ZWX240

EVALUATION DATA

型式データ

DWG No. A235-53-01		
APPD	CHK	DWG
Juichi 7/Dec/'07	G.Sasaki 28.Nov.'07	y.noguchi 28.Nov.'07

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2. 特性データ Characteristics

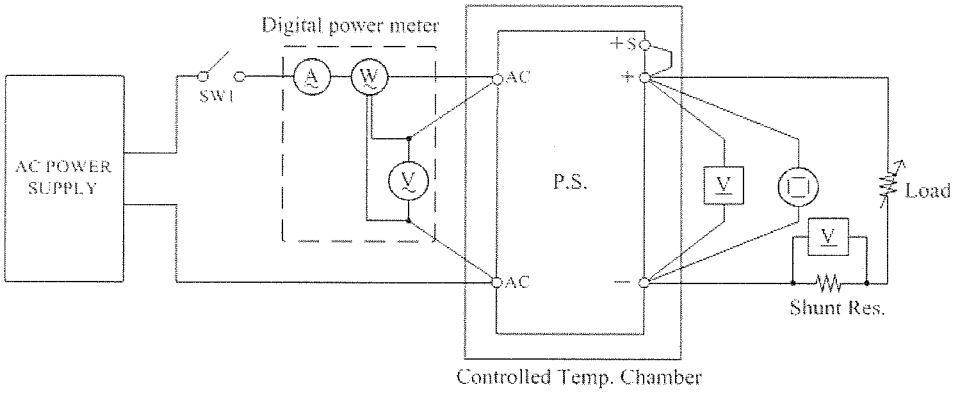
使用記号 Terminology used

	Definition	
Vin	..... 入力電圧	Input voltage
Vout	..... 出力電圧	Output voltage
Iin	..... 入力電流	Input current
Iout	..... 出力電流	Output current
Ta	..... 周囲温度	Ambient temperature
Wout	..... 出力電力	Output Power

1.1 測定回路　　Circuit used for measurement

測定回路 1　Circuit 1

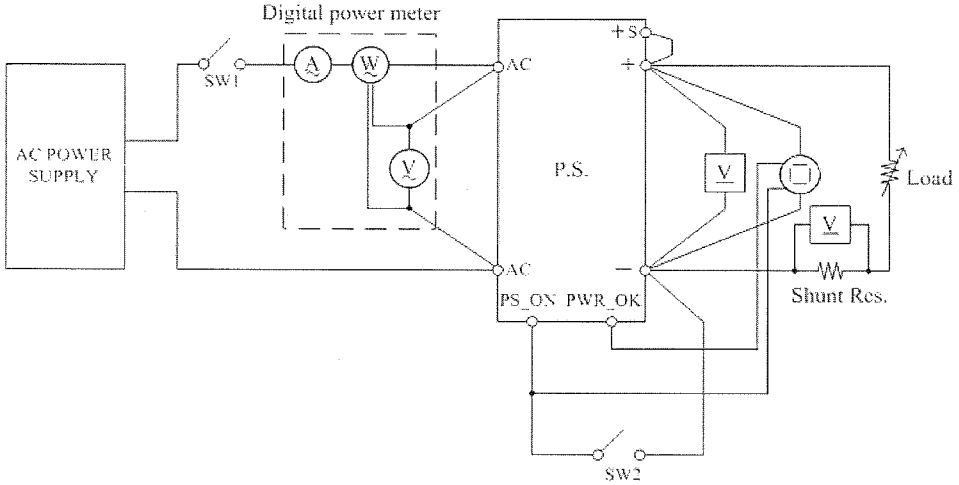
・静特性	Steady state data
・通電ドリフト	Warm up voltage drift characteristics
・過電圧保護特性	Over voltage protection (OVP) characteristics
・過電流保護特性	Over current protection (OCP) characteristics
・出力立ち上がり特性	Output rise characteristics
・出力立ち下がり特性	Output fall characteristics
・過渡応答（入力急変）特性	Dynamic line response characteristics
・スタンバイ電流特性	Stand-by current characteristics



測定回路 2　Circuit 2

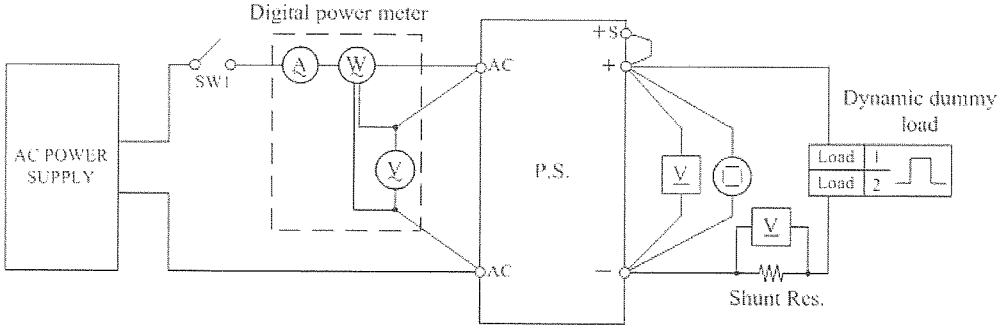
・出力立ち上がり特性（ON/OFFコントロール時）
Output rise characteristics with ON/OFF Control

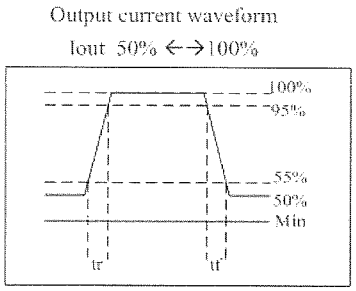
・出力立ち下がり特性（ON/OFFコントロール時）
Output fall characteristics with ON/OFF Control



測定回路３　Circuit 3

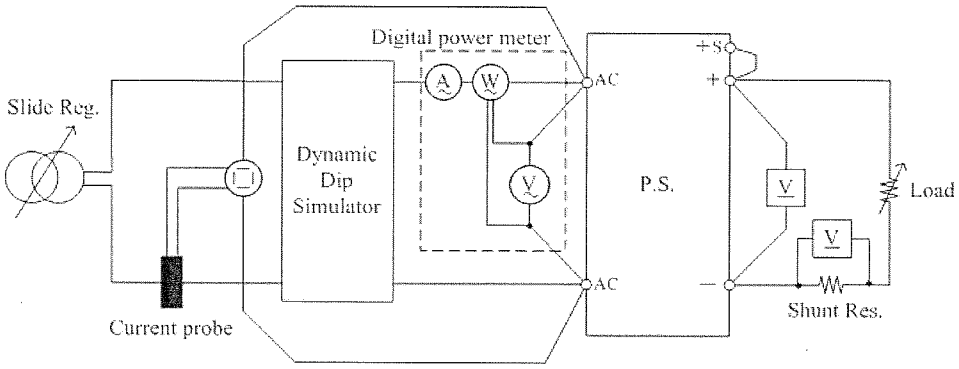
・過渡応答（負荷急変）特性　　Dynamic load response characteristics





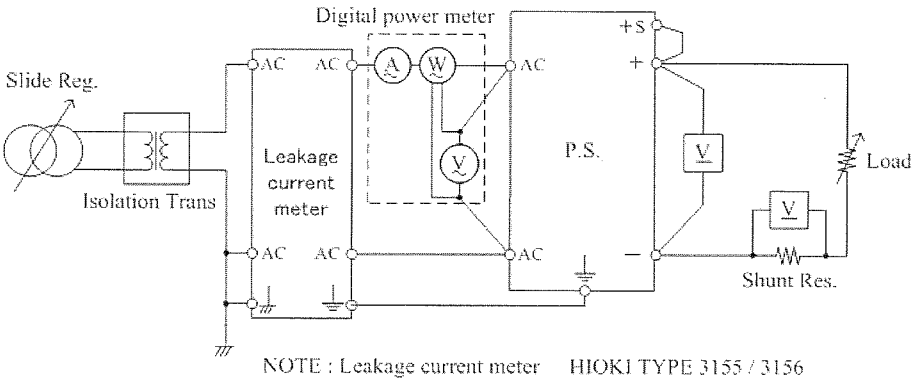
測定回路４　Circuit 4

・入力サージ電流（突入電流）特性　　Inrush current characteristics



測定回路５　Circuit 5

・リーク電流　　Leakage current characteristics

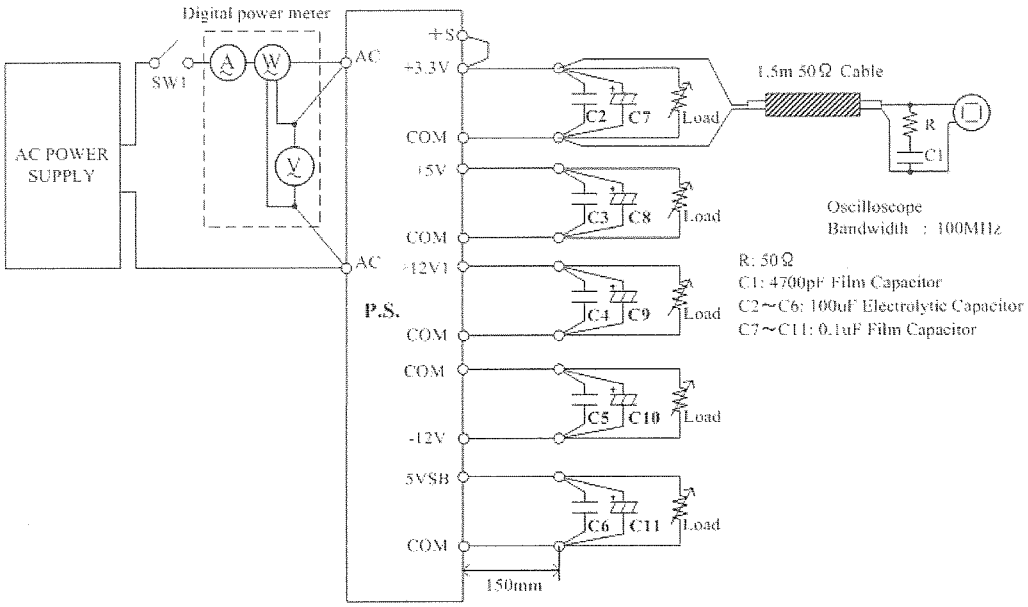


NOTE : Leakage current meter　HIOKI TYPE 3155 / 3156

測定回路 6　Circuit 6

・出力リップル、ノイズ　　Output ripple and noise

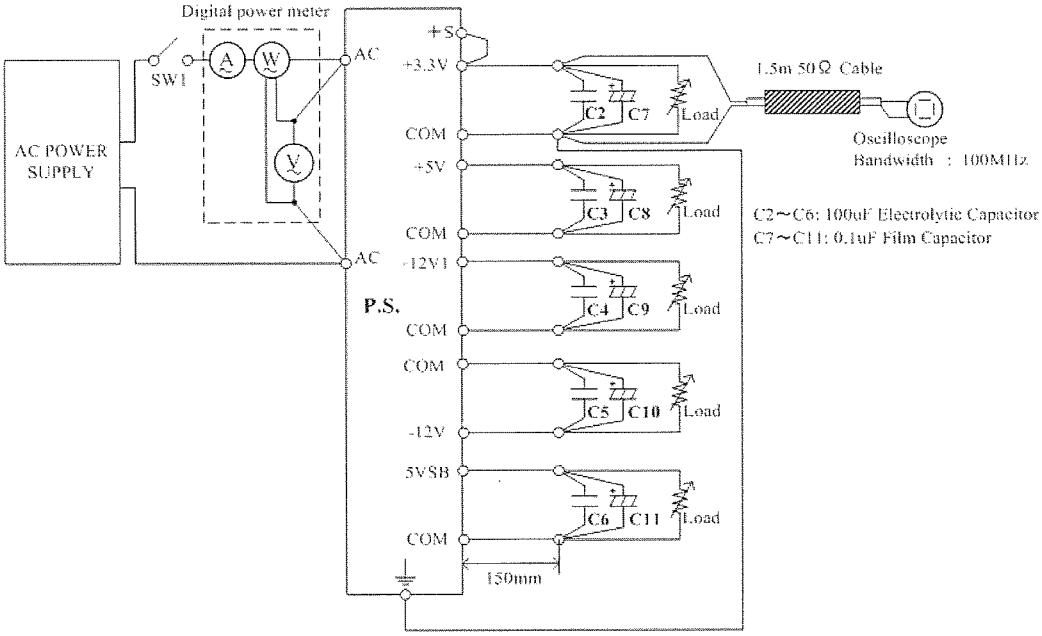
(a) Normal Mode



測定回路 7　Circuit 7

・出力リップル、ノイズ　　Output ripple and noise

(b) Normal + Common Mode

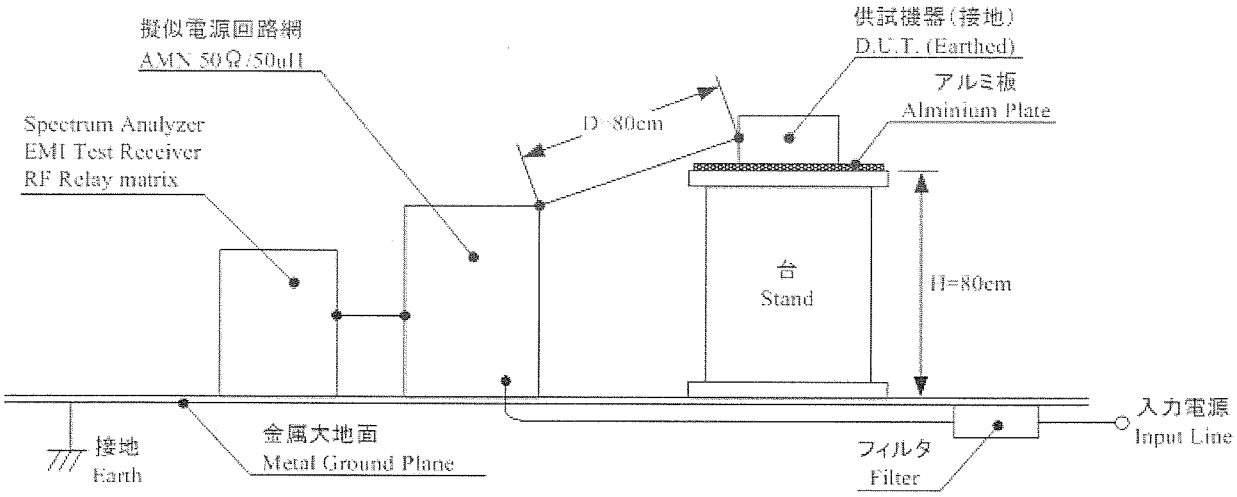


測定構成 1　Configuration 1

・EMI特性　Electro-Magnetic Interference characteristics

(a) 雑音端子電圧 (帰還ノイズ)

Conducted Emission Noise

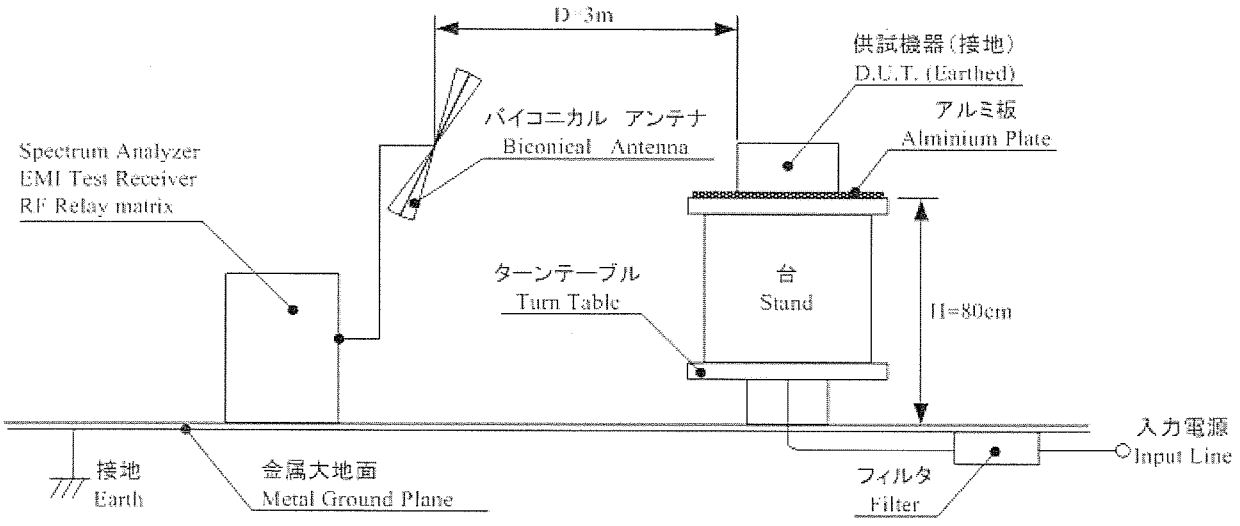


測定構成 2　Configuration 2

・EMI特性　Electro-Magnetic Interference characteristics

(b) 雑音電界強度 (輻射ノイズ)

Radiated Emission Noise



1.2 使用測定機器　　List of equipment used

	EQUIPMENT USED	MANUFACTURER	MODEL NO.
1	OSCILLOSCOPE	HITACHI	V-1100A
2	OSCILLOSCOPE	YOKOGAWA ELECT.	DL1740EL
3	DIGITAL STORAGE OSCILLOSCOPE	TEKTRONIX	TDS540A
4	DIGITAL MULTIMETER	AGILENT	34970A
5	DYNAMIC DIP SIMULATOR	TAKAMISAWA	PSA-210
6	DIGITAL POWER METER	YOKOGAWA ELECT.	WT110 / WT210
7	CURRENT PROBE/AMPLIFIER	TEKTRONIX	A6303 / AM502A
8	DYNAMIC DUMMY LOAD	TAKASAGO	FK600L / 400L / 200L
9	DUMMY LOAD	PCN	RHF250 Siries
10	SLIDE REGURATOR	MATSUNAGA	SD-2450
11	AC POWER SUPPLY	KIKUSUI	PCR-4000L
12	AC POWER SUPPLY	TAKASAGO	AA2000XG
13	LEAKAGE CURRENT METER	HIOKI	3156
14	CONTROLLED TEMP. CHAMBER	TABAI ESPEC	PU-4K / SU240S1
15	SPECTRUM ANALYZER	ROHDE & SCHWARZ	ESPI3
16	EMI TEST RECEIVER	ROHDE & SCHWARZ	ESHS10
17	EMI TEST RECEIVER	ROHDE & SCHWARZ	ESVS10
18	RF RELAY MATRIX	ROHDE & SCHWARZ	PSU
19	AMN	KYORITU DENSHI	KNW-242
20	ANTENA(BICONICAL ANTENA)	SCHWARZBECK	BBA9106

1.3 評価負荷条件　　Load condition

Output	Load conditions			
	FL1	FL2	FL3	FL4
	Io(A)			
V1: +3.3V	0	9.8	5.7	9.0
V2: +5V	0	8.4	7.5	8.0
V3: +12V	0	9.7	11.2	10.6
V4: -12V	0	0.3	0.3	0.2
V5: +5VSB	0	2	2	1

FL1 : All output CH=0A

Output	Load conditions	
	PL1	PL2
	Io(A)	
V1: +3.3V	14.0	3.6
V2: +5V	12.0	4.5
V3: +12V	10.1	16.0
V4: -12V	0.3	0.3
V5: +5VSB	2	2

2.特性データ　Characteristics

2.1 静特性　Steady state data

(1) 入力、負荷、温度変動　Regulation - line and load, temperature drift

V1 : +3.3V

1.Regulation - line and load　condition　Ta : 25℃
Iout(100%) : PL1

Iout \ Vin	85VAC	100VAC	200VAC	265VAC	line regulation	
0%	3.292V	3.292V	3.292V	3.292V	0mV	0.00%
50%	3.300V	3.300V	3.300V	3.300V	0mV	0.00%
85%	3.313V	3.313V	3.314V	3.314V	1mV	0.03%
100%(peak)	3.322V	3.322V	3.322V	3.322V	0mV	0.00%
load	30mV	30mV	30mV	30mV		
regulation	0.91%	0.91%	0.91%	0.91%		

2. Temperature drift

condition　Vin : 100VAC
Iout : FL2

Ta	-10℃	+25℃	+50℃	temperature stability	
Vout	3.314V	3.313V	3.310V	4mV	0.12%

V2 : +5V

1.Regulation - line and load　condition　Ta : 25℃
Iout(100%) : PL1

Iout \ Vin	85VAC	100VAC	200VAC	265VAC	line regulation	
0%	4.985V	4.985V	4.985V	4.985V	0mV	0.00%
50%	4.976V	4.976V	4.976V	4.976V	0mV	0.00%
85%	4.970V	4.970V	4.970V	4.970V	0mV	0.00%
100%(peak)	4.966V	4.966V	4.966V	4.966V	0mV	0.00%
load	19mV	19mV	19mV	19mV		
regulation	0.38%	0.38%	0.38%	0.38%		

2. Temperature drift

condition　Vin : 100VAC
Iout : FL2

Ta	-10℃	+25℃	+50℃	temperature stability	
Vout	4.967V	4.970V	4.968V	3mV	0.06%

V3 : +12V

1.Regulation - line and load　condition　Ta : 25℃
Iout(100%) : PL2

Iout \ Vin	85VAC	100VAC	200VAC	265VAC	line regulation	
0%	11.996V	11.996V	11.996V	11.996V	0mV	0.00%
50%	11.996V	11.996V	11.996V	11.996V	0mV	0.00%
85%	11.997V	11.997V	11.997V	11.997V	0mV	0.00%
100%(peak)	11.997V	11.997V	11.997V	11.996V	1mV	0.01%
load	1mV	1mV	1mV	1mV		
regulation	0.01%	0.01%	0.01%	0.01%		

2. Temperature drift

condition　Vin : 100VAC
Iout : FL3

Ta	-10℃	+25℃	+50℃	temperature stability	
Vout	11.975V	11.997V	12.002V	27mV	0.23%

2.特性データ　Characteristics

2.1 静特性　Steady state data

(1) 入力、負荷、温度変動　Regulation - line and load, temperature drift

V4 : -12V

1.Regulation - line and load　condition　Ta : 25℃

Iout(100%) : PL1

Iout \ Vin	85VAC	100VAC	200VAC	265VAC	line regulation	
0%	-12.084V	-12.084V	-12.084V	-12.084V	0mV	0.00%
50%	-12.075V	-12.075V	-12.075V	-12.075V	0mV	0.00%
85%	-12.074V	-12.075V	-12.075V	-12.074V	1mV	0.01%
100%(peak)	-12.074V	-12.076V	-12.076V	-12.075V	2mV	0.02%
load	10mV	9mV	9mV	10mV		
regulation	0.08%	0.08%	0.08%	0.08%		

2. Temperature drift

condition　Vin : 100VAC

Iout : FL2

Ta	-10℃	+25℃	+50℃	temperature stability	
Vout	-12.086V	-12.075V	-12.075V	11mV	0.09%

V5 : +5VSB

1.Regulation - line and load　condition　Ta : 25℃

Iout(100%) : PL1

Iout \ Vin	85VAC	100VAC	200VAC	265VAC	line regulation	
0%	4.993V	4.994V	4.994V	4.994V	1mV	0.02%
50%	4.983V	4.983V	4.983V	4.983V	0mV	0.00%
85%	4.976V	4.976V	4.976V	4.976V	0mV	0.00%
100%(peak)	4.972V	4.972V	4.972V	4.972V	0mV	0.00%
load	21mV	22mV	22mV	22mV		
regulation	0.42%	0.44%	0.44%	0.44%		

