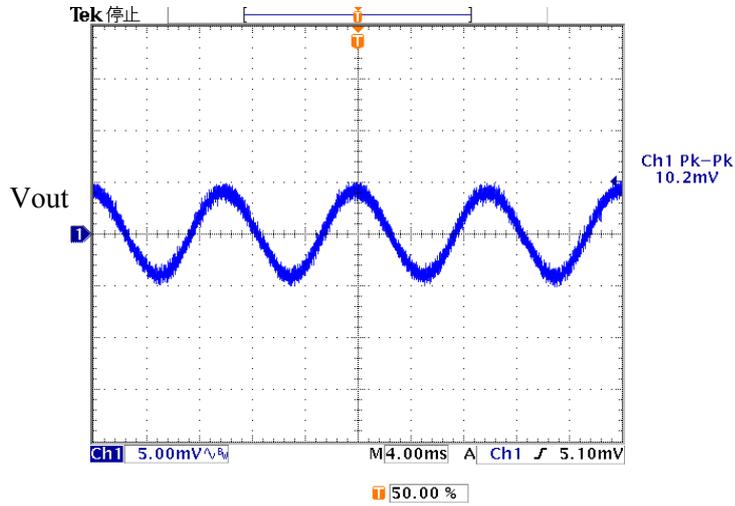


Output Ripple and Noise Waveform

Ta : 25°C



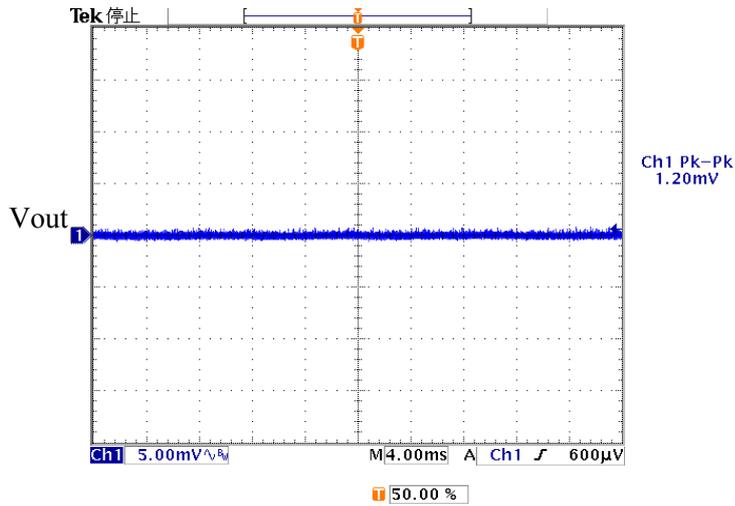
Input Voltage : 100 VAC  
Output Current : 100 %

Vout : 5 mVAC/DIV

TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 10.2 mV



Input Voltage : 100 VAC  
Output Current : 0 %

Vout : 5 mVAC/DIV

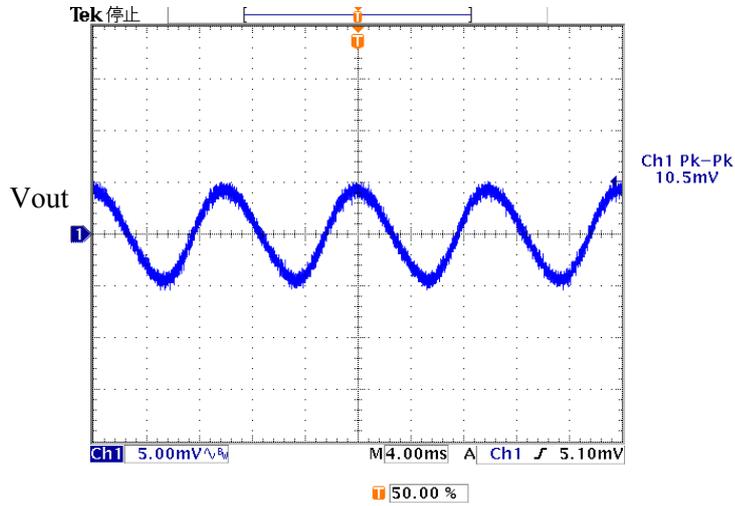
TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 1.20 mV

Output Ripple and Noise Waveform

Ta : 25°C



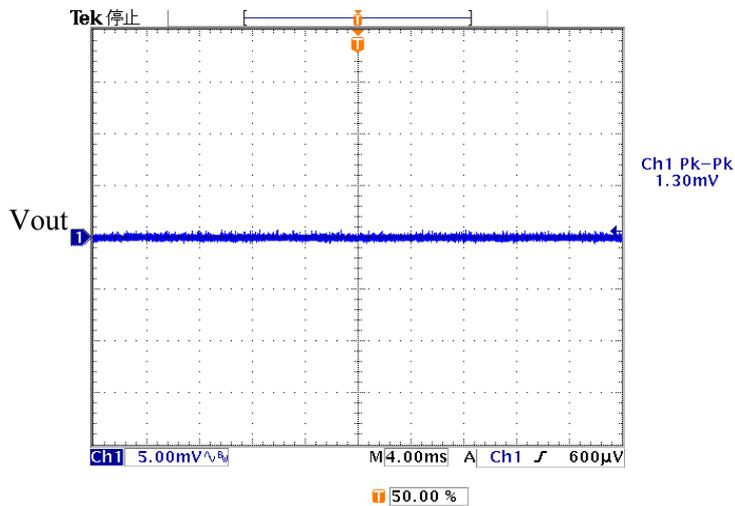
Input Voltage : 200 VAC  
Output Current : 100 %

Vout : 5 mVAC/DIV

TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 10.5 mV



Input Voltage : 200 VAC  
Output Current : 0 %

Vout : 5 mVAC/DIV

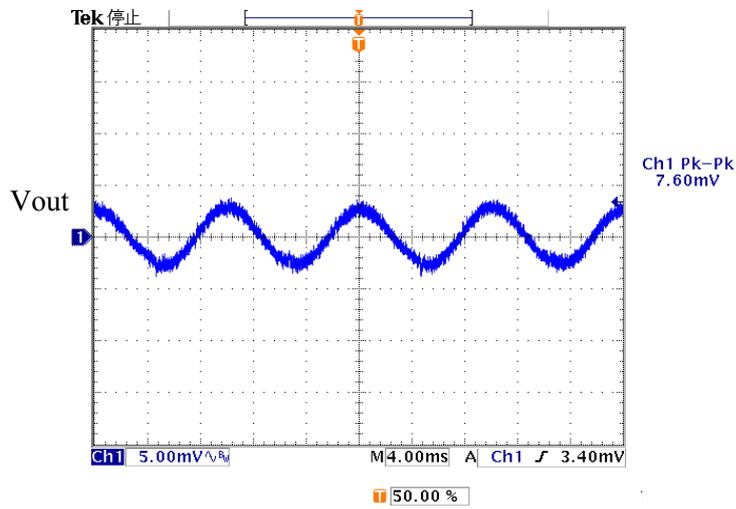
TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 1.30 mV

Output Ripple and Noise Waveform

Ta : 25°C



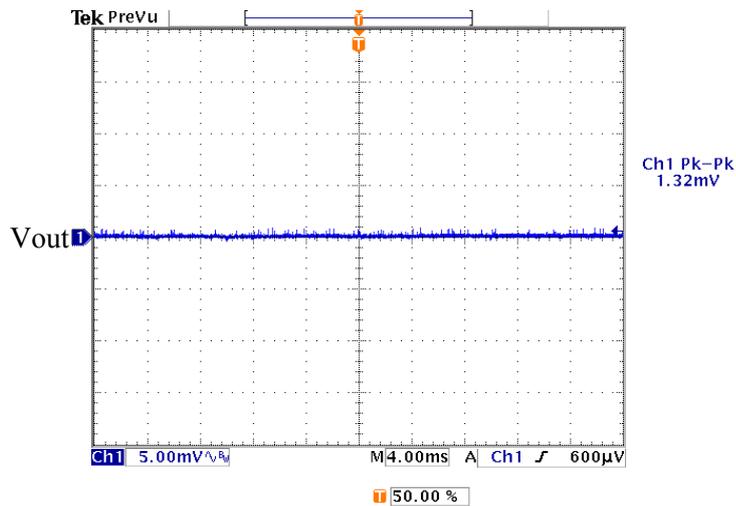
Input Voltage : 100 VAC  
Output Current : 100 %

Vout : 5 mVAC/DIV

TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 7.60mV



Input Voltage : 100 VAC  
Output Current : 0 %

Vout : 5 mVAC/DIV

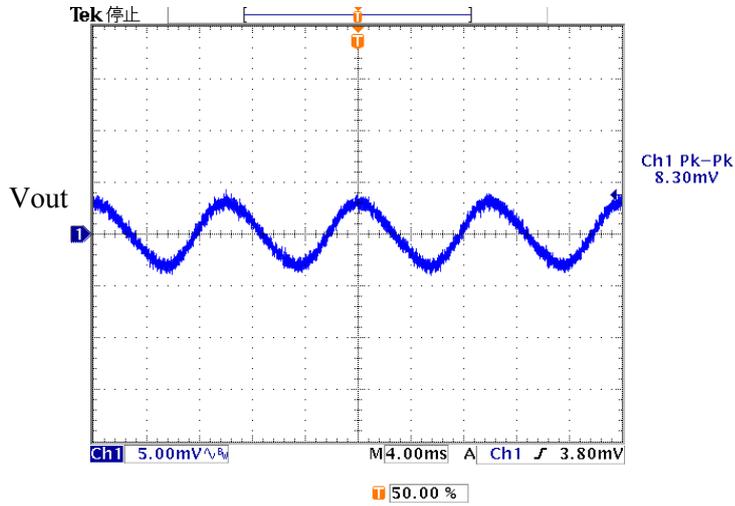
TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 1.32mV

Output Ripple and Noise Waveform

Ta : 25°C



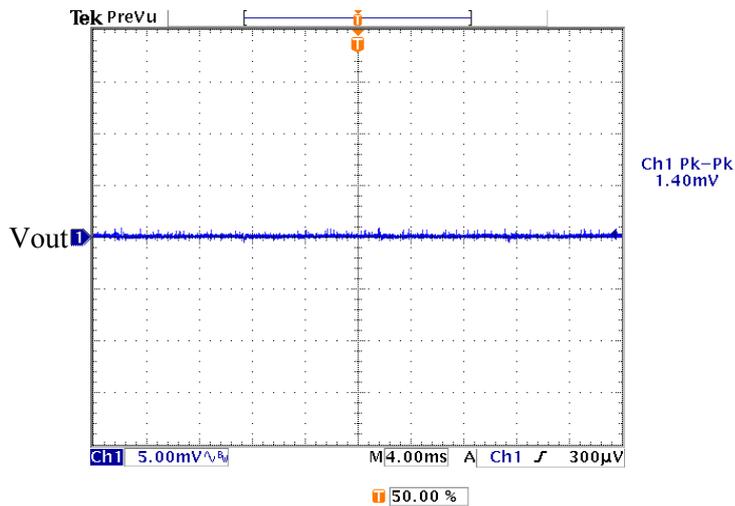
Input Voltage : 200 VAC  
Output Current : 100 %

Vout : 5 mVAC/DIV

TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 8.30mV



Input Voltage : 200 VAC  
Output Current : 0 %

Vout : 5 mVAC/DIV

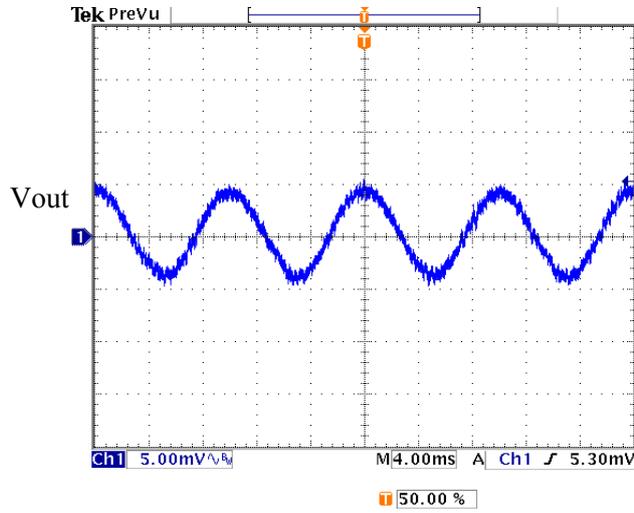
TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 1.40mV

Output Ripple and Noise Waveform

Ta : 25°C



Input Voltage : 100 VAC  
Output Current : 100 %

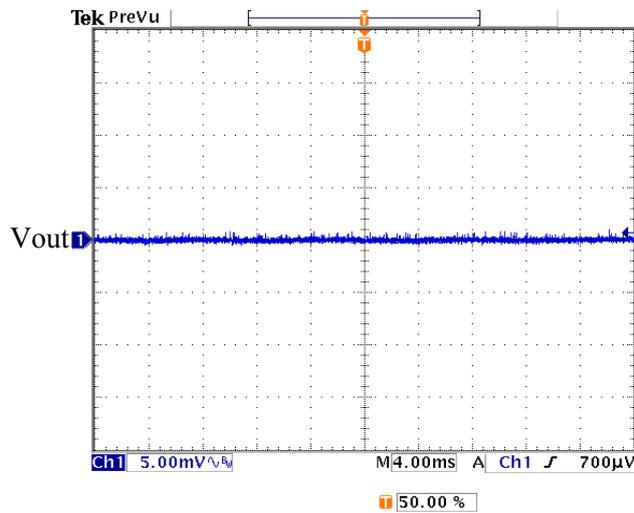
Ch1 Pk-Pk  
10.2mV

Vout : 5 mVAC/DIV

TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 10.2mV



Input Voltage : 100 VAC  
Output Current : 0 %

Ch1 Pk-Pk  
1.50mV

Vout : 5 mVAC/DIV

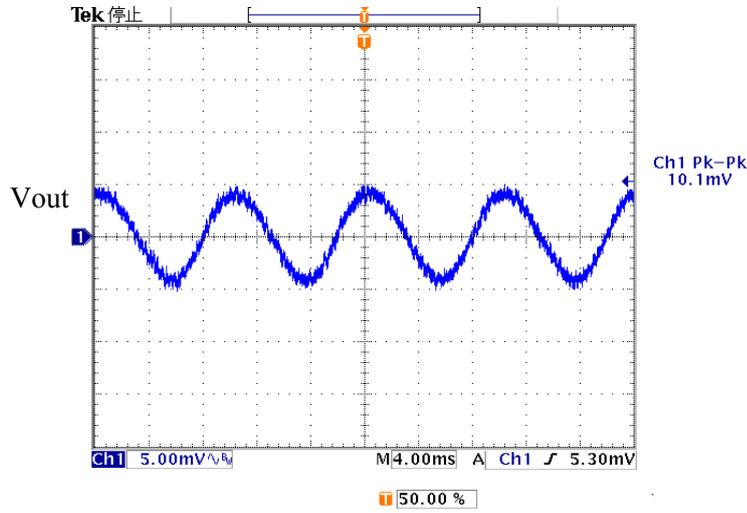
TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 1.50mV

