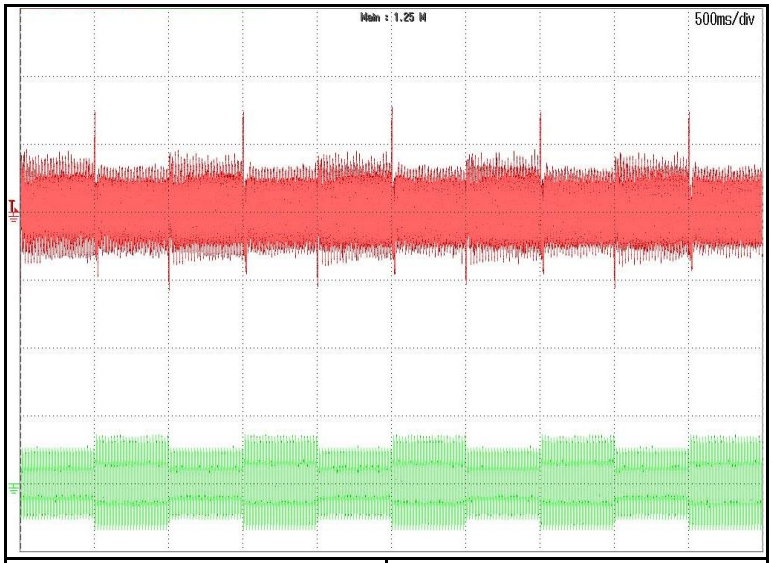
2.7 Dynamic line response characteristics

Ta = 25°C

C.C mode

G10-265 3Φ400

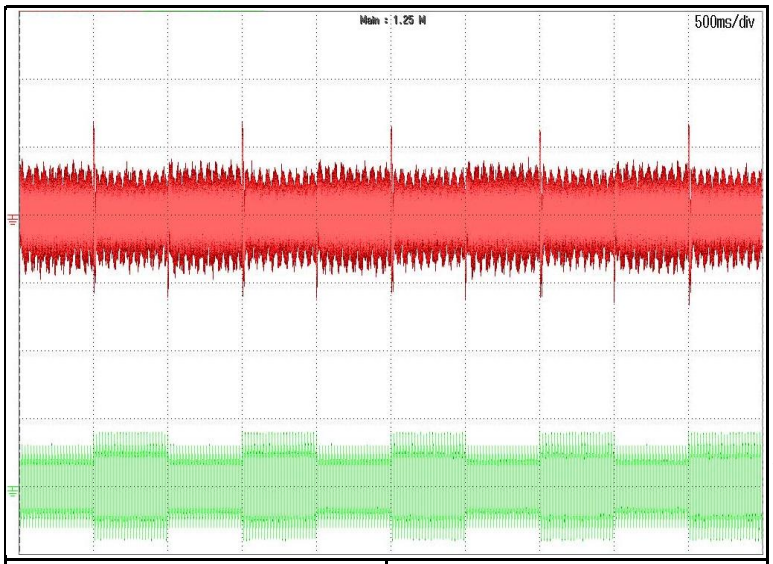
Conditions: Vout: 100%
Iout: 100%
Vin:342↔460V



Iout: 0.35A/DIV	500ms/DIV
Vin: 1000V/DIV	

G10-265 3Φ480

Conditions: Vout: 100%
Iout: 100%
Vin:342↔520V



Iout: 0.35A/DIV	500ms/DIV
Vin: 1000V/DIV	

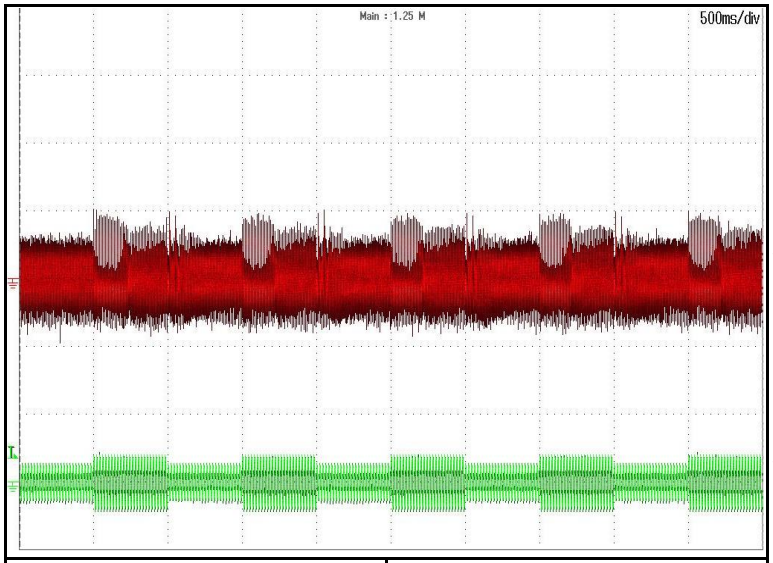
2.7 Dynamic line response characteristics

Ta = 25°C

C.V mode

G60-45 1Φ200

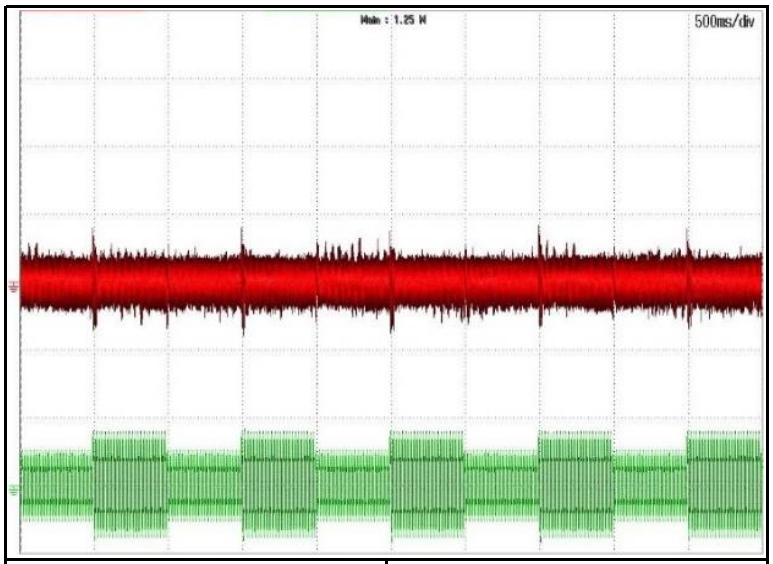
Conditions: Vout: 100%
Iout: 100%
Vin:170↔265V



Vout: 20 mV/DIV	500 ms/DIV
Vin: 500 V/DIV	

G60-45 3Φ200

Conditions: Vout: 100%
Iout: 100%
Vin:170↔265V



Vout: 20 mV/DIV	500 ms/DIV
Vin: 500 V/DIV	

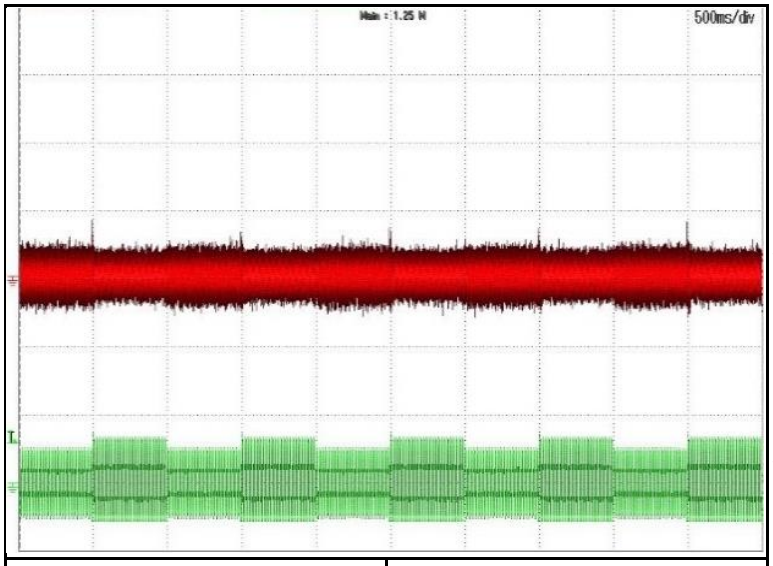
2.7 Dynamic line response characteristics

Ta = 25°C

C.V mode

G60-45 3Φ400

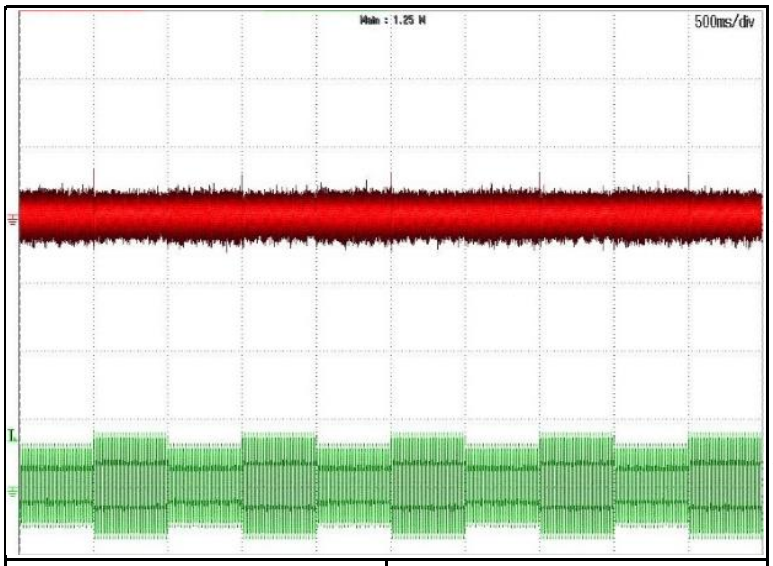
Conditions: Vout: 100%
Iout: 100%
Vin:342↔460V



Vout: 20 mV/DIV	500 ms/DIV
Vin: 1000 V/DIV	

G60-45 3Φ480

Conditions: Vout: 100%
Iout: 100%
Vin:396↔520V



Vout: 20 mV/DIV	500 ms/DIV
Vin: 1000 V/DIV	

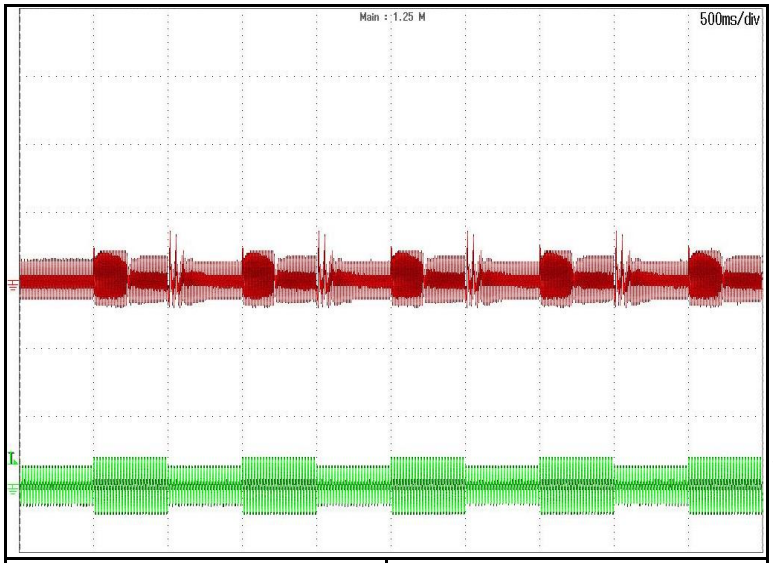
2.7 Dynamic line response characteristics

Ta = 25°C

C.C mode

G60-45 1Φ200

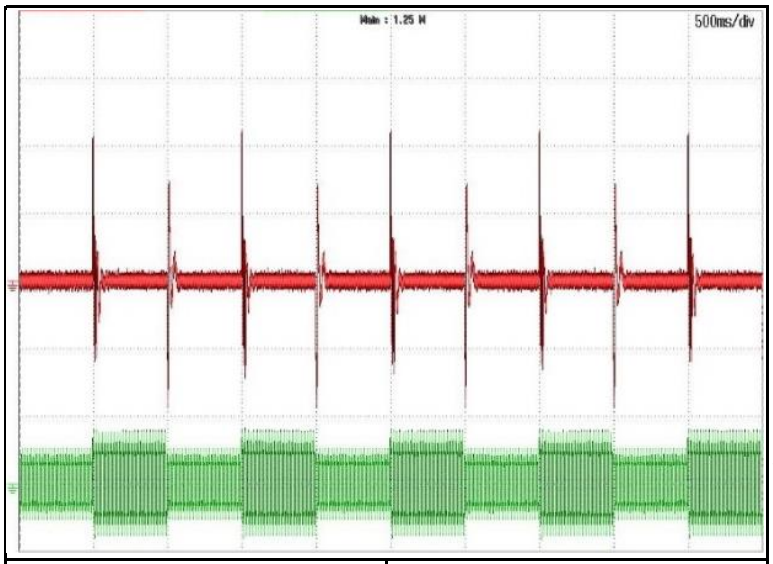
Conditions: Vout: 100%
Iout: 100%
Vin:170↔265V



Iout:0.375$^{A}/_{DIV}$	500$^{ms}/_{DIV}$
Vin: 500$^{V}/_{DIV}$	

G60-45 3Φ200

Conditions: Vout: 100%
Iout: 100%
Vin:170↔265V



Iout:0.075$^{A}/_{DIV}$	500$^{ms}/_{DIV}$
Vin: 500$^{V}/_{DIV}$	

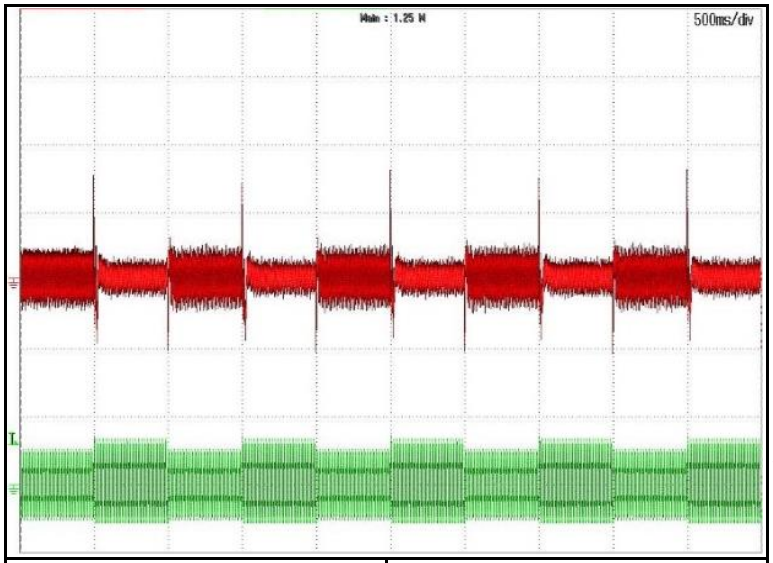
2.7 Dynamic line response characteristics

Ta = 25°C

C.C mode

G60-45 3Φ400

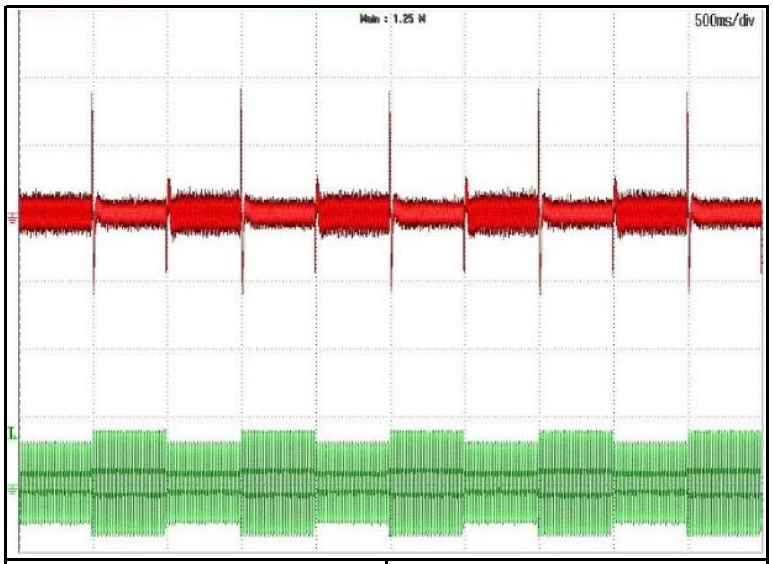
Conditions: Vout: 100%
Iout: 100%
Vin:342↔460V



Iout: 37.5$^{mA}/_{DIV}$	500$^{ms}/_{DIV}$
Vin: 1000$^{V}/_{DIV}$	

G60-45 3Φ480

Conditions: Vout: 100%
Iout: 100%
Vin:396↔520V



Iout: 37.5$^{mA}/_{DIV}$	500$^{ms}/_{DIV}$
Vin: 1000$^{V}/_{DIV}$	

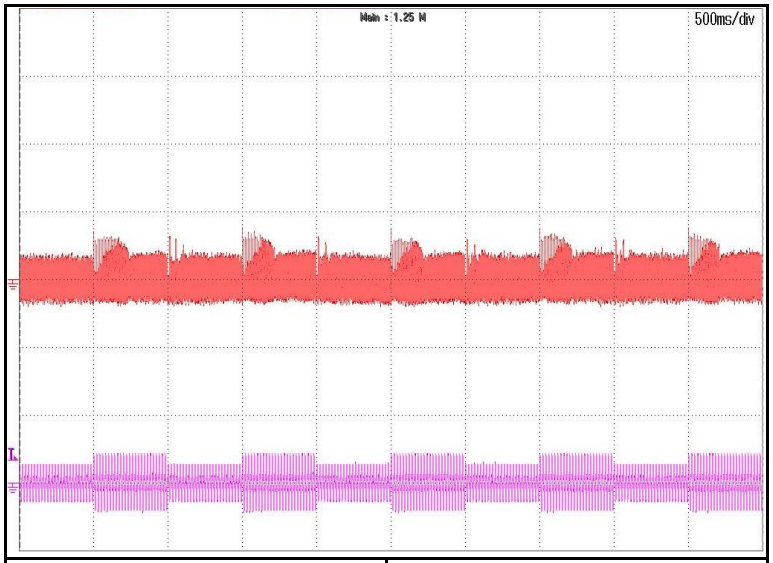
2.7 Dynamic line response characteristics