2. Temperature drift

condition　Vin : 100VAC

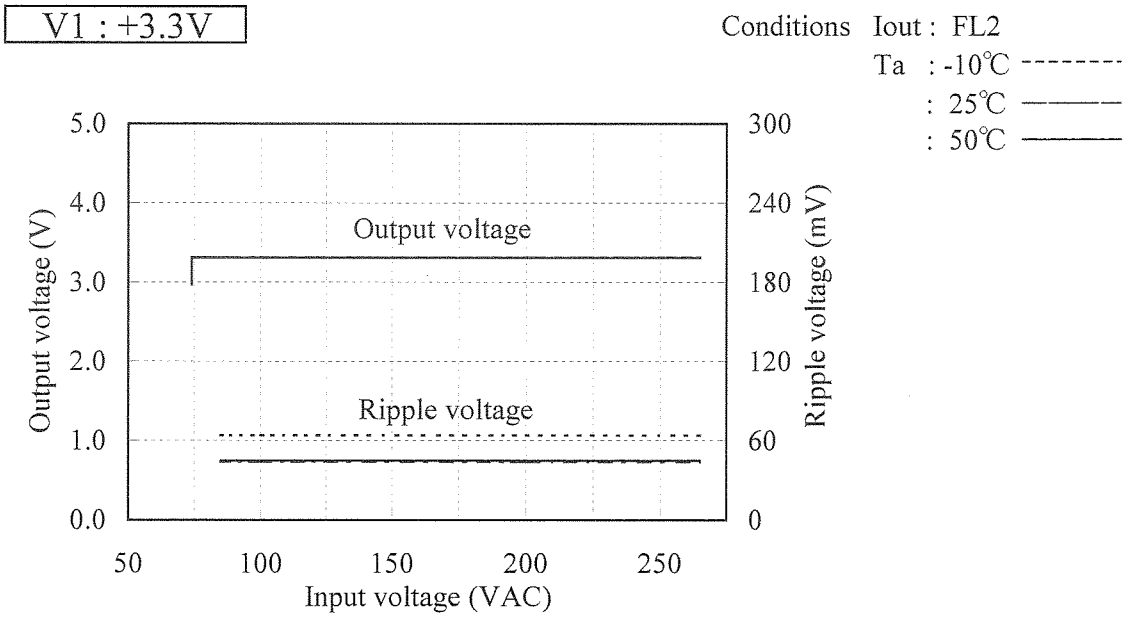
Iout : FL2

Ta	-10℃	+25℃	+50℃	temperature stability	
Vout	4.964V	4.972V	4.972V	8mV	0.16%

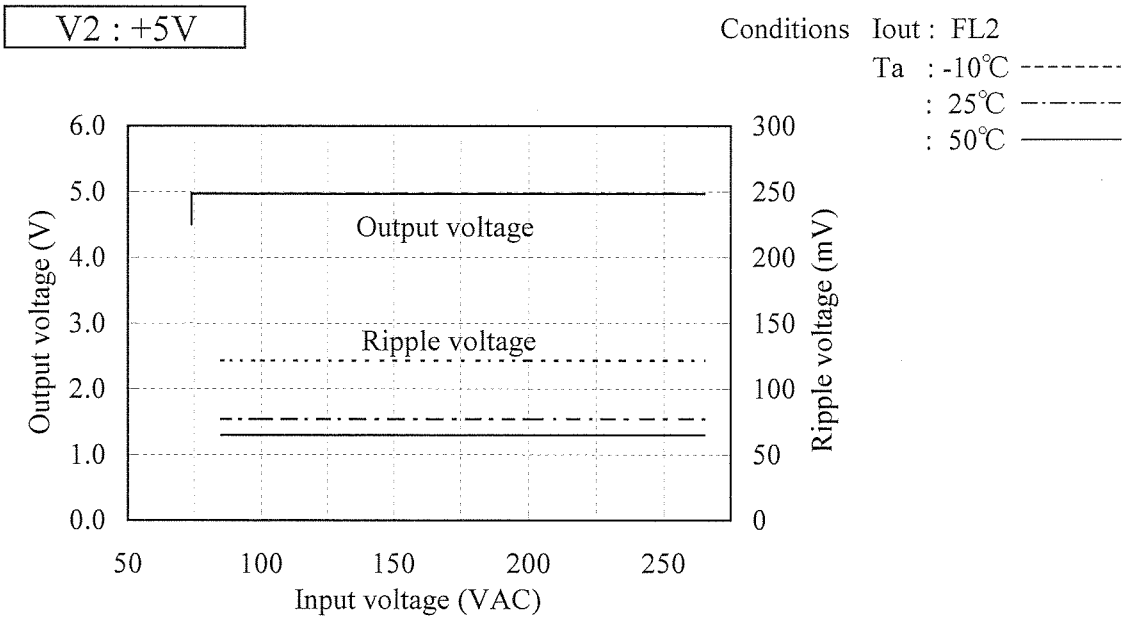
2.1 (2) 出力電圧、リップル電圧対入力電圧

Output voltage and Ripple voltage v.s. Input voltage

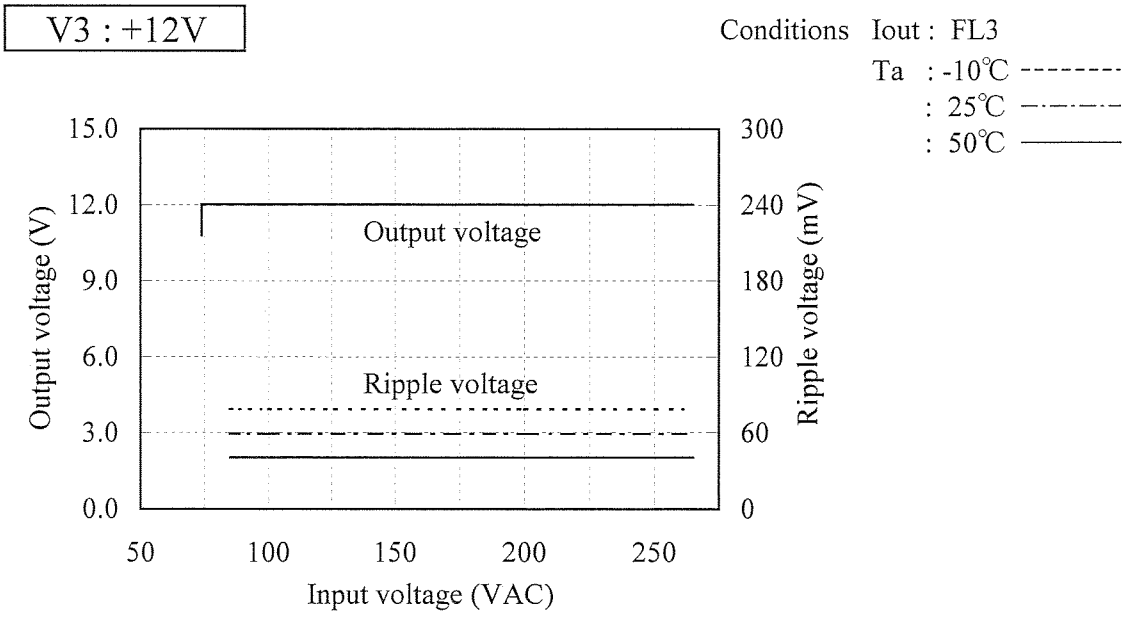
V1 : +3.3V



V2 : +5V



V3 : +12V

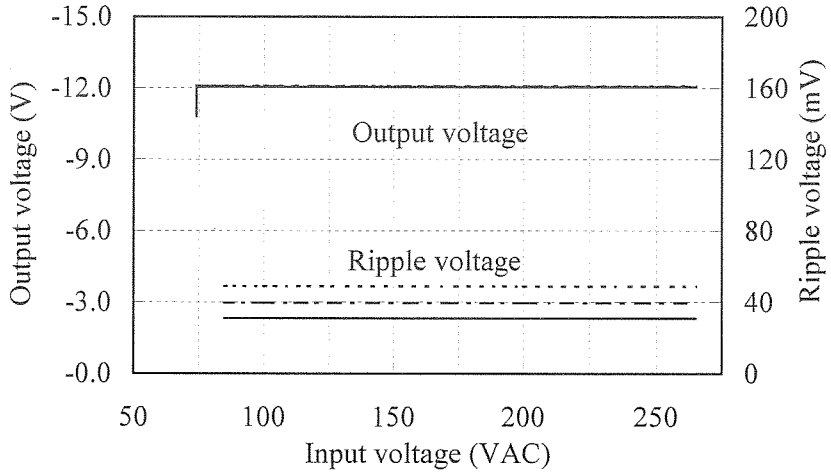


2.1 (2) 出力電圧、リップル電圧対入力電圧

Output voltage and Ripple voltage v.s. Input voltage

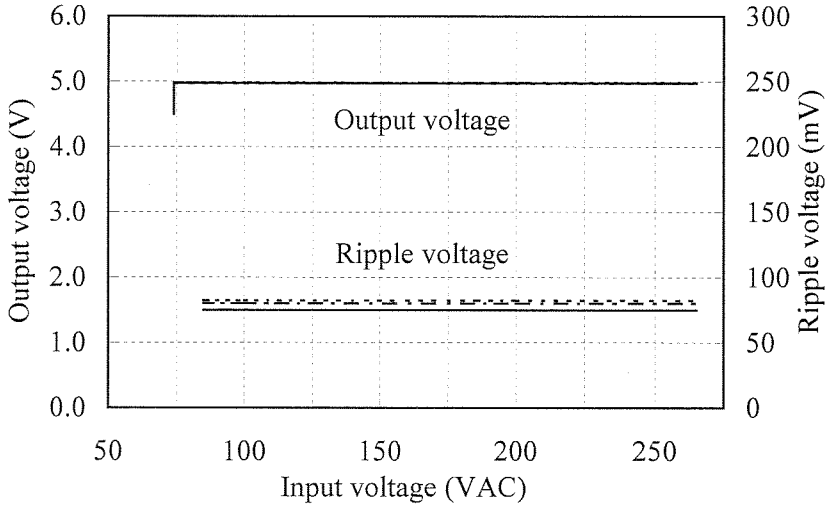
V4 : -12V

Conditions Iout : FL2
Ta : -10℃
: 25℃
: 50℃



V5 : +5VSB

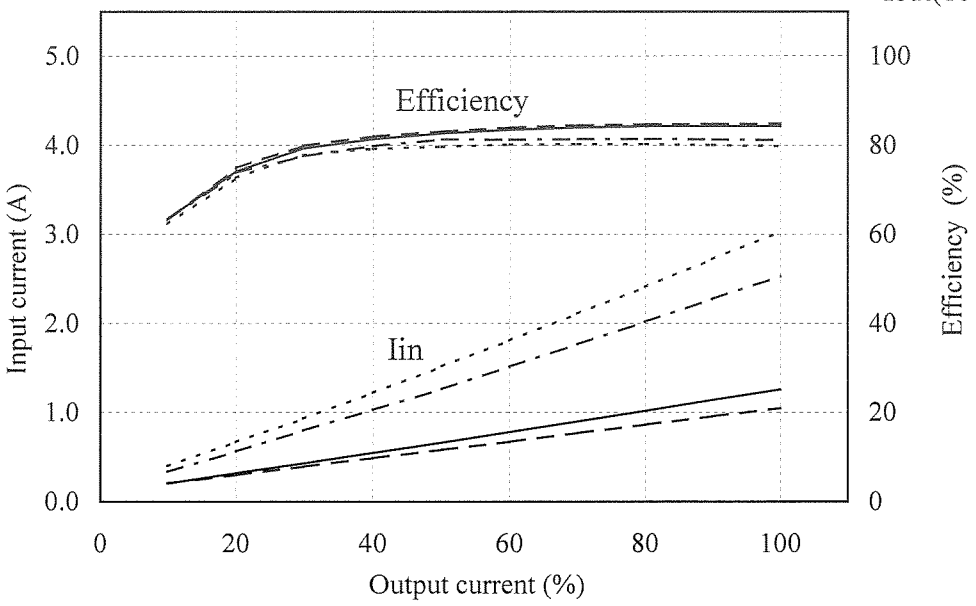
Conditions Iout : FL2
Ta : -10℃
: 25℃
: 50℃



2.1 (3) 効率、入力電流対出力電流

Efficiency and Input current v.s. Output current

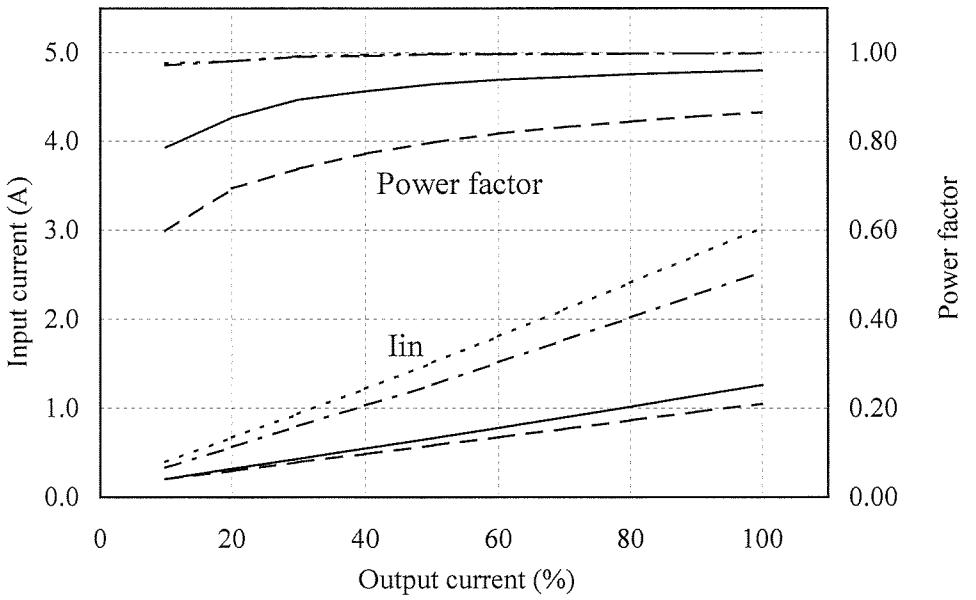
Conditions Vin : 85VAC --------
: 100VAC -·-·-·-·-
: 200VAC ————
: 265VAC – – – – –
Ta : 25℃
Iout(100%) : FL4



2.1 (4) 力率、入力電流対出力電流

Power factor and Input current v.s. Output current

Conditions Vin : 85VAC --------
: 100VAC -·-·-·-·-
: 200VAC ————
: 265VAC – – – – –
Ta : 25℃
Iout(100%) : FL4



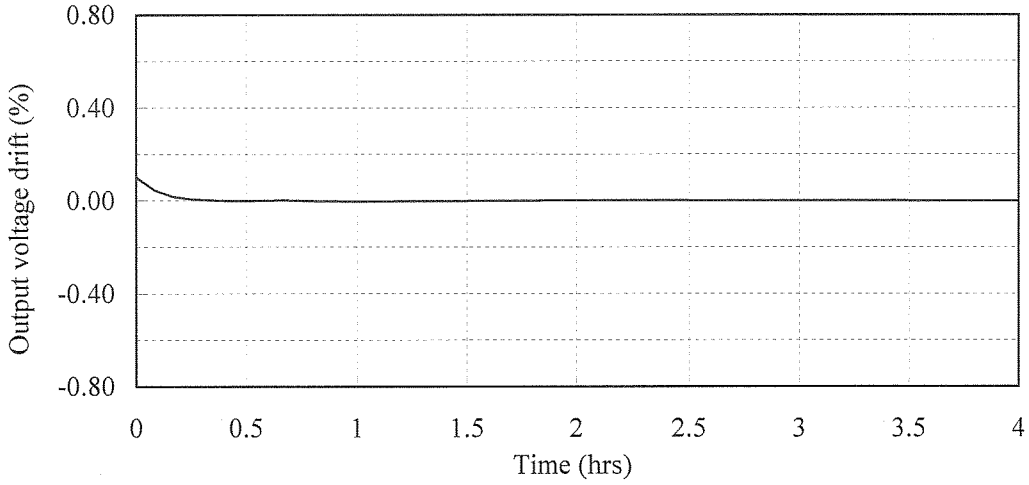
2.2 通電ドリフト特性

Warm up voltage drift characteristics

Conditions Vin : 100VAC
Ta : 25℃

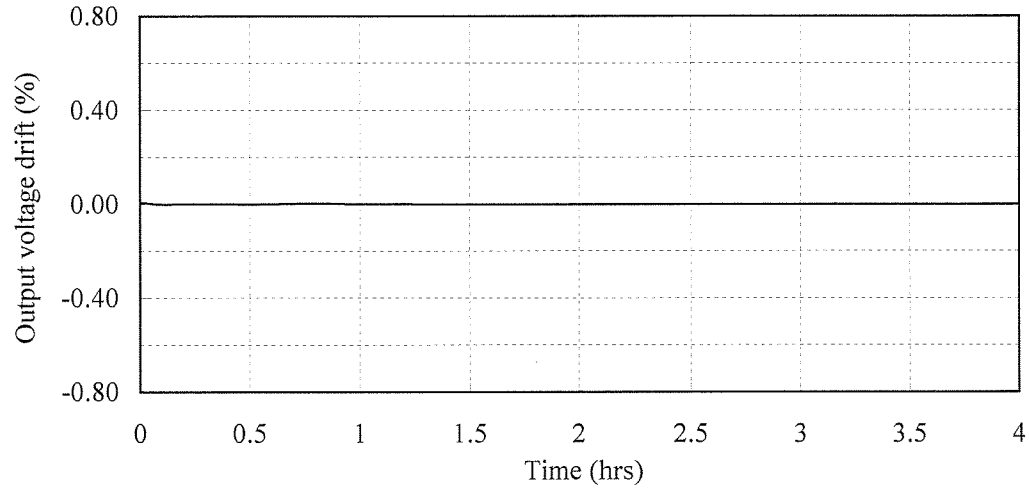
V1 : +3.3V

Iout : FL2



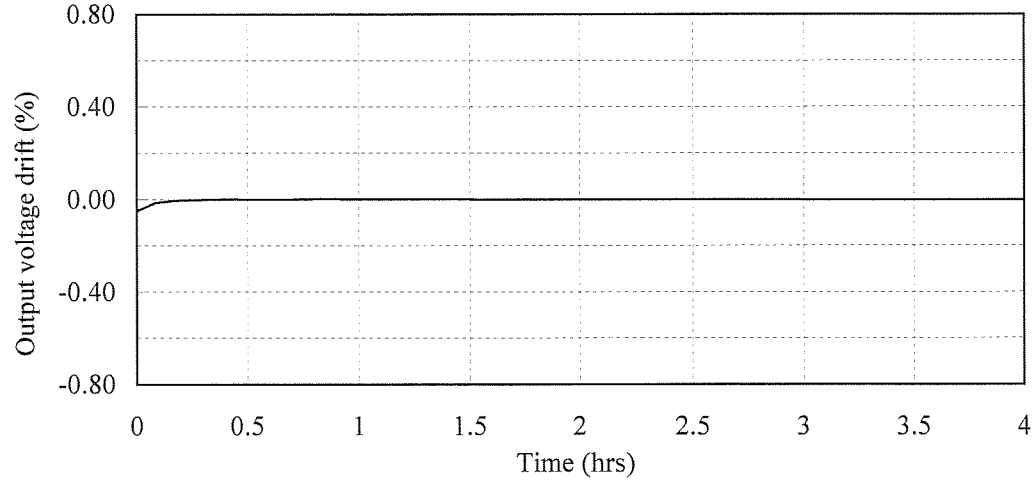
V2 : +5V

Iout : FL2



V3 : +12V

Iout : FL3



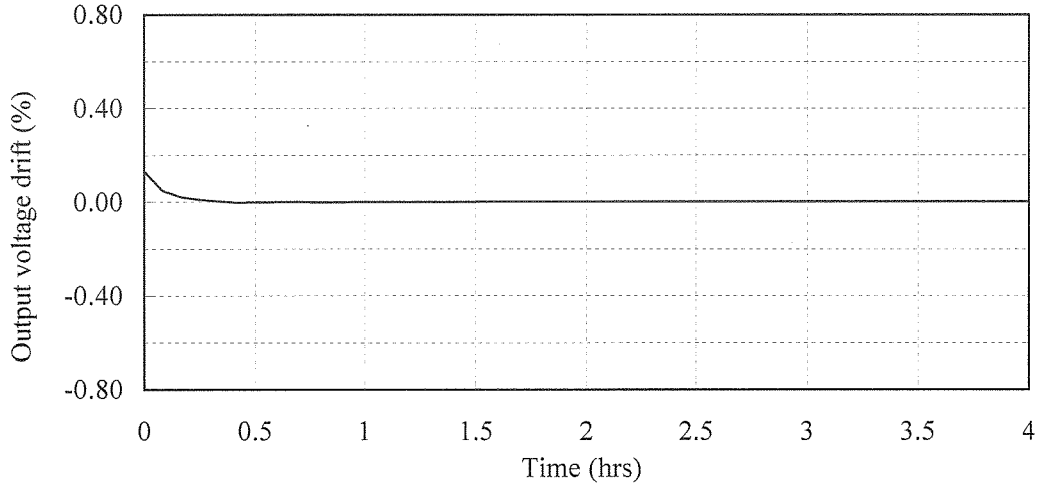
2.2 通電ドリフト特性

Warm up voltage drift characteristics

Conditions Vin : 100VAC
Ta : 25℃

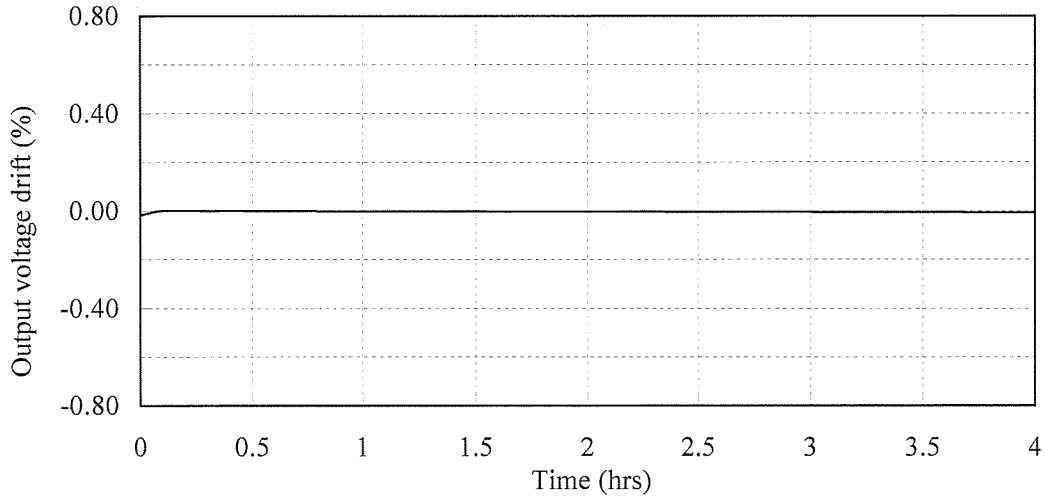
V4 : -12V

Iout : FL2



V5 : +5VSB

Iout : FL2



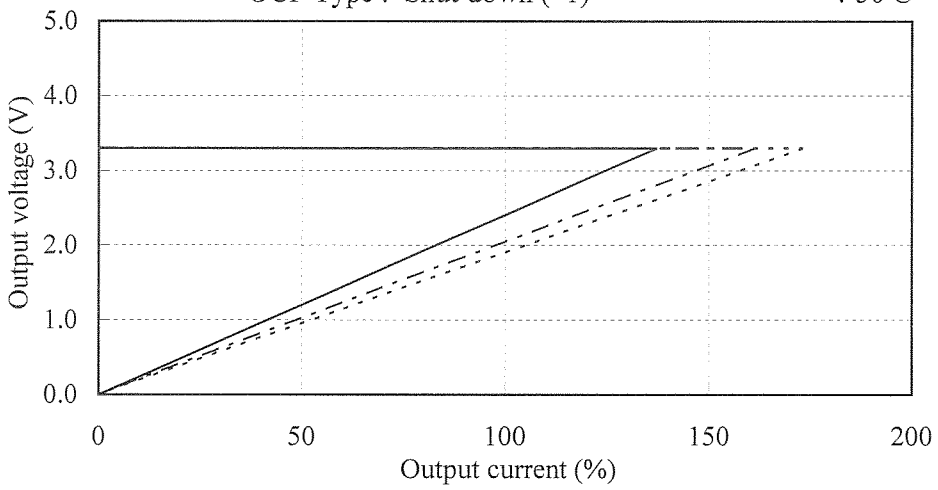
2.3 過電流保護特性

Over current protection (OCP) characteristics

Conditions Vin : 100VAC
Ta : -10℃ -------
: 25℃ —·—·—
: 50℃ ———

V1 : +3.3V

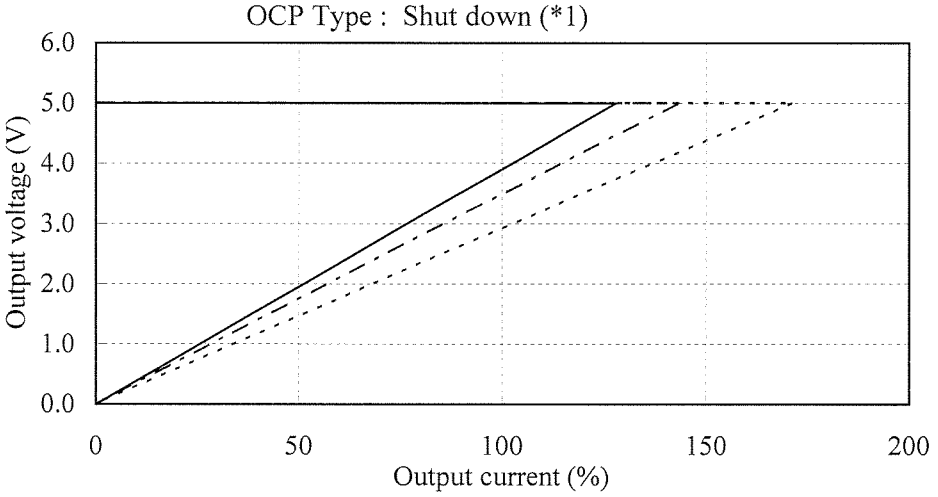
OCP Type : Shut down (*1)