Output Ripple and Noise Waveform

Ta : 25°C



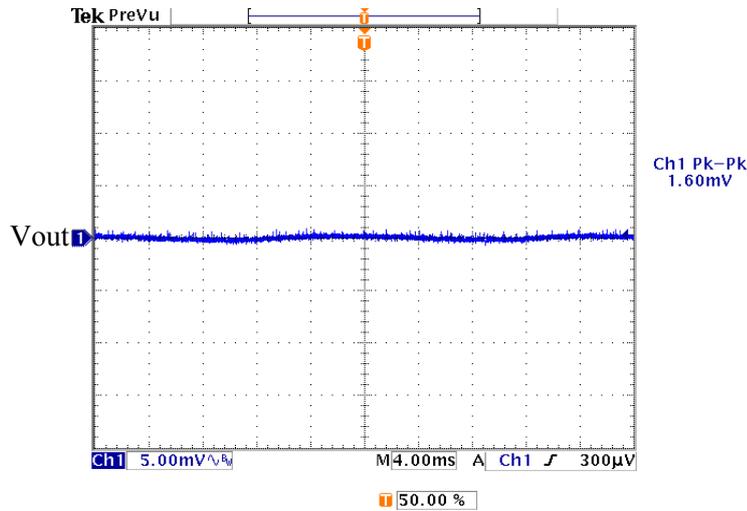
Input Voltage : 200 VAC  
Output Current : 100 %

Vout : 5 mVAC/DIV

TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 10.1mV



Input Voltage : 200 VAC  
Output Current : 0 %

Vout : 5 mVAC/DIV

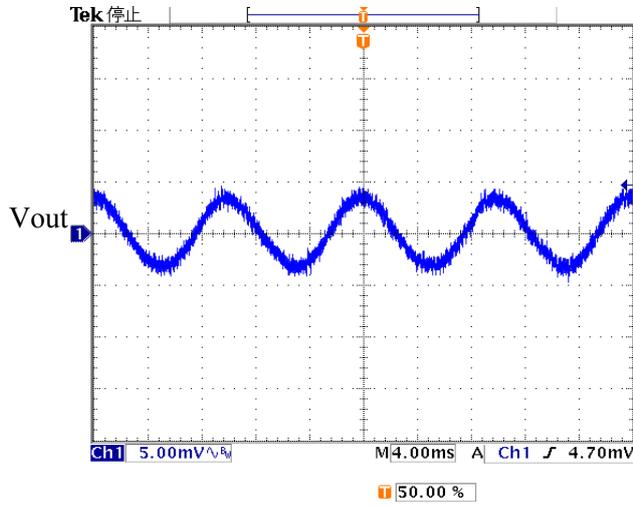
TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 1.60mV

Output Ripple and Noise Waveform

Ta : 25°C



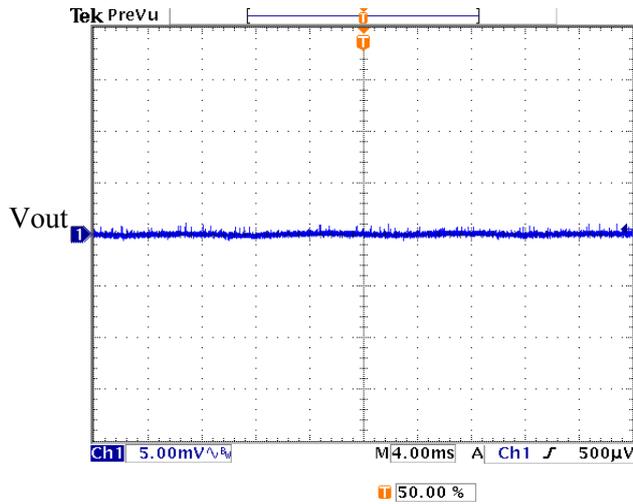
Input Voltage : 100 VAC  
Output Current : 100 %

Vout : 5 mVAC/DIV

TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 9.30 mV



Input Voltage : 100 VAC  
Output Current : 0 %

Vout : 5 mVAC/DIV

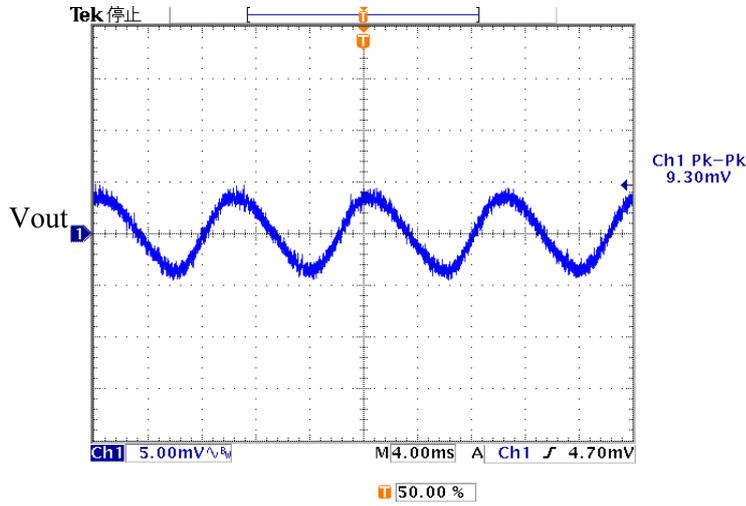
TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 1.70 mV

Output Ripple and Noise Waveform

Ta : 25°C



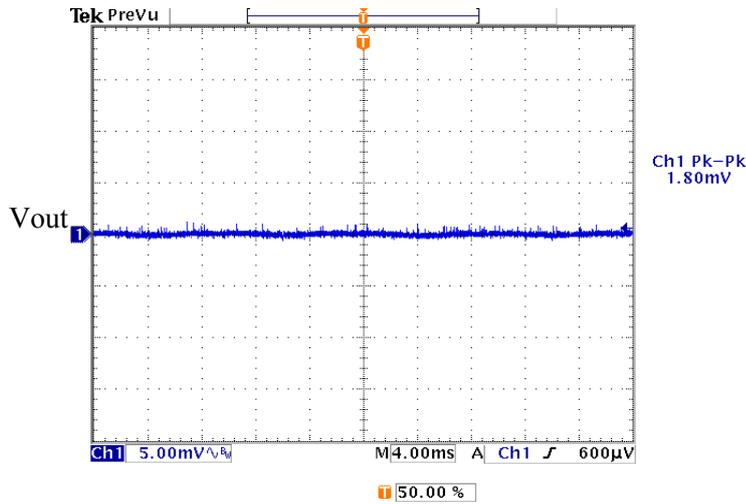
Input Voltage : 200 VAC  
Output Current : 100 %

Vout : 5 mVAC/DIV

TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 9.30 mV



Input Voltage : 200 VAC  
Output Current : 0 %

Vout : 5 mVAC/DIV

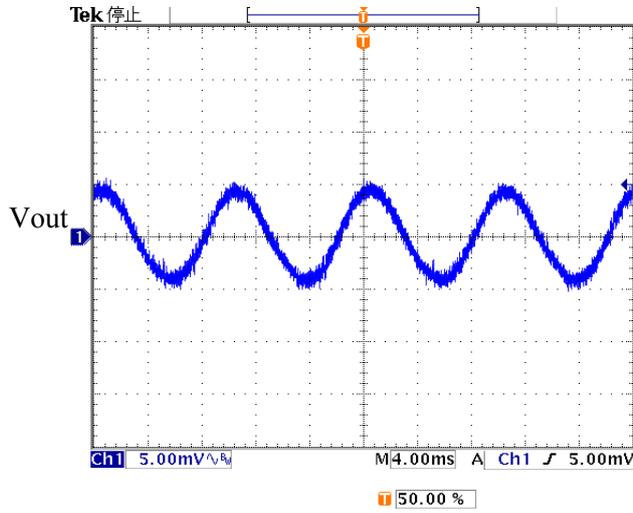
TIME : 40 ms/DIV

BW : 150 MHz

Vp-p : 1.80 mV

Output Ripple and Noise Waveform

Ta : 25°C



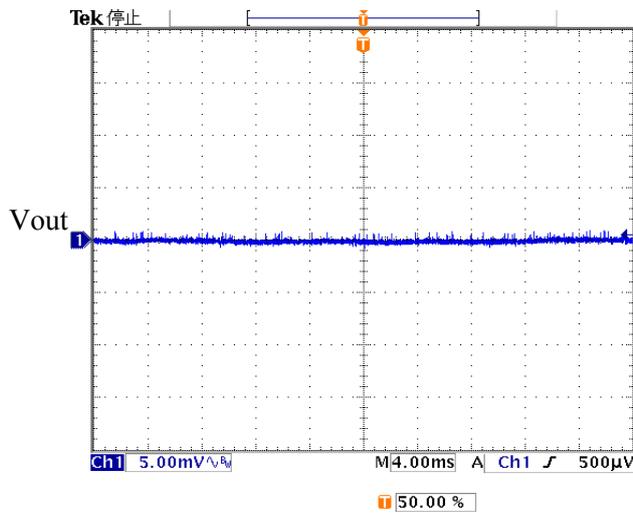
Input Voltage : 100 VAC  
Output Current : 100 %

Vout : 5 mVAC/DIV

TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 10.8 mV



Input Voltage : 100 VAC  
Output Current : 0 %

Vout : 5 mVAC/DIV

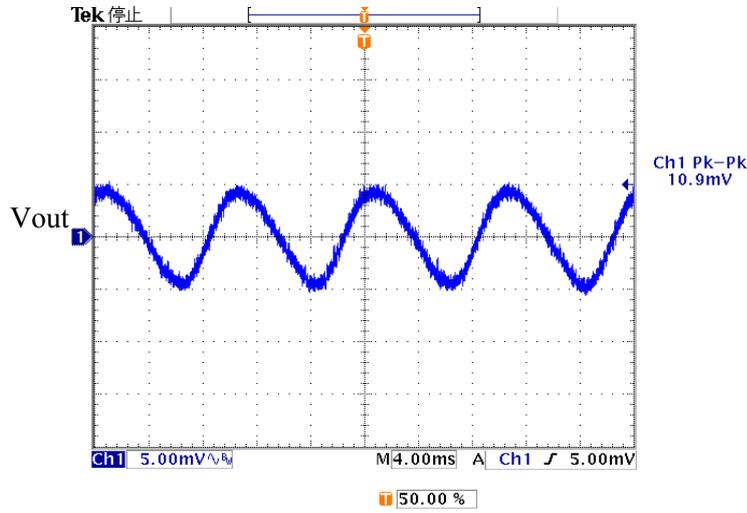
TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 1.70 mV

Output Ripple and Noise Waveform

Ta : 25°C



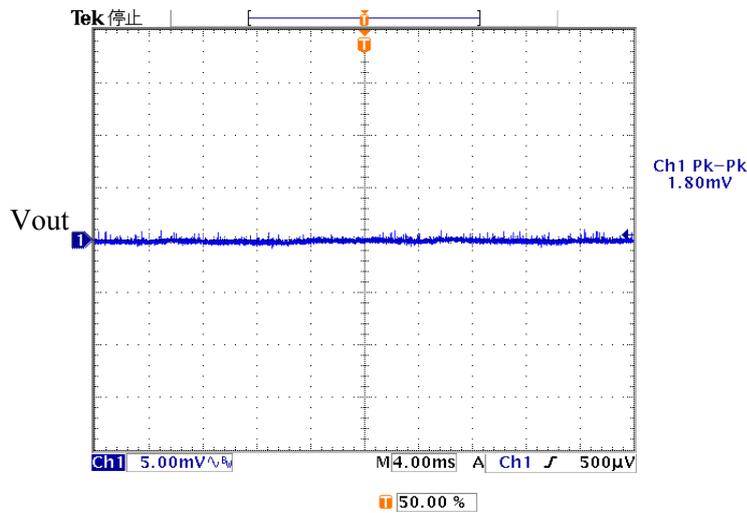
Input Voltage : 200 VAC  
Output Current : 100 %