Ta = 25°C

C.V mode

G150-18 1Φ200

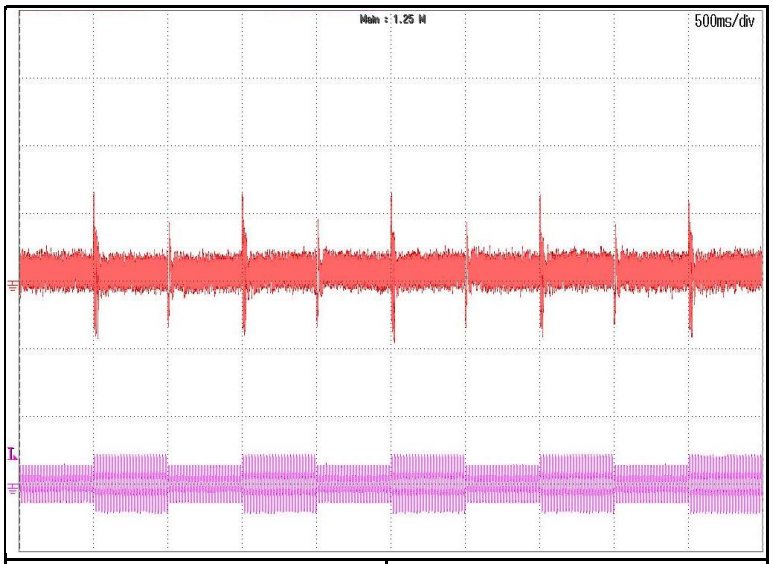
Conditions: Vout: 100%
Iout: 100%
Vin:170↔265V



Vout: 50 mV/DIV	500 ms/DIV
Vin: 1000 V/DIV	

G150-18 3Φ200

Conditions: Vout: 100%
Iout: 100%
Vin:170↔265V



Vout: 20 mV/DIV	500 ms/DIV
Vin: 1000 V/DIV	

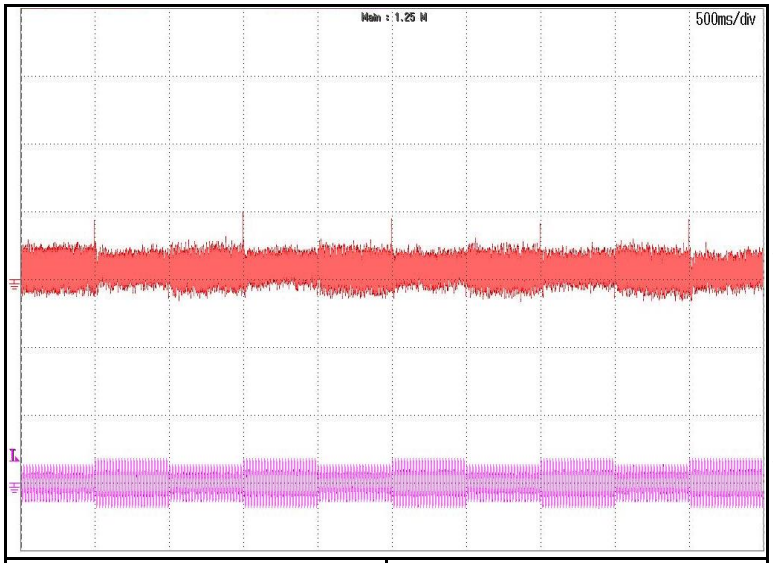
2.7 Dynamic line response characteristics

Ta = 25°C

C.V mode

G150-18 3Φ400

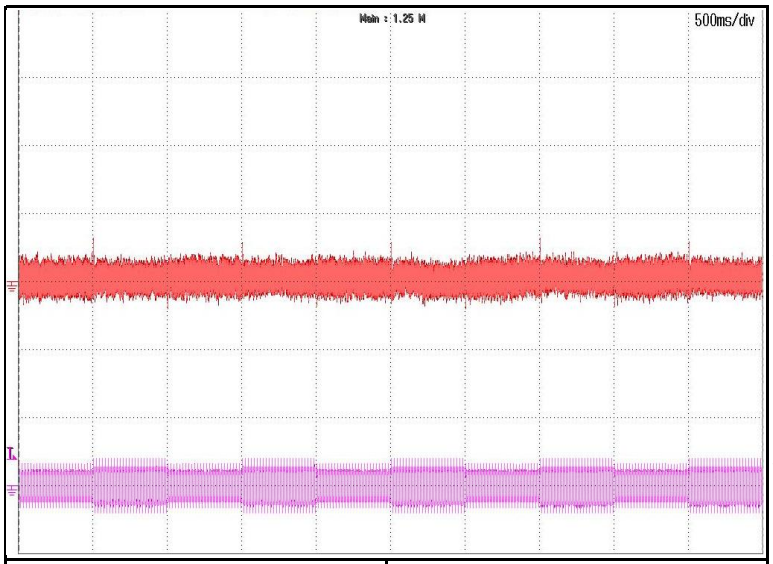
Conditions: Vout: 100%
Iout: 100%
Vin:342↔460V



Vout: 20$^{mV}/_{DIV}$	500$^{ms}/_{DIV}$
Vin: 2000$^{V}/_{DIV}$	

G150-18 3Φ480

Conditions: Vout: 100%
Iout: 100%
Vin:396↔520V



Vout: 20$^{mV}/_{DIV}$	500$^{ms}/_{DIV}$
Vin: 2000$^{V}/_{DIV}$	

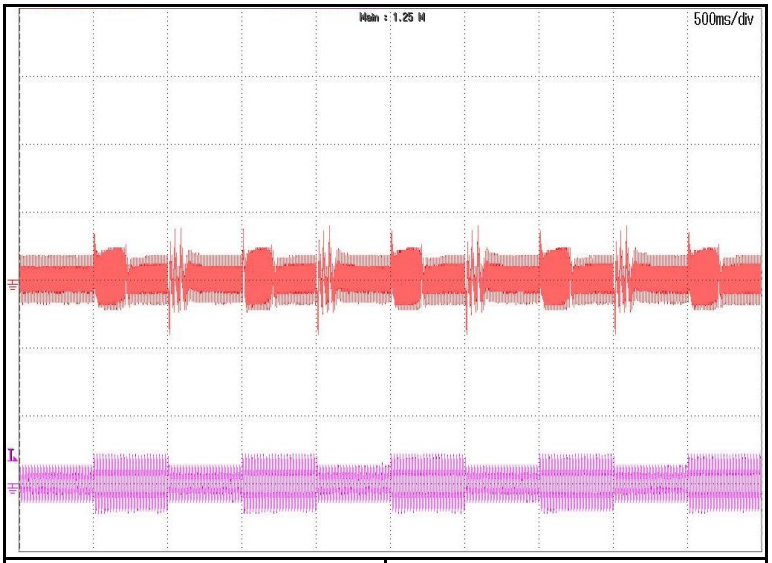
2.7 Dynamic line response characteristics

Ta = 25°C

C.C mode

G150-18 1Φ200

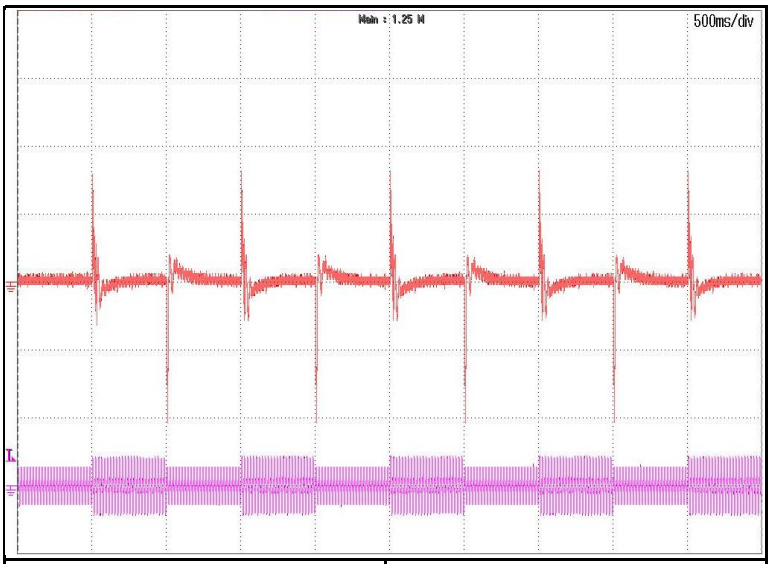
Conditions: Vout: 100%
Iout: 100%
Vin:170↔265V



Iout: 60mA/DIV	500ms/DIV
Vin: 1000V/DIV	

G150-18 3Φ200

Conditions: Vout: 100%
Iout: 100%
Vin:170↔265V



Iout: 24mA/DIV	500ms/DIV
Vin: 1000V/DIV	

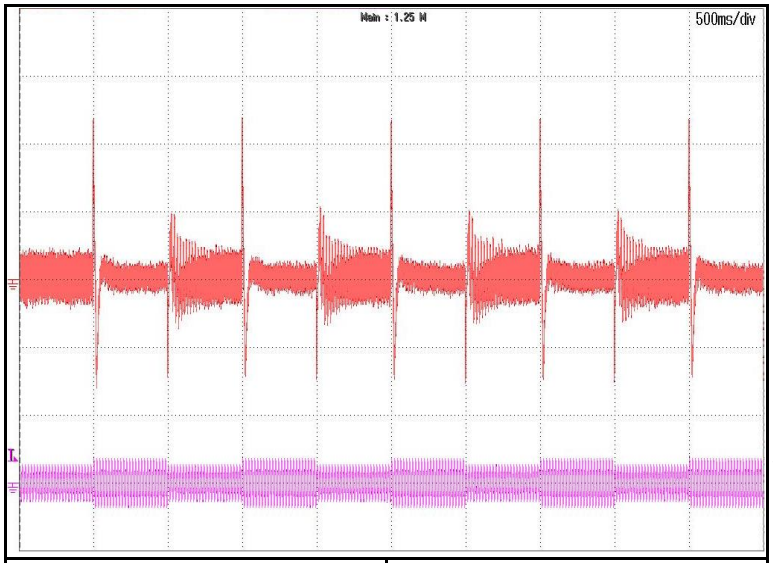
2.7 Dynamic line response characteristics

Ta = 25°C

C.C mode

G150-18 3Φ400

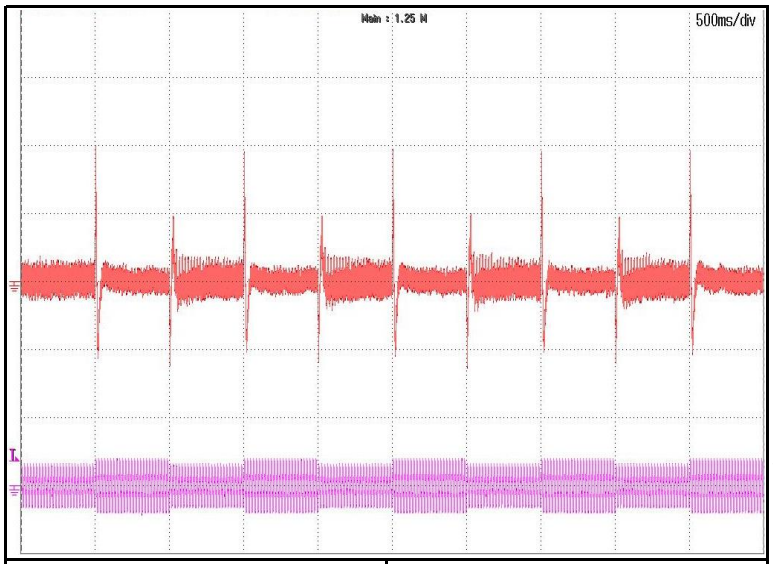
Conditions: Vout: 100%
Iout: 100%
Vin:342↔460V



Iout: 6$^{mA}/_{DIV}$	500$^{ms}/_{DIV}$
Vin: 2000$^{V}/_{DIV}$	

G150-18 3Φ480

Conditions: Vout: 100%
Iout: 100%
Vin:396↔520V



Iout: 6$^{mA}/_{DIV}$	500$^{ms}/_{DIV}$
Vin: 2000$^{V}/_{DIV}$	

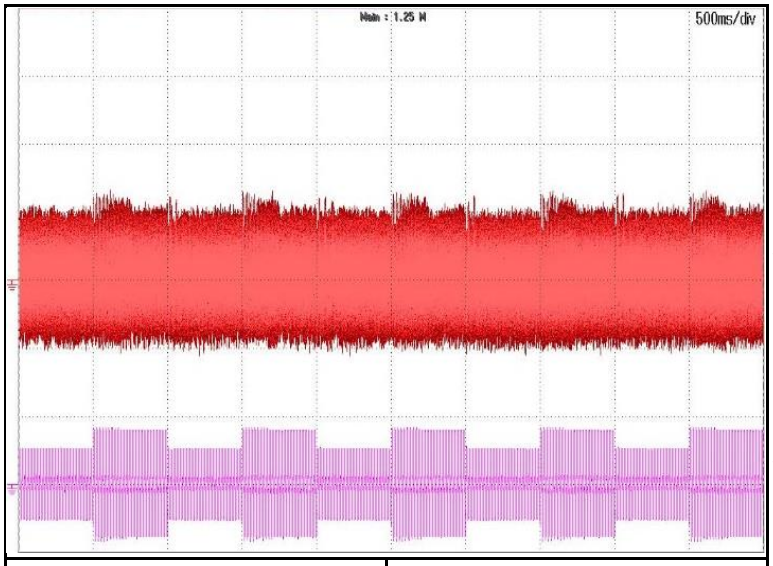
2.7 Dynamic line response characteristics

Ta = 25°C

C.V mode

G600-4.5 1Φ200

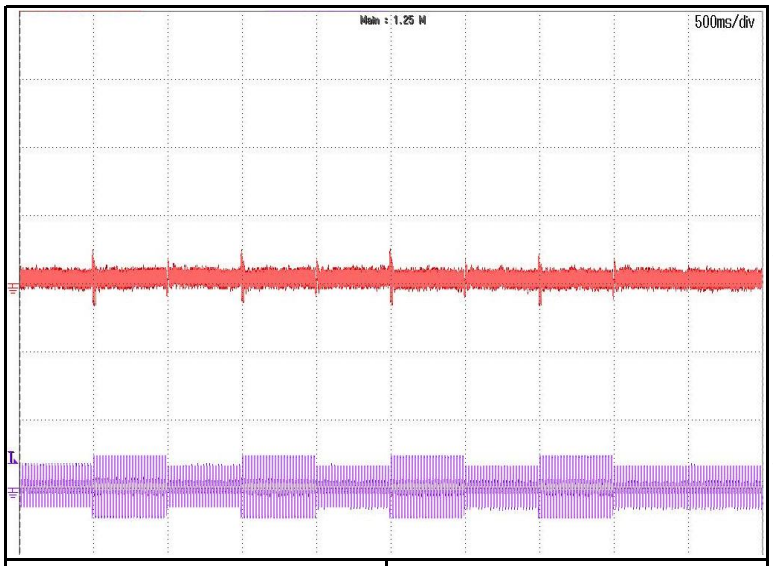
Conditions: Vout: 100%
Iout: 100%
Vin:170↔265V



Vout: 200mV/DIV	500ms/DIV
Vin: 500V/DIV	

G600-4.5 3Φ200

Conditions: Vout: 100%
Iout: 100%
Vin:170↔265V



Vout: 200mV/DIV	500ms/DIV
Vin: 500V/DIV	

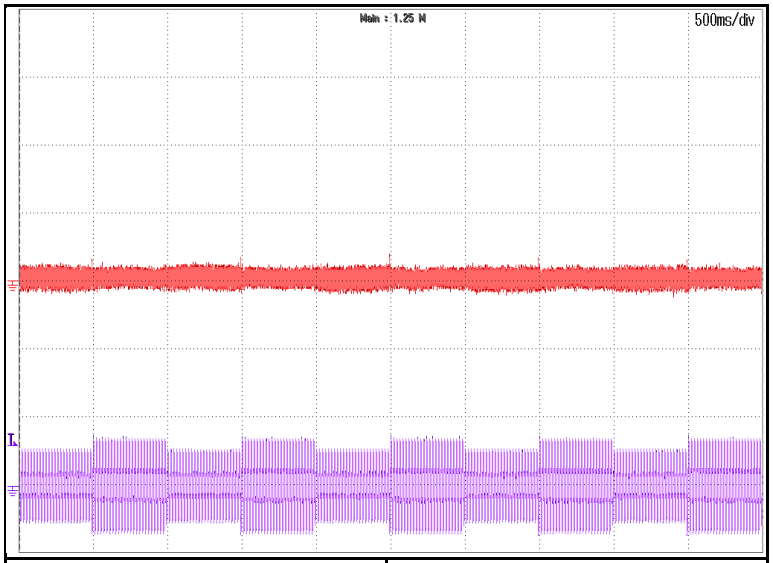
2.7 Dynamic line response characteristics

Ta = 25°C

C.V mode

G600-4.5 3Φ400

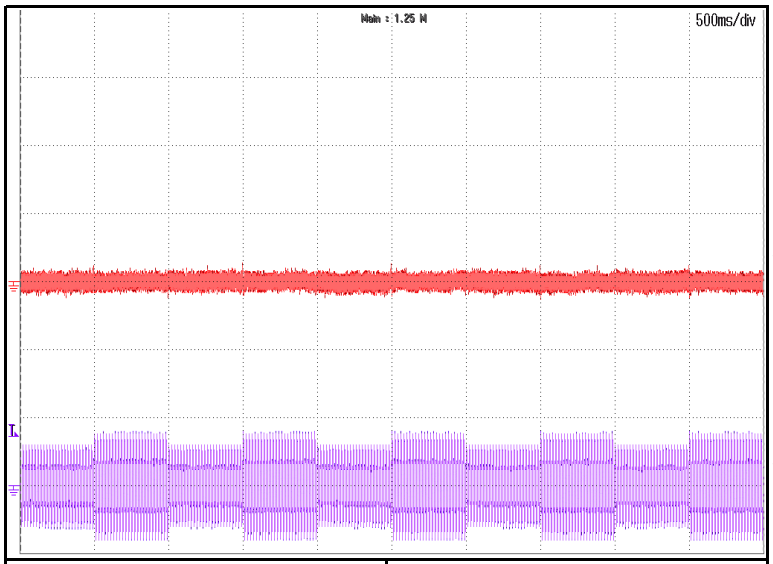
Conditions: Vout: 100%
Iout: 100%
Vin:342↔460V