Note1: V2,V3,V4,V5 => No Load
Note2: V1 Peak Load=100%

V2 : +5V

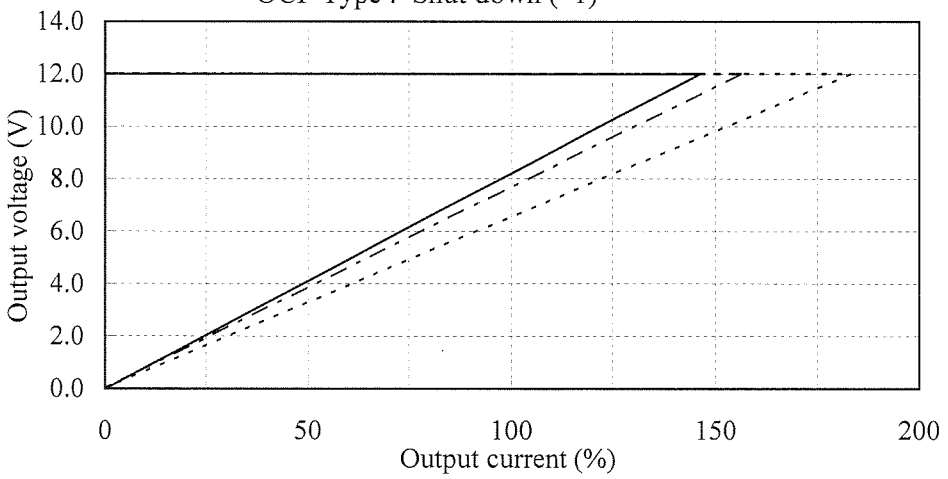
OCP Type : Shut down (*1)



Note3: V1,V3,V4,V5 => No Load
Note4: V2 Peak Load=100%

V3 : +12V

OCP Type : Shut down (*1)



Note5: V1,V2,V4,V5 => No Load
Note6: V3 Peak Load=100%

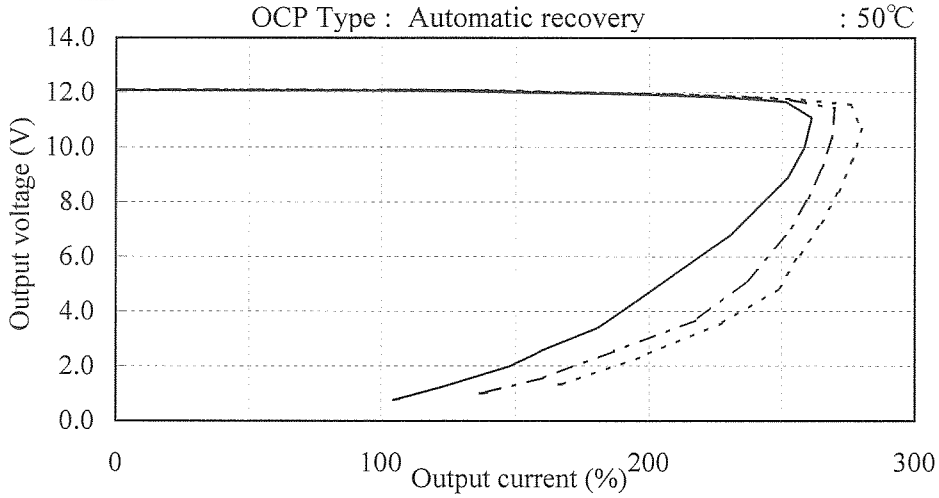
2.3 過電流保護特性

Over current protection (OCP) characteristics

Conditions Vin : 100VAC
Ta : -10℃ -------
: 25℃ -·-·-·-
: 50℃ ———

V4 : -12V

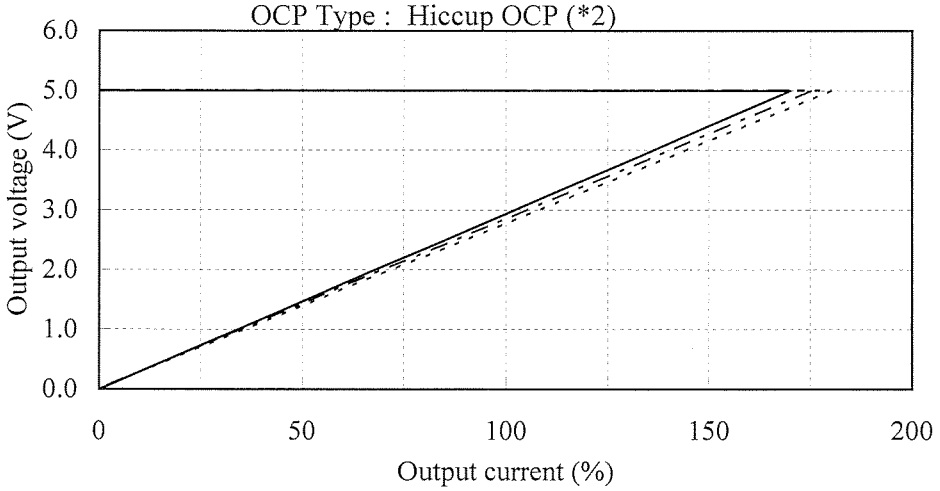
OCP Type : Automatic recovery



Note7: V1,V2,V3,V5 => No Load
Note8: V4 Peak Load=100%

V5 : +5VSB

OCP Type : Hiccup OCP (*2)



Note9: V1,V2,V3,V4 => No Load
Note10: V5 Peak Load=100%

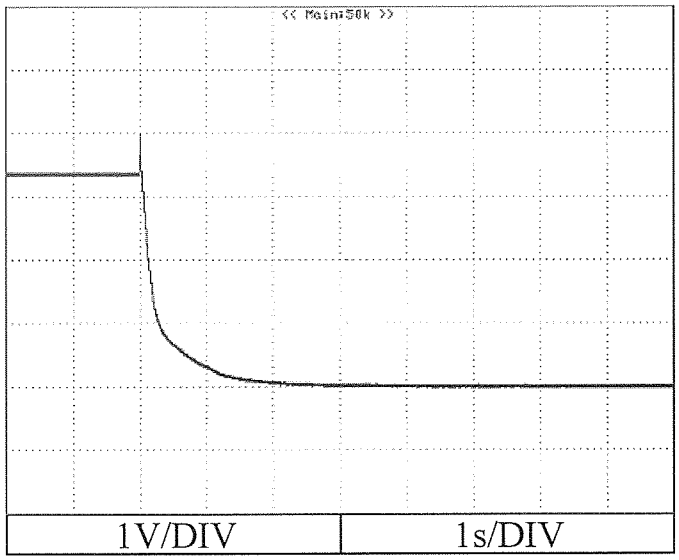
(*1) Output will be shut down after the delay time at 5 seconds.
(*2) When 5V SB is shut down with over current or short,
all output power will be shut down.

2.4 過電圧保護特性

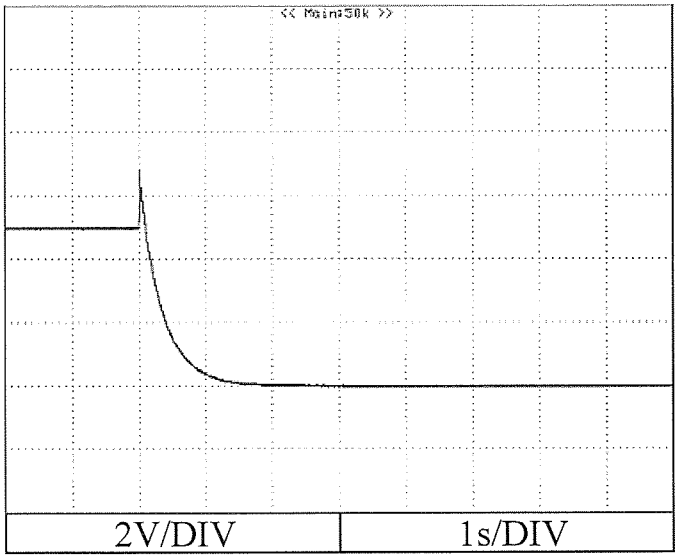
Over voltage protection (OVP) characteristics

Conditions Vin : 100VAC
Iout : 0% (FL1)
Ta : 25℃

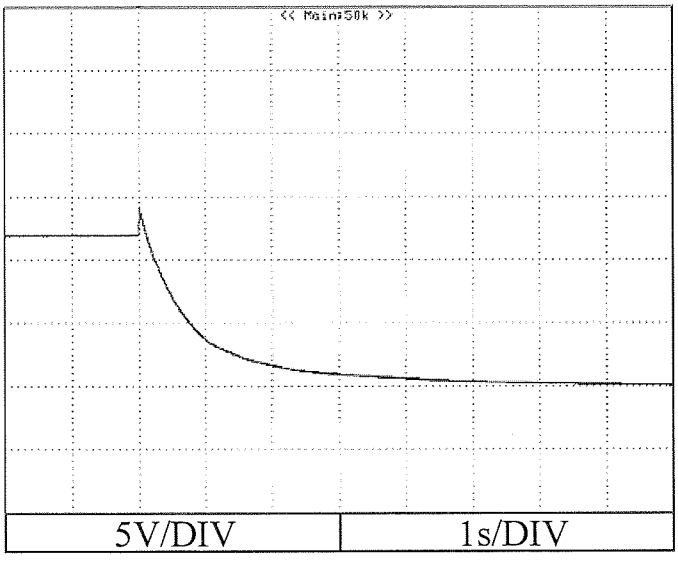
V1 : +3.3V



V2 : +5V



V3 : +12V

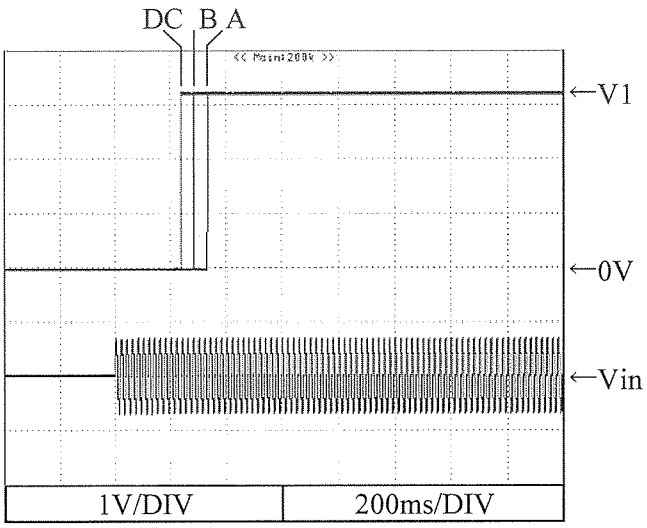


2.5 出力立ち上がり特性
Output rise characteristics

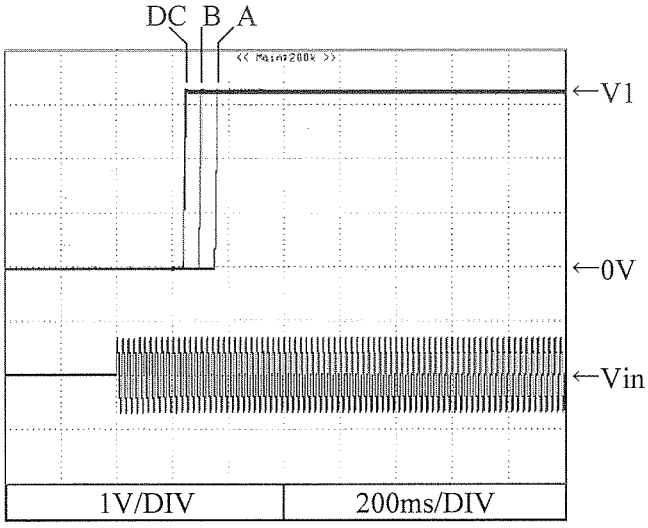
Conditions Vin : 85VAC (A)
100VAC (B)
200VAC (C)
265VAC (D)
Ta : 25℃

V1 : +3.3V

Iout : 0% (FL1)

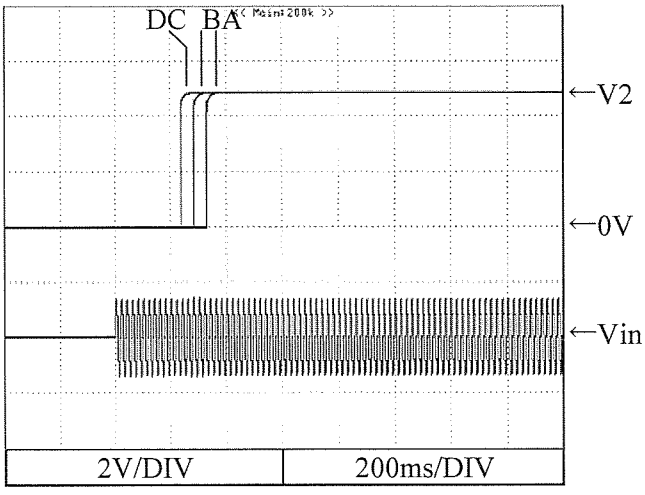


Iout : 100% (FL2)

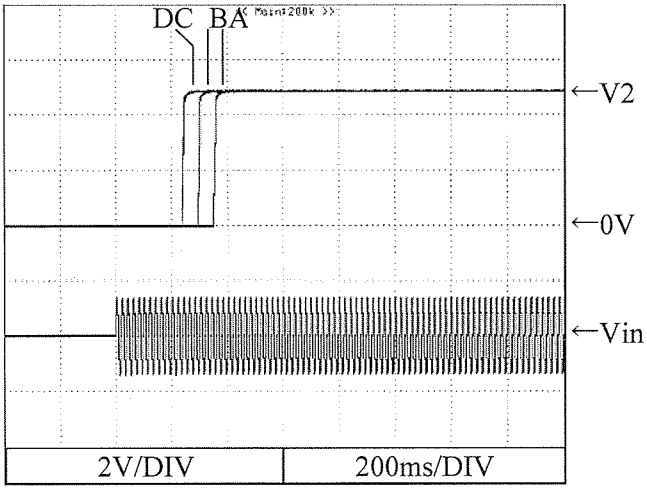


V2 : +5V

Iout : 0% (FL1)



Iout : 100% (FL2)

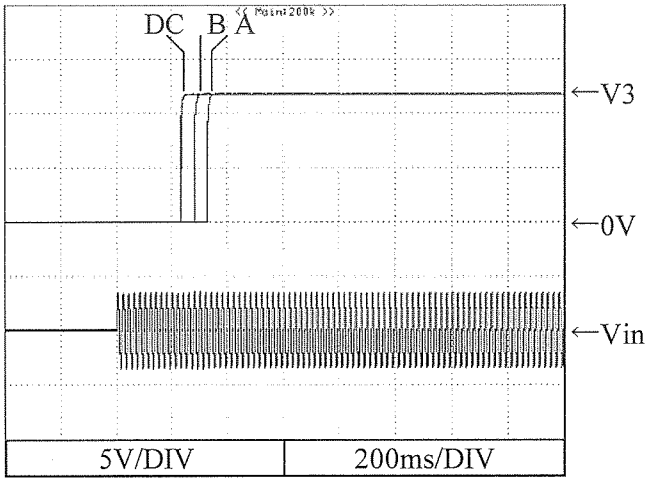


2.5 出力立ち上がり特性
Output rise characteristics

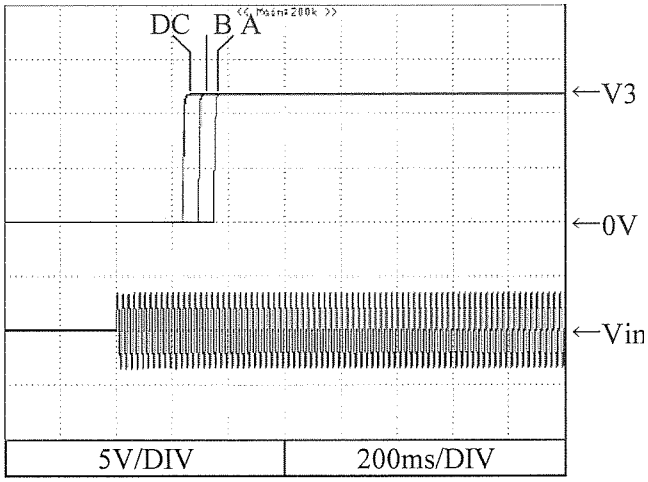
Conditions Vin : 85VAC (A)
100VAC (B)
200VAC (C)
265VAC (D)
Ta : 25℃

V3 : +12V

Iout : 0% (FL1)

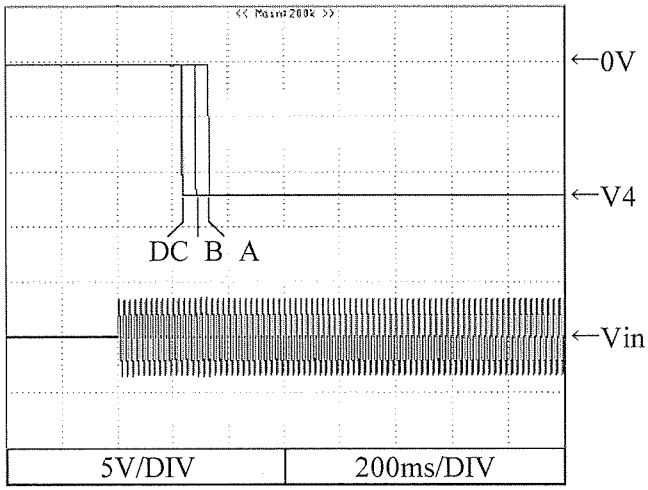


Iout : 100% (FL3)

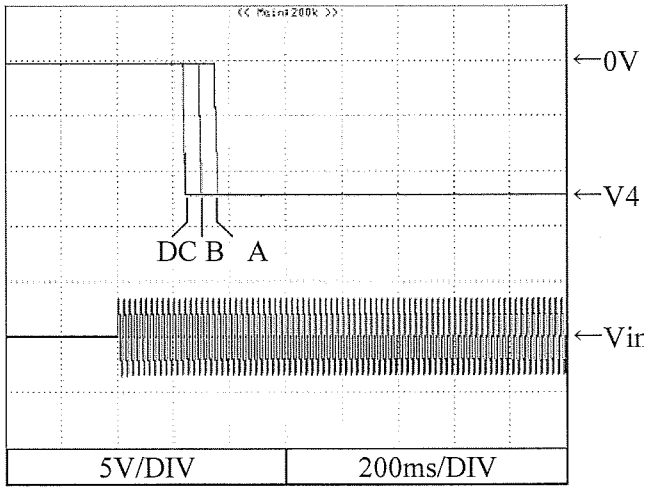


V4 : -12V

Iout : 0% (FL1)



Iout : 100% (FL2)

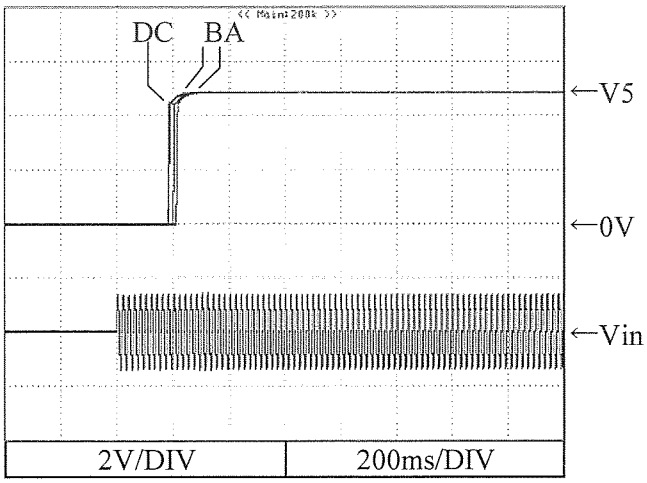


2.5 出力立ち上がり特性
Output rise characteristics

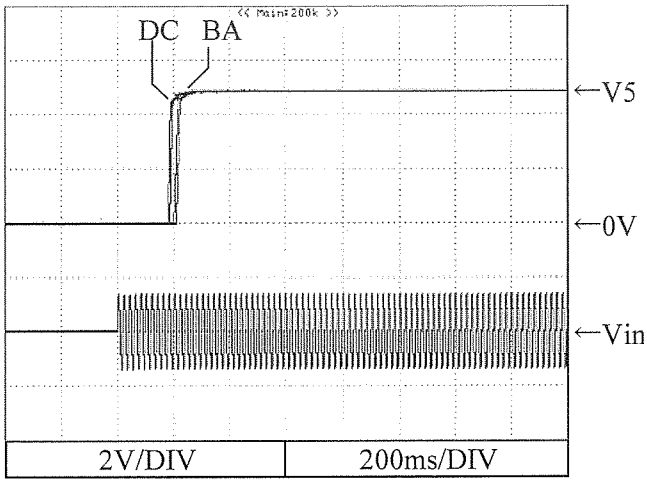
Conditions Vin : 85VAC (A)
100VAC (B)
200VAC (C)
265VAC (D)
Ta : 25℃