Vout : 5 mVAC/DIV

TIME : 4 ms/DIV

BW : 150 MHz

Vp-p : 10.9 mV



Input Voltage : 200 VAC  
Output Current : 0 %

Vout : 5 mVAC/DIV

TIME : 40 ms/DIV

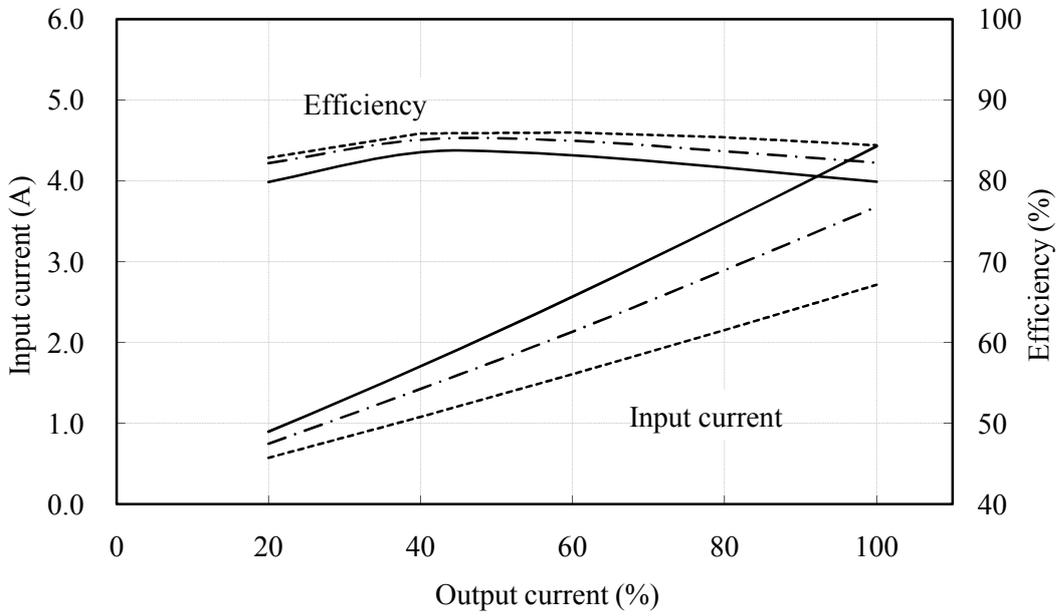
BW : 150 MHz

Vp-p : 1.80 mV

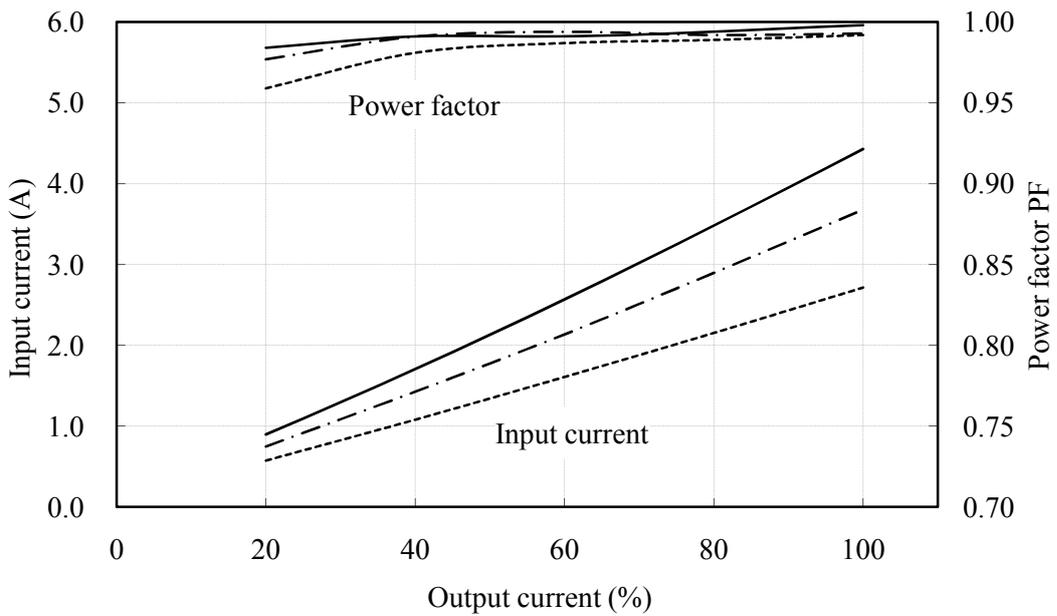
$\eta$  and PF, input current v.s. output current

25°C

conditions Vin : 85VAC ———  
 : 100VAC - · - · - ·  
 : 132VAC - - - - -



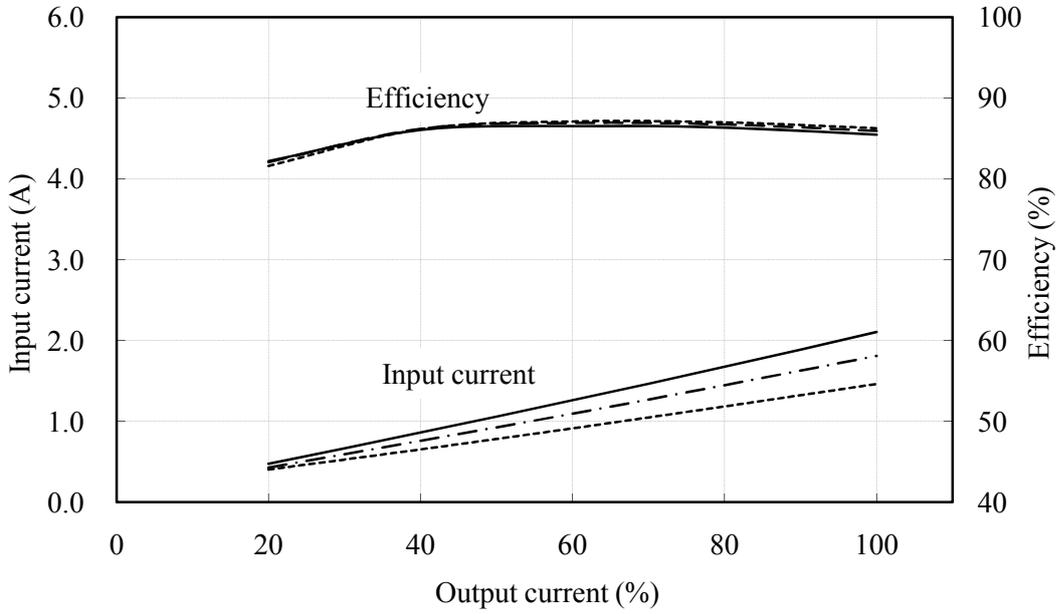
conditions Vin : 85VAC ———  
 : 100VAC - · - · - ·  
 : 132VAC - - - - -



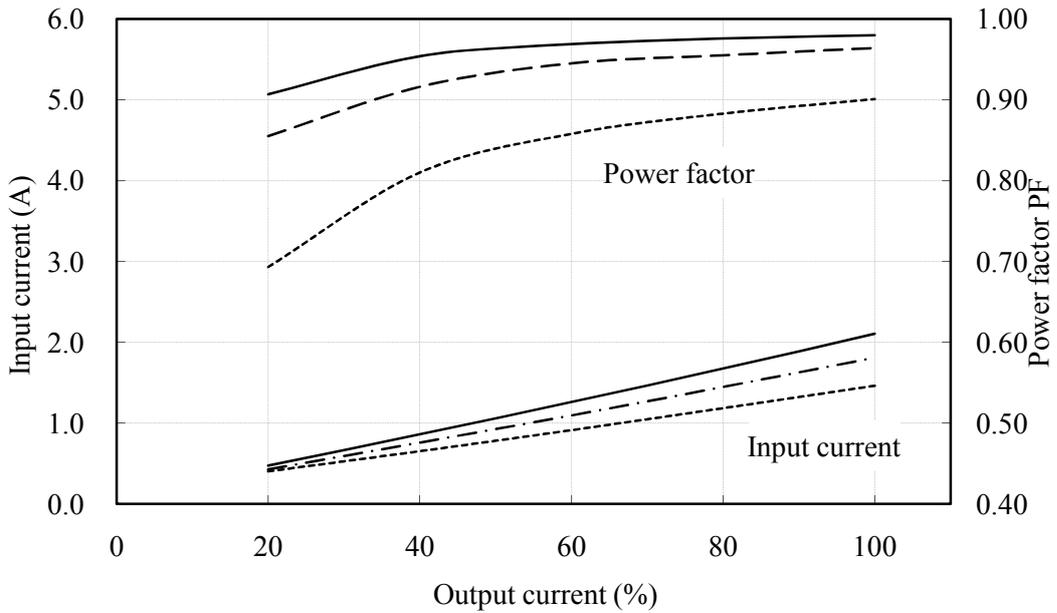
$\eta$  and PF , input current v.s. output current

25°C

conditions Vin : 170VAC ———  
: 200VAC - - - - -  
: 264VAC - - - - -



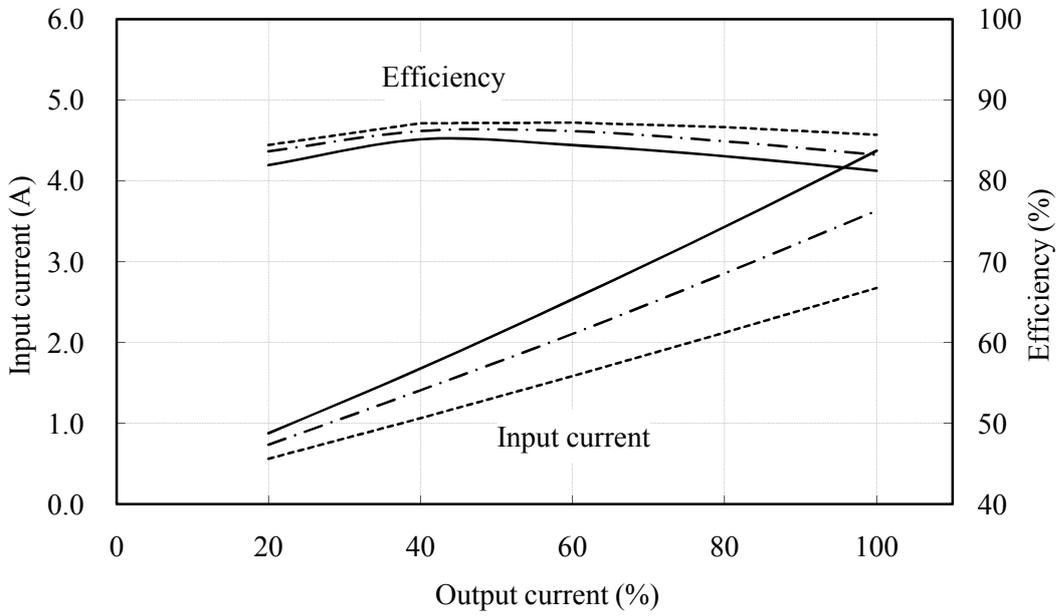
conditions Vin : 170VAC ———  
: 200VAC - - - - -  
: 264VAC - - - - -



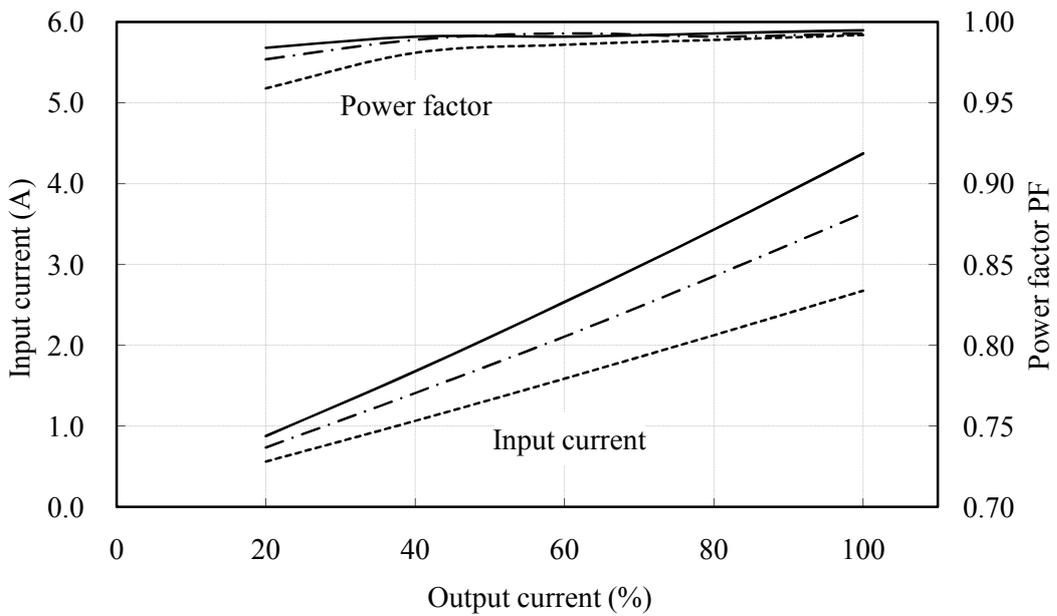
$\eta$  and PF , input current v.s. output current

25°C

conditions Vin : 85VAC ———  
: 100VAC - - - - -  
: 132VAC - - - - -



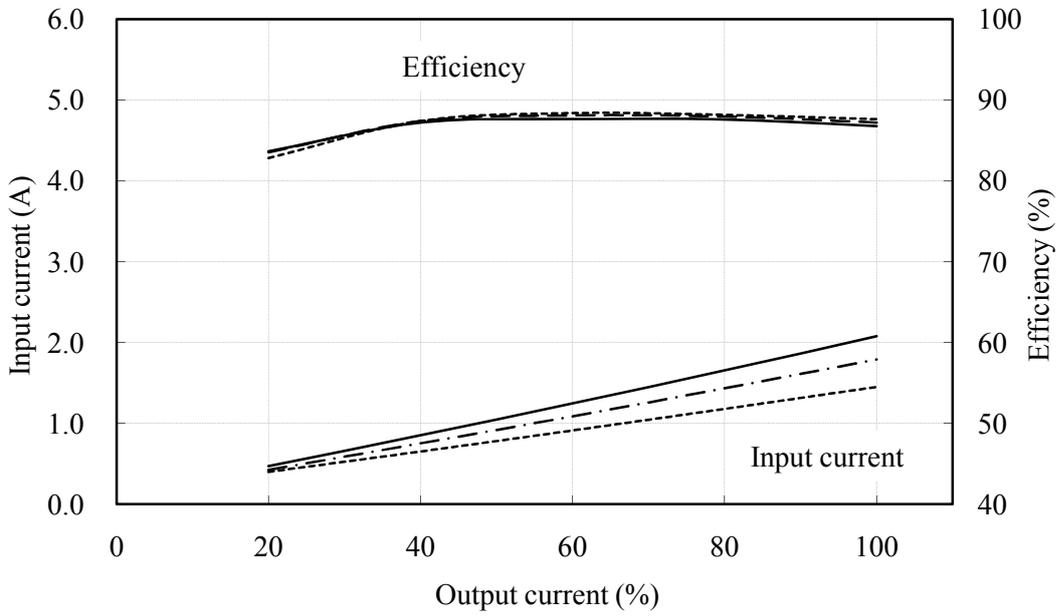
conditions Vin : 85VAC ———  
: 100VAC - - - - -  
: 132VAC - - - - -



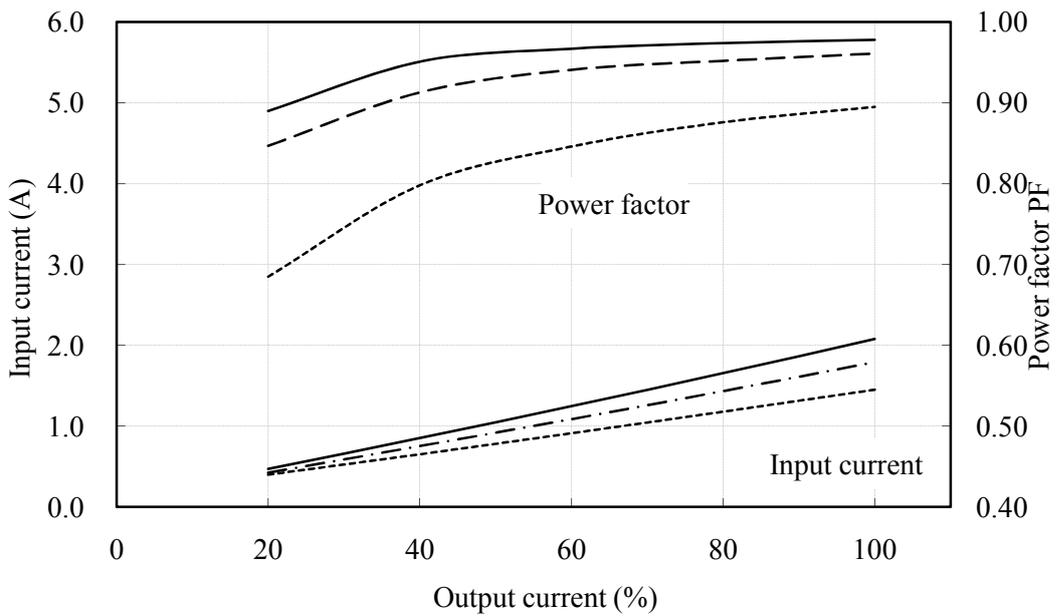
$\eta$  and PF, input current v.s. output current