Vout: 200mV/DIV	500ms/DIV
Vin: 1000V/DIV	

G600-4.5 3Φ480

Conditions: Vout: 100%
Iout: 100%
Vin:342↔520V



Vout: 200mV/DIV	500ms/DIV
Vin: 1000V/DIV	

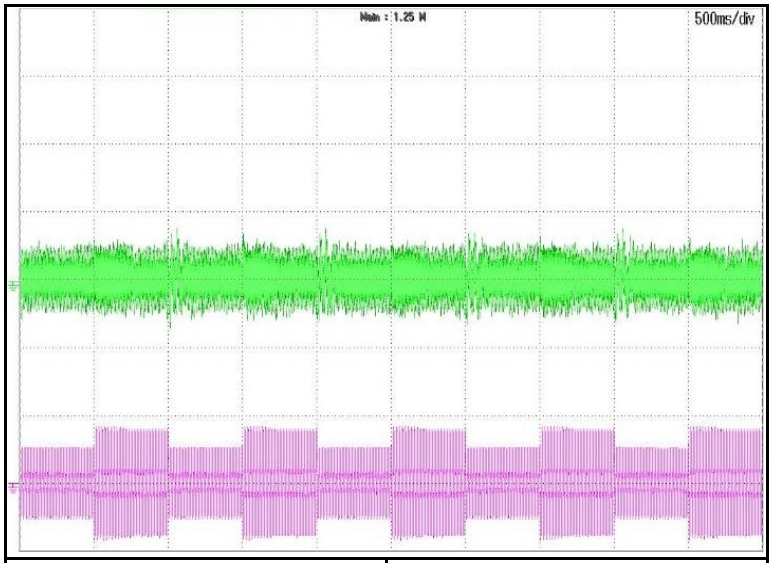
2.7 Dynamic line response characteristics

Ta = 25°C

C.C mode

G600-4.5 1Φ200

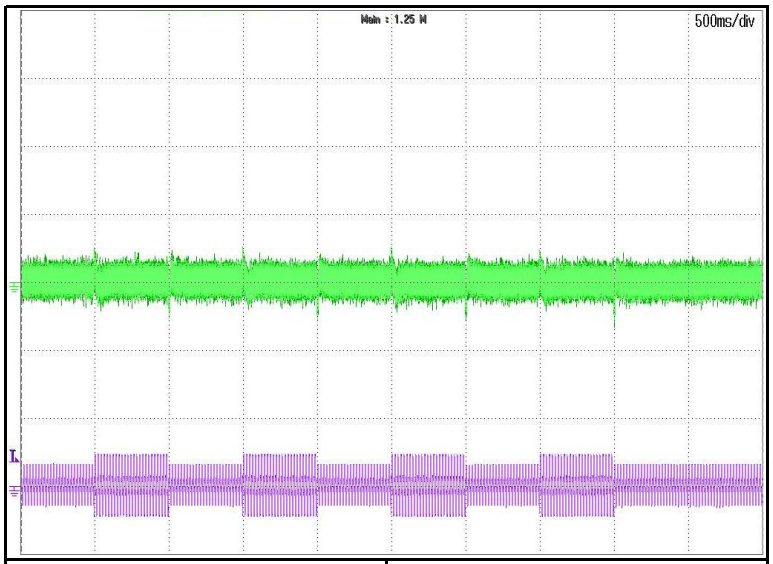
Conditions: Vout: 100%
Iout: 100%
Vin:170↔265V



Iout: 20$^{mA}/_{DIV}$	500$^{ms}/_{DIV}$
Vin: 500$^{V}/_{DIV}$	

G600-4.5 3Φ200

Conditions: Vout: 100%
Iout: 100%
Vin:170↔265V



Iout: 20$^{mA}/_{DIV}$	500$^{ms}/_{DIV}$
Vin: 500$^{V}/_{DIV}$	

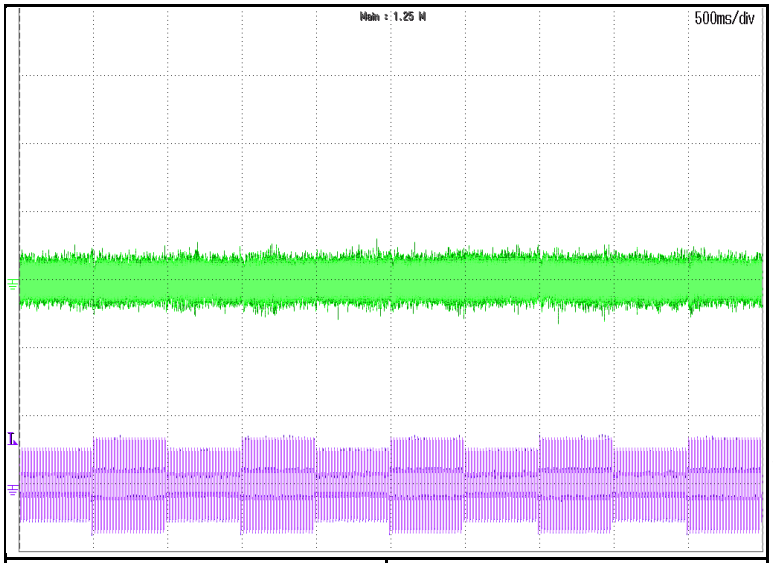
2.7 Dynamic line response characteristics

Ta = 25°C

C.C mode

G600-4.5 3Φ400

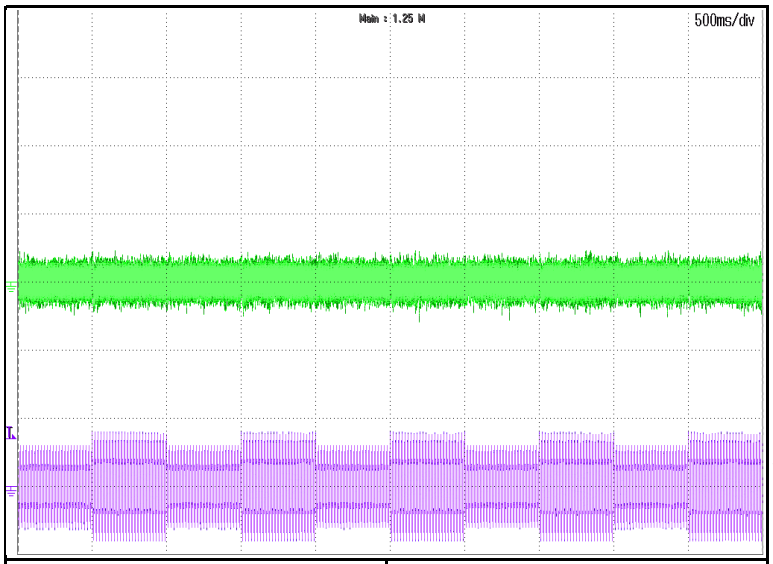
Conditions: Vout: 100%
Iout: 100%
Vin:342↔460V



Iout: 20mA/DIV	500ms/DIV
Vin: 1000V/DIV	

G600-4.5 3Φ480

Conditions: Vout: 100%
Iout: 100%
Vin:342↔520V



Iout: 20mA/DIV	500ms/DIV
Vin: 1000V/DIV	

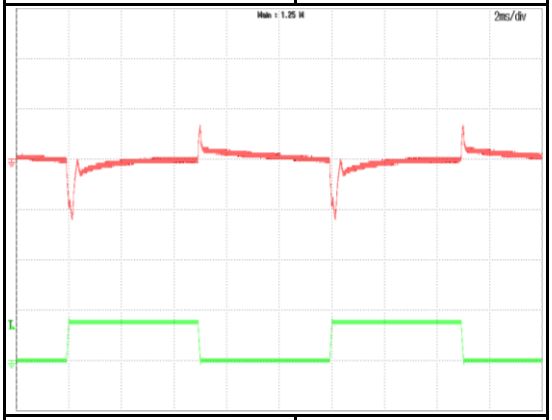
2.8 Dynamic load response characteristics

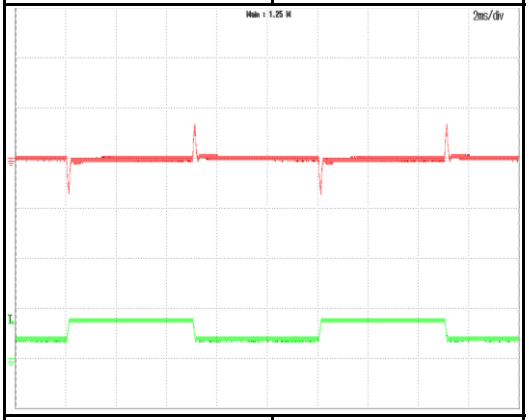
C.V mode

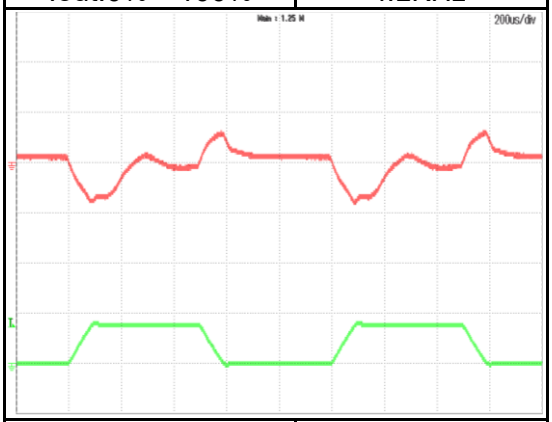
Conditions: Vin: Nominal
Vout: 100%
Ta = 25°C

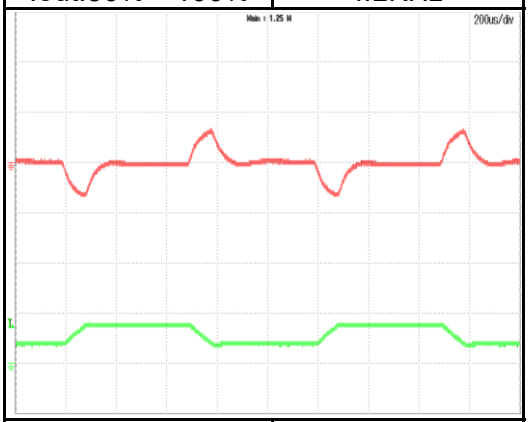
Load current: tr=tf=100us

G10-265

Iout:0%↔100%	f:100Hz
	
$1^{V}/_{DIV}$	$2^{ms}/_{DIV}$
6.80%	-12.00%

Iout:50%↔100%	f:100Hz
	
$0.5^{V}/_{DIV}$	$2^{ms}/_{DIV}$
3.40%	-3.60%

Iout:0%↔100%	f:1KHz
	
$1^{V}/_{DIV}$	$200^{\mu s}/_{DIV}$
6.40%	-8.40%

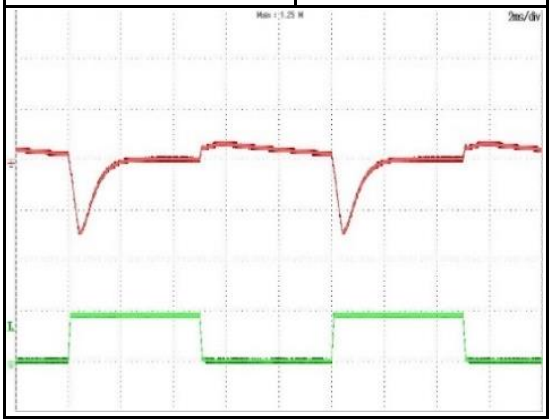
Iout:50%↔100%	f:1KHz
	
$0.5^{V}/_{DIV}$	$200^{\mu s}/_{DIV}$
3.40%	-3.40%

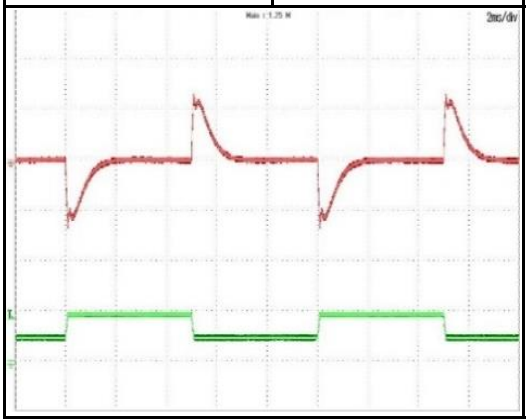
2.8 Dynamic load response characteristics
C.V mode

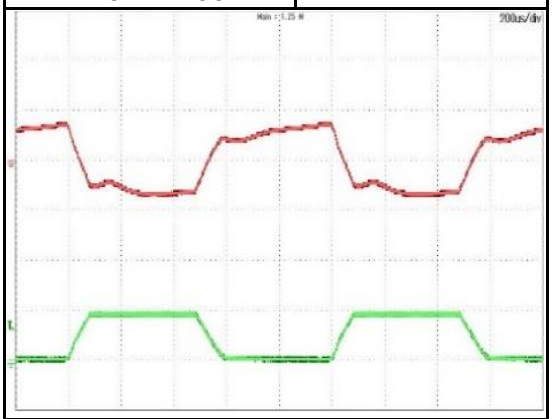
Conditions: Vin: Nominal
Vout: 100%
Ta = 25°C

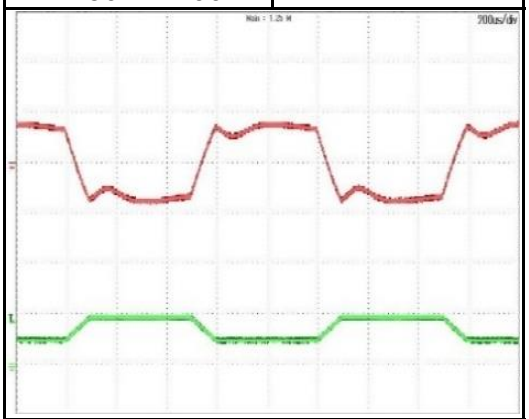
Load current: tr=tf=100us

G60-45

Iout:0%↔100%	f:100Hz
	
$2^{V}/_{DIV}$	$2^{ms}/_{DIV}$
1.20%	-4.93%

Iout:50%↔100%	f:100Hz
	
$0.2^{V}/_{DIV}$	$2^{ms}/_{DIV}$
0.44%	-0.45%

Iout:0%↔100%	f:1KHz
	
$0.5^{V}/_{DIV}$	$200^{\mu s}/_{DIV}$
0.63%	-0.60%

Iout:50%↔100%	f:1KHz
	
$0.2^{V}/_{DIV}$	$200^{\mu s}/_{DIV}$
0.28%	-0.28%

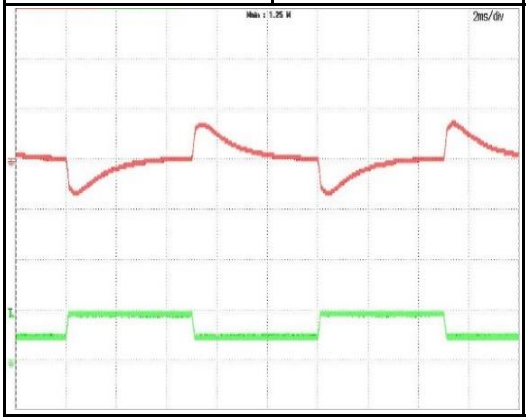
2.8 Dynamic load response characteristics
C.V mode

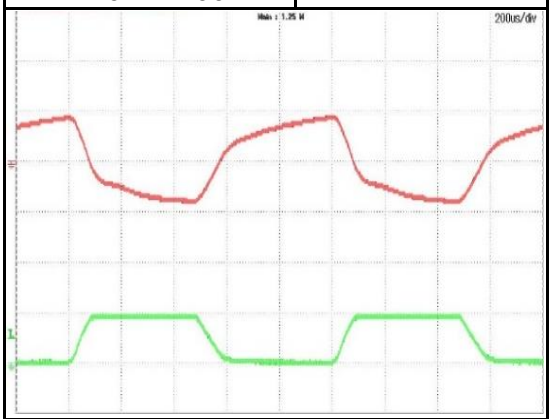
Conditions: Vin: Nominal
Vout: 100%
Ta = 25°C

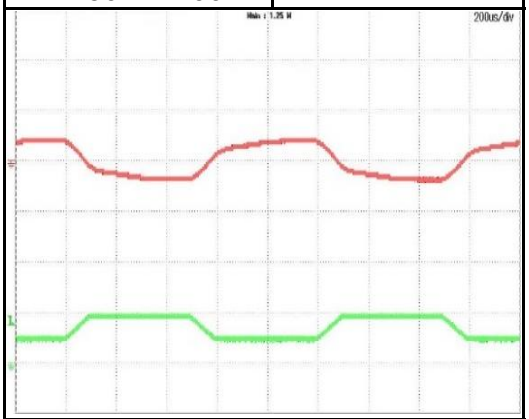
Load current: tr=tf=100us

G150-18

Iout:0%↔100%	f:100Hz
	
$2^{V}/_{DIV}$	$2^{ms}/_{DIV}$
0.75%	-1.76%

Iout:50%↔100%	f:100Hz
	
$0.5^{V}/_{DIV}$	$2^{ms}/_{DIV}$
0.25%	-0.24%

Iout:0%↔100%	f:1KHz
	
$0.5^{V}/_{DIV}$	$200^{\mu s}/_{DIV}$
0.31%	-0.28%

Iout:50%↔100%	f:1KHz
	
$0.5^{V}/_{DIV}$	$200^{\mu s}/_{DIV}$
0.15%	-0.15%

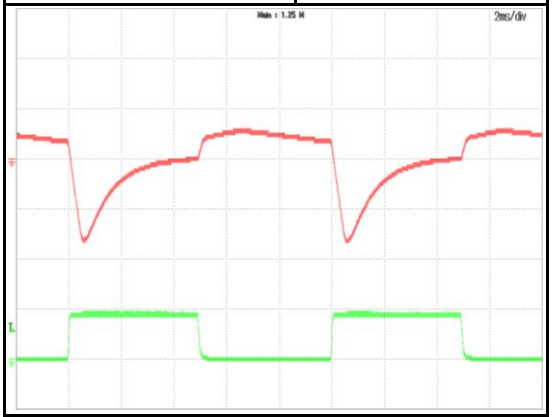
2.8 Dynamic load response characteristics

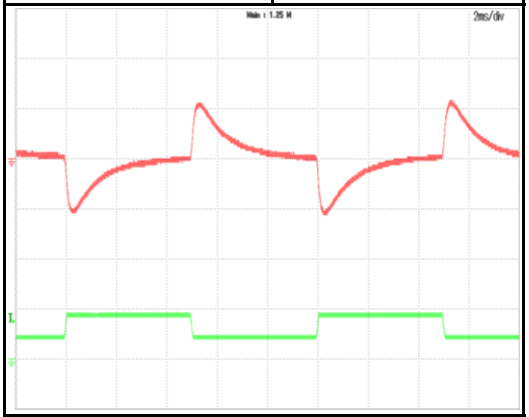
C.V mode

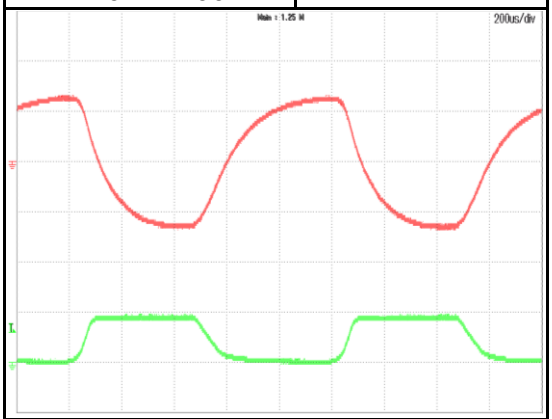
Conditions: Vin: Nominal
Vout: 100%
Ta = 25°C