V5 : +5VSB

Iout : 0% (FL1)



Iout : 100% (FL2)

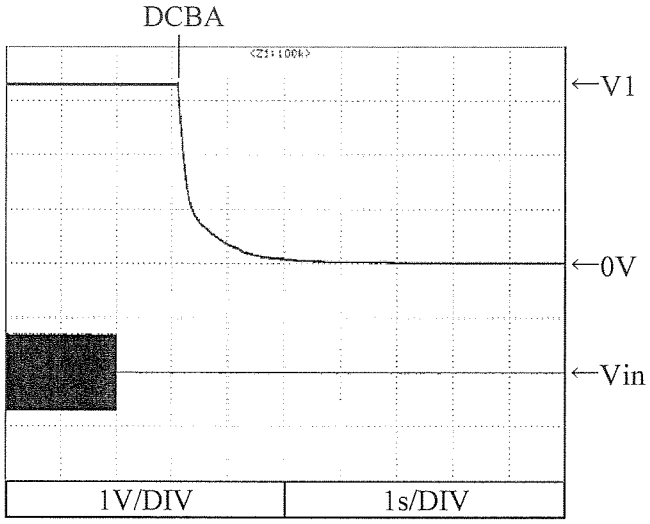


2.6 出力立ち下がり特性
Output fall characteristics

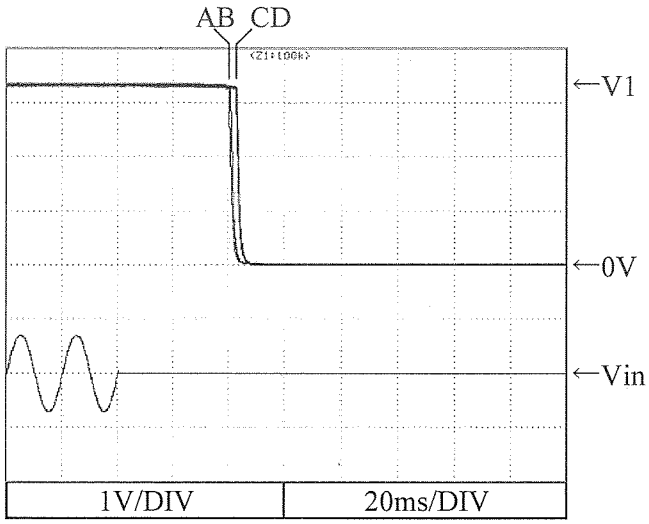
Conditions Vin : 85VAC (A)
100VAC (B)
200VAC (C)
265VAC (D)
Ta : 25℃

V1 : +3.3V

Iout : 0% (FL1)

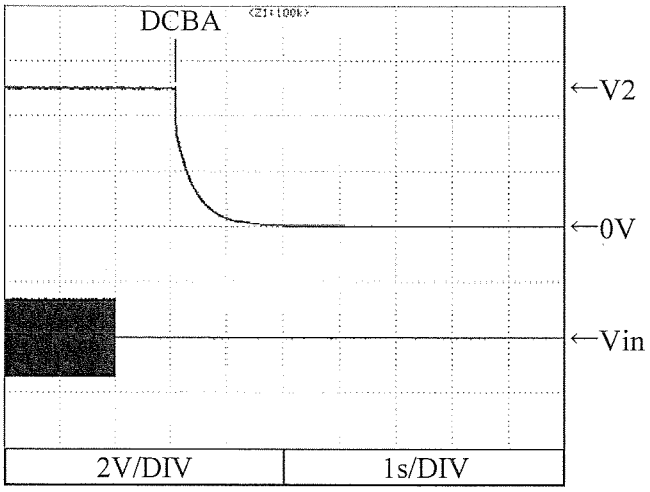


Iout : 100% (FL2)

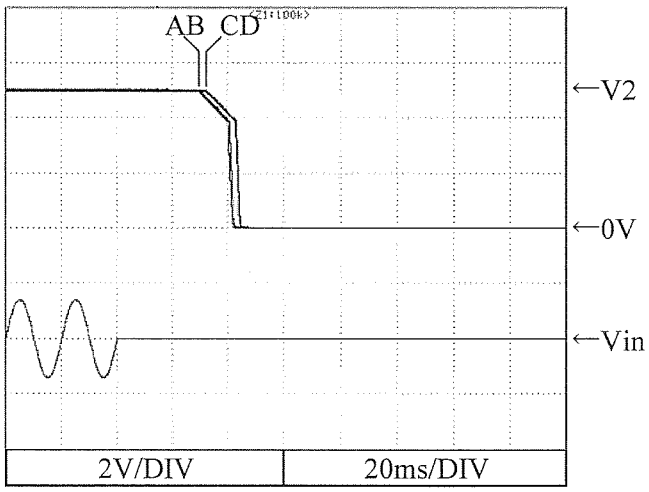


V2 : +5V

Iout : 0% (FL1)



Iout : 100% (FL2)

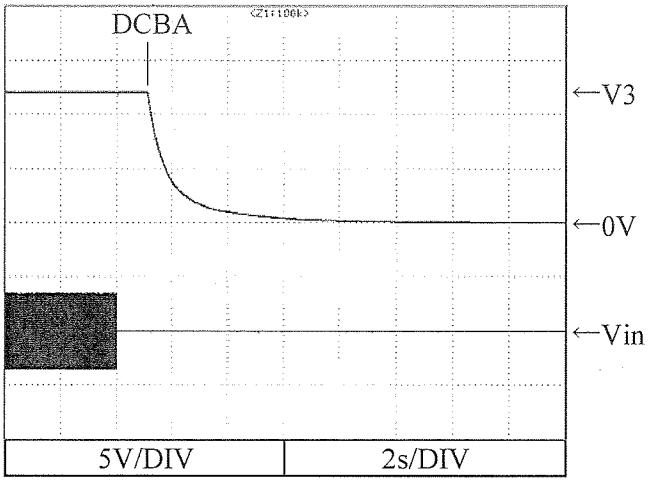


2.6 出力立ち下がり特性
Output fall characteristics

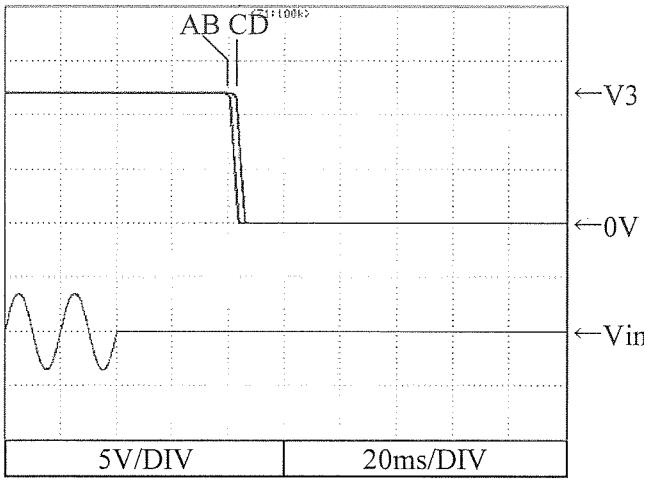
Conditions Vin : 85VAC (A)
100VAC (B)
200VAC (C)
265VAC (D)
Ta : 25℃

V3 : +12V

Iout : 0% (FL1)

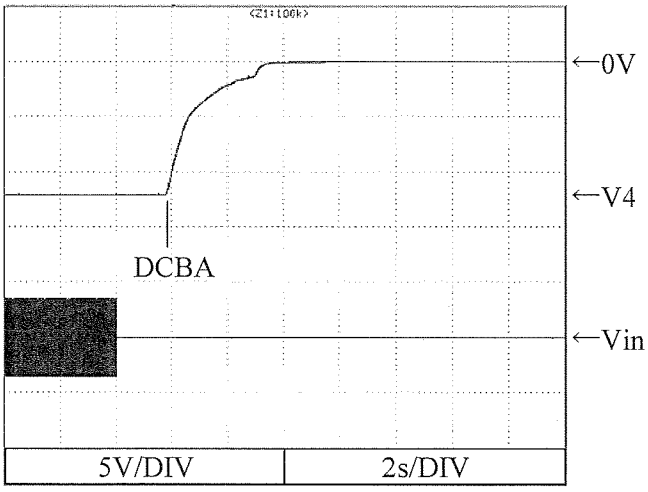


Iout : 100% (FL3)

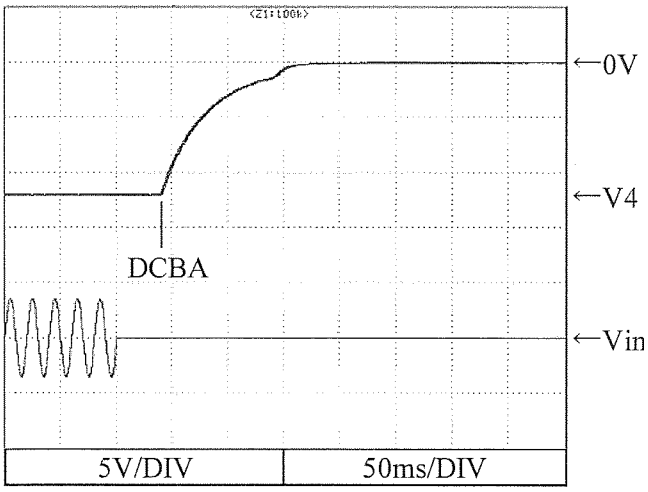


V2 : -12V

Iout : 0% (FL1)



Iout : 100% (FL2)

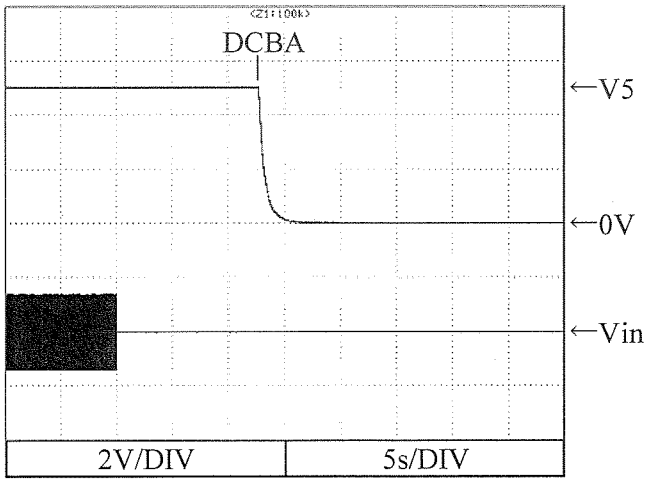


2.6 出力立ち下がり特性
Output fall characteristics

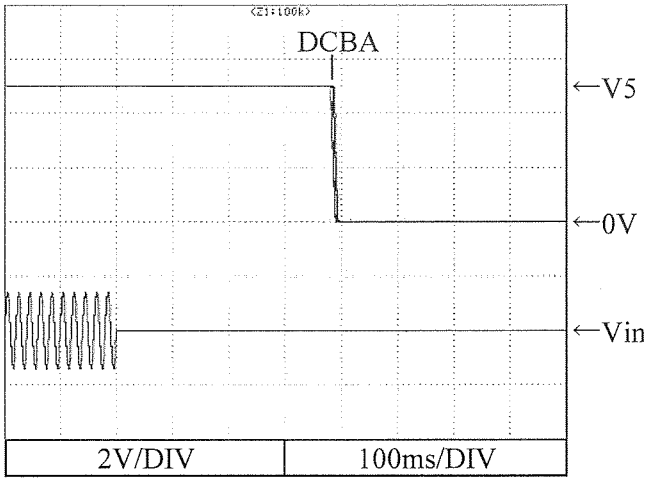
Conditions Vin : 85VAC (A)
100VAC (B)
200VAC (C)
265VAC (D)
Ta : 25℃

V5 : +5VSB

Iout : 0% (FL1)

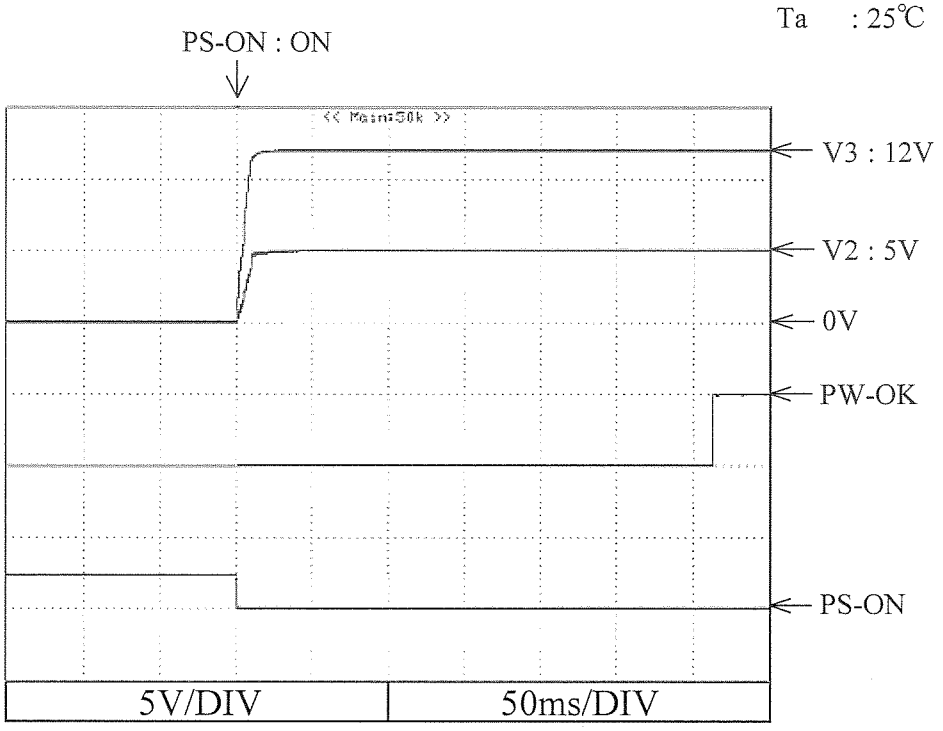


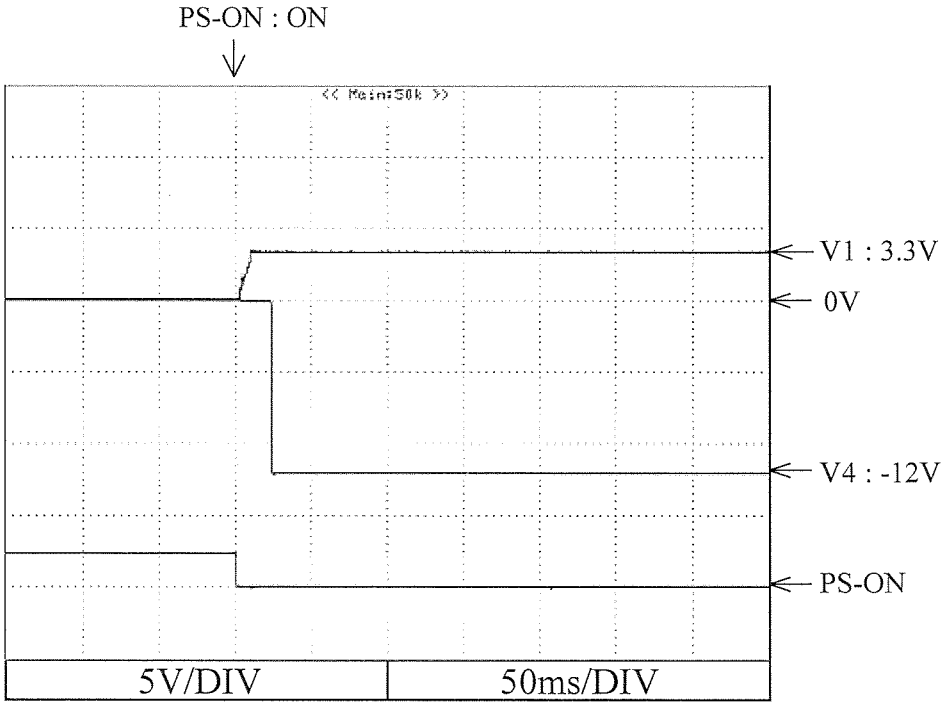
Iout : 100% (FL2)



2.7 ON/OFFコントロール時出力立ち上がり特性
Output rise characteristics with ON/OFF Control

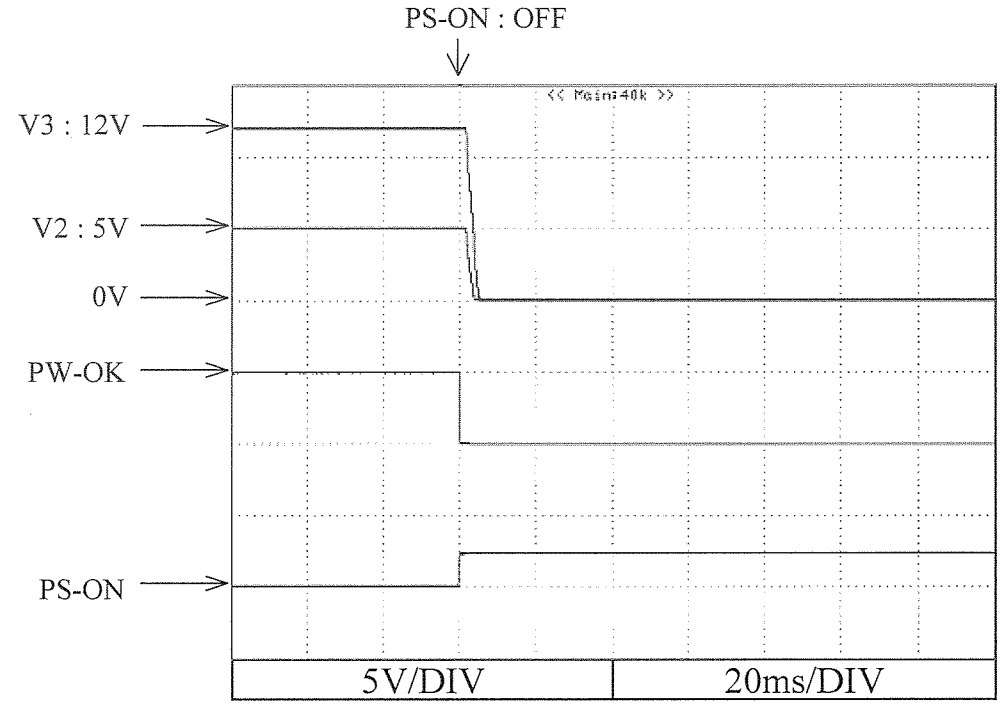
Conditions Vin : 100VAC
Iout : 100% (FL4)
Ta : 25℃

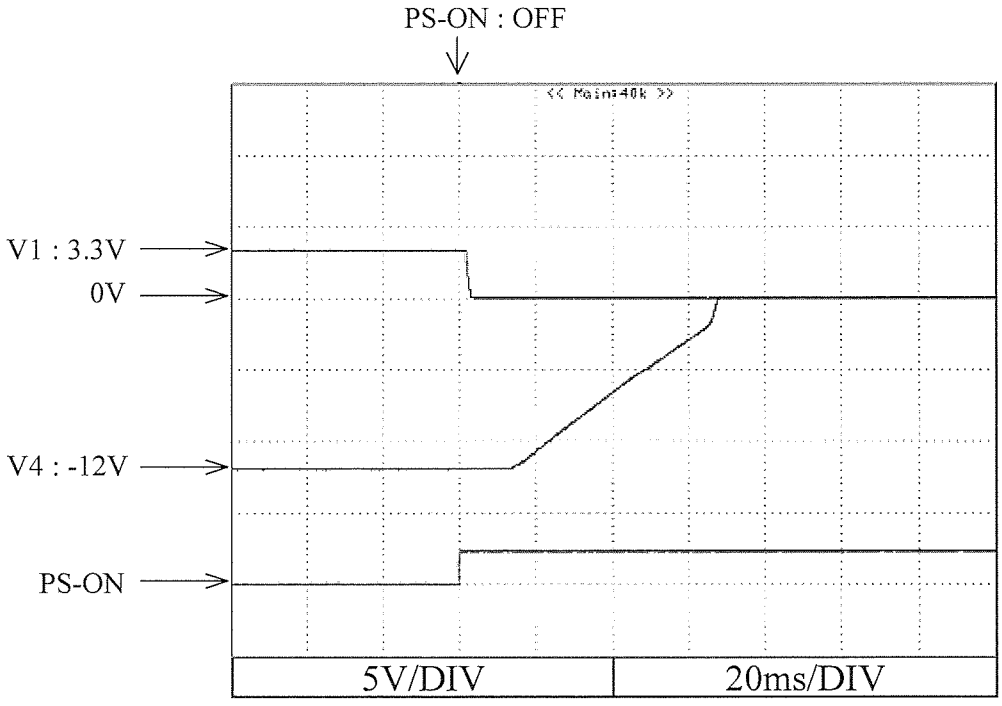




2.8 ON/OFFコントロール時出力立ち下がり特性
Output fall characteristics with ON/OFF Control

Conditions Vin : 100VAC
Iout : 100% (FL4)
Ta : 25℃

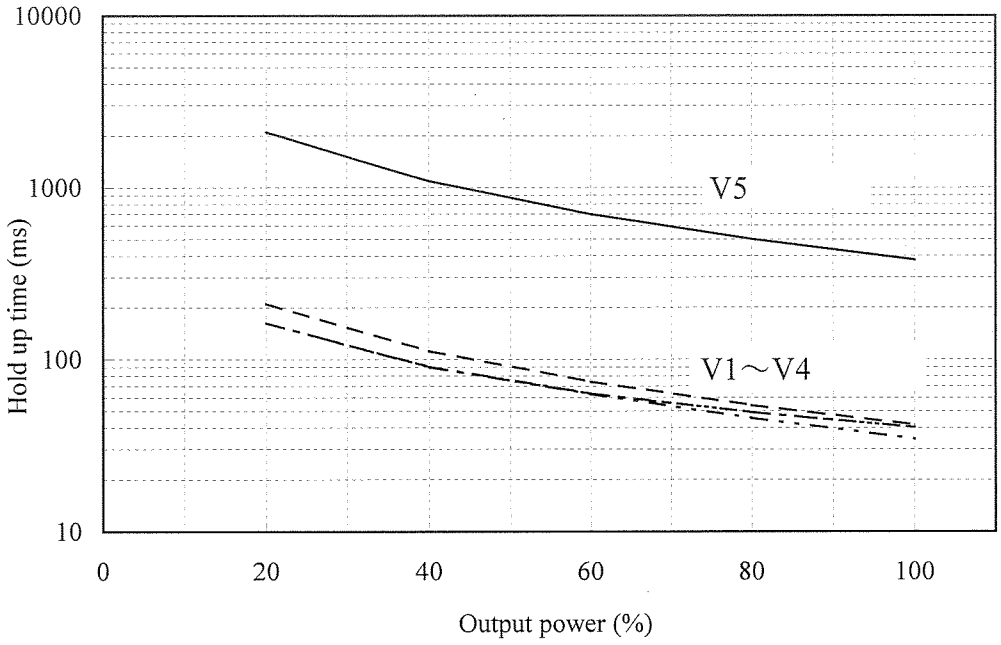




2.9 出力保持時間特性

Hold up time characteristics

Conditions V1 : 3.3V : FL2
V2 : 5V : FL2
V3 : 12V : FL3
V4 : -12V : FL2
V5 : 5V : FL2
Vin : 100VAC
Ta : 25℃