25°C

conditions Vin : 170VAC ———  
: 200VAC - - - - -  
: 264VAC - - - - -



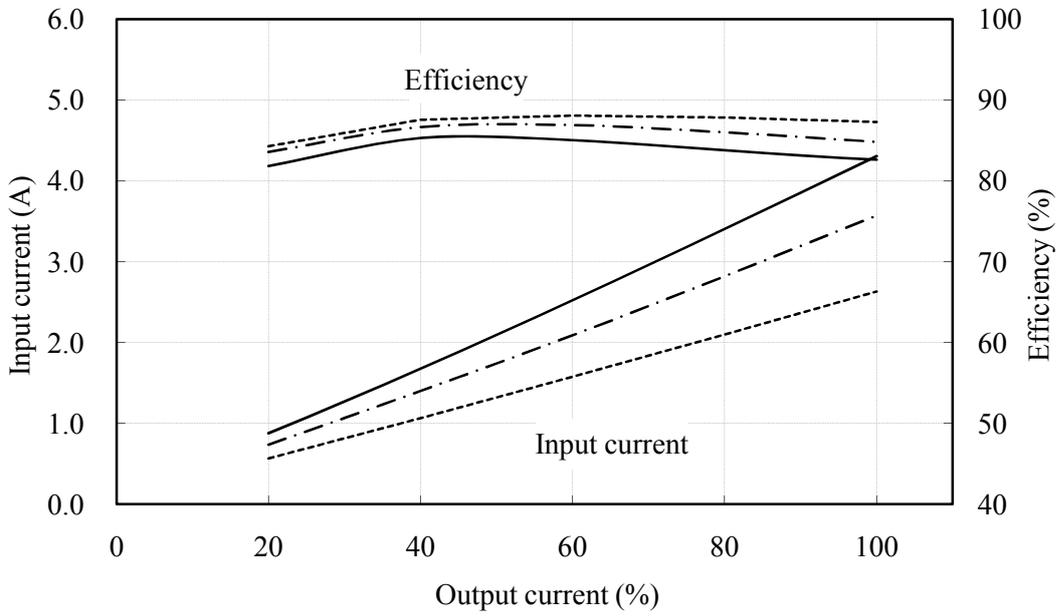
conditions Vin : 170VAC ———  
: 200VAC - - - - -  
: 264VAC - - - - -



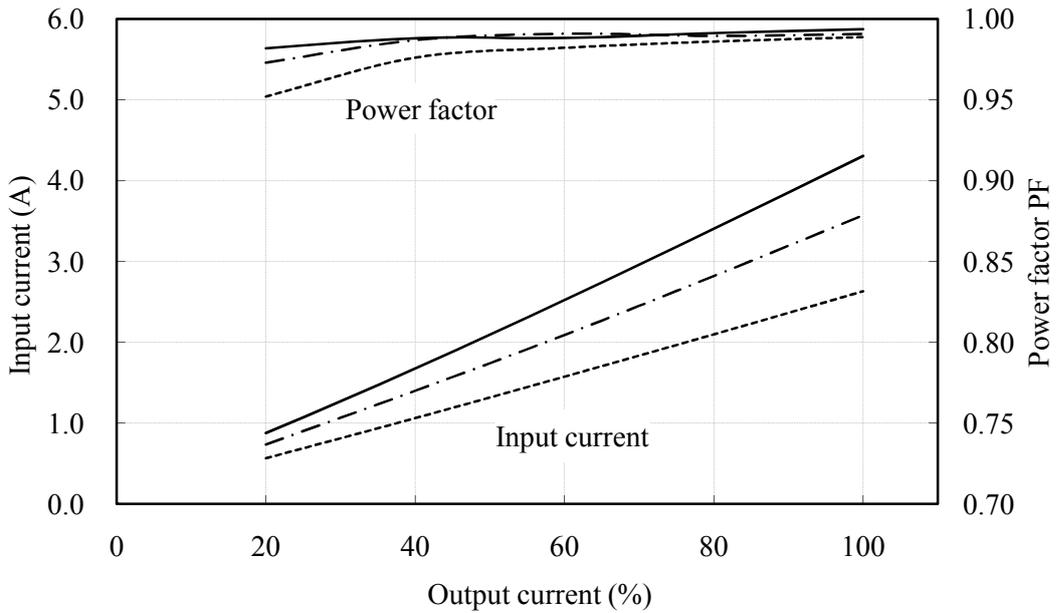
$\eta$  and PF, input current v.s. output current

25°C

conditions Vin : 85VAC ———  
 : 100VAC - - - - -  
 : 132VAC - - - - -



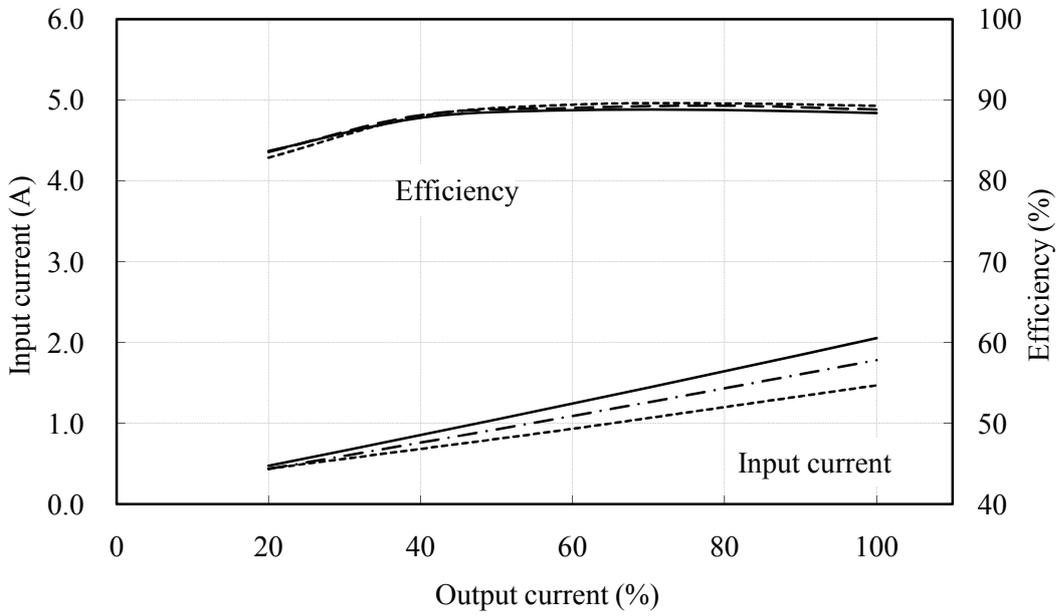
conditions Vin : 85VAC ———  
 : 100VAC - - - - -  
 : 132VAC - - - - -



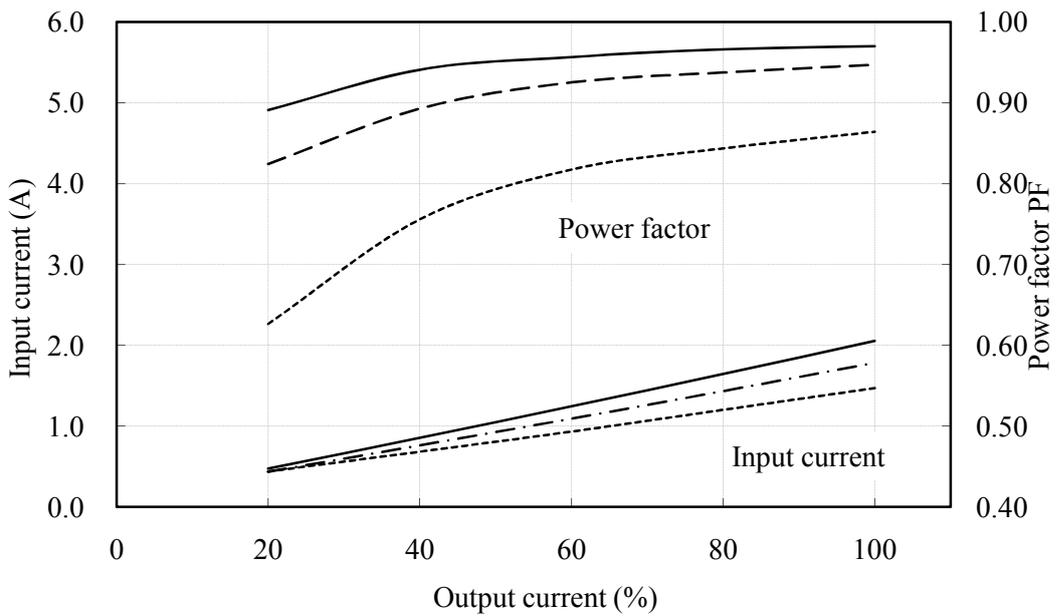
$\eta$  and PF , input current v.s. output current

25°C

conditions Vin : 170VAC ———  
: 200VAC - - - - -  
: 264VAC - - - - -



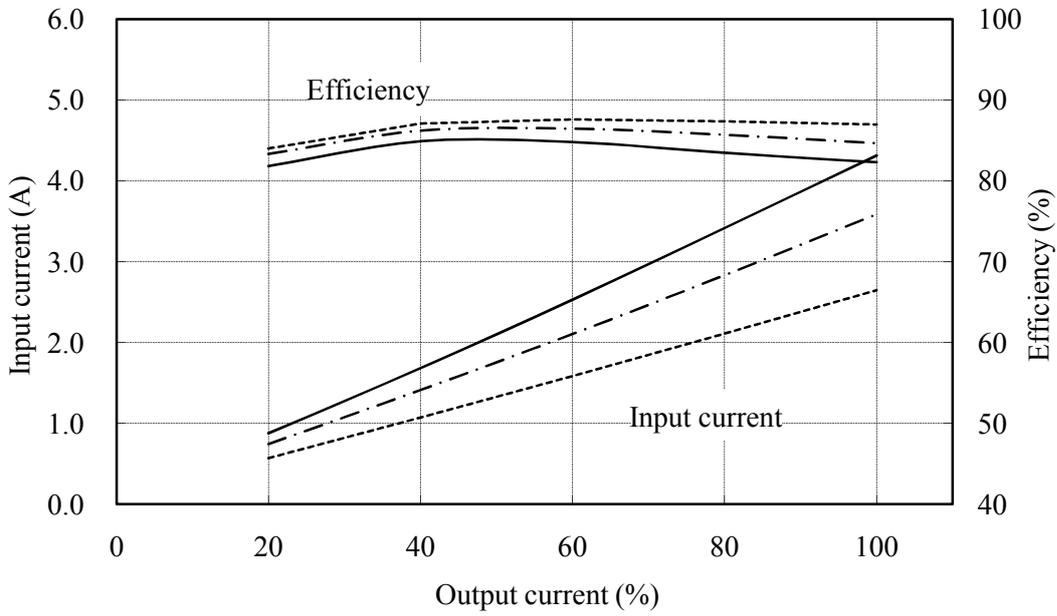
conditions Vin : 170VAC ———  
: 200VAC - - - - -  
: 264VAC - - - - -



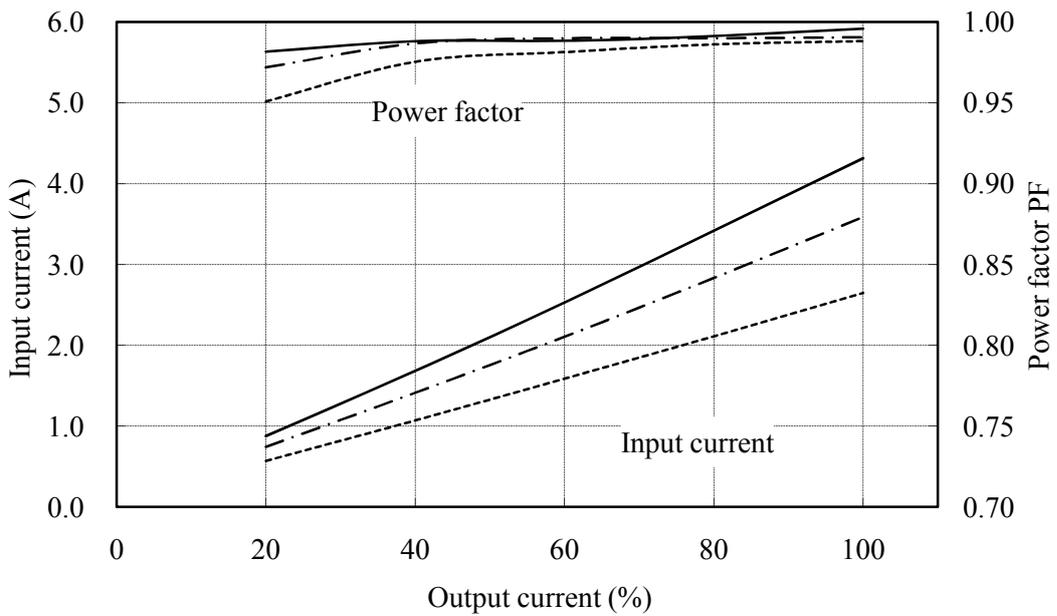
$\eta$  and PF , input current v.s. output current