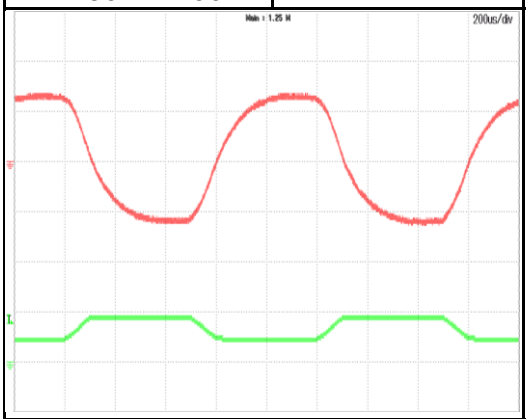
Load current: tr=tf=100us

G600-4.5

Iout:0%↔100%	f:100Hz
	
$5^{V}/_{DIV}$	$2^{ms}/_{DIV}$
0.50%	-1.40%

Iout:50%↔100%	f:100Hz
	
$1^{V}/_{DIV}$	$2^{ms}/_{DIV}$
0.27%	-0.19%

Iout:0%↔100%	f:1KHz
	
$1^{V}/_{DIV}$	$200^{\mu s}/_{DIV}$
0.22%	-0.23%

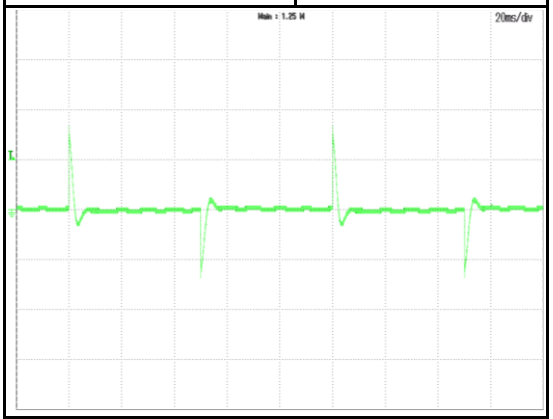
Iout:50%↔100%	f:1KHz
	
$0.5^{V}/_{DIV}$	$200^{\mu s}/_{DIV}$
0.11%	-0.11%

2.8 Dynamic load response characteristics
C.C mode

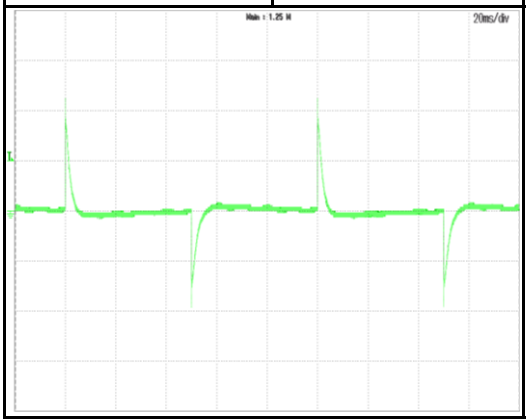
Conditions: Vin: Nominal
Ta = 25°C

G10-265

Io=265A

Vout:9↔7.5V	f:10Hz
	
$35^{A}/_{DIV}$	$20^{ms}/_{DIV}$
-17.96%	

Io=132.5A

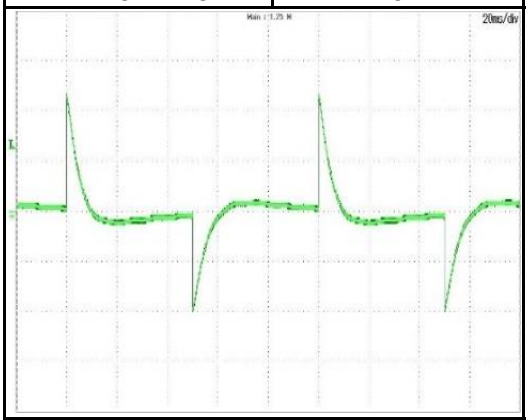
Vout:9↔7.5V	f:10Hz
	
$14^{A}/_{DIV}$	$20^{ms}/_{DIV}$
-10.15%	

G60-45

Io=45A

Vout:54↔45V	f:10Hz
	
$5^{A}/_{DIV}$	$20^{ms}/_{DIV}$
-17.33%	

Io=22.5A

Vout:54↔45V	f:10Hz
	
$2^{A}/_{DIV}$	$20^{ms}/_{DIV}$
-8.89%	

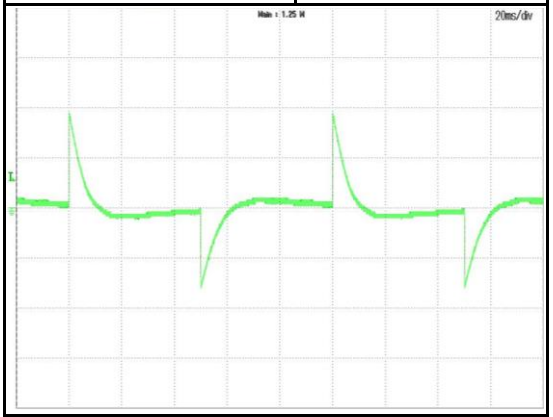
2.8 Dynamic load response characteristics
C.C mode

Conditions: Vin: Nominal
Ta = 25°C

G150-18

Io=18A

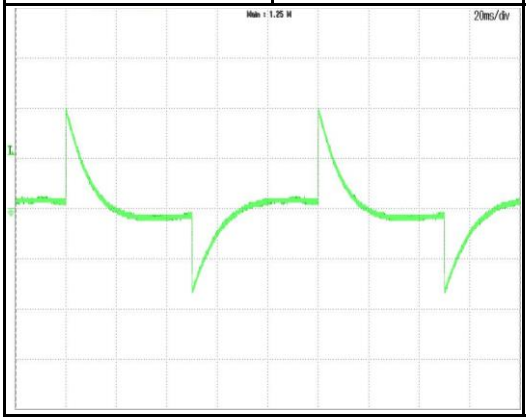
Vout:135↔112.5V	f:10Hz



$2^{A}/_{DIV}$	$20^{ms}/_{DIV}$
-17.78%	

Io=9A

Vout:135↔112.5V	f:10Hz

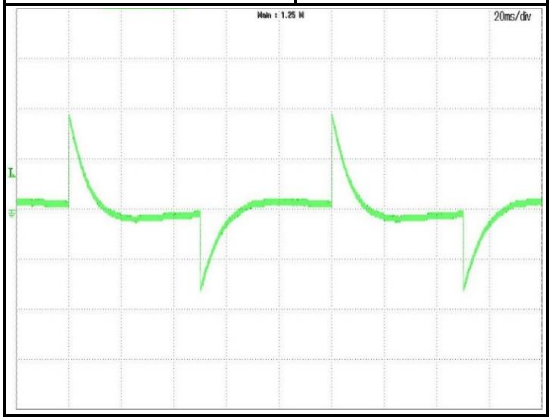


$1^{A}/_{DIV}$	$20^{ms}/_{DIV}$
-9.33%	

G600-4.5

Io=4.5A

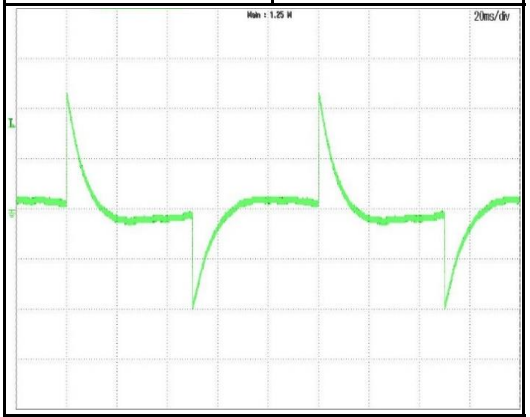
Vout:540↔450V	f:10Hz



$0.5^{A}/_{DIV}$	$20^{ms}/_{DIV}$
-18.00%	

Io=2.25A

Vout:540↔450V	f:10Hz



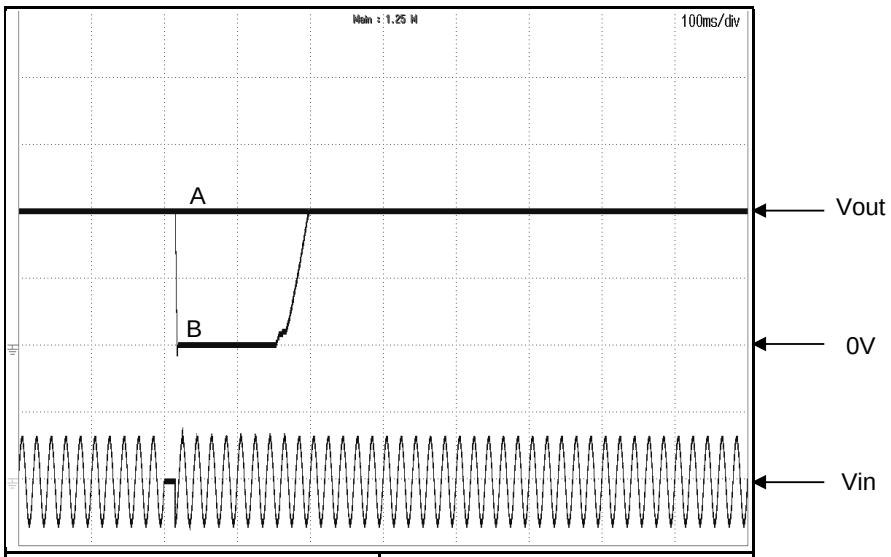
$0.2^{A}/_{DIV}$	$20^{ms}/_{DIV}$
-8.80%	