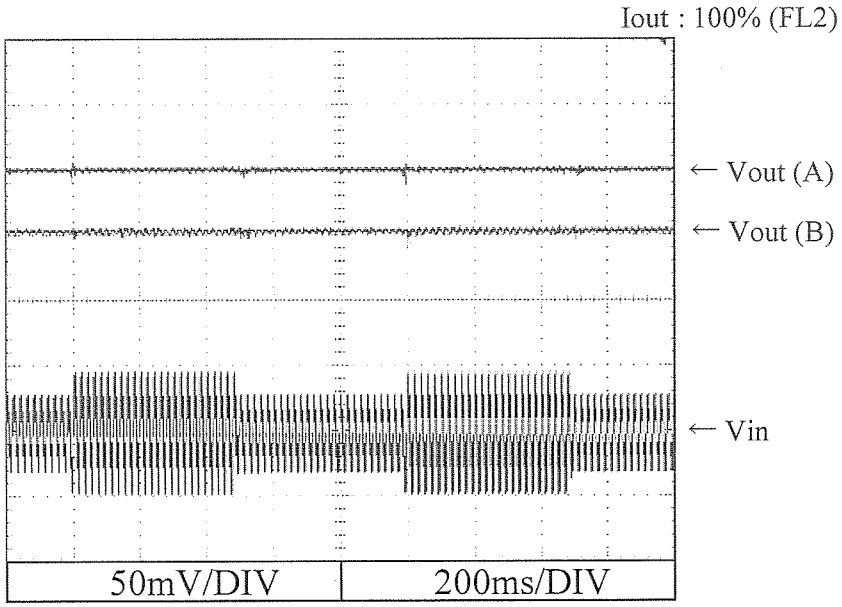


2.10 過渡応答（入力急変）特性

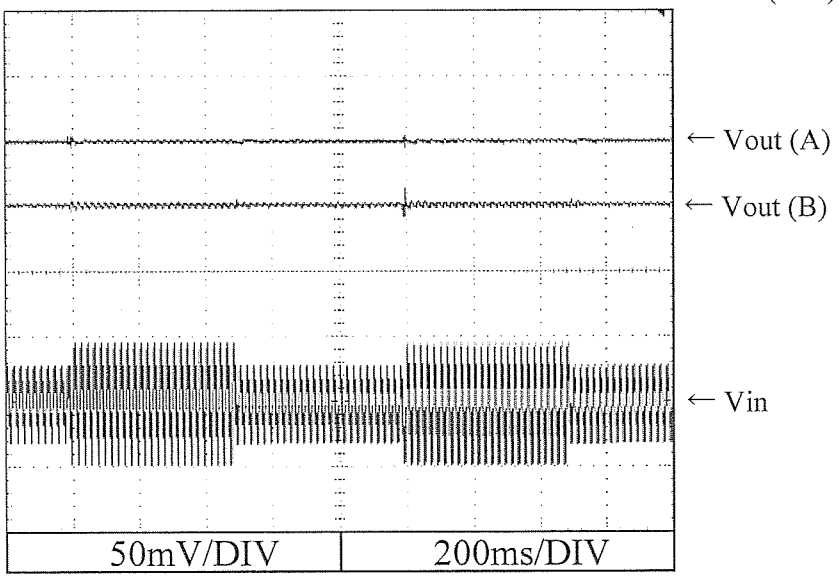
Dynamic line response characteristics

Conditions Vin : 85VAC⟷132VAC (A)
170VAC⟷265VAC (B)
Ta : 25℃

V1 : +3.3V



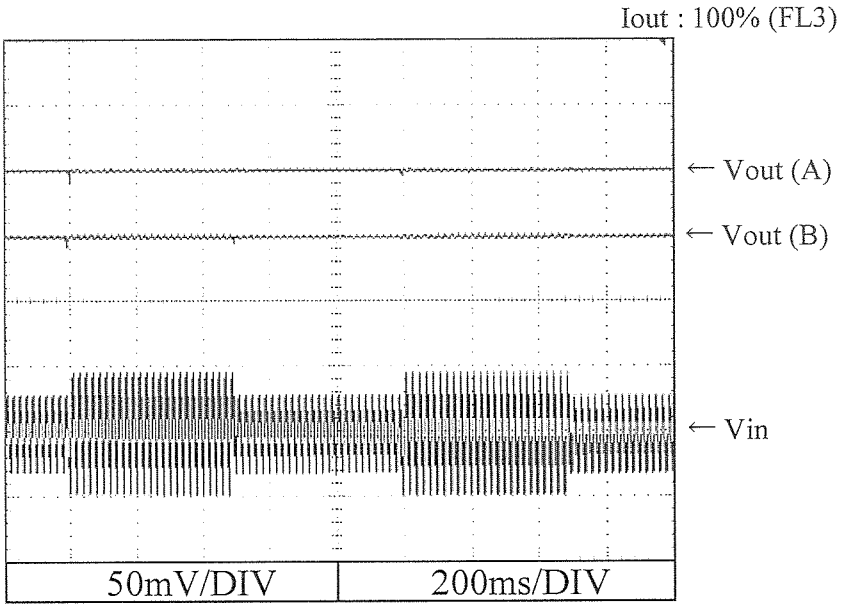
V2 : +5V



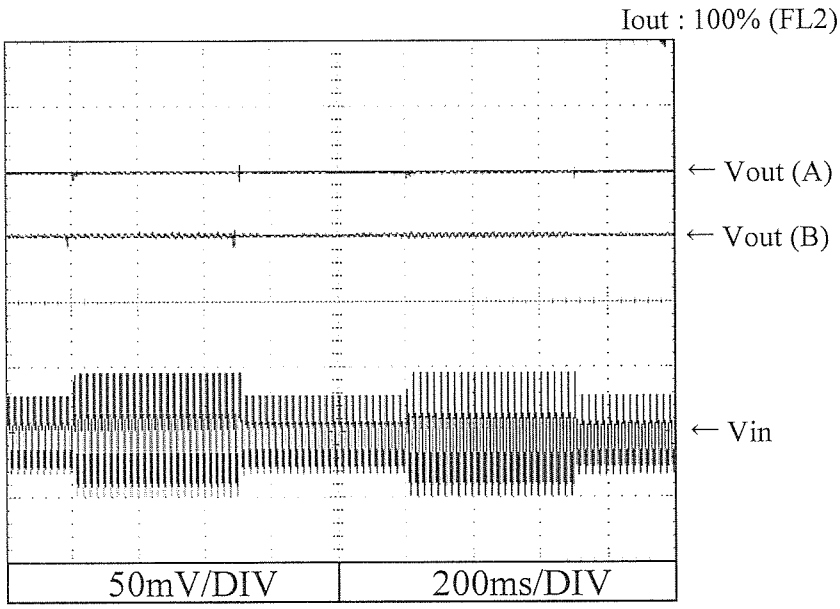
2.10 過渡応答（入力急変）特性
Dynamic line response characteristics

Conditions Vin : 85VAC⟷132VAC (A)
170VAC⟷265VAC (B)
Ta : 25℃

V3 : +12V



V4 : -12V



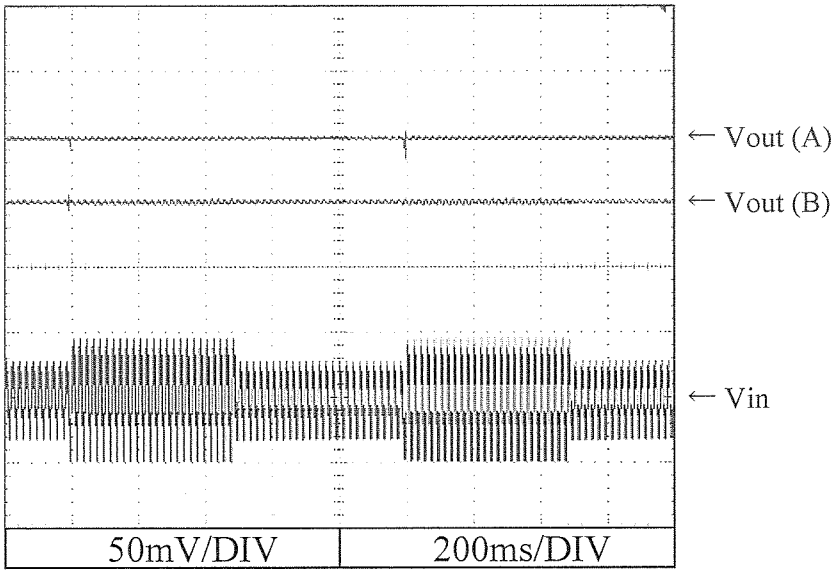
2.10 過渡応答（入力急変）特性

Dynamic line response characteristics

Conditions Vin : 85VAC←→132VAC (A)
170VAC←→265VAC (B)
Ta : 25℃

V5 : +5VSB

Iout : 100% (FL2)

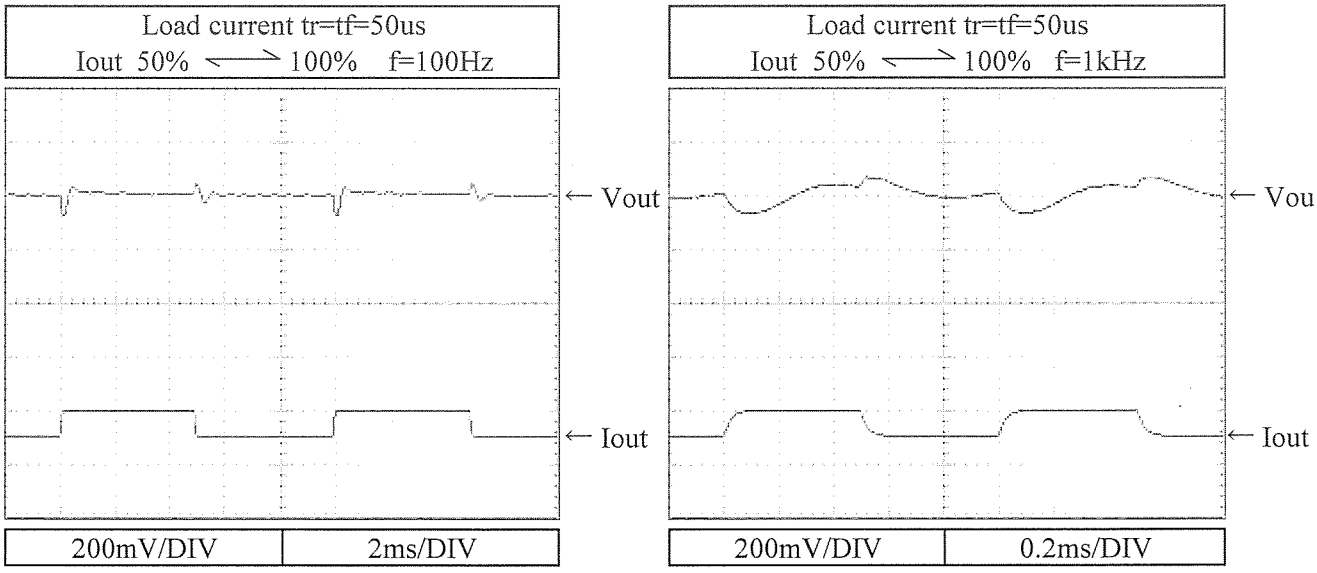


2.11 過渡応答（負荷急変）特性
Dynamic load response characteristics

Conditions Vin : 100VAC
Ta : 25℃

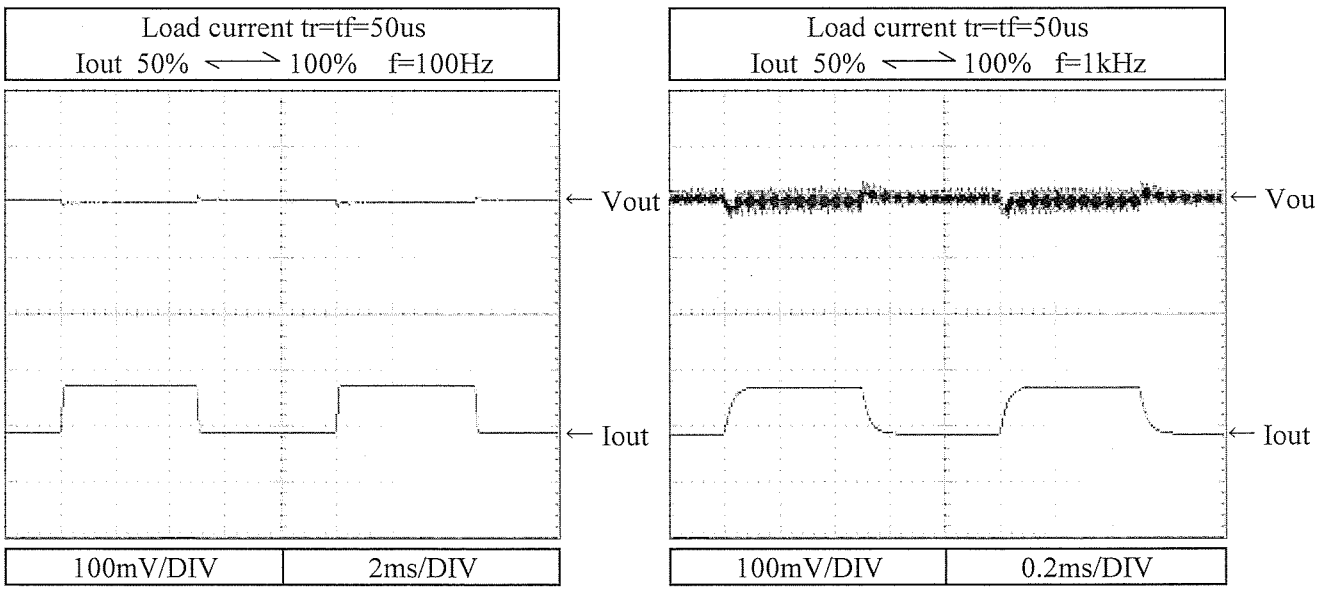
V1 : +3.3V

Iout : FL2



V2 : +5V

Iout : FL2

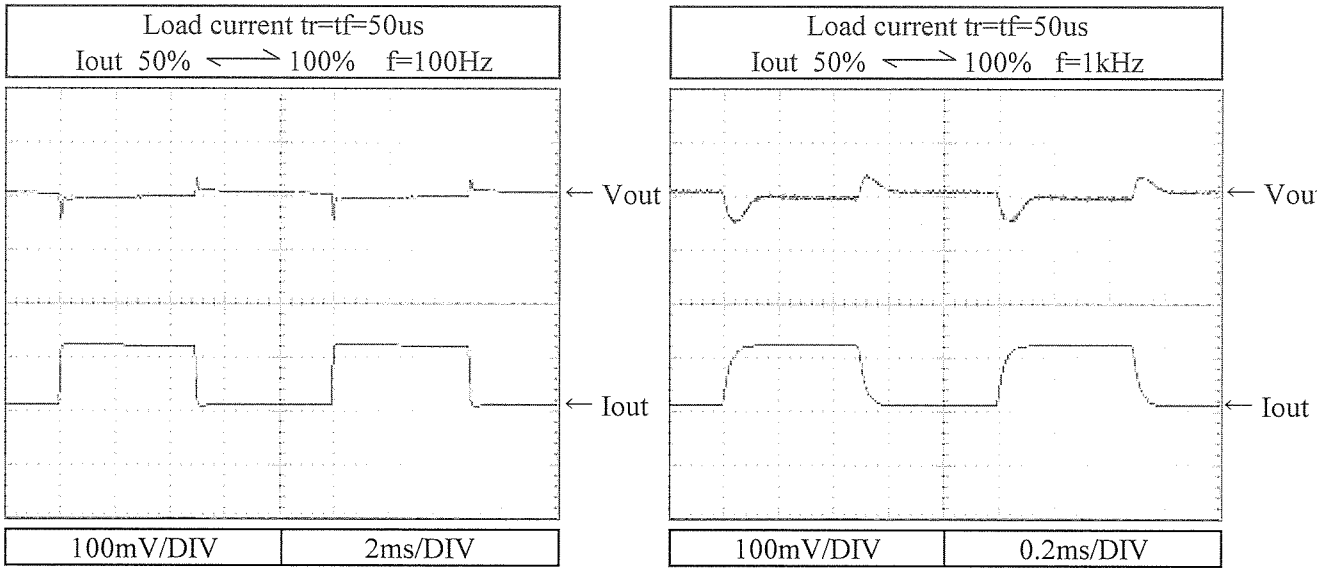


2.11 過渡応答（負荷急変）特性
Dynamic load response characteristics

Conditions Vin : 100VAC
Ta : 25℃

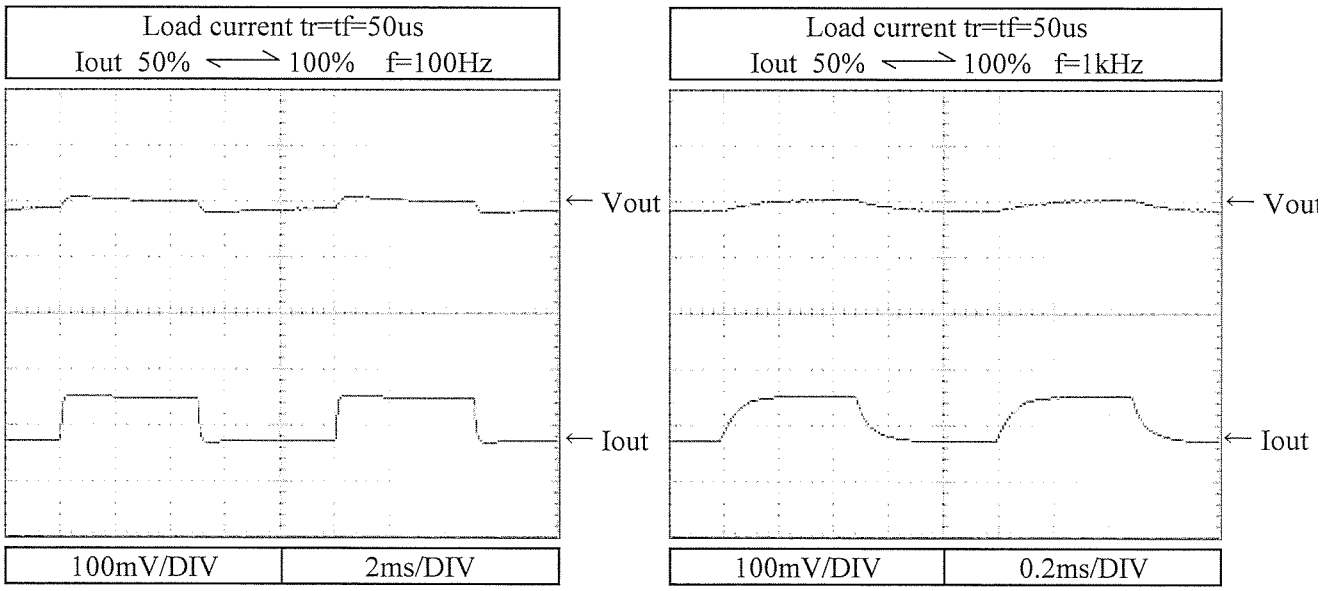
V3 : +12V

Iout : FL3



V4 : -12V

Iout : FL2

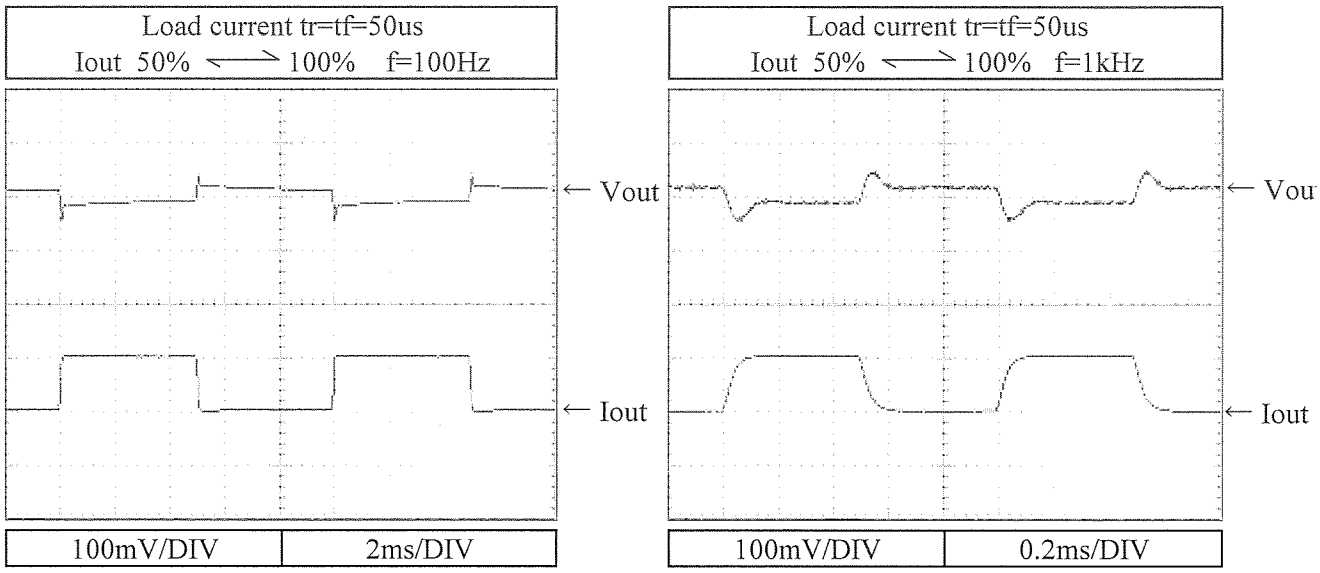


2.11 過渡応答（負荷急変）特性
Dynamic load response characteristics

Conditions Vin : 100VAC
Ta : 25℃

V5 : +5VSB

Iout : FL2

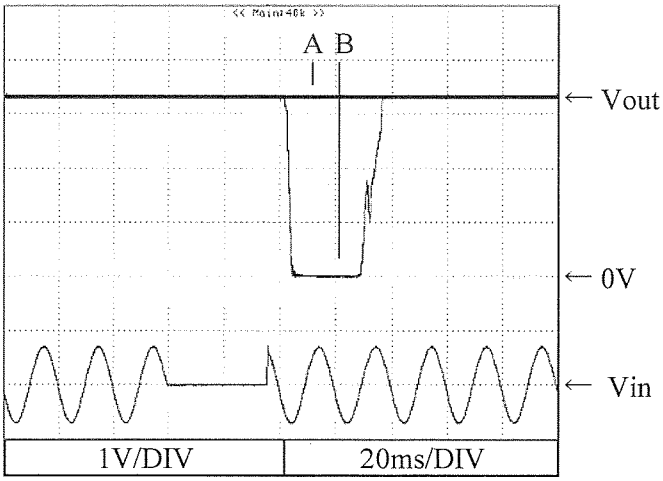


2.12 入力電圧瞬停特性

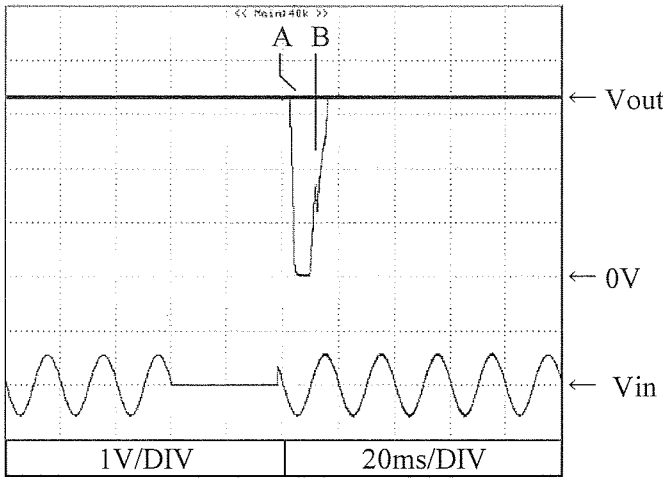
Response to brown out characteristics　　Conditions　　Ta : 25℃