25°C

conditions Vin : 85VAC ———  
: 100VAC - - - - -  
: 132VAC - - - - -



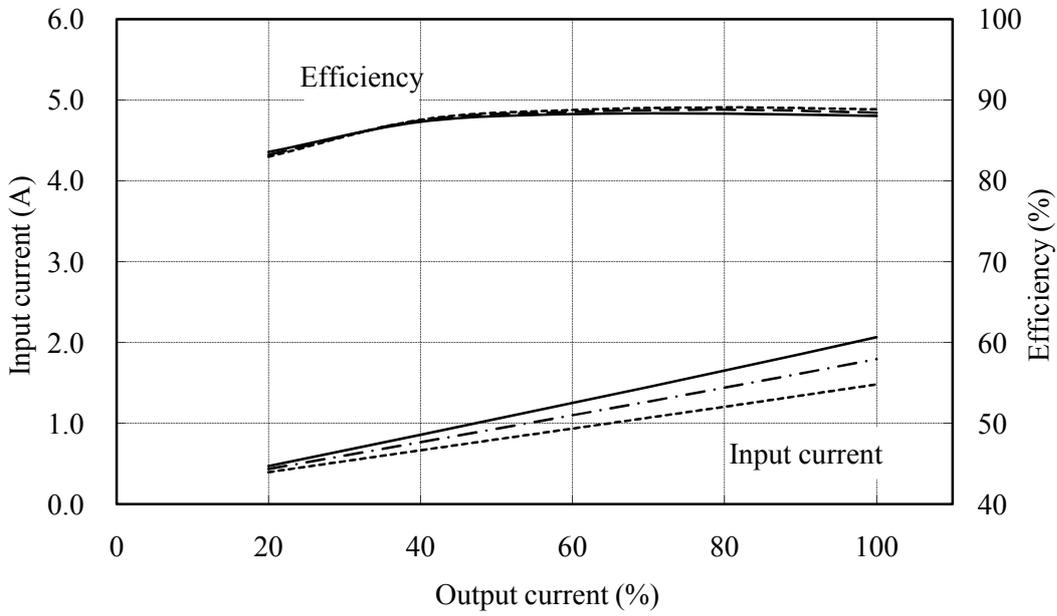
conditions Vin : 85VAC ———  
: 100VAC - - - - -  
: 132VAC - - - - -



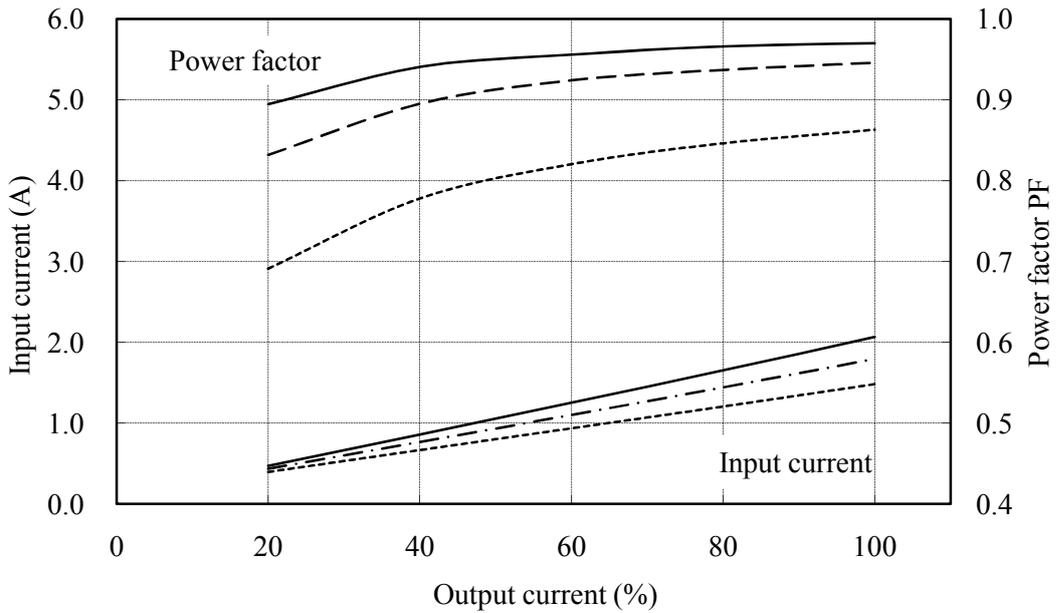
$\eta$  and PF , input current v.s. output current

25°C

conditions Vin : 170VAC —————  
                  : 200VAC - - - - -  
                  : 264VAC - - - - -



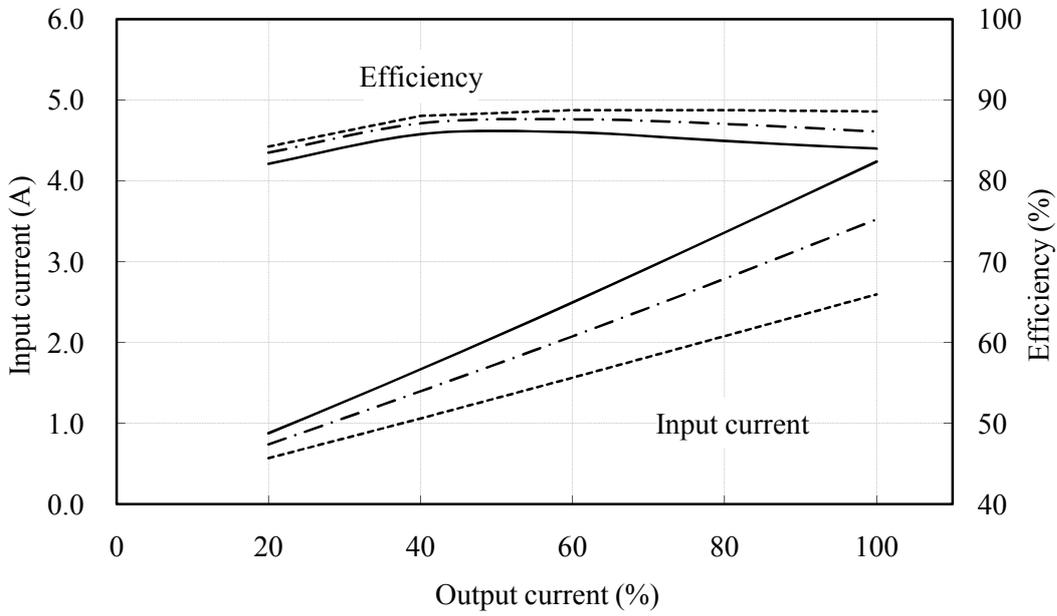
conditions Vin : 170VAC —————  
                  : 230VAC - - - - -  
                  : 264VAC - - - - -



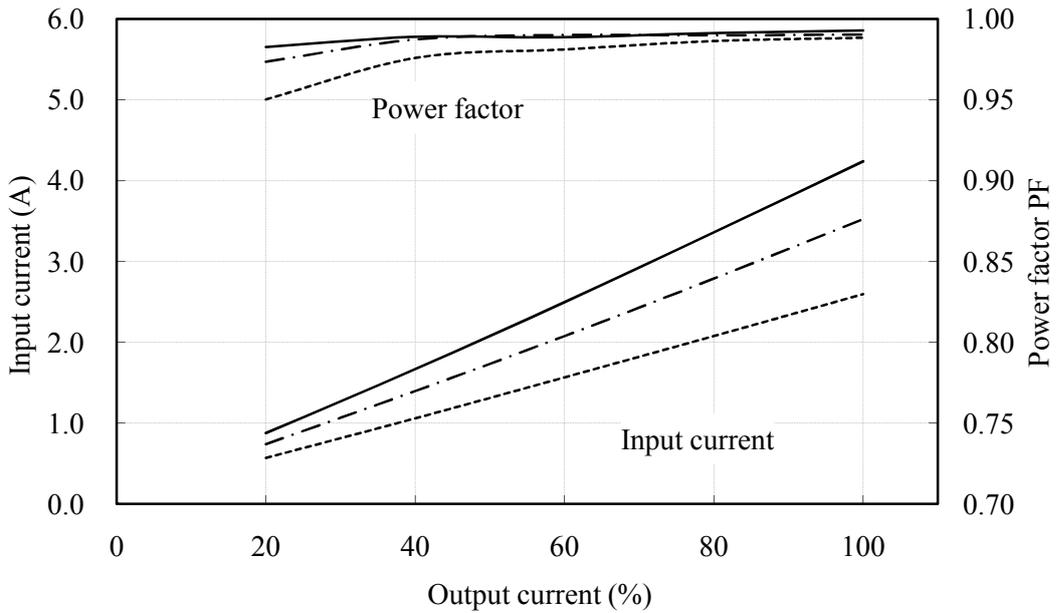
$\eta$  and PF , input current v.s. output current

25°C

conditions Vin : 85VAC ———  
 : 100VAC - - - - -  
 : 132VAC - - - - -



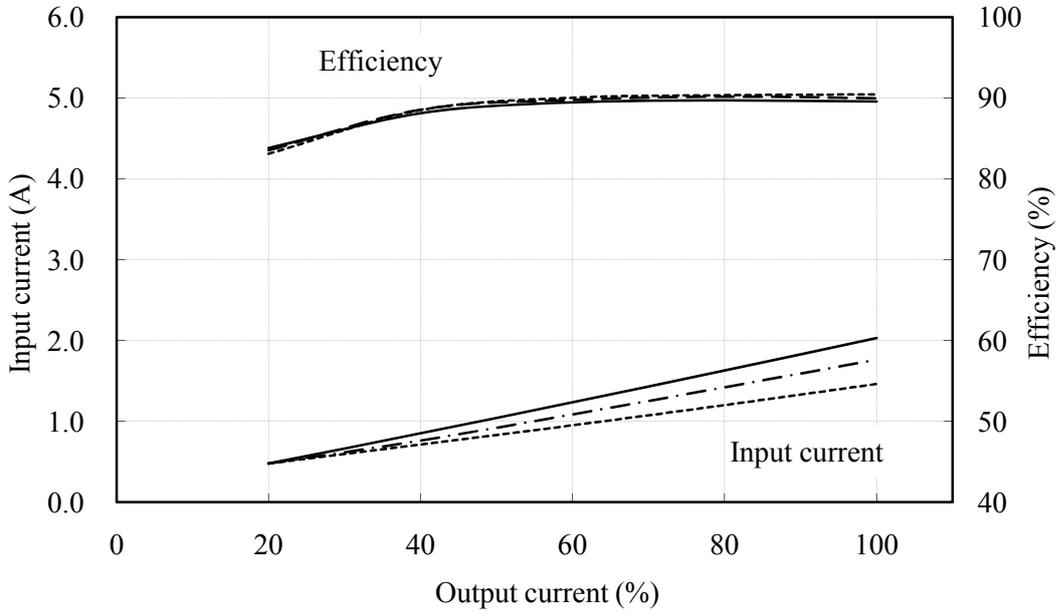
conditions Vin : 85VAC ———  
 : 100VAC - - - - -  
 : 132VAC - - - - -



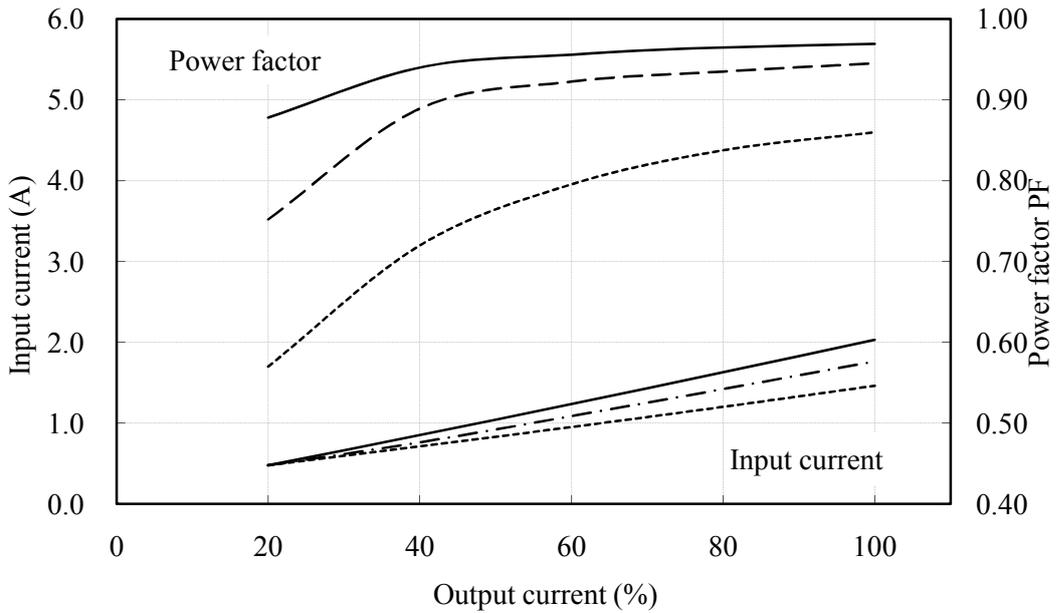
$\eta$  and PF , input current v.s. output current

25°C

conditions Vin : 170VAC ———  
: 200VAC - - - - -  
: 264VAC - - - - -



conditions Vin : 170VAC ———  
: 230VAC - - - - -  
: 264VAC - - - - -



**MODEL****PFS300A-12****Regulation - Line and Load****12V****1.Regulation - line and load**

conditions Ta : -10°C

Vin \ Iout	0%	20%	40%	60%	80%	100%	120%	load regulation	
AC85V	11.981 V	11.982 V	11.983 V	11.985 V	12.000 V	12.000 V		19 mV	0.16%
AC100V	12.001 V	11.989 V	11.988 V	11.991 V	11.991 V	11.993 V		13 mV	0.11%
AC132V	12.003 V	11.995 V	11.996 V	11.995 V	11.995 V	11.998 V		8 mV	0.07%
AC170V	12.005 V	11.997 V	11.995 V	11.998 V	11.996 V	11.998 V		10 mV	0.08%
AC200V	12.008 V	12.000 V	11.997 V	11.998 V	12.002 V	11.999 V		11 mV	0.09%
AC264V	12.008 V	12.000 V	11.998 V	11.998 V	12.000 V	11.998 V		10 mV	0.08%
line regulation	27.0 mV	18.0 mV	15.0 mV	13.0 mV	11.0 mV	7.0 mV	0.0 mV		
	0.22%	0.15%	0.12%	0.11%	0.09%	0.06%	0.00%		

conditions Ta : 25°C

Vin \ Iout	0%	20%	40%	60%	80%	100%	120%	load regulation	
AC85V	12.013 V	12.010 V	12.012 V	12.012 V	12.016 V	12.013 V		6 mV	0.05%
AC100V	12.037 V	12.032 V	12.031 V	12.030 V	12.030 V	12.027 V		10 mV	0.08%
AC132V	12.035 V	12.032 V	12.031 V	12.030 V	12.030 V	12.031 V		5 mV	0.04%
AC170V	12.038 V	12.032 V	12.031 V	12.030 V	12.030 V	12.030 V		8 mV	0.07%
AC200V	12.037 V	12.032 V	12.031 V	12.030 V	12.030 V	12.028 V		9 mV	0.08%
AC264V	12.035 V	12.030 V	12.029 V	12.029 V	12.030 V	12.028 V		7 mV	0.06%
line regulation	25.0 mV	22.0 mV	19.0 mV	18.0 mV	14.0 mV	18.0 mV	0.0 mV		
	0.21%	0.18%	0.16%	0.15%	0.12%	0.15%	0.00%		

conditions Ta : 60°C

Vin \ Iout	0%	20%	40%	60%	80%	100%	120%	load regulation	
AC85V	12.054 V	12.050 V	12.050 V	12.049 V	12.047 V	12.043 V		11 mV	0.09%
AC100V	12.054 V	12.051 V	12.050 V	12.048 V	12.045 V	12.042 V		12 mV	0.10%
AC132V	12.053 V	12.050 V	12.048 V	12.047 V	12.044 V	12.040 V		13 mV	0.11%
AC170V	12.049 V	12.048 V	12.047 V	12.045 V	12.042 V	12.037 V		12 mV	0.10%
AC200V	12.047 V	12.046 V	12.045 V	12.044 V	12.041 V	12.038 V		9 mV	0.08%
AC264V	12.048 V	12.045 V	12.045 V	12.043 V	12.041 V	12.036 V		12 mV	0.10%
line regulation	7.0 mV	6.0 mV	5.0 mV	6.0 mV	6.0 mV	7.0 mV	0.0 mV		
	0.06%	0.05%	0.04%	0.05%	0.05%	0.06%	0.00%		