2.9 Response to brown-out characteristics
C.V mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G10-265 1Φ200

Vin:230VAC

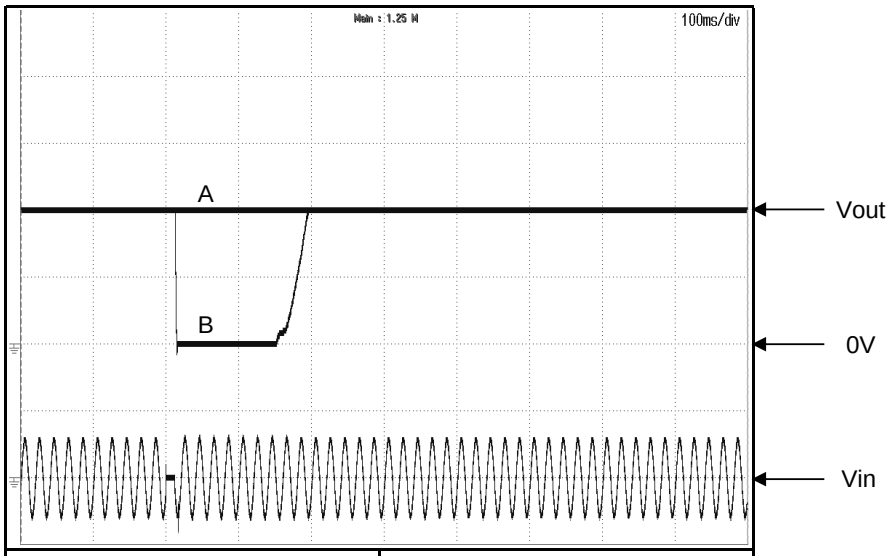


Vout: $5^{V}/_{DIV}$	$100^{ms}/_{DIV}$
Vin: $500^{V}/_{DIV}$	

Brown-out time
A - 14ms
B - 15ms

G10-265 3Φ200

Vin:200VAC



Vout: $5^{V}/_{DIV}$	$100^{ms}/_{DIV}$
Vin: $500^{V}/_{DIV}$	

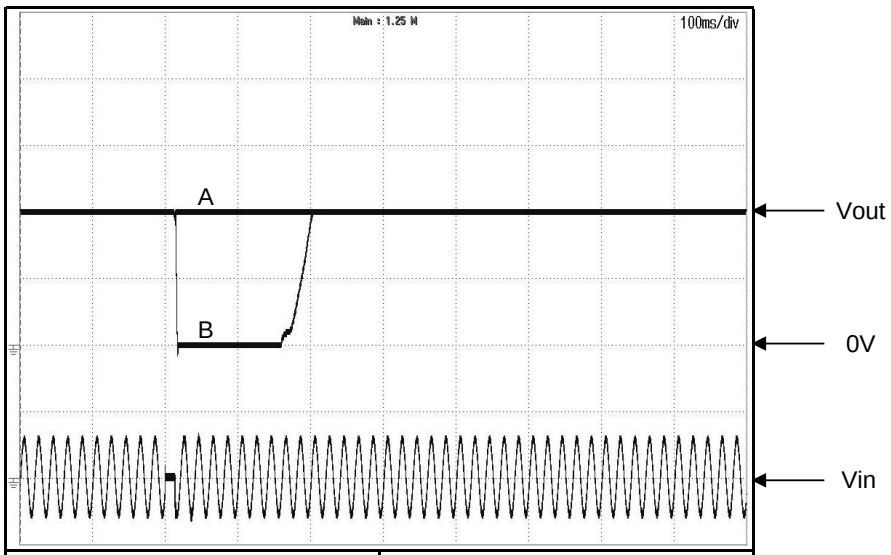
Brown-out time
A - 11ms
B - 12ms

2.9 Response to brown-out characteristics
C.V mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G10-265 3Φ400

Vin:400VAC

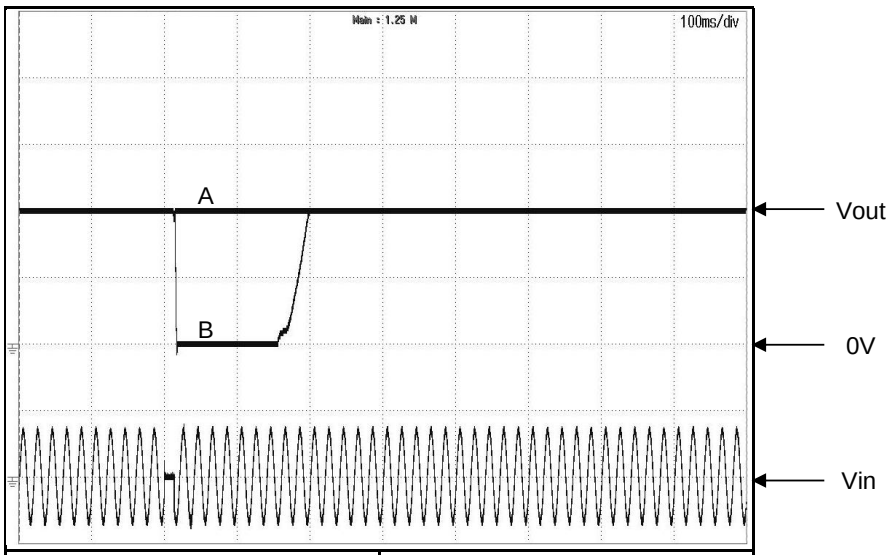


Vout: 5V/DIV	100ms/DIV
Vin: 1000V/DIV	

Brown-out time
A - 14ms
B - 15ms

G10-265 3Φ480

Vin:480VAC



Vout: 5V/DIV	100ms/DIV
Vin: 1000V/DIV	

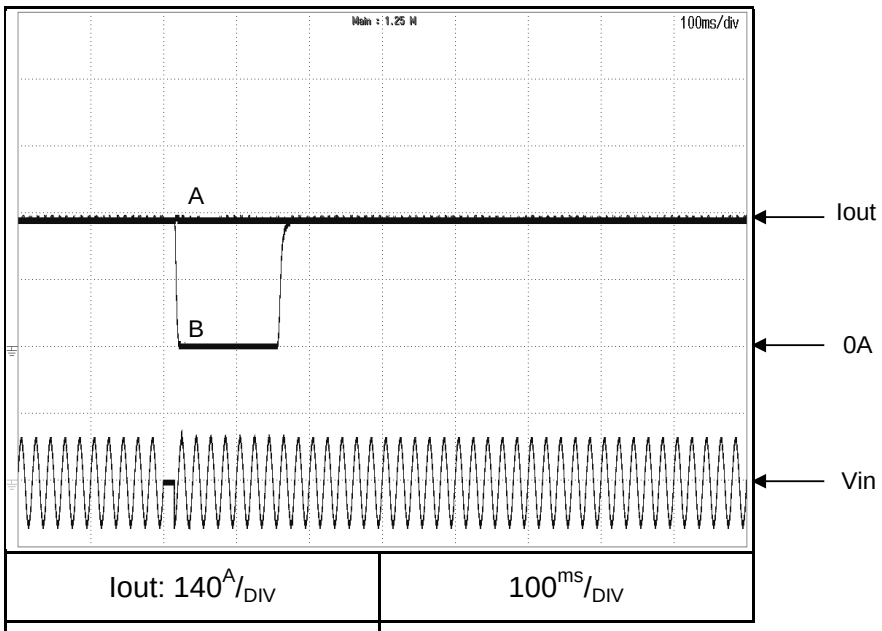
Brown-out time
A - 13ms
B - 14ms

2.9 Response to brown-out characteristics
C.C mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G10-265 1Φ200

Vin:230VAC

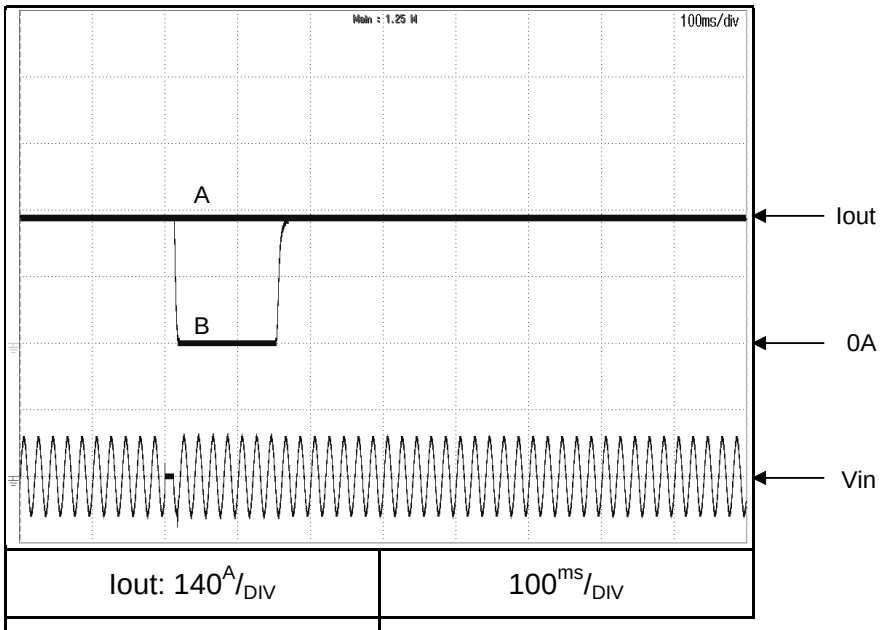


Iout: 140A/DIV	100ms/DIV
Vin: 500V/DIV	

Brown-out time
A - 14ms
B - 15ms

G10-265 3Φ200

Vin:200VAC



Iout: 140A/DIV	100ms/DIV
Vin: 500V/DIV	

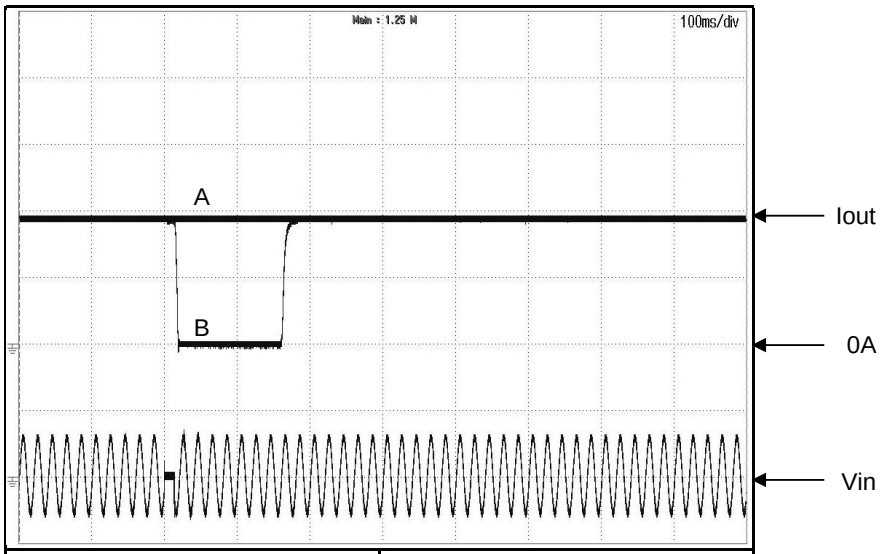
Brown-out time
A - 12ms
B - 13ms

2.9 Response to brown-out characteristics
C.C mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G10-265 3Φ400

Vin:400VAC

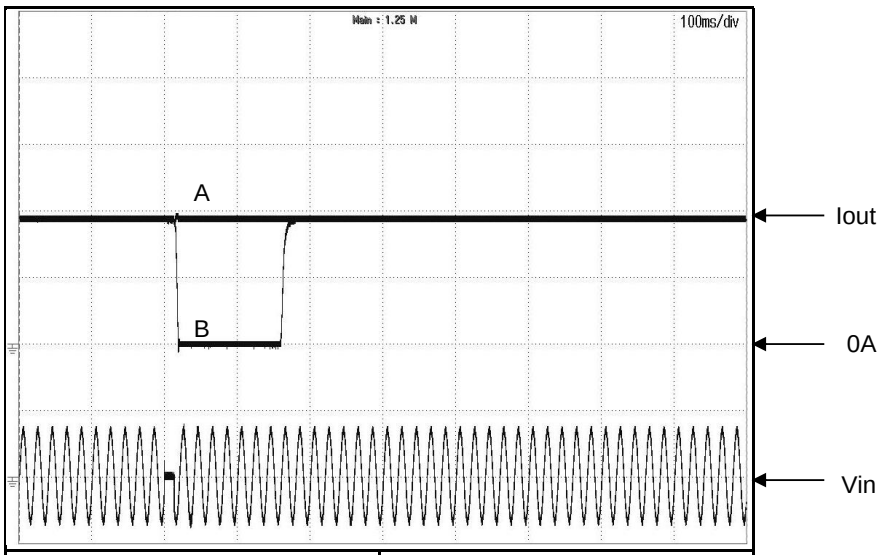


Iout: 140A/DIV	100ms/DIV
Vin: 1000V/DIV	

Brown-out time
A - 13ms
B - 14ms

G10-265 3Φ480

Vin:480VAC



Iout: 140A/DIV	100ms/DIV
Vin: 1000V/DIV	

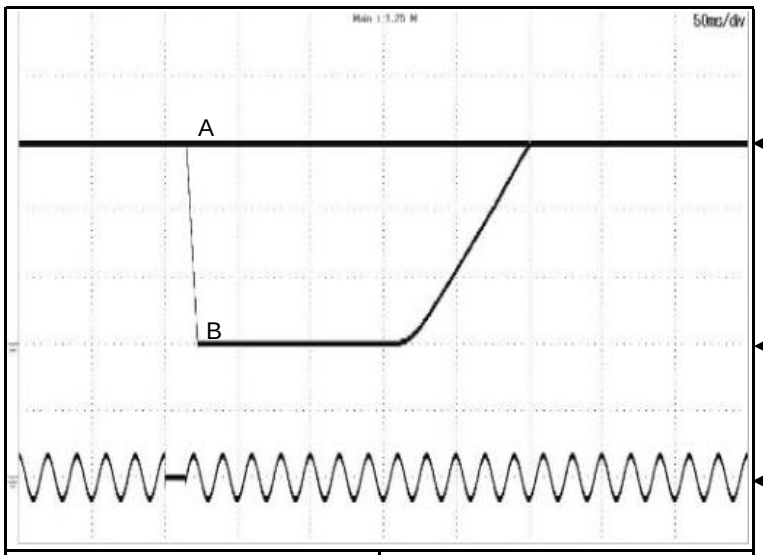
Brown-out time
A - 13ms
B - 14ms

2.9 Response to brown-out characteristics
C.V mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G60-45 1Φ200

Vin:230VAC

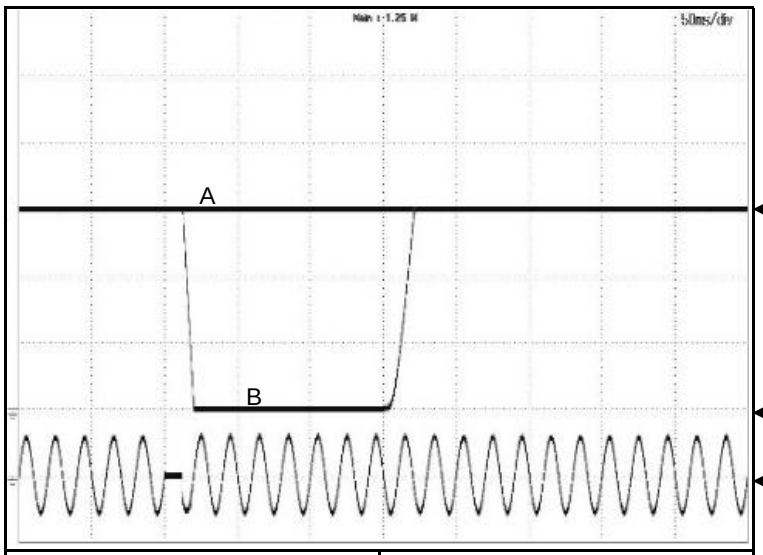


Vout: 20 V/DIV	50 ms/DIV
Vin: 1000 V/DIV	

Brown-out time
A - 13ms
B - 14ms

G60-45 3Φ200

Vin:200VAC



Vout: 20 V/DIV	50 ms/DIV
Vin: 500 V/DIV	

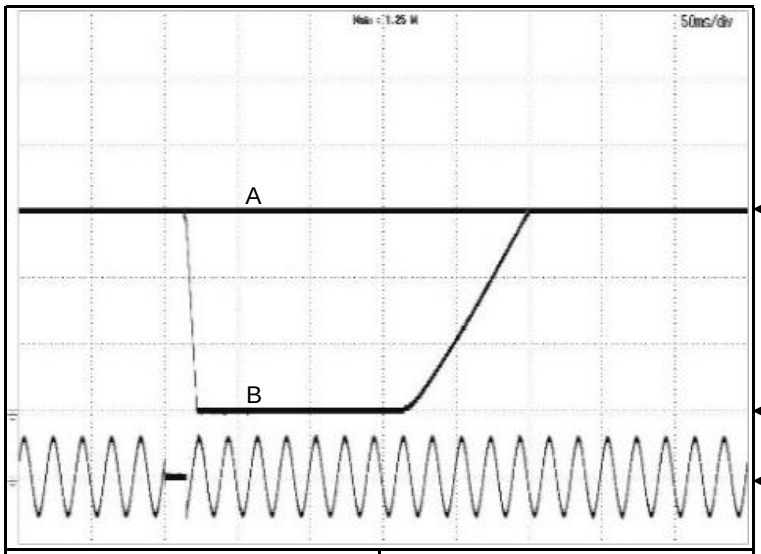
Brown-out time
A - 11ms
B - 12ms

2.9 Response to brown-out characteristics
C.V mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G60-45 3Φ400

Vin:400VAC

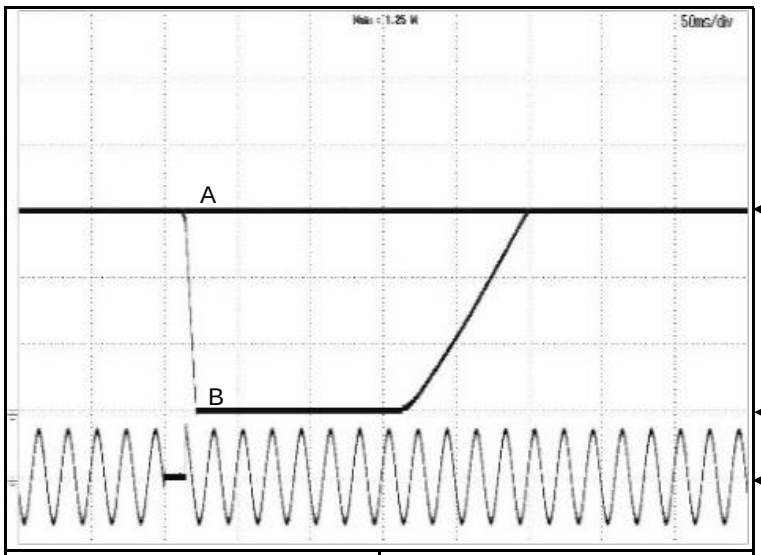


Vout: 20V/DIV	50ms/DIV
Vin: 1000V/DIV	

Brown-out time
A - 14ms
B - 15ms

G60-45 3Φ480

Vin:480VAC



Vout: 20V/DIV	50ms/DIV
Vin: 1000V/DIV	

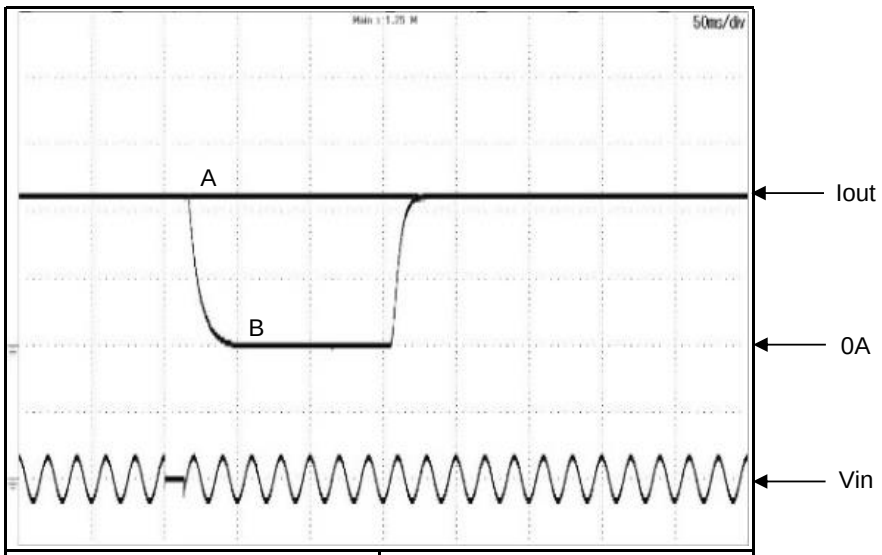
Brown-out time
A - 14ms