V1 : +3.3V

Vin : 100VAC
Iout : 100% (FL2)
Brown out time : A= 35ms
B= 36ms

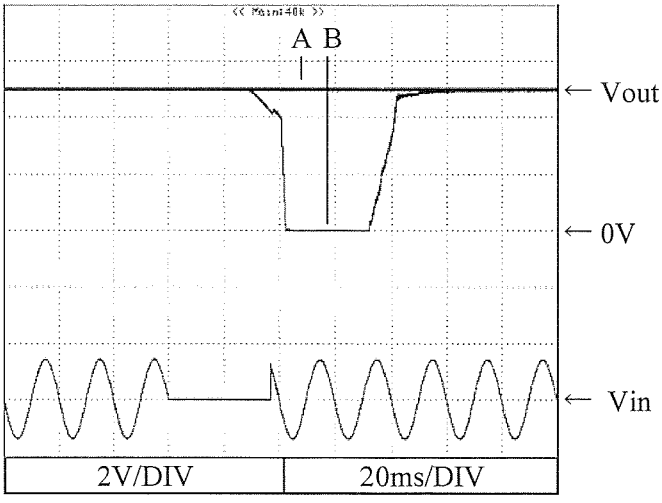


Vin : 200VAC
Iout : 100% (FL2)
Brown out time : A= 37ms
B= 38ms

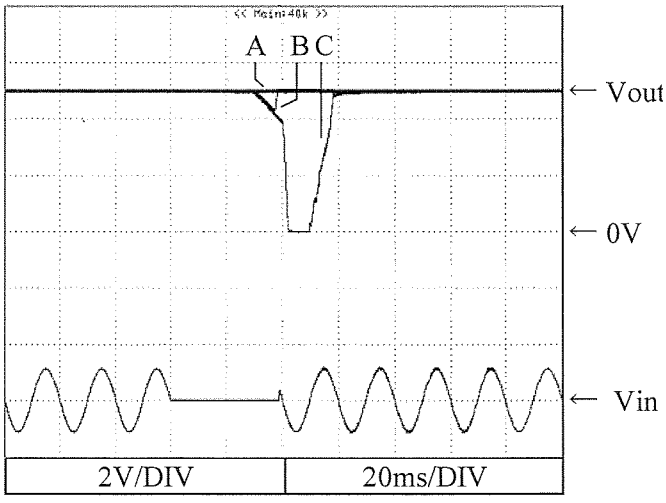


V2 : +5V

Vin : 100VAC
Iout : 100% (FL2)
Brown out time : A= 35ms
B= 36ms



Vin : 200VAC
Iout : 100% (FL2)
Brown out time : A= 37ms
B= 38ms
C= 39ms

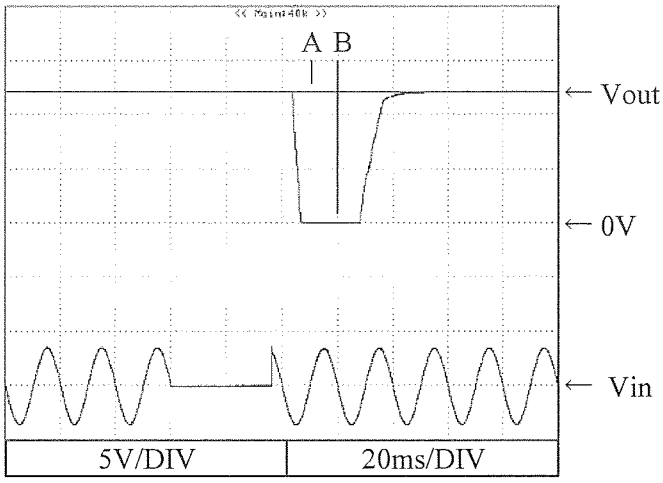


2.12 入力電圧瞬停特性

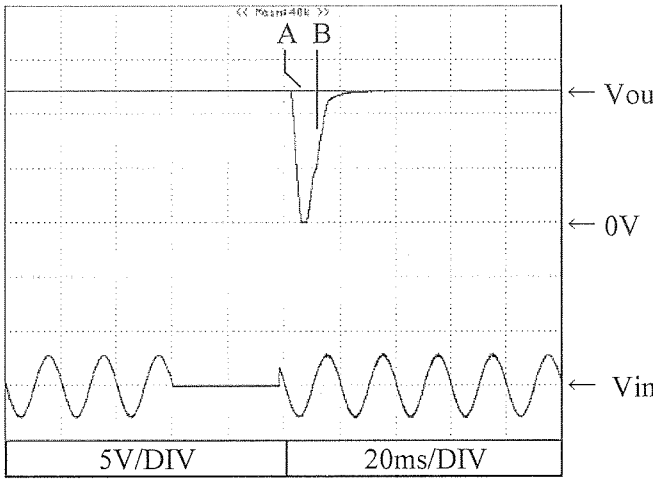
Response to brown out characteristics　　Conditions　　Ta : 25℃

V1 : +12V

Vin : 100VAC
Iout : 100% (FL3)
Brown out time : A= 35ms
B= 36ms

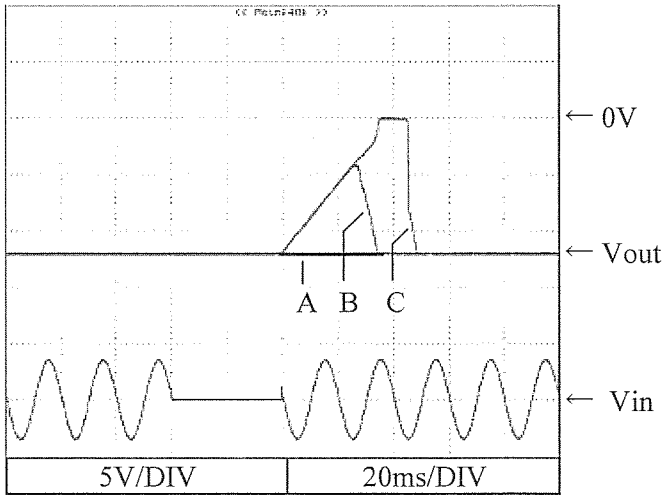


Vin : 200VAC
Iout : 100% (FL3)
Brown out time : A= 37ms
B= 38ms

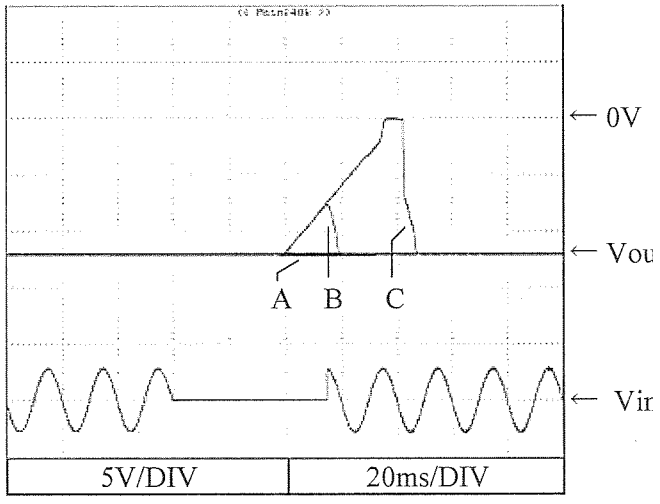


V4 : -12V

Vin : 100VAC
Iout : 100% (FL2)
Brown out time : A= 35ms
B= 36ms
C= 39ms



Vin : 200VAC
Iout : 100% (FL2)
Brown out time : A= 37ms
B= 38ms
C= 55ms

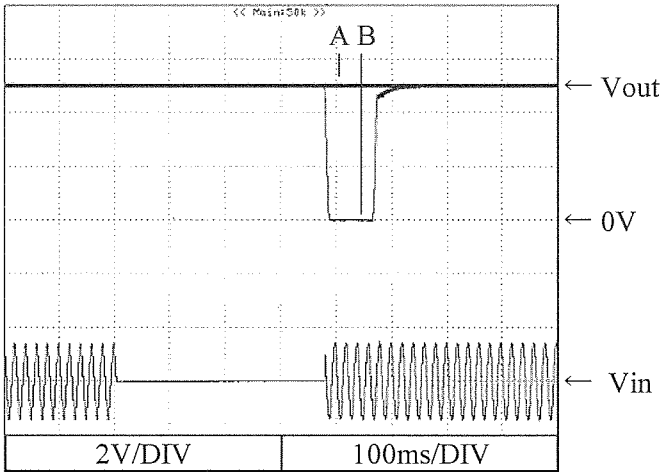


2.12 入力電圧瞬停特性

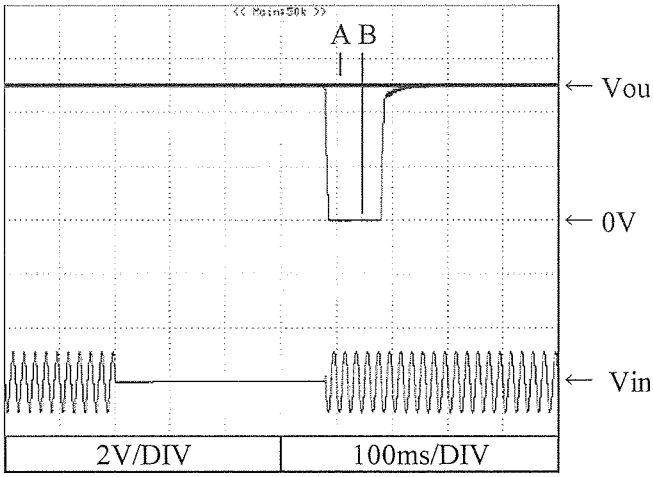
Response to brown out characteristics　　Conditions　Ta : 25℃

V5 : +5VSB

Vin : 100VAC
Iout : 100% (FL2)
Brown out time : A= 376ms
B= 377ms



Vin : 200VAC
Iout : 100% (FL2)
Brown out time : A= 378ms
B= 379ms

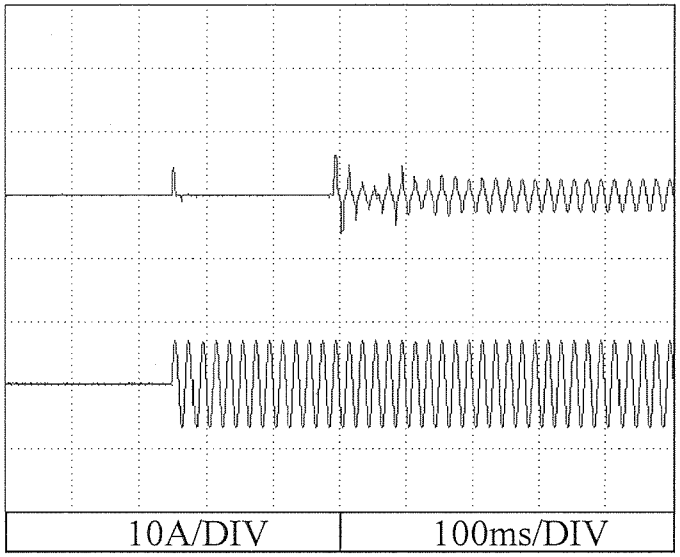


2.13 入力サージ電流（突入電流）特性

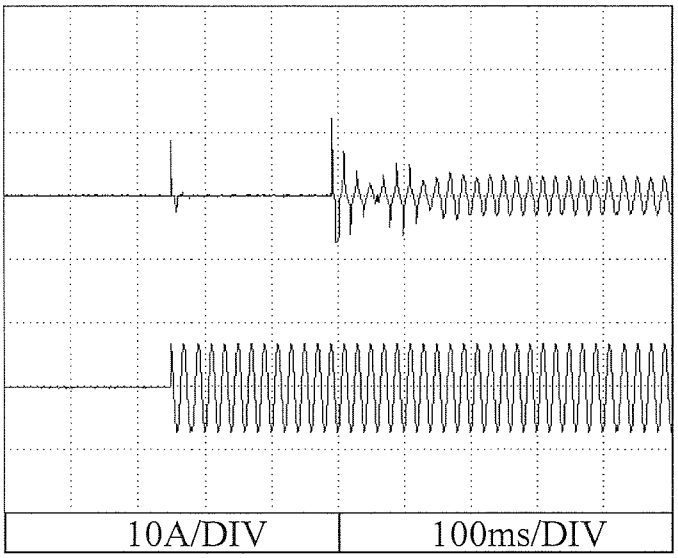
Inrush current waveform

Conditions　Vin : 100VAC
Iout : 100% (FL4)
Ta : 25℃

Switch on phase angle of input AC voltage ϕ =0 °



Switch on phase angle of input AC voltage ϕ =90 °

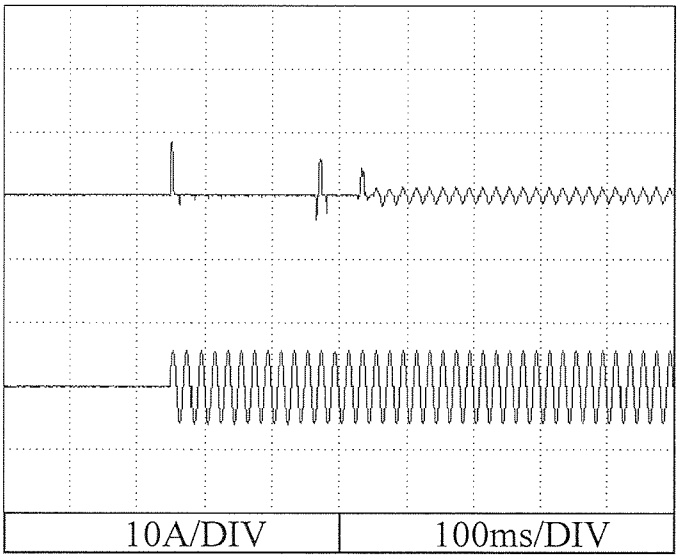


2.13 入力サージ電流（突入電流）特性

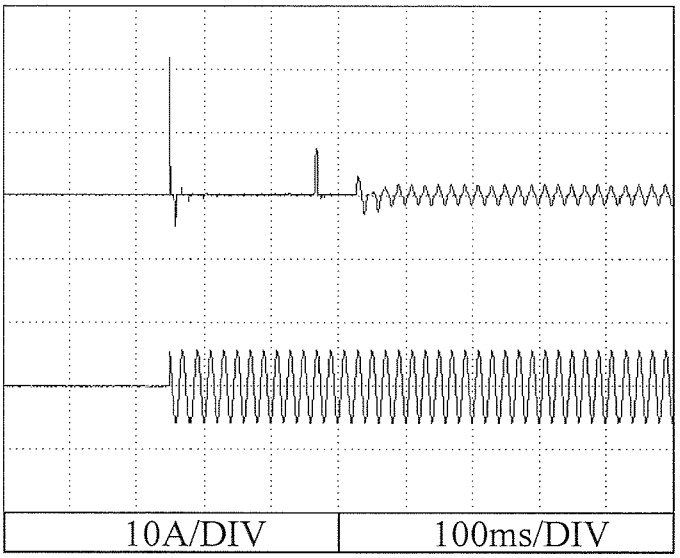
Inrush current waveform

Conditions　Vin　: 200VAC
Iout　: 100% (FL4)
Ta　: 25℃

Switch on phase angle of input AC voltage ϕ =0 °



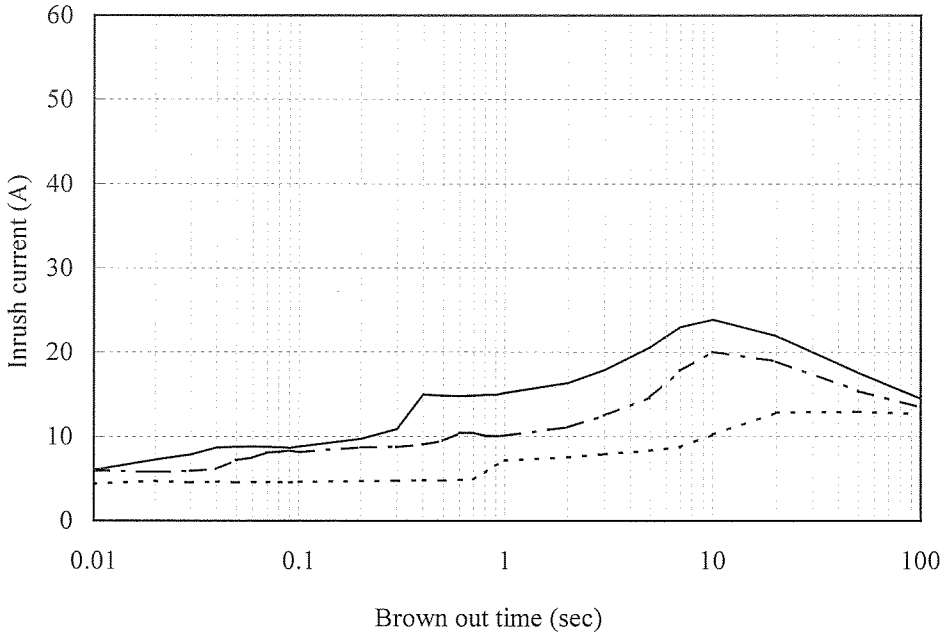
Switch on phase angle of input AC voltage ϕ =90 °



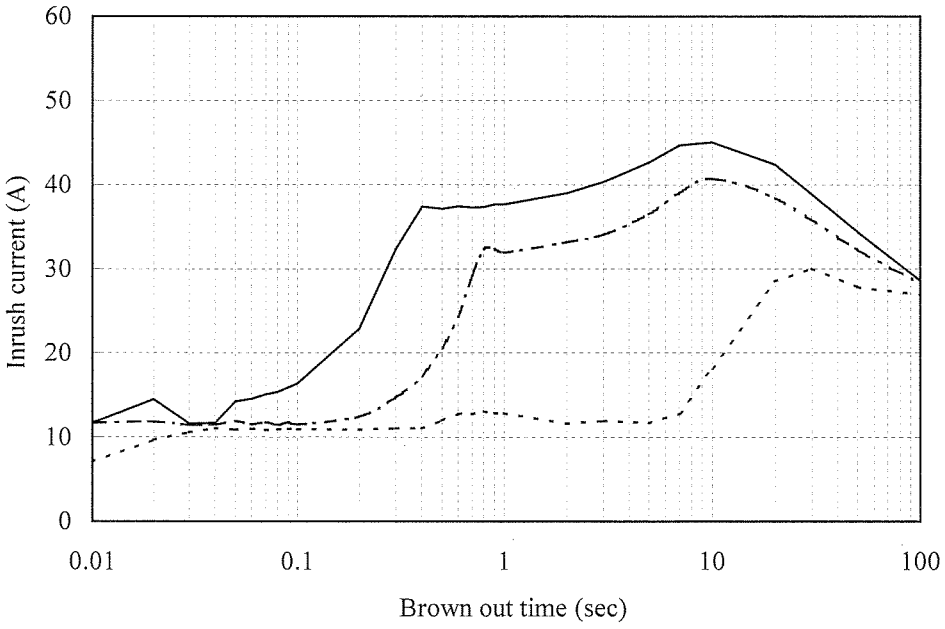
2.14 瞬停時突入電流特性
Inrush current characteristics

Conditions Iout : 0 % ------
50 % -·-·-·
100 % ———
Iout(100%)=FL4
Ta : 25 ℃

Vin : 100 VAC



Vin : 200 VAC



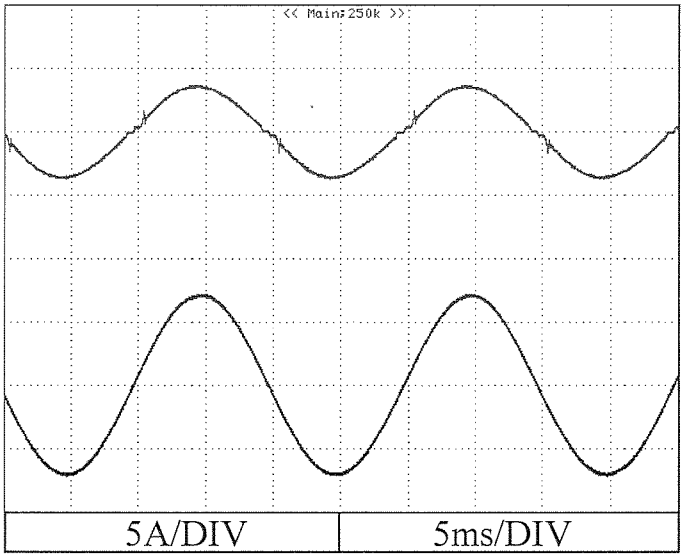
※ 上記値は、2次突入電流を含んだ値である。
Above data includes secondary inrush current.