**2. Temperature drift**

conditions Vin : 100VAC

Iout : 100%

Ta	-10°C	25°C	60°C	temperature stability	
Vo	11.993 V	12.027 V	12.042 V	49mV	0.41%

**Regulation - Line and Load**

15V

1.Regulation - line and load

conditions Ta : -10°C

Vin \ Iout	0%	20%	40%	60%	80%	100%	120%	load regulation	
AC85V	15.017 V	15.011 V	15.009 V	15.009 V	15.008 V	15.008 V		9 mV	0.06%
AC100V	15.028 V	15.017 V	15.016 V	15.013 V	15.013 V	15.011 V		17 mV	0.11%
AC132V	15.030 V	15.019 V	15.018 V	15.015 V	15.015 V	15.012 V		18 mV	0.12%
AC170V	15.030 V	15.020 V	15.018 V	15.015 V	15.014 V	15.012 V		18 mV	0.12%
AC200V	15.030 V	15.020 V	15.018 V	15.016 V	15.015 V	15.011 V		19 mV	0.13%
AC264V	15.030 V	15.020 V	15.018 V	15.016 V	15.015 V	15.011 V		19 mV	0.13%
line regulation	13.0 mV	9.0 mV	9.0 mV	7.0 mV	7.0 mV	4.0 mV	0.0 mV		
	0.09%	0.06%	0.06%	0.05%	0.05%	0.03%	0.00%		

conditions Ta : 25°C

Vin \ Iout	0%	20%	40%	60%	80%	100%	120%	load regulation	
AC85V	15.025 V	15.015 V	15.014 V	15.012 V	15.010 V	15.004 V		21 mV	0.14%
AC100V	15.023 V	15.015 V	15.013 V	15.011 V	15.006 V	15.000 V		23 mV	0.15%
AC132V	15.018 V	15.013 V	15.012 V	15.009 V	15.005 V	14.998 V		20 mV	0.13%
AC170V	15.030 V	15.020 V	15.018 V	15.015 V	15.014 V	15.012 V		18 mV	0.12%
AC200V	15.030 V	15.020 V	15.018 V	15.016 V	15.015 V	15.011 V		19 mV	0.13%
AC264V	15.030 V	15.020 V	15.018 V	15.016 V	15.015 V	15.011 V		19 mV	0.13%
line regulation	12.0 mV	7.0 mV	6.0 mV	7.0 mV	10.0 mV	14.0 mV	0.0 mV		
	0.08%	0.05%	0.04%	0.05%	0.07%	0.09%	0.00%		

conditions Ta : 60°C

Vin \ Iout	0%	20%	40%	60%	80%	100%	120%	load regulation	
AC85V	15.026 V	15.016 V	15.013 V	15.010 V	15.004 V	14.998 V		28 mV	0.19%
AC100V	15.019 V	15.010 V	15.008 V	15.005 V	14.999 V	14.993 V		26 mV	0.17%
AC132V	15.012 V	15.004 V	15.003 V	15.001 V	14.997 V	14.989 V		23 mV	0.15%
AC170V	15.013 V	15.004 V	15.003 V	15.001 V	14.995 V	14.989 V		24 mV	0.16%
AC200V	15.011 V	15.004 V	15.003 V	15.001 V	14.995 V	14.991 V		20 mV	0.13%
AC264V	15.005 V	15.001 V	15.000 V	14.999 V	14.993 V	14.989 V		16 mV	0.11%
line regulation	21.0 mV	15.0 mV	13.0 mV	11.0 mV	11.0 mV	9.0 mV	0.0 mV		
	0.14%	0.10%	0.09%	0.07%	0.07%	0.06%	0.00%		

2. Temperature drift

conditions Vin : 100VAC  
Iout : 100%

Ta	-10°C	25°C	60°C	temperature stability	
Vo	15.011 V	15.000 V	14.993 V	18mV	0.12%

**MODEL****PFS300A-24****Regulation - Line and Load****24V****1.Regulation - line and load**

conditions Ta : -10°C

Vin \ Iout	0%	20%	40%	60%	80%	100%	120%	load regulation	
AC85V	24.010 V	24.000 V		10 mV	0.04%				
AC100V	24.010 V	24.010 V	24.010 V	24.000 V	24.000 V	24.000 V		10 mV	0.04%
AC132V	24.010 V	24.010 V	24.010 V	24.000 V	24.000 V	24.000 V		10 mV	0.04%
AC170V	24.010 V	24.010 V	24.010 V	24.000 V	24.000 V	24.000 V		10 mV	0.04%
AC200V	24.010 V	24.010 V	24.010 V	24.000 V	24.000 V	24.000 V		10 mV	0.04%
AC264V	24.010 V	24.010 V	24.010 V	24.010 V	24.000 V	24.000 V		10 mV	0.04%
line regulation	0.0 mV	10.0 mV	10.0 mV	10.0 mV	0.0 mV	0.0 mV	0.0 mV		
	0.00%	0.04%	0.04%	0.04%	0.00%	0.00%	0.00%		

conditions Ta : 25°C

Vin \ Iout	0%	20%	40%	60%	80%	100%	120%	load regulation	
AC85V	24.010 V	24.000 V		10 mV	0.04%				
AC100V	24.000 V		0 mV	0.00%					
AC132V	24.000 V	23.990 V		10 mV	0.04%				
AC170V	23.990 V		0 mV	0.00%					
AC200V	23.990 V		0 mV	0.00%					
AC264V	23.990 V		0 mV	0.00%					
line regulation	20.0 mV	10.0 mV	0.0 mV						
	0.08%	0.04%	0.04%	0.04%	0.04%	0.04%	0.00%		

conditions Ta : 60°C

Vin \ Iout	0%	20%	40%	60%	80%	100%	120%	load regulation	
AC85V	23.980 V	23.980 V	23.970 V	23.970 V	23.970 V	23.970 V		10 mV	0.04%
AC100V	23.980 V	23.970 V		10 mV	0.04%				
AC132V	23.980 V	23.970 V	23.960 V	23.960 V	23.960 V	23.960 V		20 mV	0.08%
AC170V	23.970 V	23.970 V	23.960 V	23.960 V	23.960 V	23.960 V		10 mV	0.04%
AC200V	23.970 V	23.960 V		10 mV	0.04%				
AC264V	23.970 V	23.960 V		10 mV	0.04%				
line regulation	10.0 mV	20.0 mV	10.0 mV	10.0 mV	10.0 mV	10.0 mV	0.0 mV		
	0.04%	0.08%	0.04%	0.04%	0.04%	0.04%	0.00%		

**2. Temperature drift**

conditions Vin : 100VAC

Iout : 100%

Ta	-10°C	25°C	60°C	temperature stability	
Vo	24.000 V	24.000 V	23.970 V	30mV	0.13%

**MODEL****PFS300A-30****Regulation - Line and Load****30V****1.Regulation - line and load**

conditions Ta : -10°C

Vin \ Iout	0%	20%	40%	60%	80%	100%	120%	load regulation	
AC85V	30.050 V	30.020 V	30.020 V	30.010 V	30.000 V	29.990 V		60 mV	0.20%
AC100V	30.050 V	30.020 V	30.020 V	30.010 V	30.000 V	29.990 V		60 mV	0.20%
AC132V	30.050 V	30.030 V	30.020 V	30.010 V	30.000 V	30.000 V		50 mV	0.17%
AC170V	30.050 V	30.030 V	30.020 V	30.010 V	30.000 V	30.000 V		50 mV	0.17%
AC200V	30.050 V	30.030 V	30.020 V	30.010 V	30.000 V	30.000 V		50 mV	0.17%
AC264V	30.050 V	30.030 V	30.020 V	30.010 V	30.000 V	30.000 V		50 mV	0.17%
line regulation	0.0 mV	10.0 mV	0.0 mV	0.0 mV	0.0 mV	10.0 mV	0.0 mV		
	0.00%	0.03%	0.00%	0.00%	0.00%	0.03%	0.00%		

conditions Ta : 25°C

Vin \ Iout	0%	20%	40%	60%	80%	100%	120%	load regulation	
AC85V	30.070 V	30.040 V	30.030 V	30.020 V	30.010 V	30.000 V		70 mV	0.23%
AC100V	30.070 V	30.040 V	30.030 V	30.020 V	30.010 V	30.010 V		60 mV	0.20%
AC132V	30.070 V	30.040 V	30.030 V	30.020 V	30.010 V	30.010 V		60 mV	0.20%
AC170V	30.070 V	30.040 V	30.030 V	30.020 V	30.010 V	30.010 V		60 mV	0.20%
AC200V	30.080 V	30.040 V	30.030 V	30.030 V	30.020 V	30.010 V		70 mV	0.23%
AC264V	30.080 V	30.040 V	30.030 V	30.030 V	30.020 V	30.010 V		70 mV	0.23%
line regulation	10.0 mV	0.0 mV	0.0 mV	10.0 mV	10.0 mV	10.0 mV	0.0 mV		
	0.03%	0.00%	0.00%	0.03%	0.03%	0.03%	0.00%		

conditions Ta : 60°C

Vin \ Iout	0%	20%	40%	60%	80%	100%	120%	load regulation	
AC85V	30.080 V	30.050 V	30.040 V	30.030 V	30.010 V	30.010 V		70 mV	0.23%
AC100V	30.070 V	30.030 V	30.020 V	30.010 V	30.000 V	29.990 V		80 mV	0.27%
AC132V	30.070 V	30.030 V	30.020 V	30.000 V	29.990 V	29.980 V		90 mV	0.30%
AC170V	30.070 V	30.020 V	30.010 V	30.000 V	29.990 V	29.980 V		90 mV	0.30%
AC200V	30.070 V	30.020 V	30.010 V	30.000 V	29.990 V	29.980 V		90 mV	0.30%
AC264V	30.070 V	30.020 V	30.010 V	30.000 V	29.990 V	29.980 V		90 mV	0.30%
line regulation	10.0 mV	30.0 mV	30.0 mV	30.0 mV	20.0 mV	30.0 mV	0.0 mV		
	0.03%	0.10%	0.10%	0.10%	0.07%	0.10%	0.00%		

**2. Temperature drift**

conditions Vin : 100VAC

Iout : 100%

Ta	-10°C	25°C	60°C	temperature stability	
Vo	29.990 V	30.010 V	29.990 V	20mV	0.07%

**MODEL****PFS300A-48****Regulation - Line and Load**

48V

## 1.Regulation - line and load

conditions Ta : -10°C

Vin \ Iout	0%	20%	40%	60%	80%	100%	120%	load regulation	
AC85V	48.060 V	48.010 V	48.000 V	47.990 V	47.970 V	47.960 V		100 mV	0.21%
AC100V	48.060 V	48.020 V	48.000 V	47.990 V	47.970 V	47.960 V		100 mV	0.21%
AC132V	48.060 V	48.020 V	48.000 V	47.990 V	47.980 V	47.960 V		100 mV	0.21%
AC170V	48.060 V	48.020 V	48.000 V	47.990 V	47.980 V	47.960 V		100 mV	0.21%
AC200V	48.060 V	48.020 V	48.000 V	47.990 V	47.980 V	47.960 V		100 mV	0.21%
AC264V	48.060 V	48.020 V	48.000 V	47.990 V	47.980 V	47.960 V		100 mV	0.21%
line regulation	0.0 mV	10.0 mV	0.0 mV	0.0 mV	10.0 mV	0.0 mV	0.0 mV		
	0.00%	0.02%	0.00%	0.00%	0.02%	0.00%	0.00%		

conditions Ta : 25°C

Vin \ Iout	0%	20%	40%	60%	80%	100%	120%	load regulation	
AC85V	48.110 V	48.060 V	48.040 V	48.030 V	48.010 V	48.000 V		110 mV	0.23%
AC100V	48.110 V	48.060 V	48.040 V	48.030 V	48.010 V	48.000 V		110 mV	0.23%
AC132V	48.110 V	48.060 V	48.040 V	48.020 V	48.010 V	48.000 V		110 mV	0.23%
AC170V	48.110 V	48.060 V	48.040 V	48.020 V	48.010 V	48.000 V		110 mV	0.23%
AC200V	48.110 V	48.060 V	48.040 V	48.020 V	48.010 V	48.000 V		110 mV	0.23%
AC264V	48.110 V	48.060 V	48.040 V	48.020 V	48.010 V	48.000 V		110 mV	0.23%
line regulation	0.0 mV	0.0 mV	0.0 mV	10.0 mV	0.0 mV	0.0 mV	0.0 mV		
	0.00%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%		

conditions Ta : 60°C

Vin \ Iout	0%	20%	40%	60%	80%	100%	120%	load regulation	
AC85V	48.120 V	48.060 V	48.030 V	48.020 V	48.010 V	48.000 V		120 mV	0.25%
AC100V	48.120 V	48.060 V	48.040 V	48.020 V	48.010 V	48.000 V		120 mV	0.25%
AC132V	48.120 V	48.060 V	48.040 V	48.020 V	48.010 V	48.000 V		120 mV	0.25%
AC170V	48.120 V	48.060 V	48.040 V	48.020 V	48.010 V	48.000 V		120 mV	0.25%
AC200V	48.130 V	48.060 V	48.040 V	48.030 V	48.020 V	48.010 V		120 mV	0.25%
AC264V	48.130 V	48.060 V	48.040 V	48.030 V	48.020 V	48.010 V		120 mV	0.25%
line regulation	10.0 mV	0.0 mV	10.0 mV	10.0 mV	10.0 mV	10.0 mV	0.0 mV		
	0.02%	0.00%	0.02%	0.02%	0.02%	0.02%	0.00%		