B - 15ms

2.9 Response to brown-out characteristics
C.C mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G60-45 1Φ200

Vin:230VAC

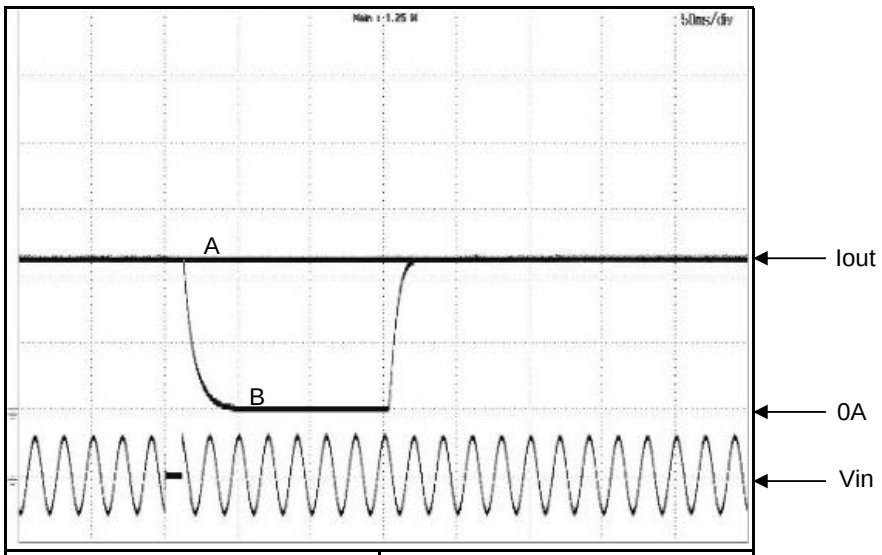


Iout: $20^{A}/_{DIV}$	$50^{ms}/_{DIV}$
Vin: $1000^{V}/_{DIV}$	

Brown-out time
A - 12ms
B - 13ms

G60-45 3Φ200

Vin:200VAC



Iout: $20^{A}/_{DIV}$	$50^{ms}/_{DIV}$
Vin: $500^{V}/_{DIV}$	

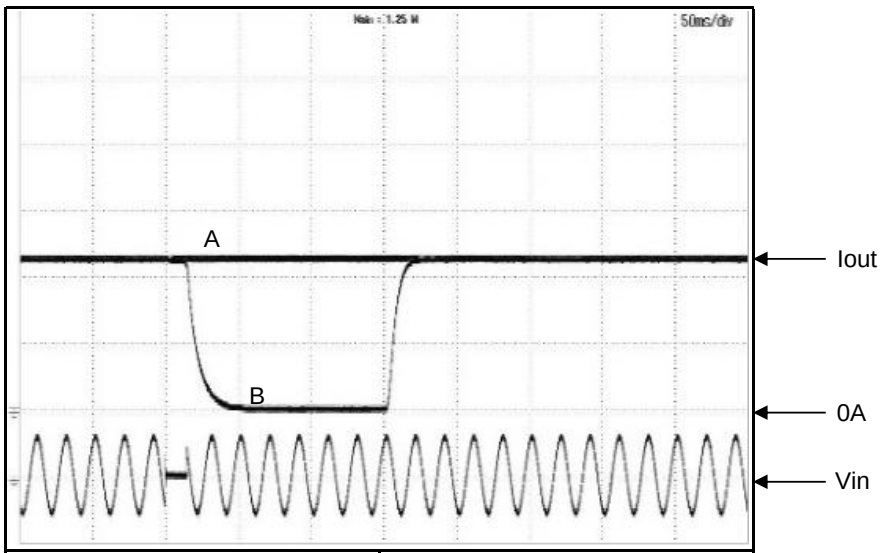
Brown-out time
A - 11ms
B - 12ms

2.9 Response to brown-out characteristics
C.C mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G60-45 3Φ400

Vin:400VAC

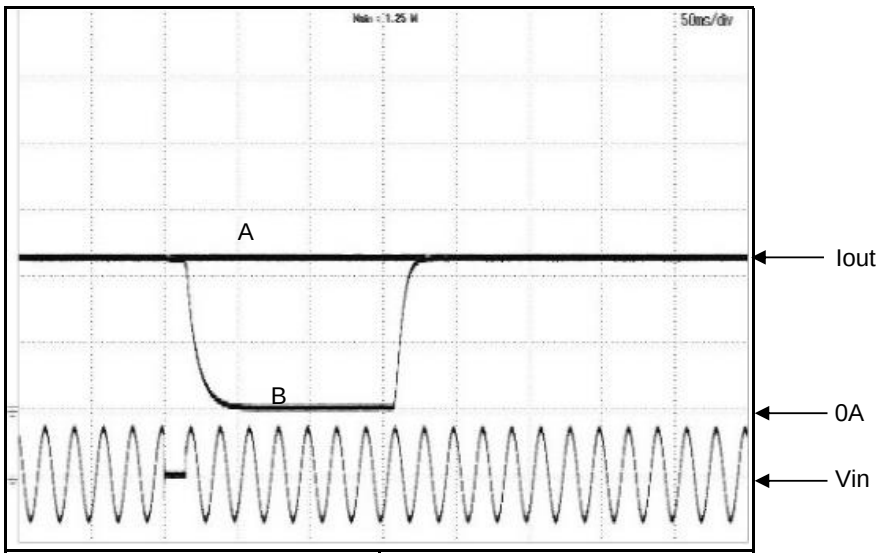


Iout: $20^{A}/_{DIV}$	$50^{ms}/_{DIV}$
Vin: $1000^{V}/_{DIV}$	

Brown-out time
A - 14ms
B - 15ms

G60-45 3Φ480

Vin:480VAC



Iout: $20^{A}/_{DIV}$	$50^{ms}/_{DIV}$
Vin: $1000^{V}/_{DIV}$	

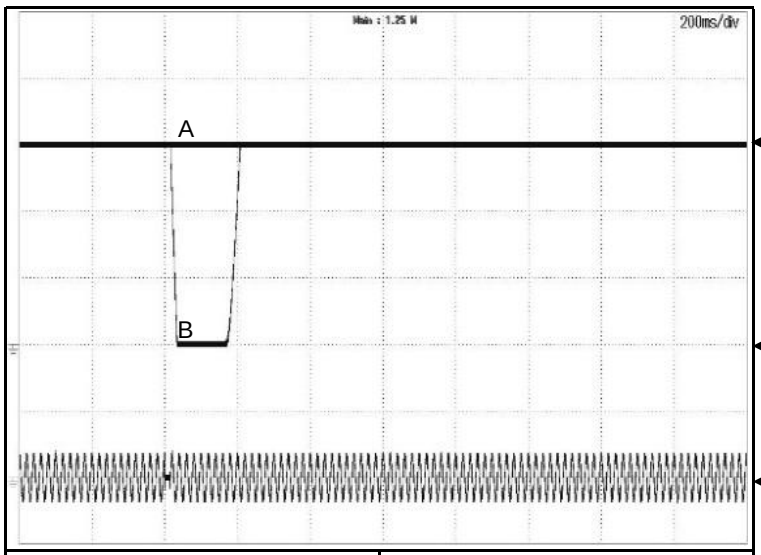
Brown-out time
A - 14ms
B - 15ms

2.9 Response to brown-out characteristics
C.V mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G150-18 1Φ200

Vin:230VAC

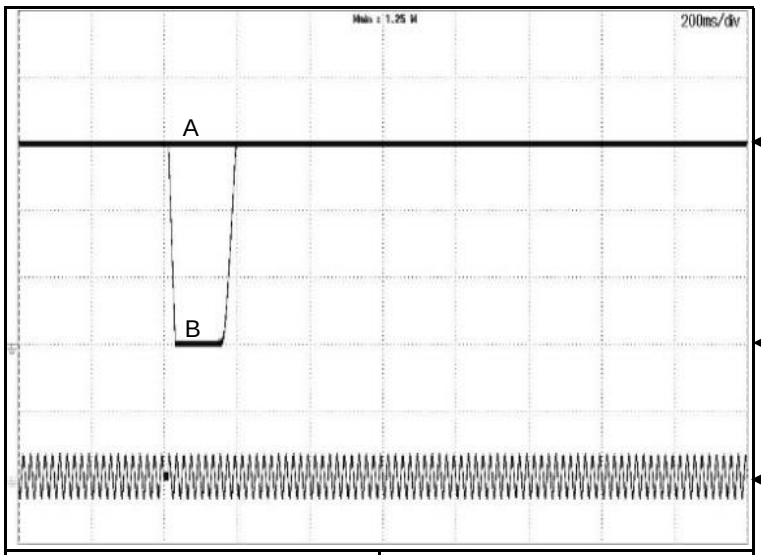


Vout: 50V/DIV	200ms/DIV
Vin: 1000V/DIV	

Brown-out time
A - 13.5ms
B - 14ms

G150-18 3Φ200

Vin:200VAC



Vout: 50V/DIV	200ms/DIV
Vin: 1000V/DIV	

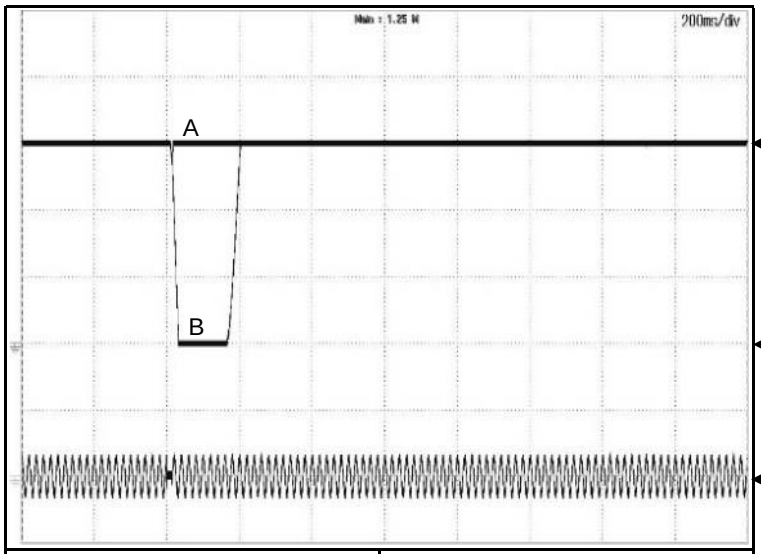
Brown-out time
A - 12ms
B - 12.5ms

2.9 Response to brown-out characteristics
C.V mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G150-18 3Φ400

Vin:400VAC

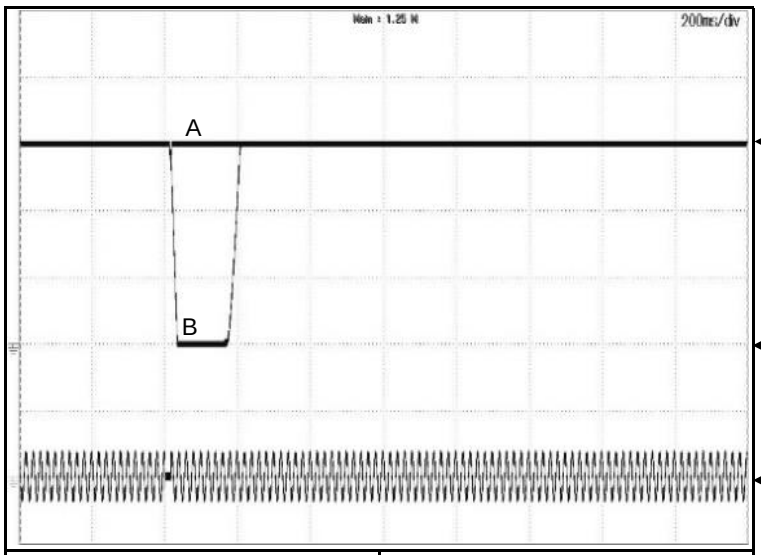


Vout: 50V/DIV	200ms/DIV
Vin: 2000V/DIV	

Brown-out time
A - 14.5ms
B - 15ms

G150-18 3Φ480

Vin:480VAC



Vout: 50V/DIV	200ms/DIV
Vin: 2000V/DIV	

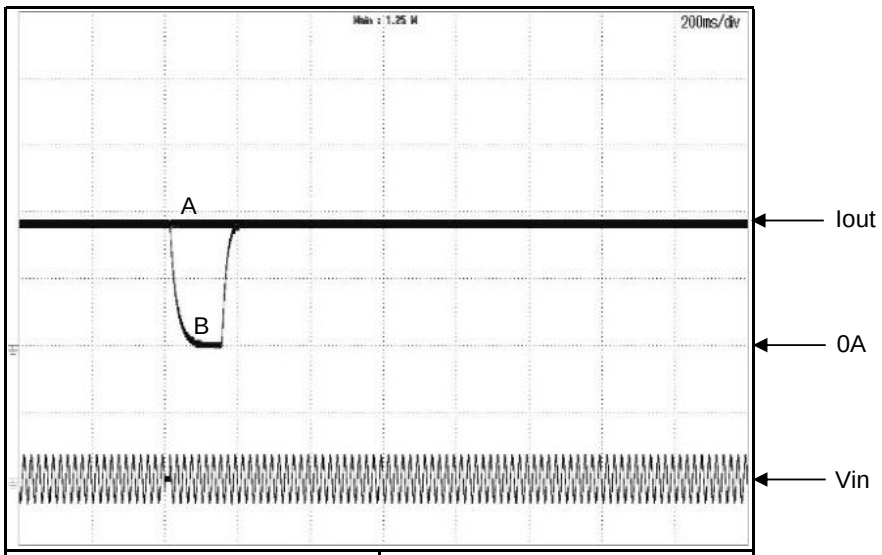
Brown-out time
A - 15.5ms
B - 16ms

2.9 Response to brown-out characteristics
C.C mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G150-18 1Φ200

Vin:230VAC

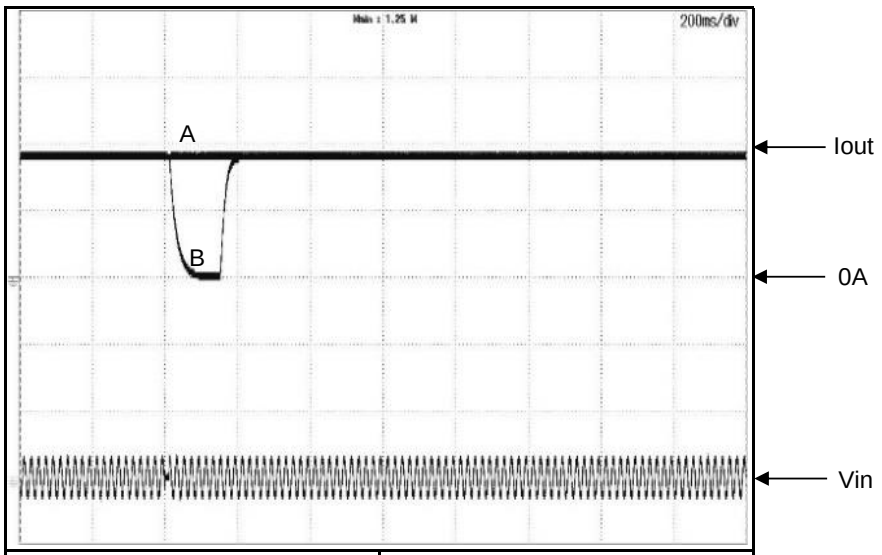


Iout: $10^{A}/_{DIV}$	$200^{ms}/_{DIV}$
Vin: $1000^{V}/_{DIV}$	

Brown-out time
A - 13.5ms
B - 14ms

G150-18 3Φ200

Vin:200VAC



Iout: $10^{A}/_{DIV}$	$200^{ms}/_{DIV}$
Vin: $1000^{V}/_{DIV}$	

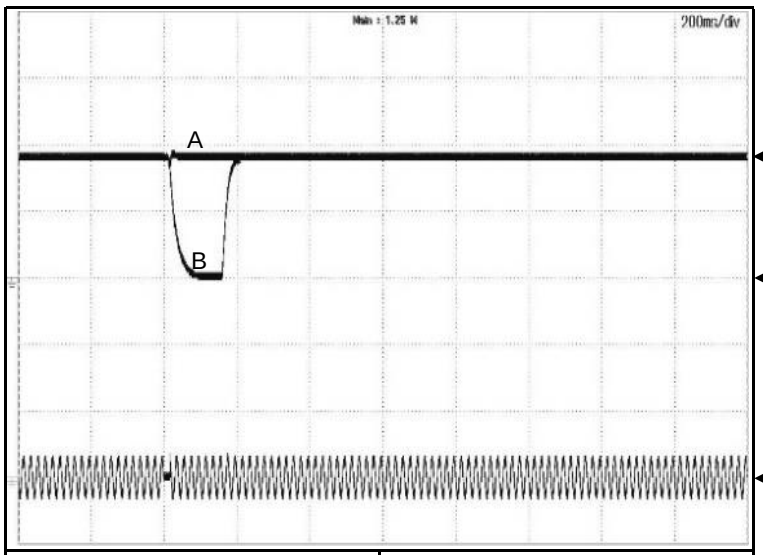
Brown-out time
A - 12ms
B - 12.5ms

2.9 Response to brown-out characteristics
C.C mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G150-18 3Φ400

Vin:400VAC

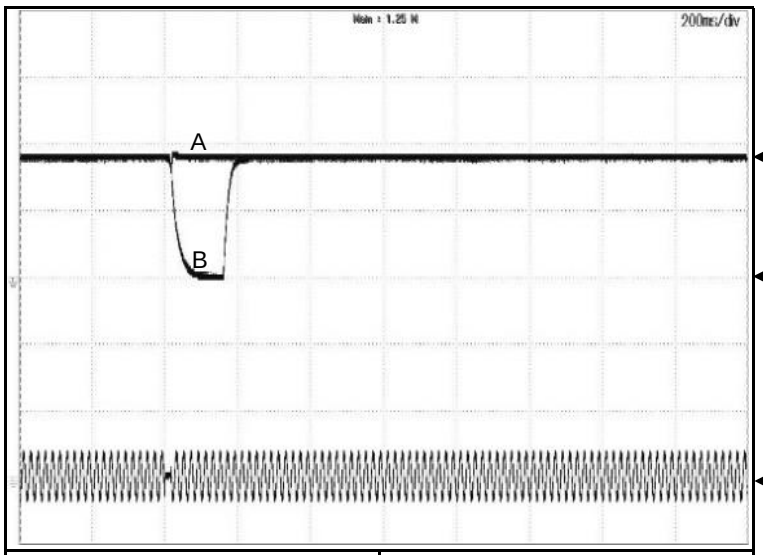


Iout: $10^{A}/_{DIV}$	$200^{ms}/_{DIV}$
Vin: $2000^{V}/_{DIV}$	

Brown-out time
A - 14.5ms