2.15 入力電流波形

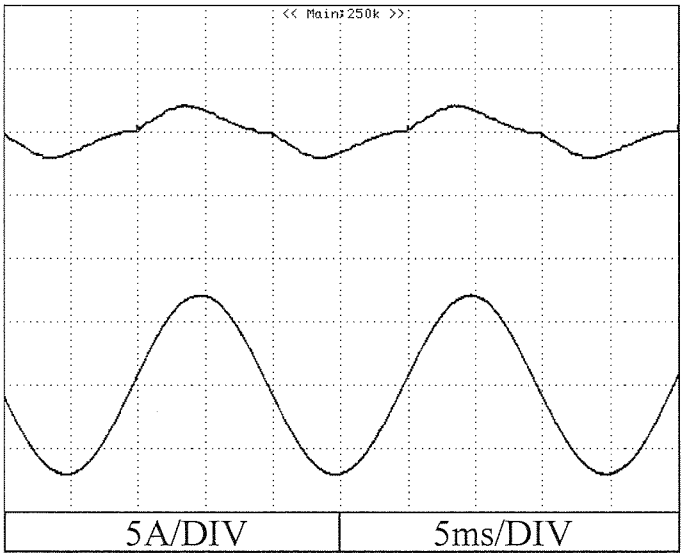
Input current waveform

Conditions Iout : 100% (FL4)
Ta : 25℃

Vin : 100 VAC



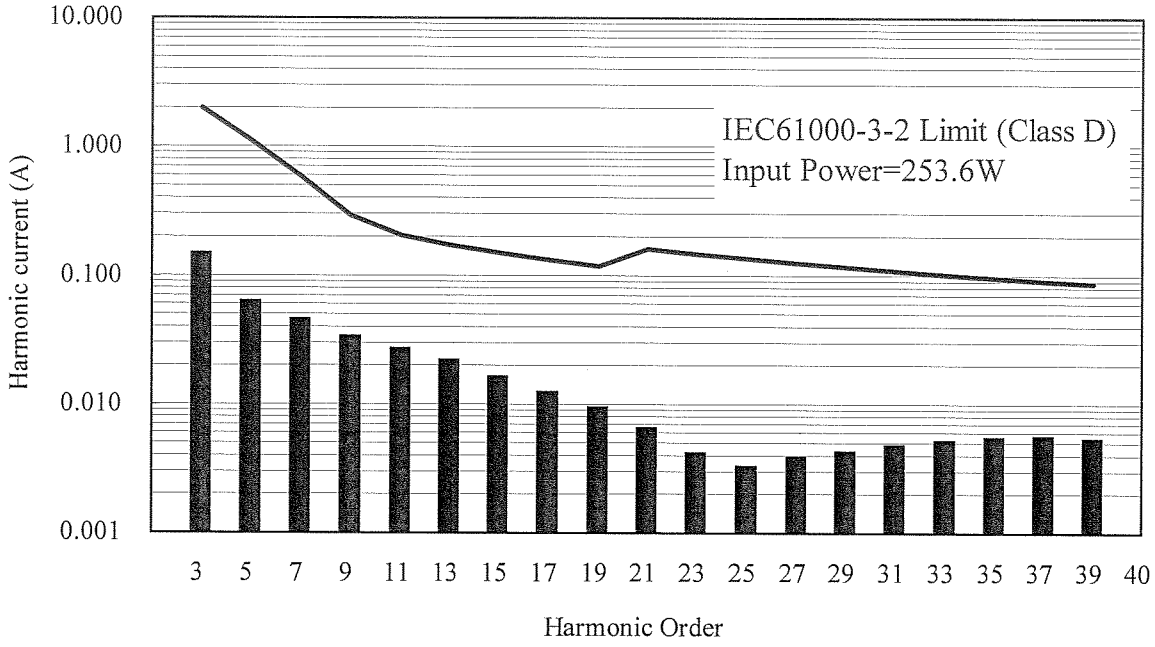
Vin : 200 VAC



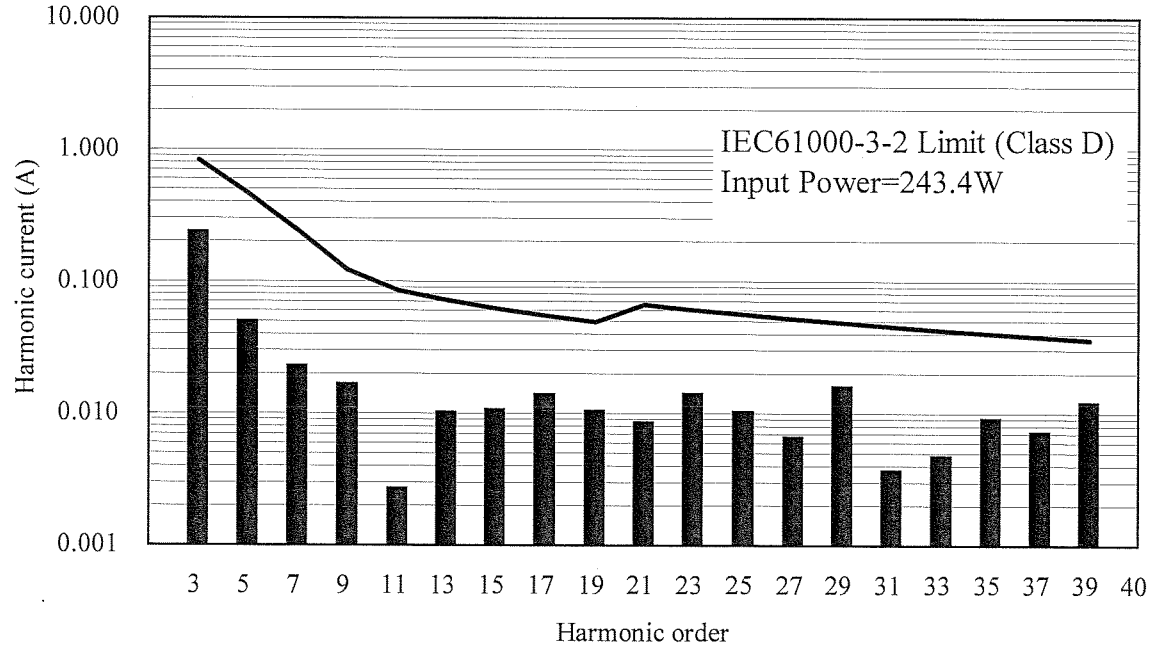
2.16 高調波成分

Input current harmonics

Conditions Vin : 100VAC
Iout : 100% (FL2)
Ta : 25℃

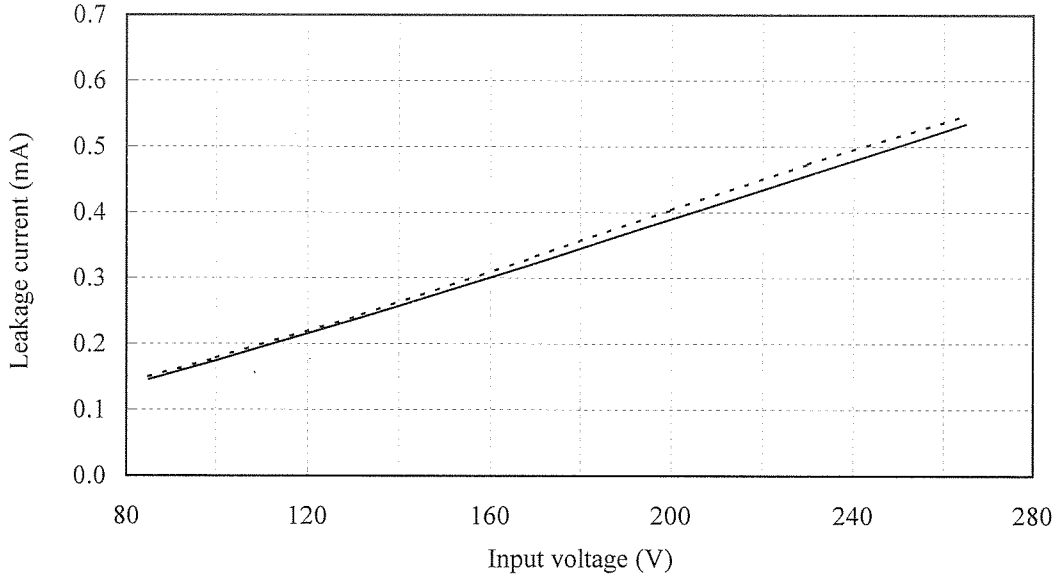


Conditions Vin : 230VAC
Iout : 100% (FL2)
Ta : 25℃

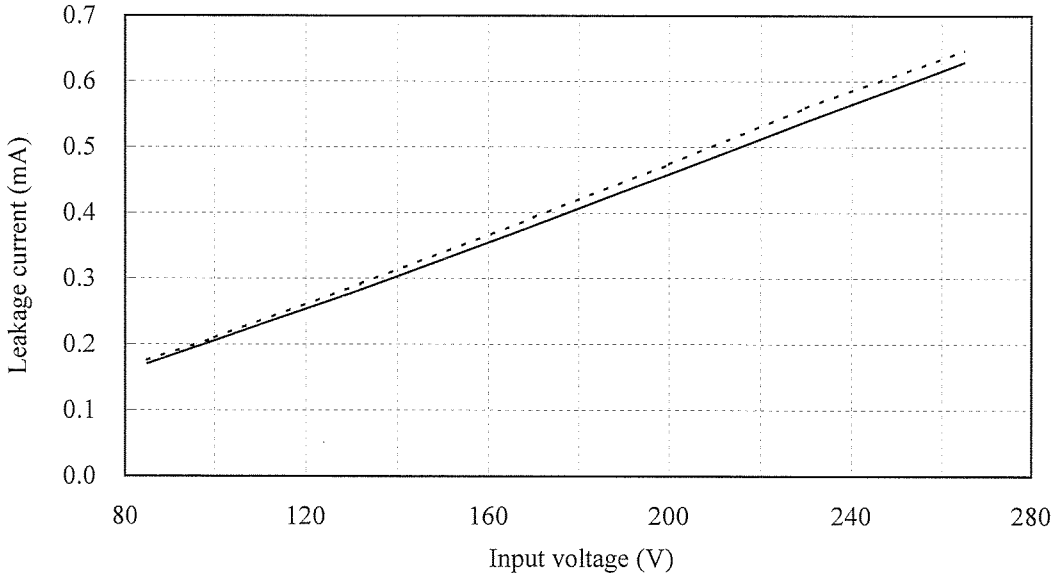


2.17 リーク電流特性
Leakage current characteristics

Conditions f : 50Hz
Iout : 0% --------
: 100% ————
Iout(100%)=FL2
Ta : 25℃
Equipment used : MODEL 3156 (HIOKI)
(IEC60950)



Conditions f : 60Hz
Iout : 0% --------
: 100% ————
Iout(100%)=FL2
Ta : 25℃
Equipment used : MODEL 3156 (HIOKI)
(IEC60950)



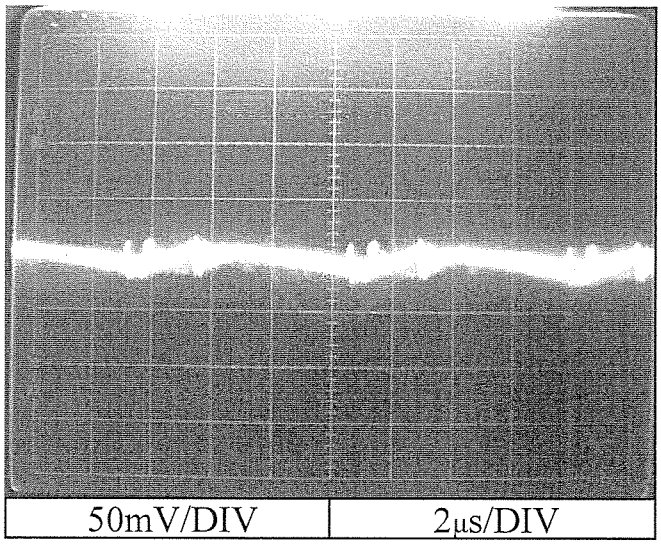
2.18 出力リップル、ノイズ波形
Output ripple and noise waveform

Conditions Vin : 100VAC
Ta : 25 ℃

NORMAL MODE

V1 : +3.3V

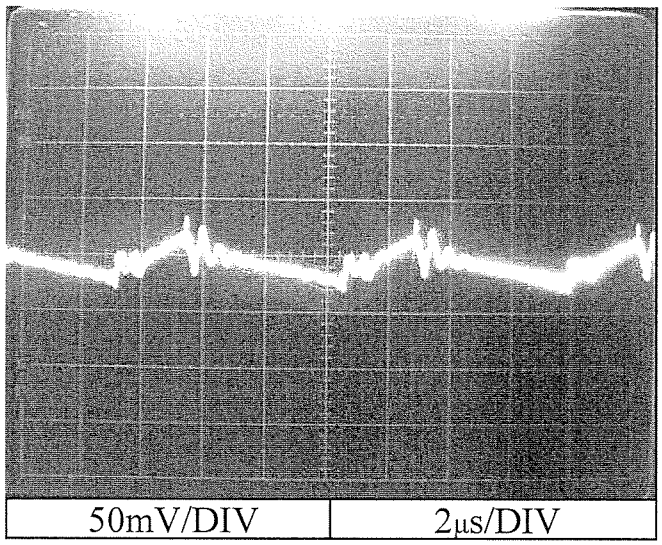
Iout : 100 % (FL2)



50mV/DIV | 2μs/DIV

V2 : +5V

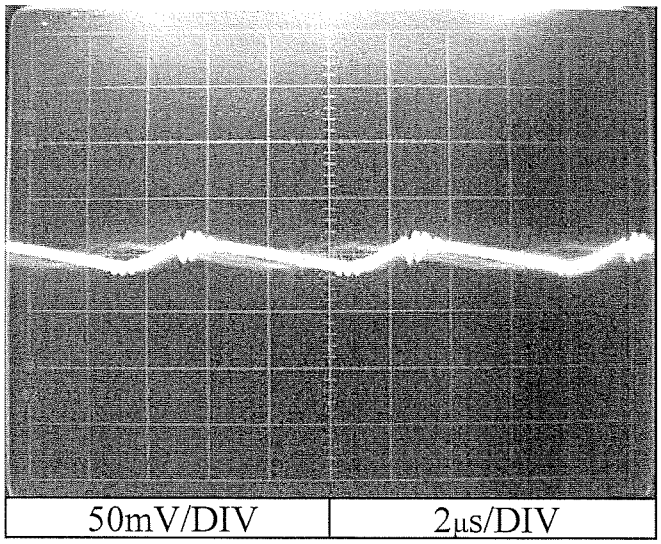
Iout : 100 % (FL2)



50mV/DIV | 2μs/DIV

V3 : +12V

Iout : 100 % (FL3)



50mV/DIV | 2μs/DIV

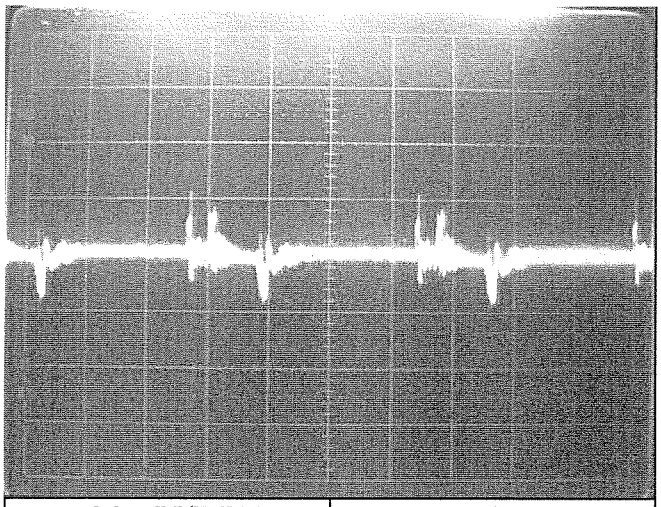
2.18 出力リップル、ノイズ波形
Output ripple and noise waveform

Conditions Vin : 100VAC
Ta : 25 ℃

NORMAL MODE

V4 : -12V

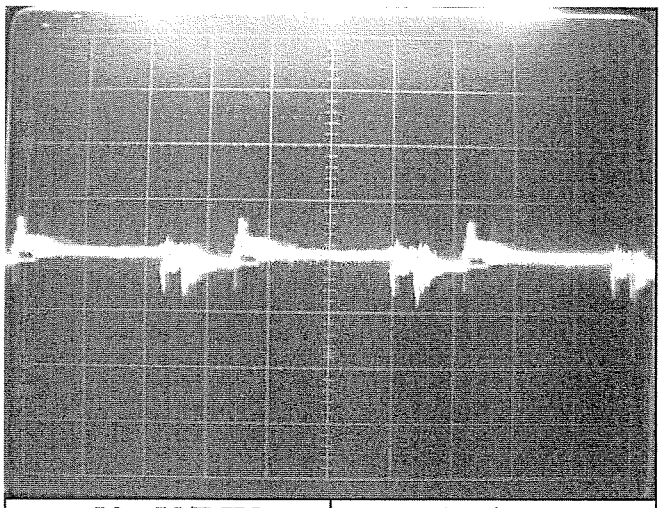
Iout : 100 % (FL2)



20mV/DIV	2μs/DIV

V5 : +5VSB

Iout : 100 % (FL2)



50mV/DIV	2μs/DIV

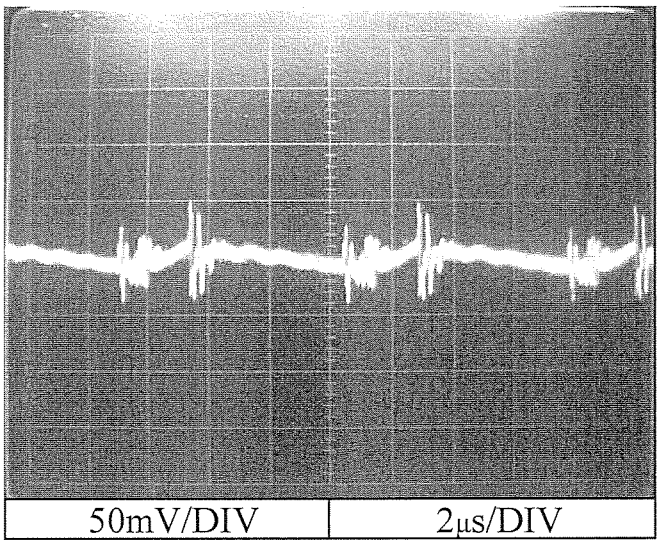
2.18 出力リップル、ノイズ波形
Output ripple and noise waveform

Conditions Vin : 100VAC
Ta : 25 ℃

NORMAL + COMMON MODE

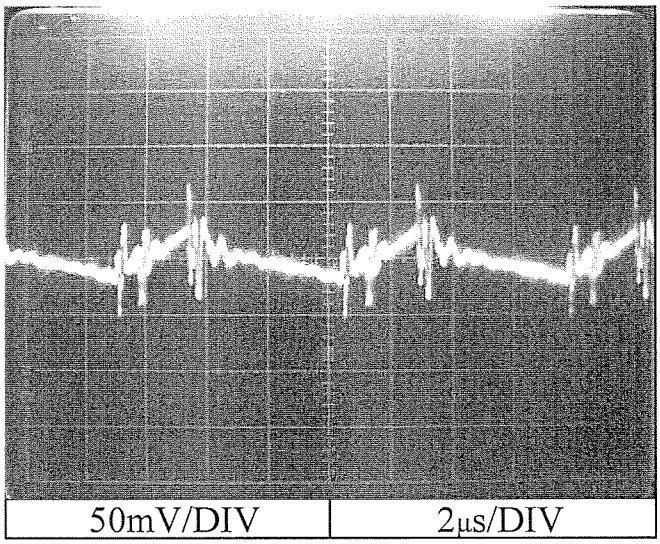
V1 : +3.3V

Iout : 100 % (FL2)



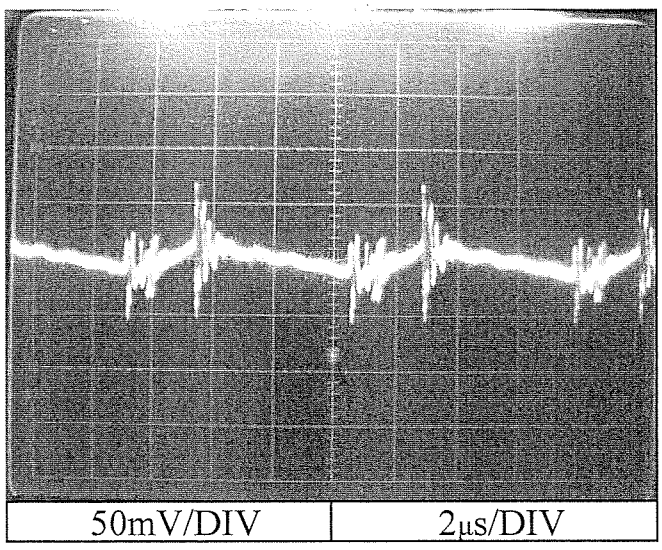
V2 : +5V

Iout : 100 % (FL2)



V3 : +12V

Iout : 100 % (FL3)



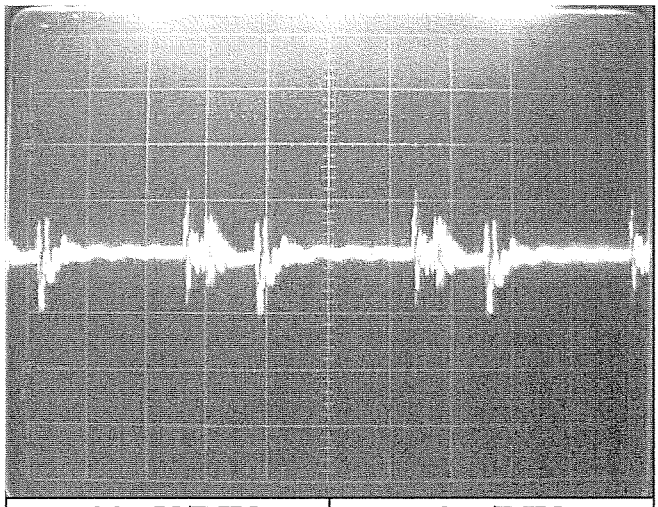
2.18 出力リップル、ノイズ波形
Output ripple and noise waveform

Conditions Vin : 100VAC
Ta : 25 ℃

NORMAL + COMMON MODE

V4 : -12V

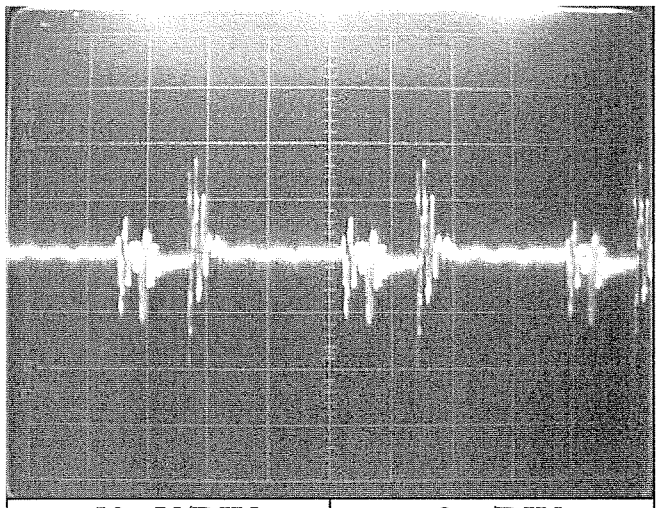
Iout : 100 % (FL2)



20mV/DIV	2μs/DIV

V5 : +5VSB

Iout : 100 % (FL2)