## 2. Temperature drift

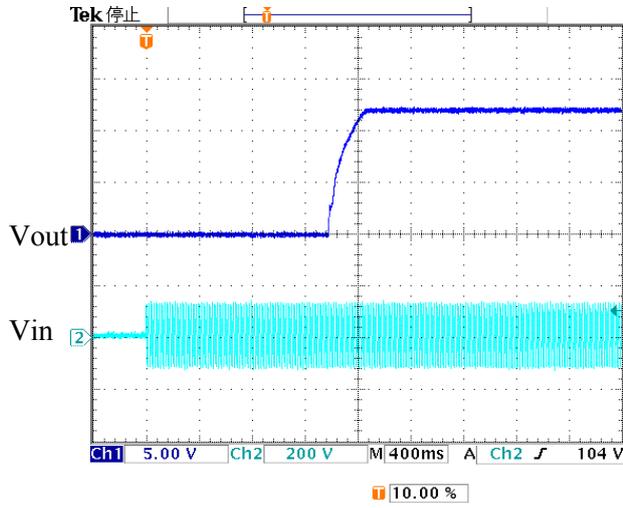
conditions Vin : 100VAC

Iout : 100%

Ta	-10°C	25°C	60°C	temperature stability	
Vo	47.960 V	48.000 V	48.000 V	40mV	0.08%