B - 15ms

G150-18 3Φ480

Vin:480VAC



Iout: $10^{A}/_{DIV}$	$200^{ms}/_{DIV}$
Vin: $2000^{V}/_{DIV}$	

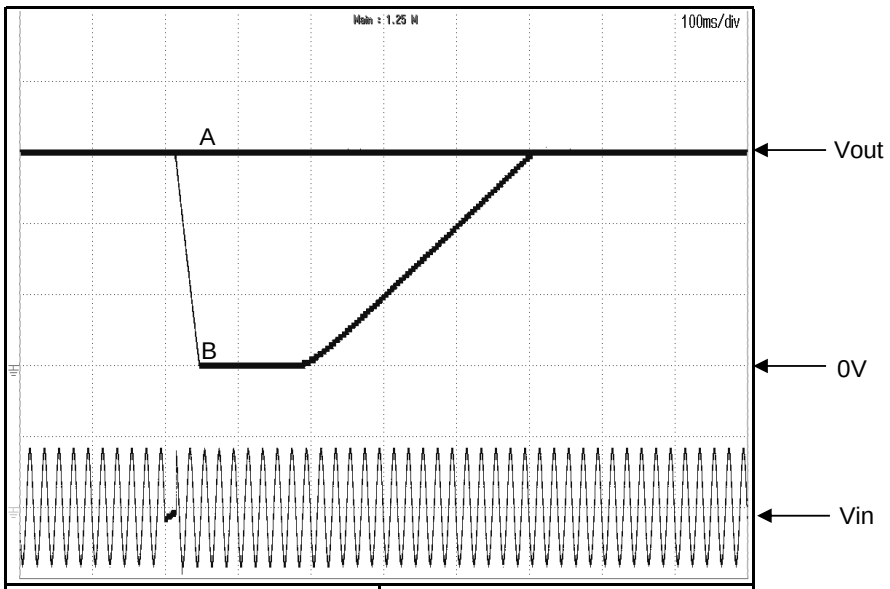
Brown-out time
A - 15.5ms
B - 16ms

2.9 Response to brown-out characteristics
C.V mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G600-4.5 1Φ200

Vin:230VAC

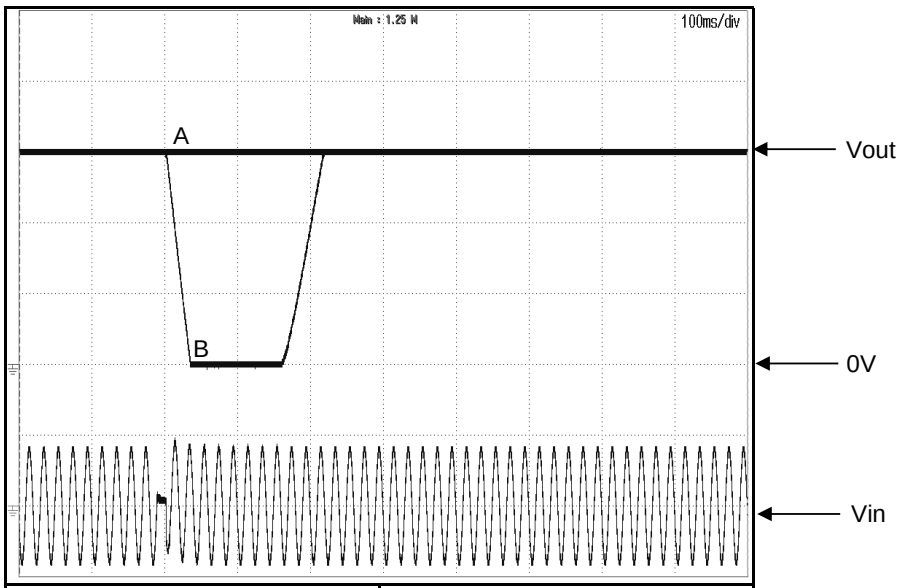


Brown-out time
A - 14ms
B - 15ms

Vout: 200V/DIV	100ms/DIV
Vin: 200V/DIV	

G600-4.5 3Φ200

Vin:200VAC



Brown-out time
A - 11ms
B - 12ms

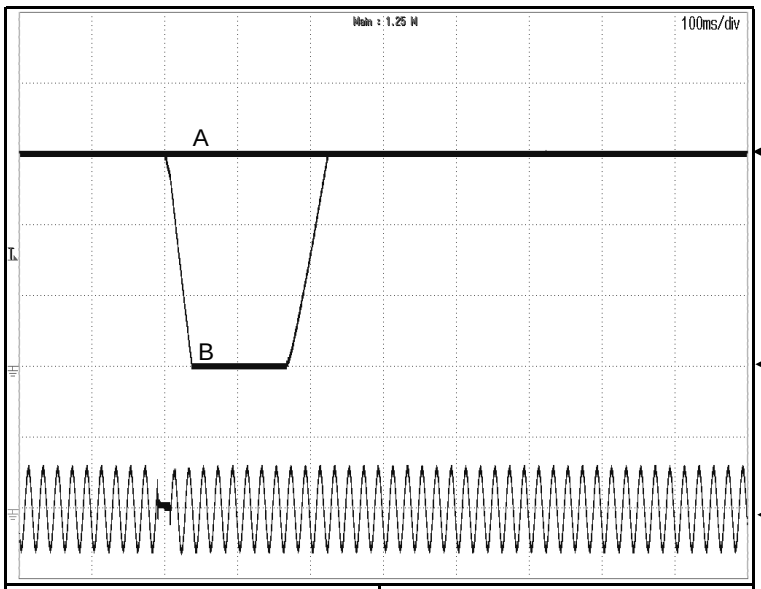
Vout: 200V/DIV	100ms/DIV
Vin: 200V/DIV	

2.9 Response to brown-out characteristics
C.V mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G600-4.5 3Φ400

Vin:400VAC

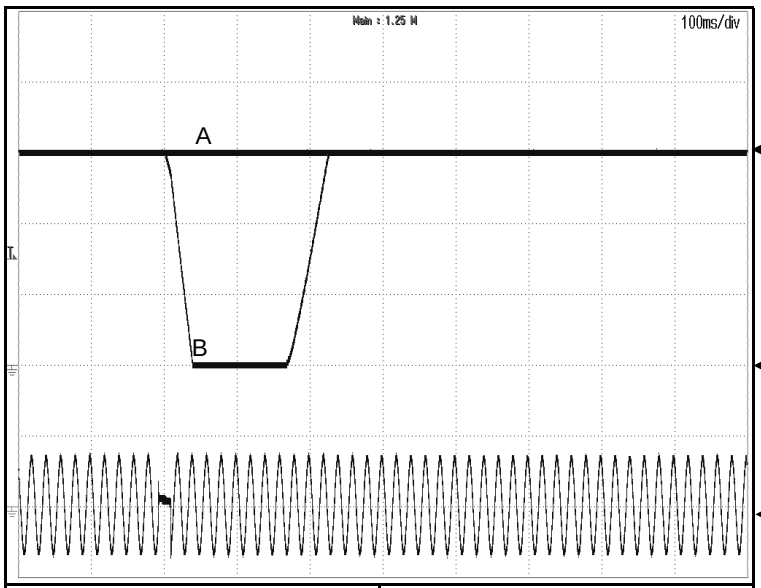


Brown-out time
A - 16ms
B - 17ms

Vout: 200V/DIV	100ms/DIV
Vin: 1000V/DIV	

G600-4.5 3Φ480

Vin:480VAC



Brown-out time
A - 16ms
B - 17ms

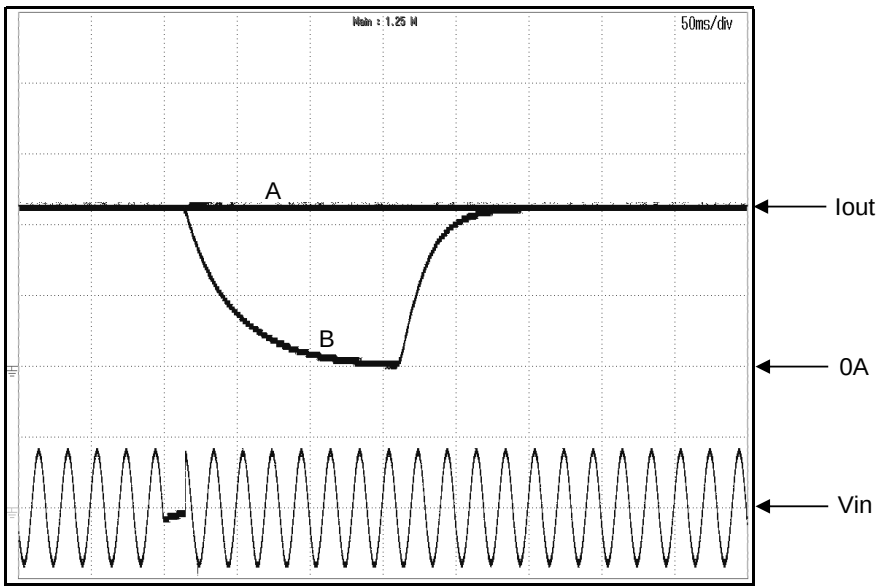
Vout: 200V/DIV	100ms/DIV
Vin: 1000V/DIV	

2.9 Response to brown-out characteristics
C.C mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G600-4.5 1Φ200

Vin:230VAC

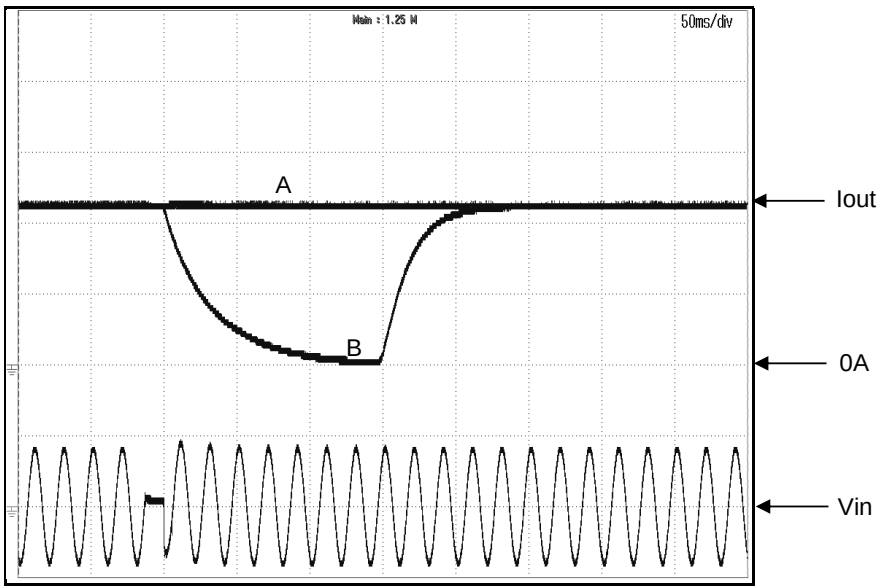


Iout: $2^{A}/_{DIV}$	$50^{ms}/_{DIV}$
Vin: $200^{V}/_{DIV}$	

Brown-out time
A - 14ms
B - 15ms

G600-4.5 3Φ200

Vin:200VAC



Iout: $2^{A}/_{DIV}$	$50^{ms}/_{DIV}$
Vin: $200^{V}/_{DIV}$	

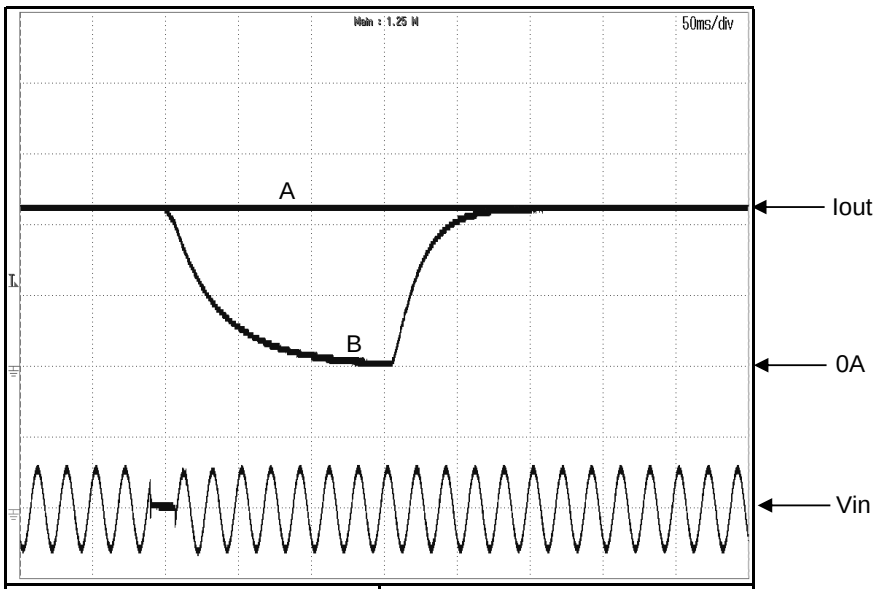
Brown-out time
A - 12ms
B - 13ms

2.9 Response to brown-out characteristics
C.C mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

G600-4.5 3Φ400

Vin:400VAC

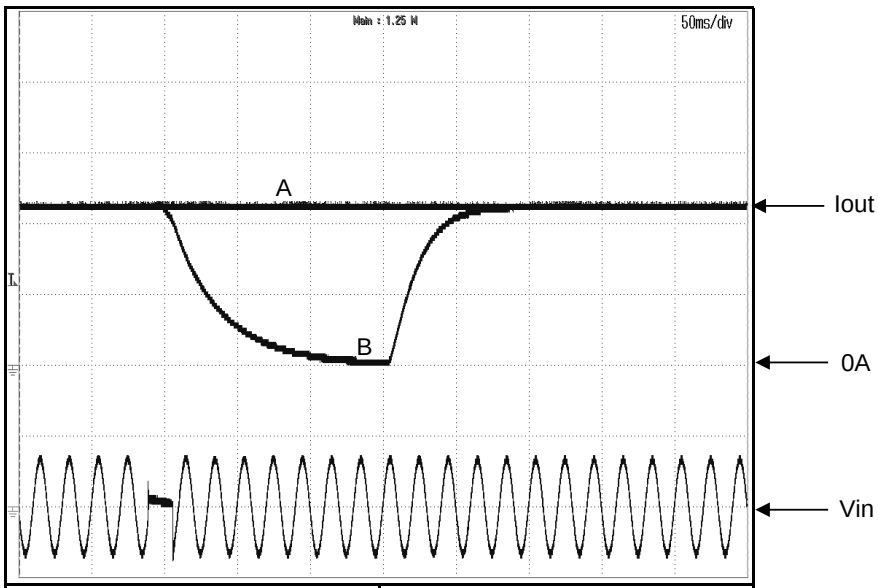


Iout: $2^{A}/_{DIV}$	$50^{ms}/_{DIV}$
Vin: $1000^{V}/_{DIV}$	

Brown-out time
A - 16ms
B - 17ms

G600-4.5 3Φ480

Vin:480VAC



Iout: $2^{A}/_{DIV}$	$50^{ms}/_{DIV}$
Vin: $1000^{V}/_{DIV}$	

Brown-out time
A - 16ms
B - 17ms

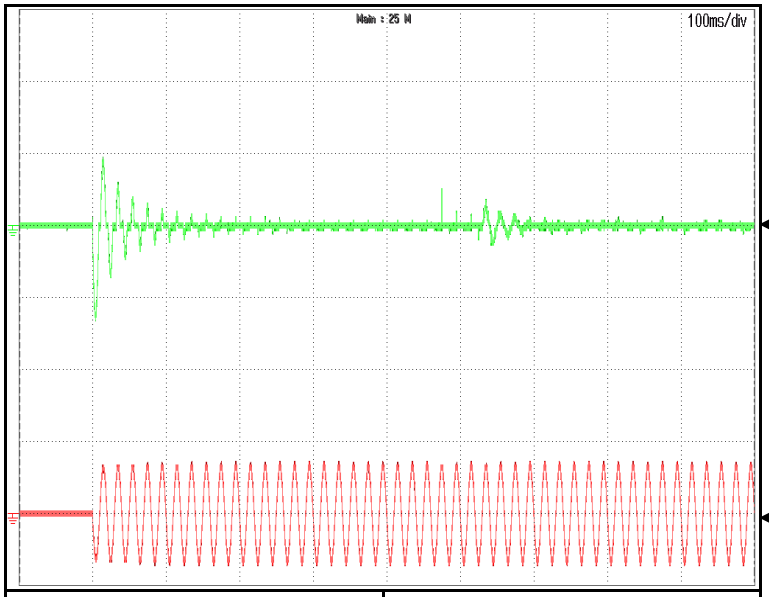
2.10 Inrush current waveform

Conditions: Vin: 230V
Vout: 100%
Iout: 100%
Ta = 25°C

1Φ200 Input

Switch on phase angle of input AC voltage

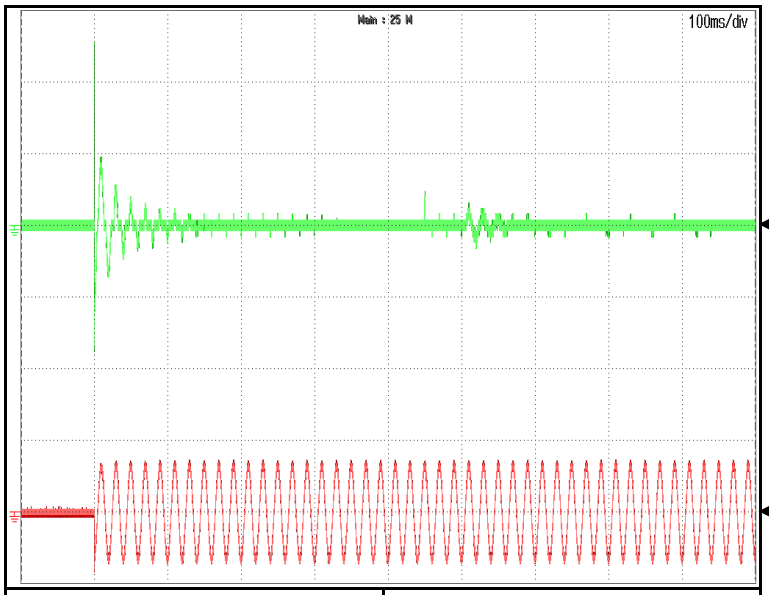
Φ=0°



$20^{A}/_{DIV}$	$100^{ms}/_{DIV}$
Vin: $500^{V}/_{DIV}$	

Switch on phase angle of input AC voltage

Φ=90°



$25^{A}/_{DIV}$	$100^{ms}/_{DIV}$
Vin: $500^{V}/_{DIV}$	

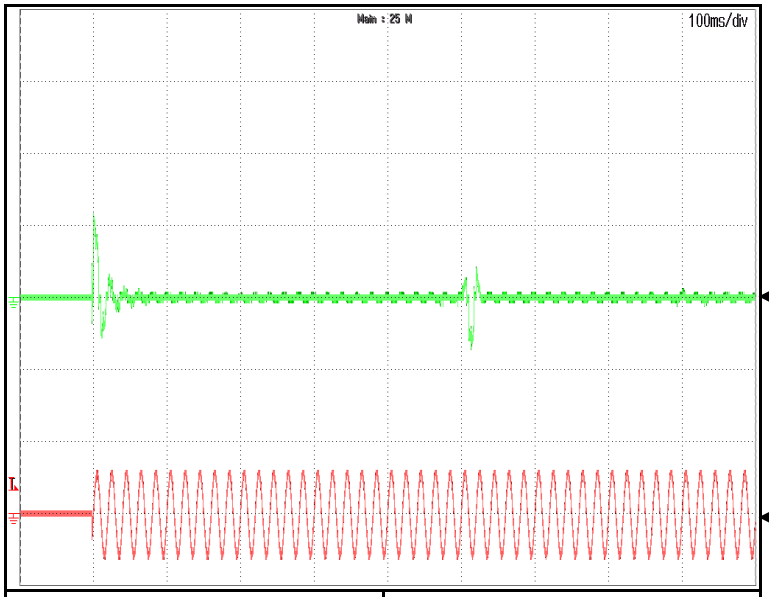
2.10 Inrush current waveform

Conditions: Vin: 200V
Vout: 100%
Iout: 100%
Ta = 25°C

3Φ200 Input

Switch on phase angle of input AC voltage