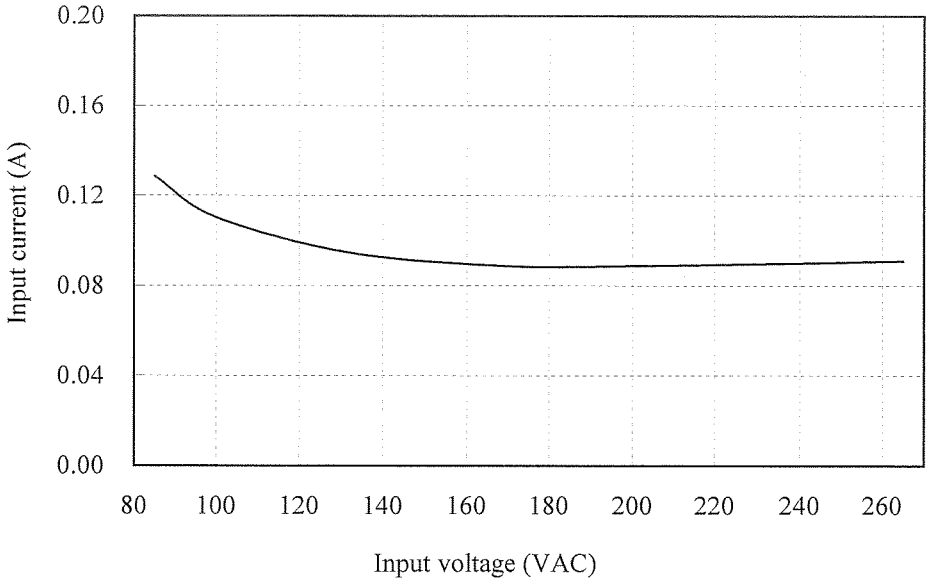


50mV/DIV	2μs/DIV

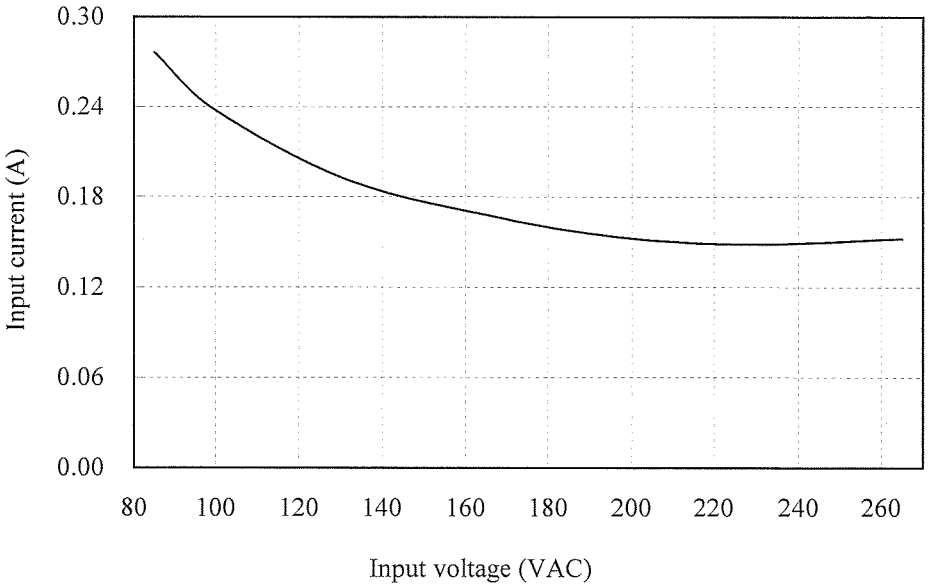
2.19 スタンバイ電流特性

Stand by current characteristics　　Condition　Ta:　25 ℃

Control ON
Io = FL1 (All output CH=0A)



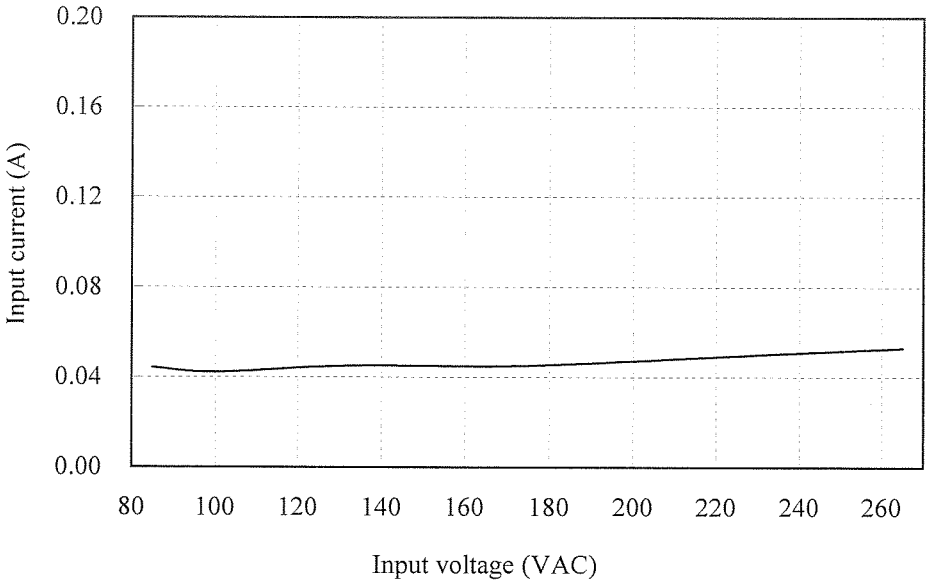
Control ON
Io =FL1 : Only V5 Output 2A



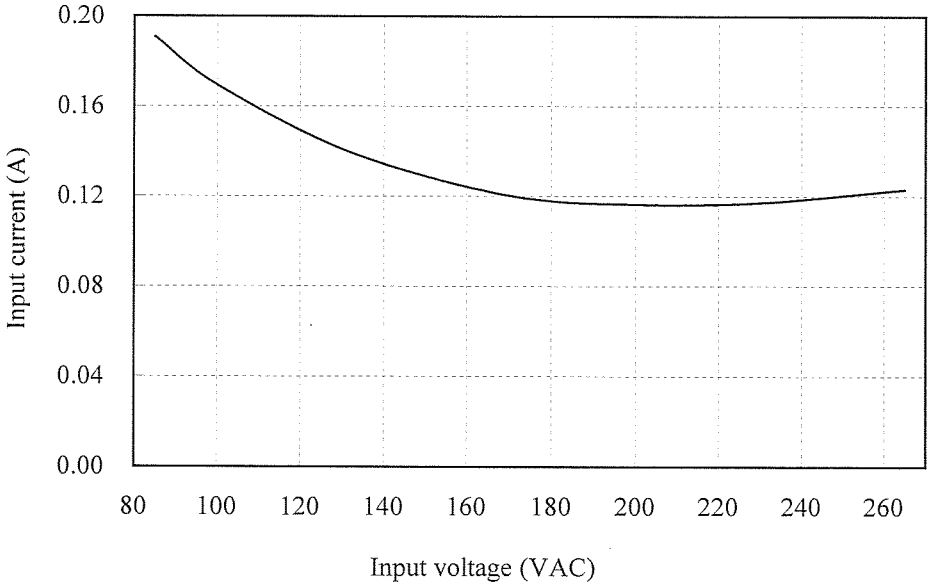
2.19 スタンバイ電流特性

Stand by current characteristics　　Condition　Ta:　25 ℃

Control OFF (No output except V5)
Io = FL1 (All output CH=0A)



Control OFF (No output except V5)
Io =FL1 : Only V5 Output 2A



2.20 EMI特性
Electro-Magnetic Interference characteristics

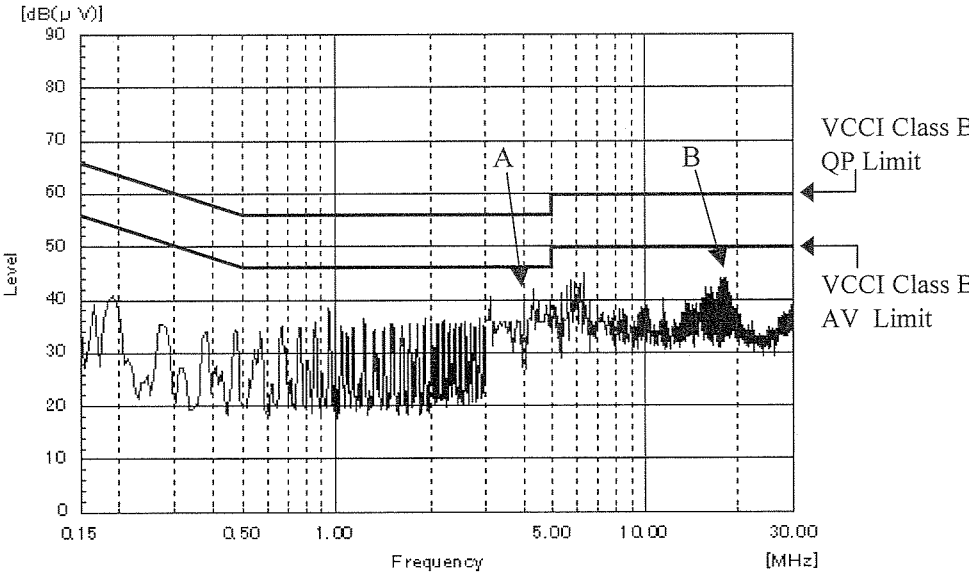
Conditions Vin : 100VAC
Iout : 100% (FL3)
Ta : 25℃

雑音端子電圧
Conducted Emission

Phase : L

Ref. / Data	Point A (4.4MHz) Limit (dBuV)	Point A (4.4MHz) Measure (dBuV)
QP	56.0	38.7
AV	46.0	37.1

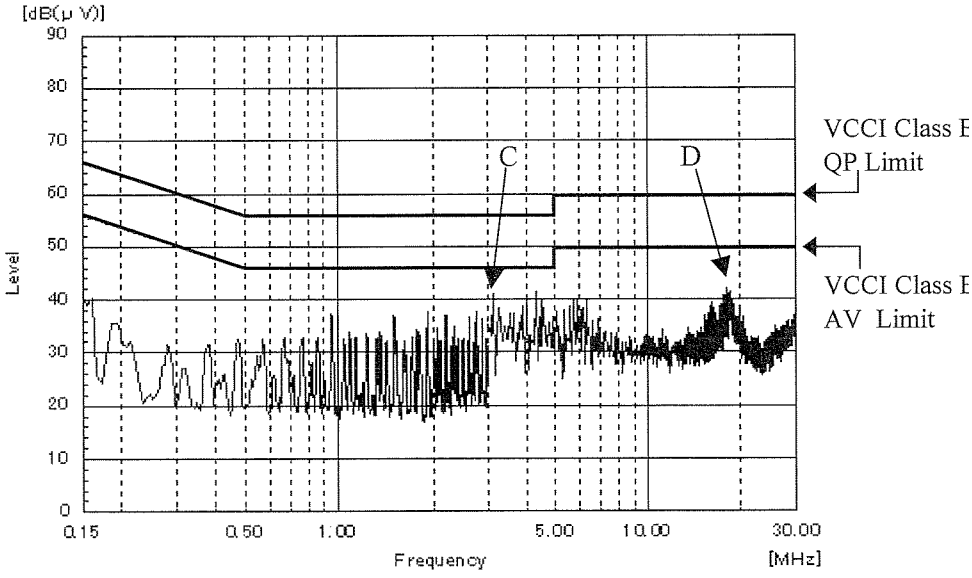
Ref. / Data	Point B (18.2MHz) Limit (dBuV)	Point B (18.2MHz) Measure (dBuV)
QP	60.0	42.4
AV	50.0	41.8



Phase : N

Ref. / Data	Point C (3.2MHz) Limit (dBuV)	Point C (3.2MHz) Measure (dBuV)
QP	56.0	39.0
AV	46.0	37.4

Ref. / Data	Point D (18.1MHz) Limit (dBuV)	Point D (18.1MHz) Measure (dBuV)
QP	60.0	40.6
AV	50.0	39.4



EN55011-B, EN55022-Bの限度値はVCCI Class Bの限度値と同じ
Limits of EN55011-B and EN55022-B are the same as VCCI Class B.

2.20 EMI特性
Electro-Magnetic Interference characteristics

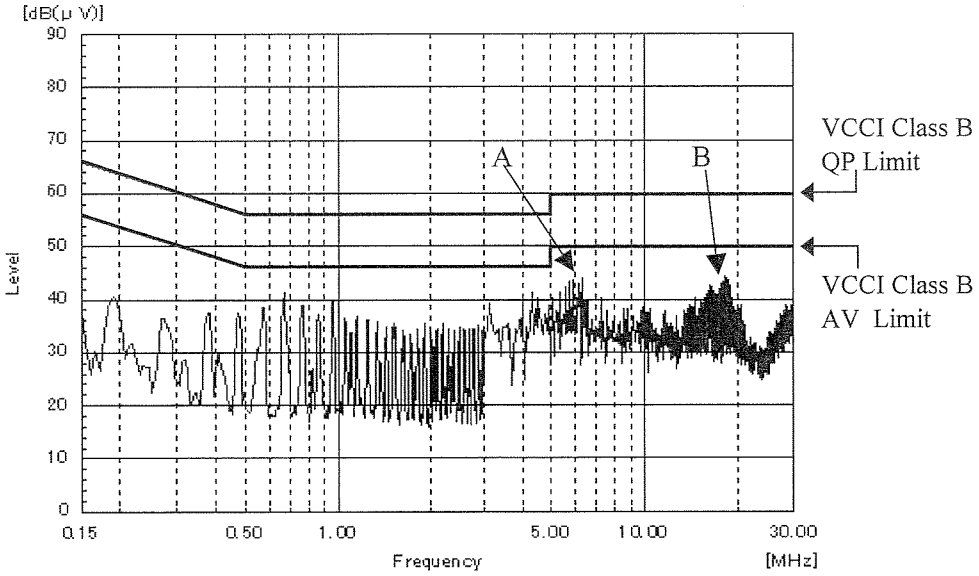
Conditions Vin : 230VAC
Iout : 100% (FL3)
Ta : 25℃

雑音端子電圧
Conducted Emission

Phase : L

Ref. / Data	Point A (6.3MHz) Limit (dBuV)	Measure (dBuV)
QP	60.0	41.5
AV	50.0	40.1

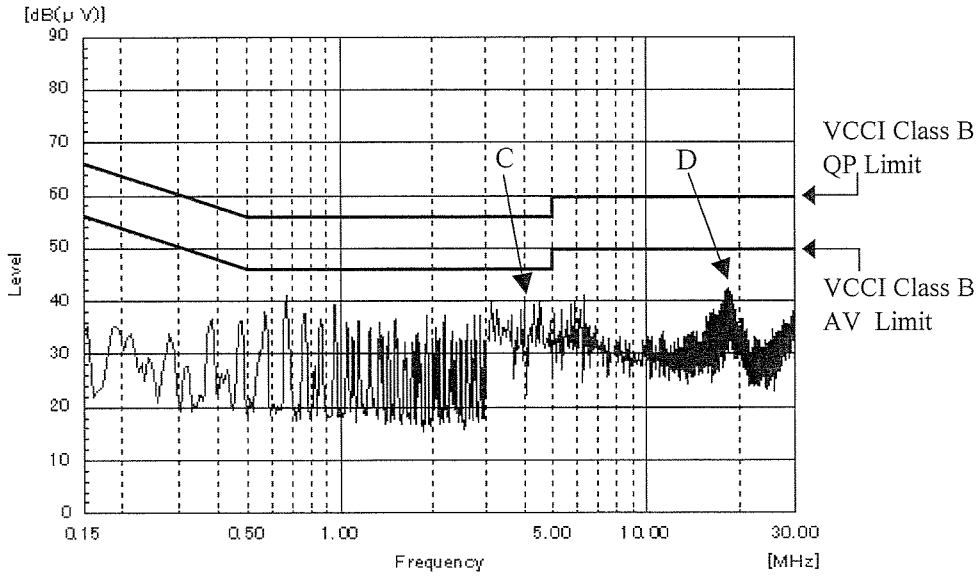
Ref. / Data	Point B (17.8MHz) Limit (dBuV)	Measure (dBuV)
QP	60.0	41.5
AV	50.0	39.5



Phase : N

Ref. / Data	Point C (4.1MHz) Limit (dBuV)	Measure (dBuV)
QP	56.0	37.8
AV	46.0	36.8

Ref. / Data	Point D (18.3MHz) Limit (dBuV)	Measure (dBuV)
QP	60.0	39.8
AV	50.0	39.2



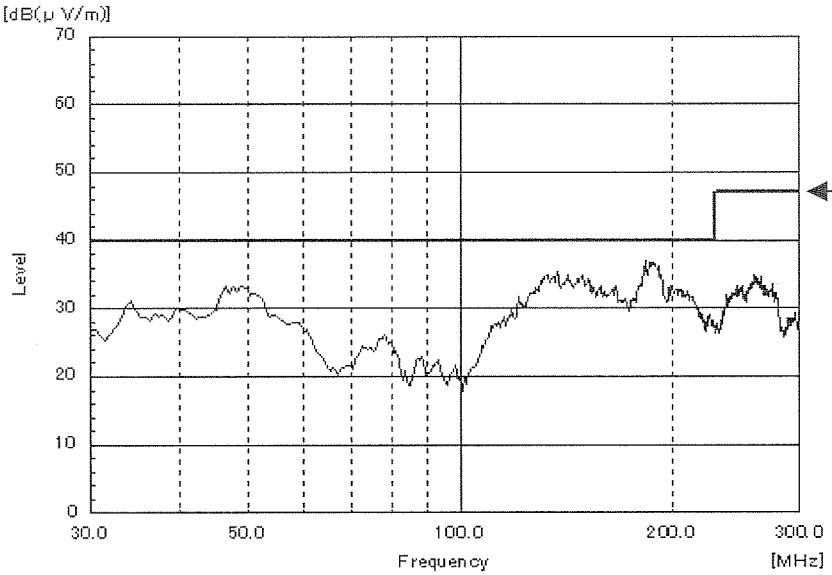
EN55011-B, EN55022-Bの限度値はVCCI Class Bの限度値と同じ
Limits of EN55011-B and EN55022-B are the same as VCCI Class B.

2.20 EMI特性
Electro-Magnetic Interference characteristics

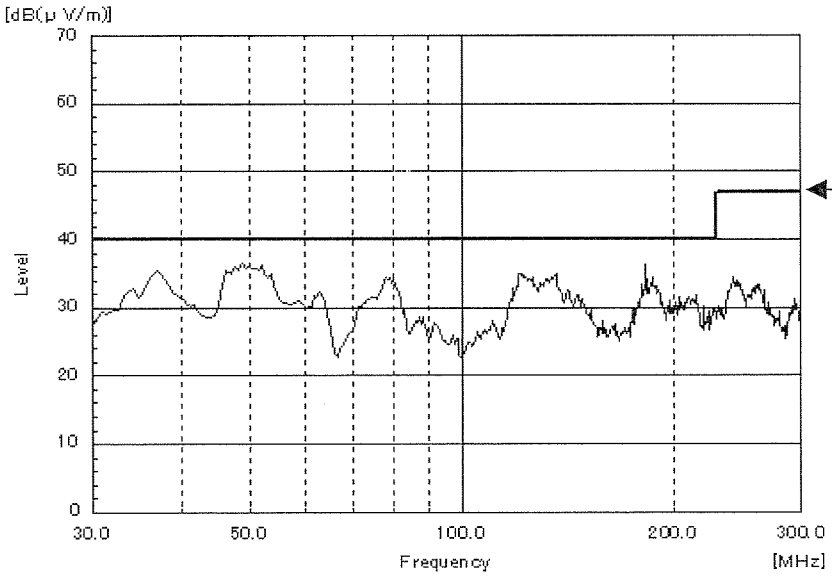
Conditions Vin : 100VAC
Iout : 100% (FL3)
Ta : 25℃

雑音電界強度
Radiated Emission

HORIZONTAL:



VERTICAL:



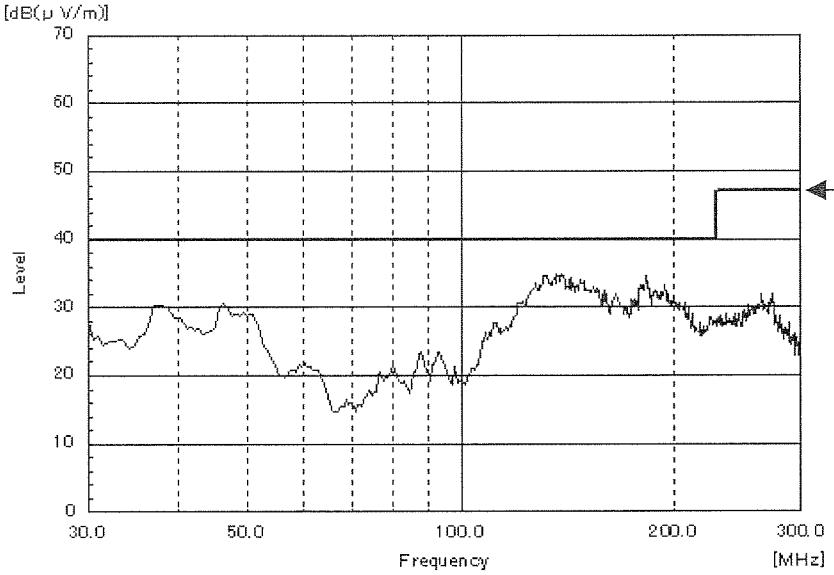
EN55011-B, EN55022-Bの限度値はVCCI Class Bの限度値と同じ
Limits of EN55011-B and EN55022-B are the same as VCCI Class B.

2.20 EMI特性
Electro-Magnetic Interference characteristics

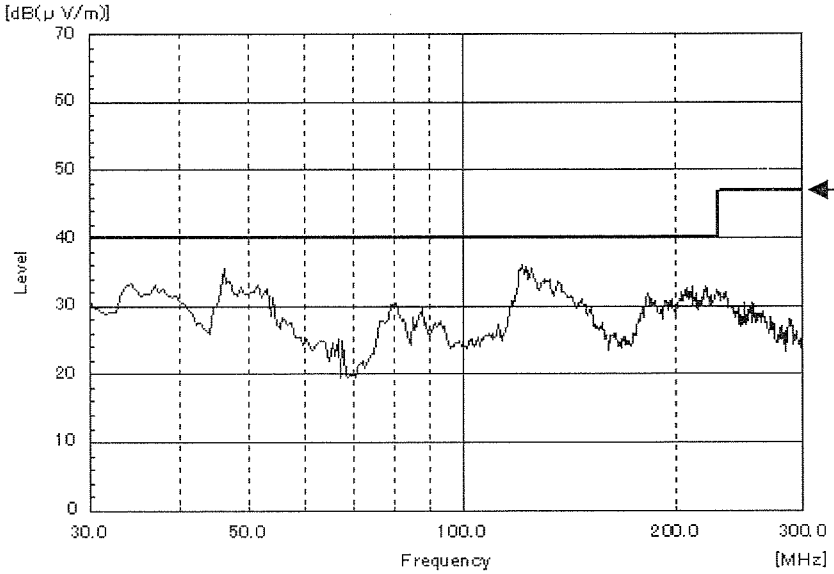
Conditions Vin : 230VAC
Iout : 100% (FL3)
Ta : 25℃

雑音電界強度
Radiated Emission

HORIZONTAL:



VERTICAL:



EN55011-B, EN55022-Bの限度値はVCCI Class Bの限度値と同じ
Limits of EN55011-B and EN55022-B are the same as VCCI Class B.