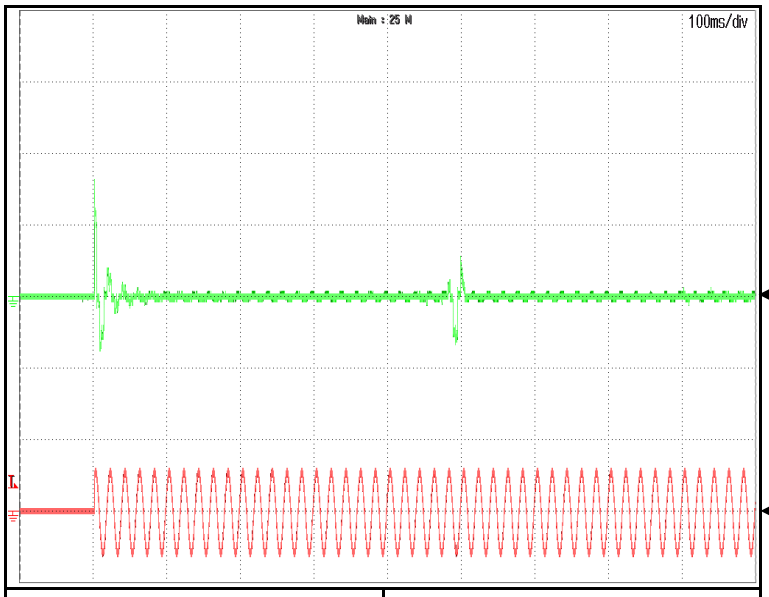
Φ=0˚



$20^{A}/_{DIV}$	$100^{ms}/_{DIV}$
Vin: $500^{V}/_{DIV}$	

Switch on phase angle of input AC voltage

Φ=90˚



$20^{A}/_{DIV}$	$100^{ms}/_{DIV}$
Vin: $500^{V}/_{DIV}$	

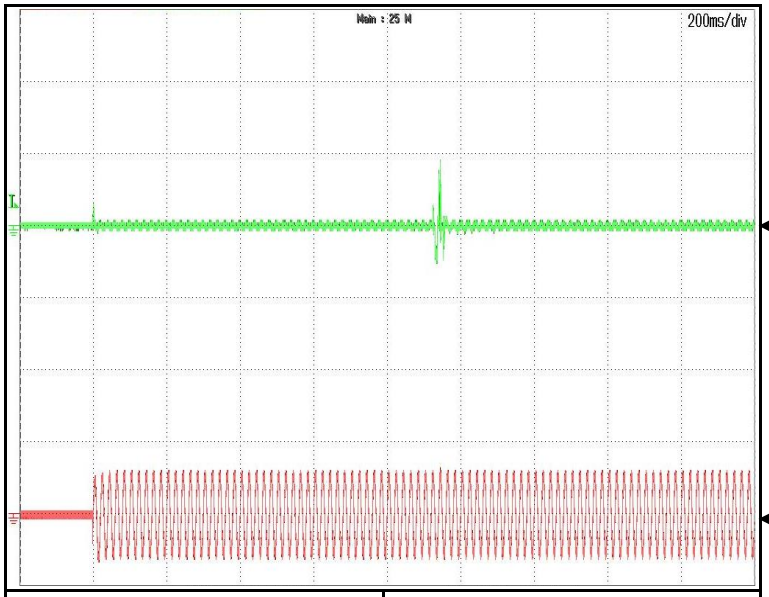
2.10 Inrush current waveform

Conditions: Vin: 400V
Vout: 100%
Iout: 100%
Ta = 25°C

3Φ400 Input

Switch on phase angle of input AC voltage

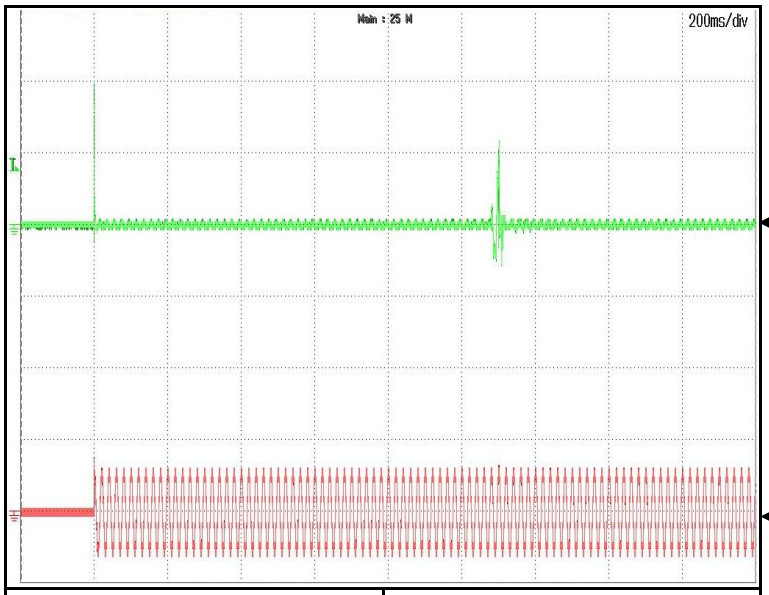
Φ=0˚



$20^{A}/_{DIV}$	$200^{ms}/_{DIV}$
Vin: $1000^{V}/_{DIV}$	

Switch on phase angle of input AC voltage

Φ=90˚



$20^{A}/_{DIV}$	$200^{ms}/_{DIV}$
Vin: $1000^{V}/_{DIV}$	

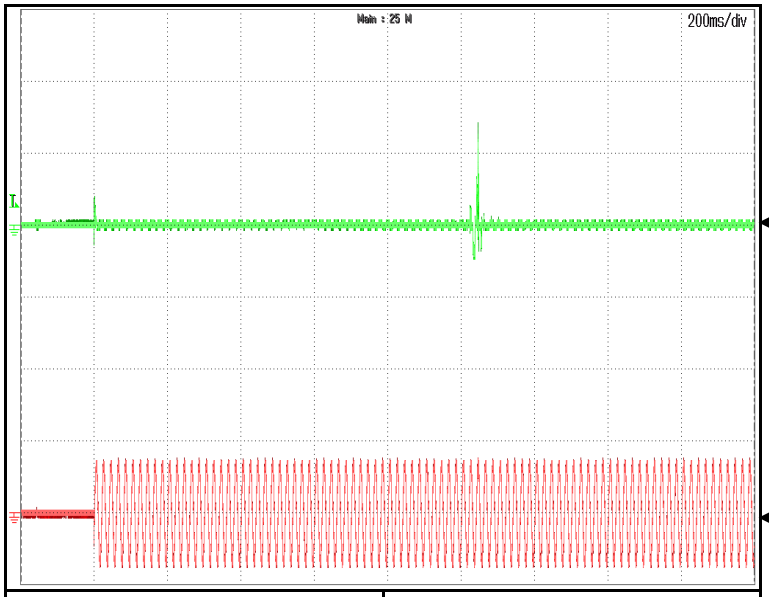
2.10 Inrush current waveform

Conditions: Vin: 480V
Vout: 100%
Iout: 100%
Ta = 25°C

3Φ480 Input

Switch on phase angle of input AC voltage

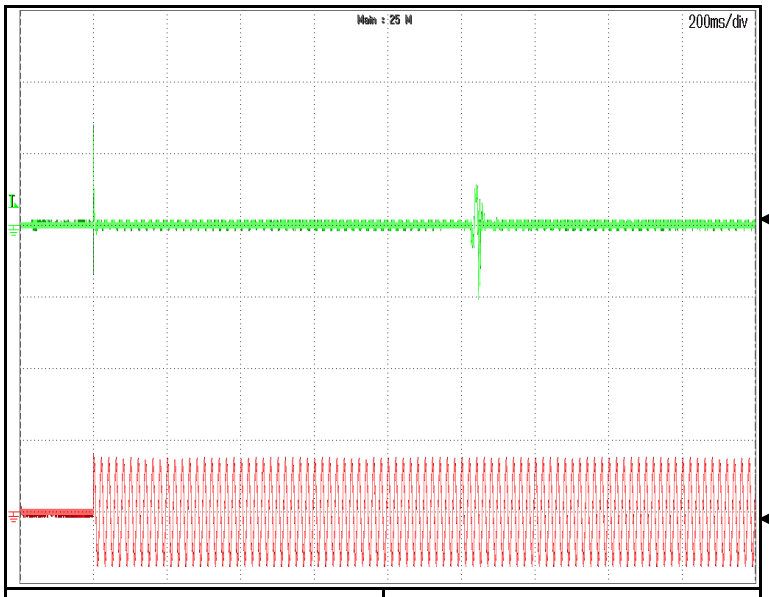
Φ=0°



$20^{A}/_{DIV}$	$200^{ms}/_{DIV}$
Vin: $1000^{V}/_{DIV}$	

Switch on phase angle of input AC voltage

Φ=90°

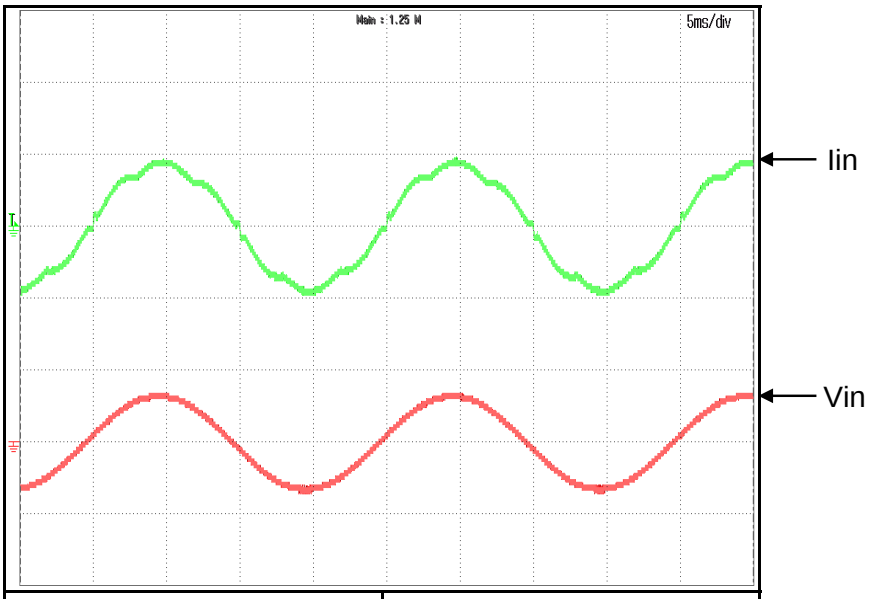


$20^{A}/_{DIV}$	$200^{ms}/_{DIV}$
Vin: $1000^{V}/_{DIV}$	

2.11 Input current waveform

Conditions: Vin: 230VAC
Vout: 100%
Iout: 100%
Ta = 25°C

1Φ200 Input

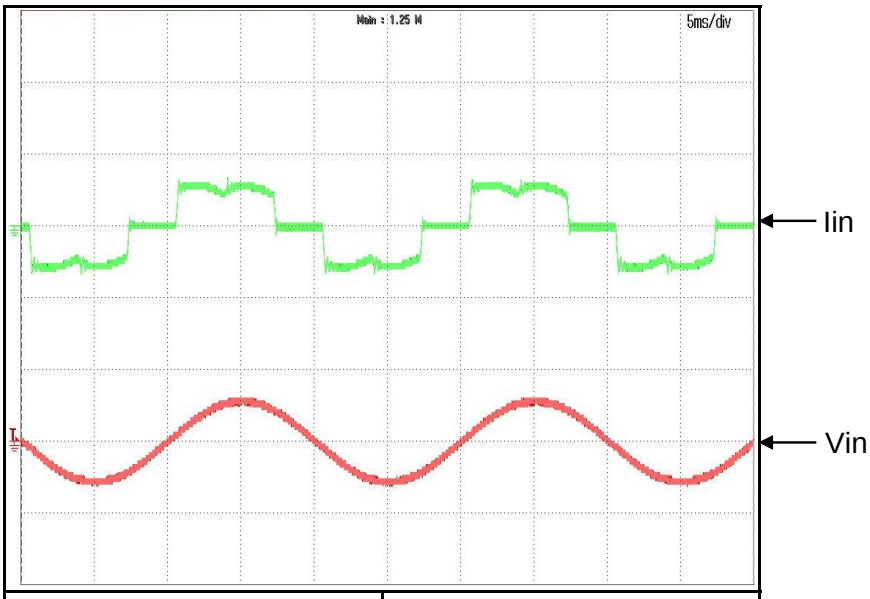


$20^{A}/_{DIV}$	$5^{ms}/_{DIV}$
$500^{V}/_{DIV}$	

2.11 Input current waveform

Conditions: Vin: 200VAC
Vout: 100%
Iout: 100%
Ta = 25°C

3Φ200 Input

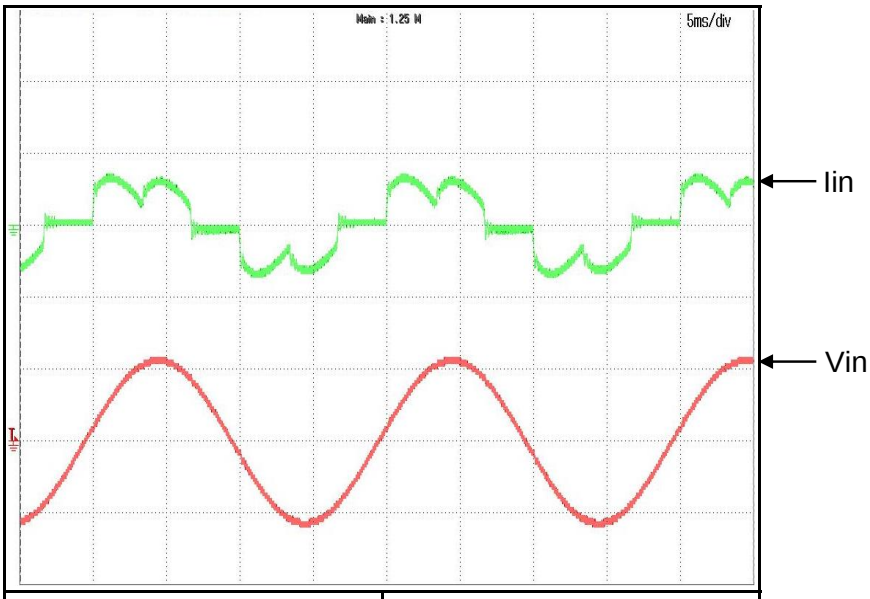


$20^{A}/_{DIV}$	$5^{ms}/_{DIV}$
$500^{V}/_{DIV}$	

2.11 Input current waveform

Conditions: Vin: 400VAC
Vout: 100%
Iout: 100%
Ta = 25°C

3Φ400 Input

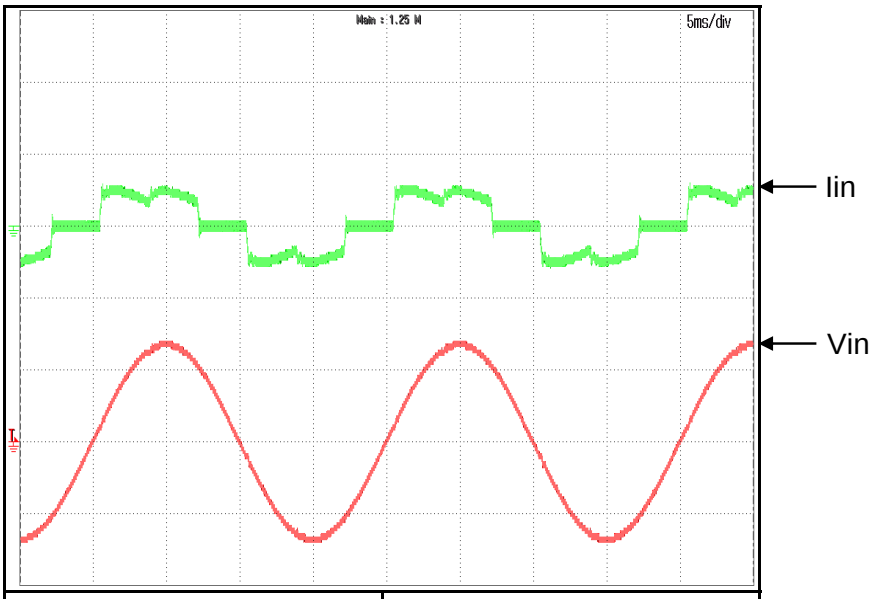


$10^{A}/_{DIV}$	$5^{ms}/_{DIV}$
$500^{V}/_{DIV}$	

2.11 Input current waveform

Conditions: Vin: 480VAC
Vout: 100%
Iout: 100%
Ta = 25°C

3Φ480 Input



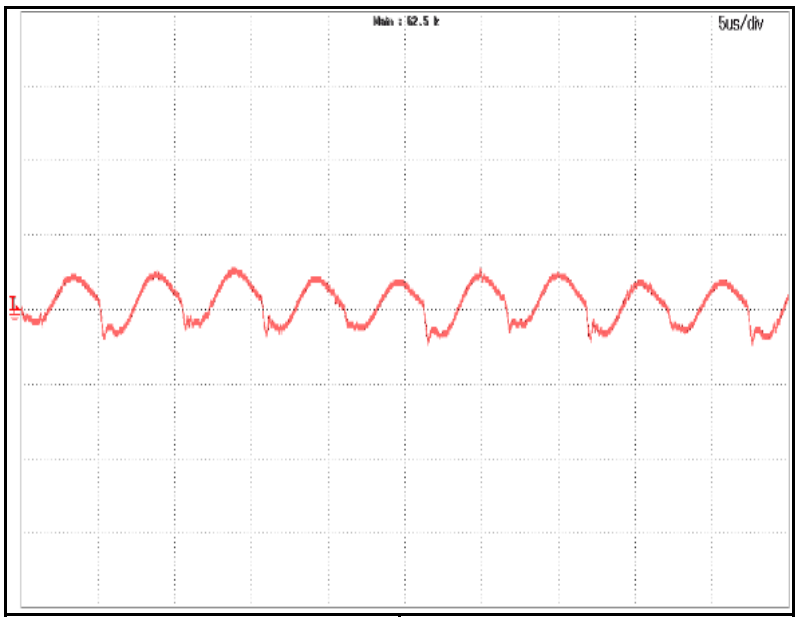
$10^{A}/_{DIV}$	$5^{ms}/_{DIV}$
$500^{V}/_{DIV}$	

2.12 Output ripple & noise waveform
C.V mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

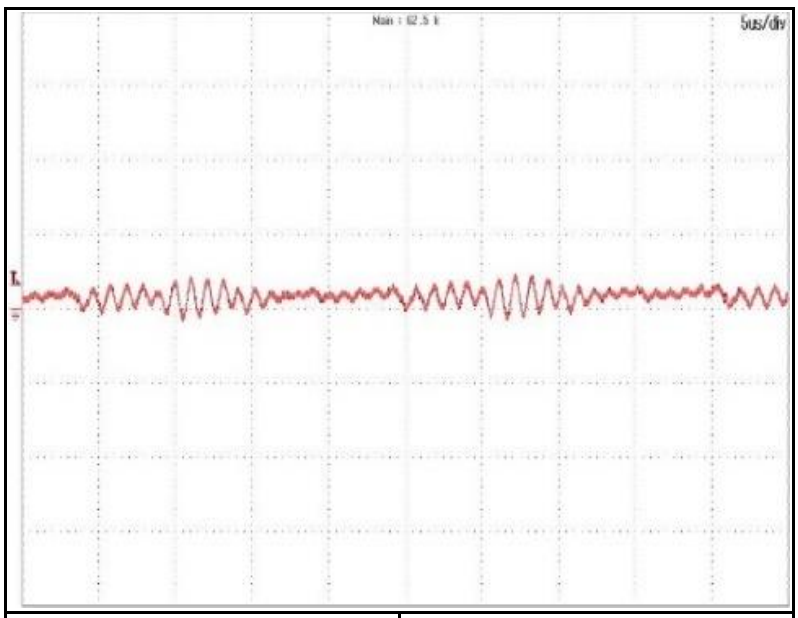
Normal Mode

G10-265



$10^{mV}/_{DIV}$	$5^{\mu s}/_{DIV}$

G60-45



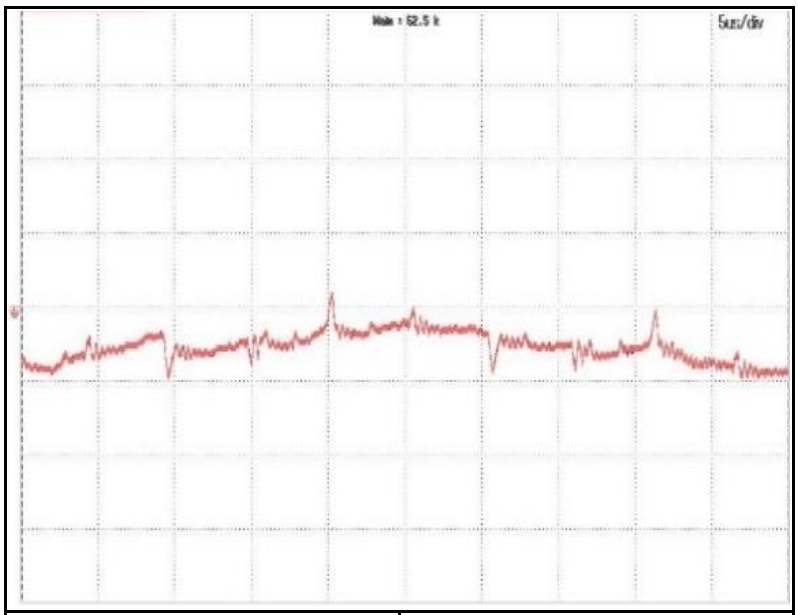
$20^{mV}/_{DIV}$	$5^{\mu s}/_{DIV}$

2.12 Output ripple & noise waveform
C.V mode

Conditions: Vout: 100%
Iout: 100%
Ta = 25°C

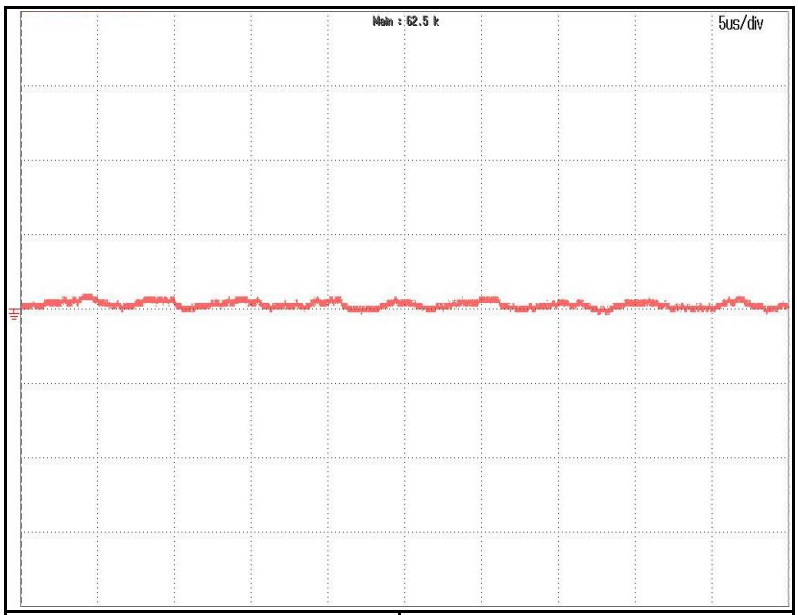
Normal Mode

G150-18



$2^{mV}/_{DIV}$	$5^{\mu s}/_{DIV}$

G600-4.5



$200^{mV}/_{DIV}$	$5^{\mu s}/_{DIV}$