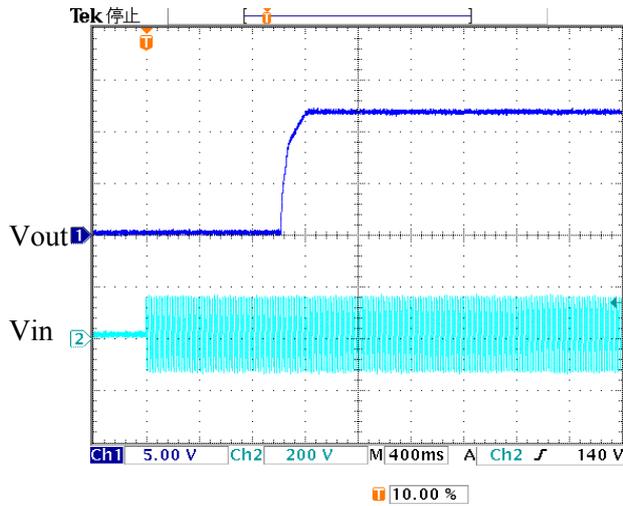
Output Rise Waveform and Start Time

Ta : 25°C



Input Voltage : 100 VAC  
Output Current : 100 %

Vin : 200 VAC/DIV  
Vout : 5 VDC/DIV  
TIME : 400 ms/DIV

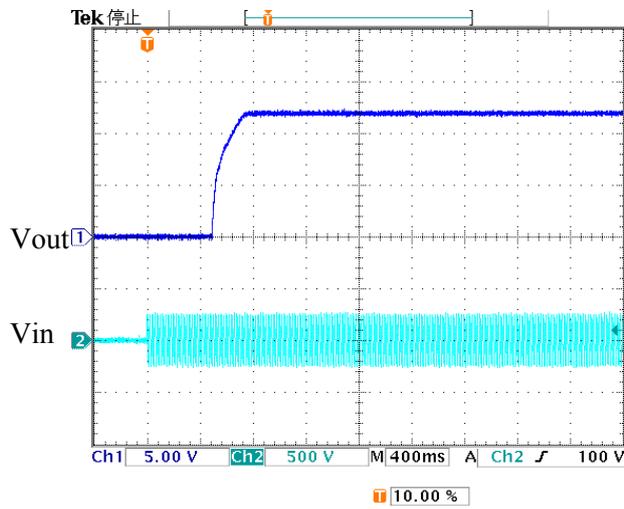


Input Voltage : 100 VAC  
Output Current : 0 %

Vin : 200 VAC/DIV  
Vout : 5 VDC/DIV  
TIME : 400 ms/DIV

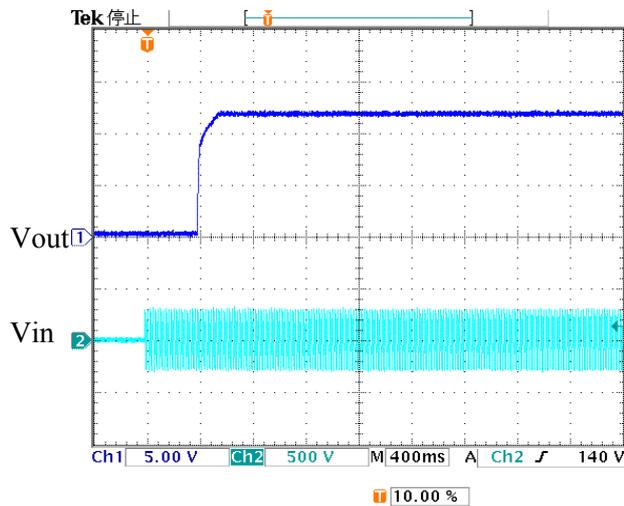
Output Rise Waveform and Start Time

Ta : 25°C



Input Voltage : 200 VAC  
Output Current : 100 %

Vin : 500 VAC/DIV  
Vout : 5 VDC/DIV  
TIME : 400 ms/DIV

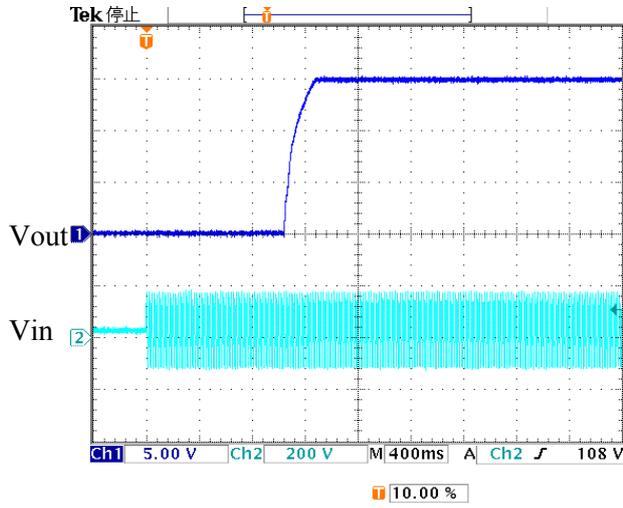


Input Voltage : 200 VAC  
Output Current : 0 %

Vin : 500 VAC/DIV  
Vout : 5 VDC/DIV  
TIME : 400 ms/DIV

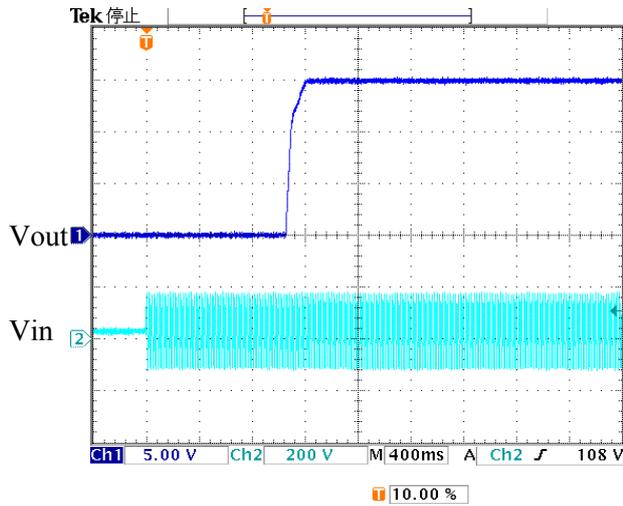
Output Rise Waveform and Start Time

Ta : 25°C



Input Voltage : 100 VAC  
Output Current : 100 %

Vin : 200 VAC/DIV  
Vout : 5 VDC/DIV  
TIME : 400 ms/DIV

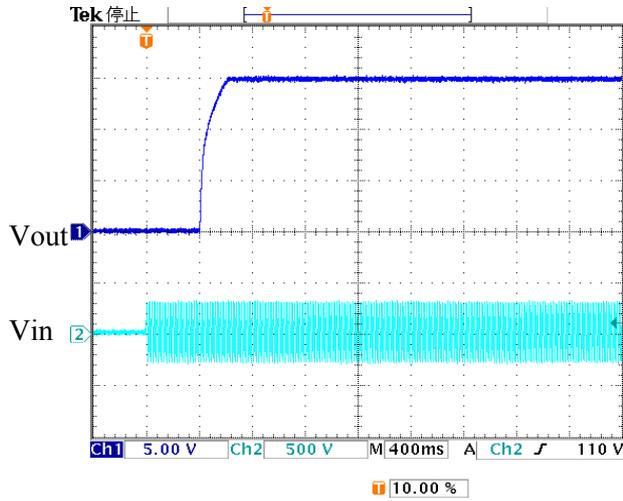


Input Voltage : 100 VAC  
Output Current : 0 %

Vin : 200 VAC/DIV  
Vout : 5 VDC/DIV  
TIME : 400 ms/DIV

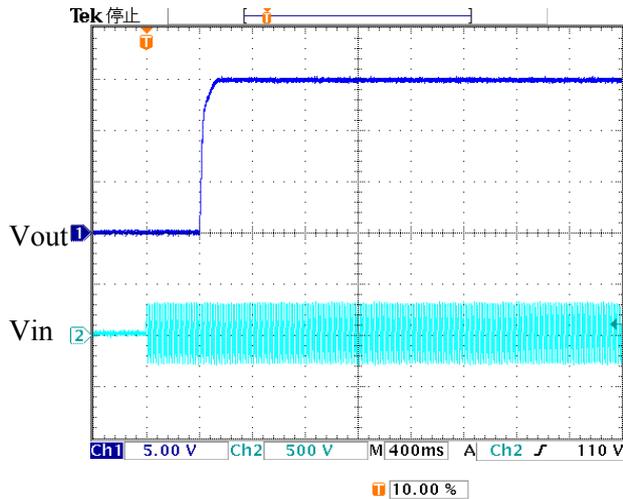
Output Rise Waveform and Start Time

Ta : 25°C



Input Voltage : 200 VAC  
Output Current : 100 %

Vin : 500 VAC/DIV  
Vout : 5 VDC/DIV  
TIME : 400 ms/DIV

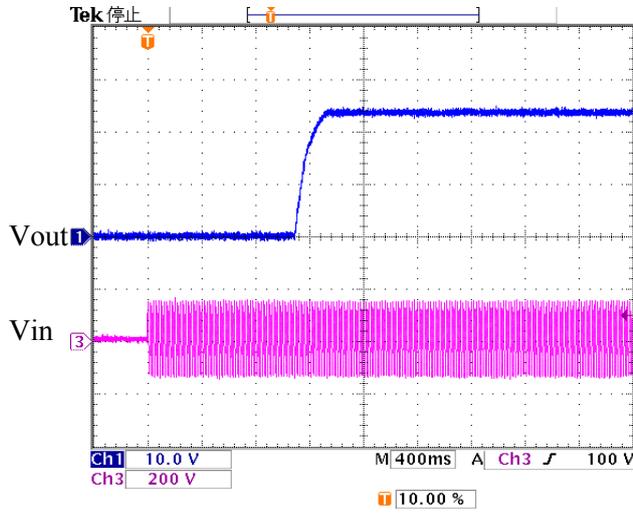


Input Voltage : 200 VAC  
Output Current : 0 %

Vin : 500 VAC/DIV  
Vout : 5 VDC/DIV  
TIME : 400 ms/DIV

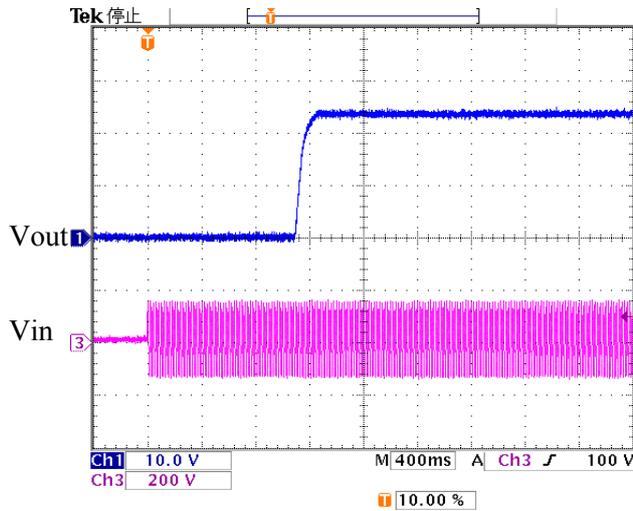
Output Rise Waveform and Start Time

Ta : 25°C



Input Voltage : 100 VAC  
Output Current : 100 %

Vin : 200 VAC/DIV  
Vout : 10 VDC/DIV  
TIME : 400 ms/DIV

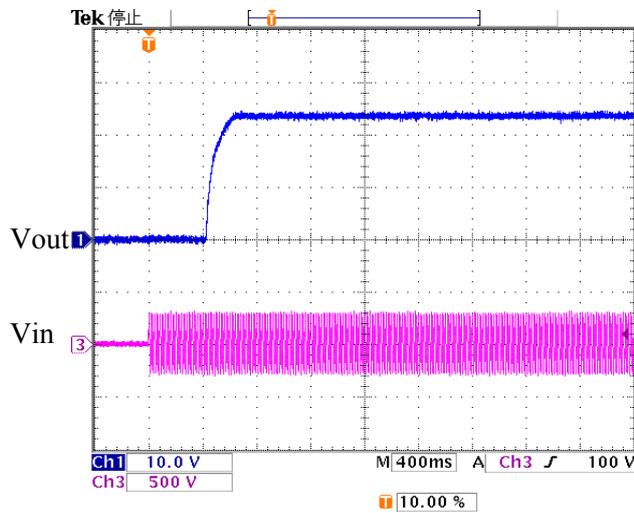


Input Voltage : 100 VAC  
Output Current : 0 %

Vin : 200 VAC/DIV  
Vout : 10 VDC/DIV  
TIME : 400 ms/DIV

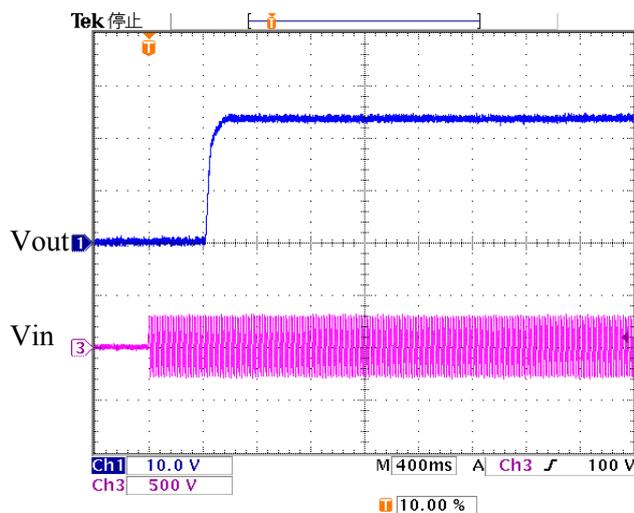
Output Rise Waveform and Start Time

Ta : 25°C



Input Voltage : 200 VAC  
Output Current : 100 %

Vin : 500 VAC/DIV  
Vout : 10 VDC/DIV  
TIME : 400 ms/DIV

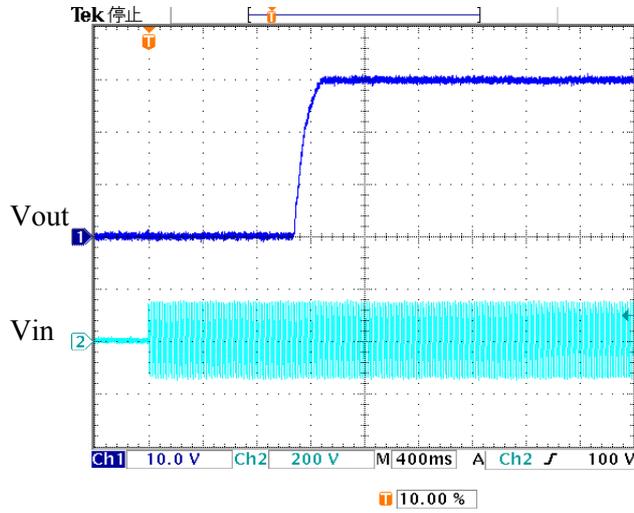


Input Voltage : 200 VAC  
Output Current : 0 %

Vin : 500 VAC/DIV  
Vout : 10 VDC/DIV  
TIME : 400 ms/DIV

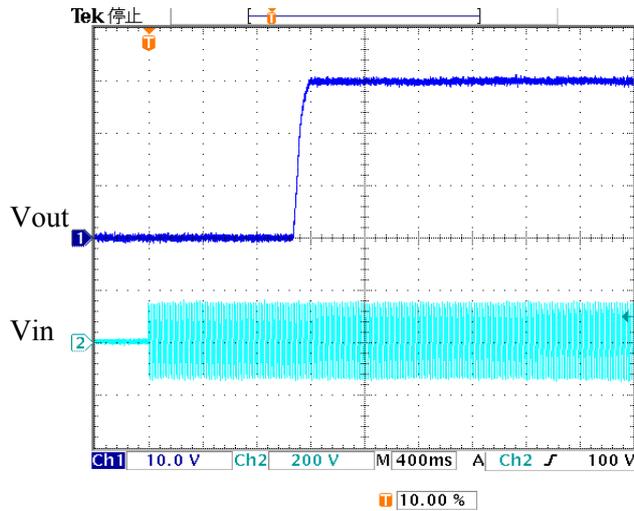
Output Rise Waveform and Start Time

Ta : 25°C



Input Voltage : 100 VAC  
Output Current : 100 %

Vin : 200 VAC/DIV  
Vout : 10 VDC/DIV  
TIME : 400 ms/DIV

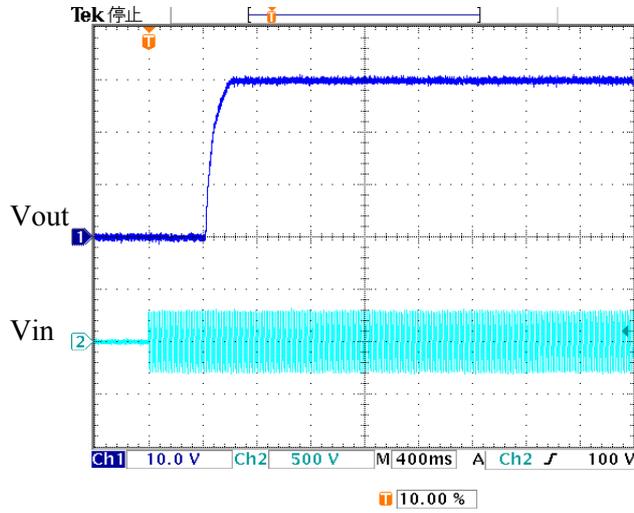


Input Voltage : 100 VAC  
Output Current : 0 %

Vin : 200 VAC/DIV  
Vout : 10 VDC/DIV  
TIME : 400 ms/DIV

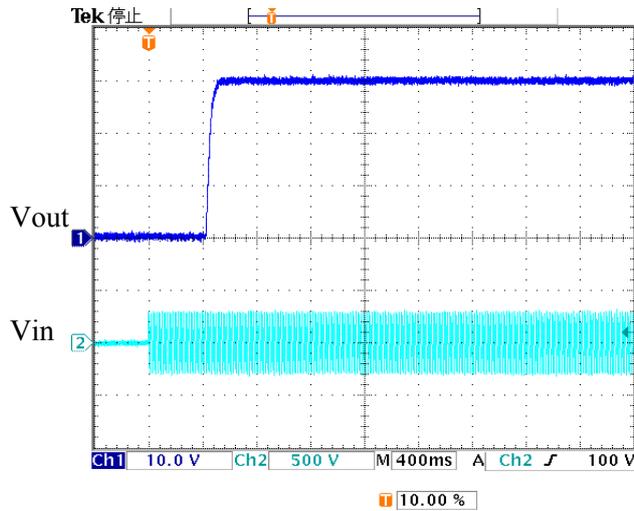
Output Rise Waveform and Start Time

Ta : 25°C



Input Voltage : 200 VAC  
Output Current : 100 %

Vin : 500 VAC/DIV  
Vout : 10 VDC/DIV  
TIME : 400 ms/DIV

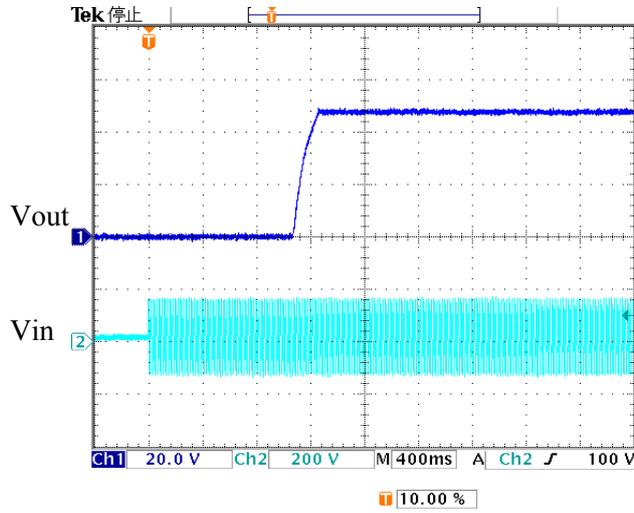


Input Voltage : 200 VAC  
Output Current : 0 %

Vin : 500 VAC/DIV  
Vout : 10 VDC/DIV  
TIME : 400 ms/DIV

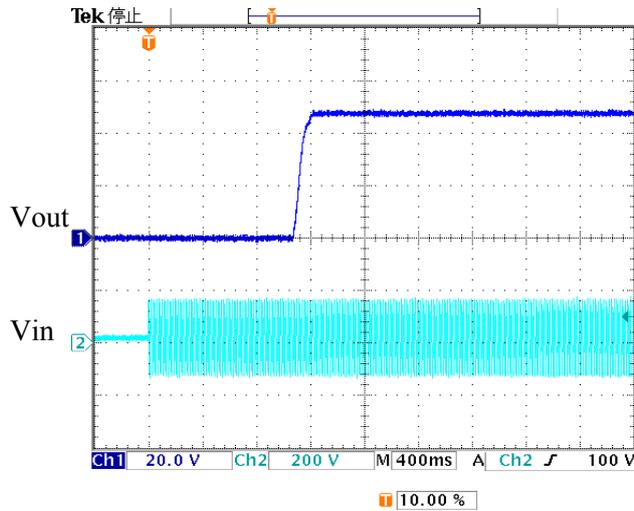
Output Rise Waveform and Start Time

Ta : 25°C



Input Voltage : 100 VAC  
Output Current : 100 %

Vin : 200 VAC/DIV  
Vout : 10 VDC/DIV  
TIME : 400 ms/DIV

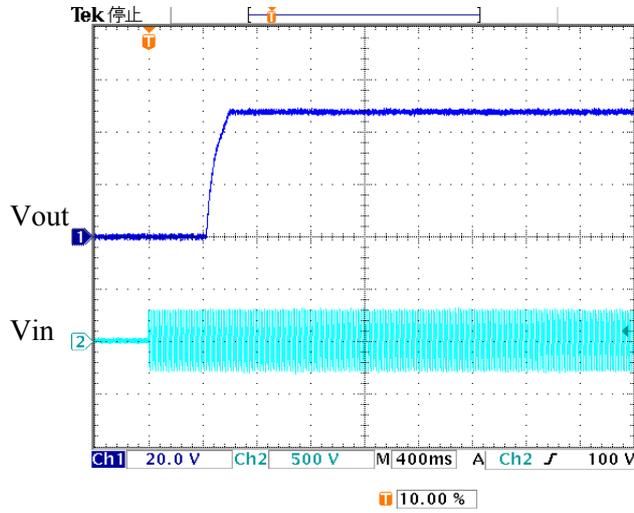


Input Voltage : 100 VAC  
Output Current : 0 %

Vin : 200 VAC/DIV  
Vout : 10 VDC/DIV  
TIME : 400 ms/DIV

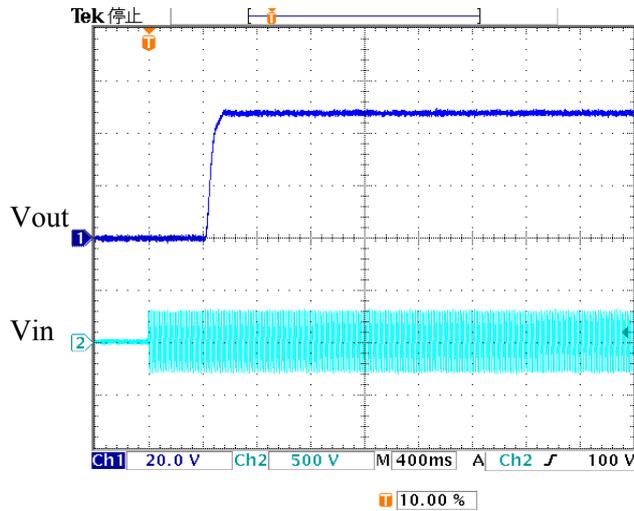
Output Rise Waveform and Start Time

Ta : 25°C



Input Voltage : 200 VAC  
Output Current : 100 %

Vin : 500 VAC/DIV  
Vout : 10 VDC/DIV  
TIME : 400 ms/DIV

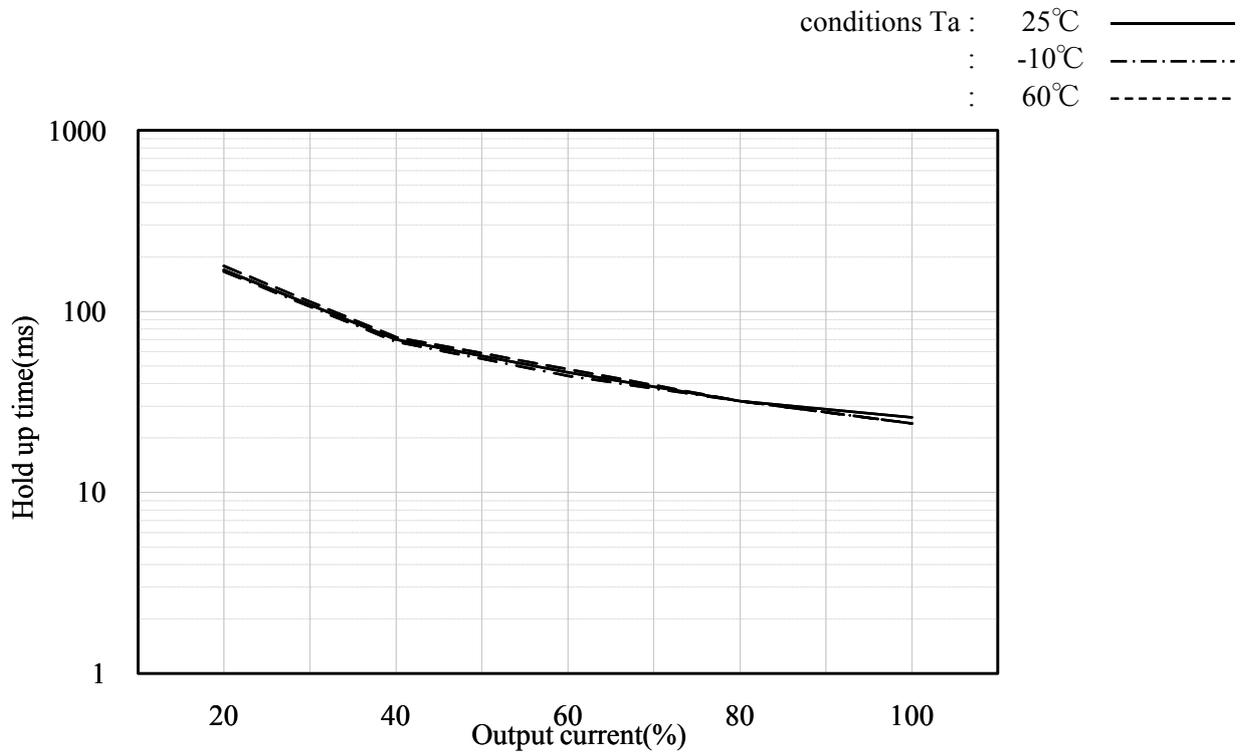


Input Voltage : 200 VAC  
Output Current : 0 %

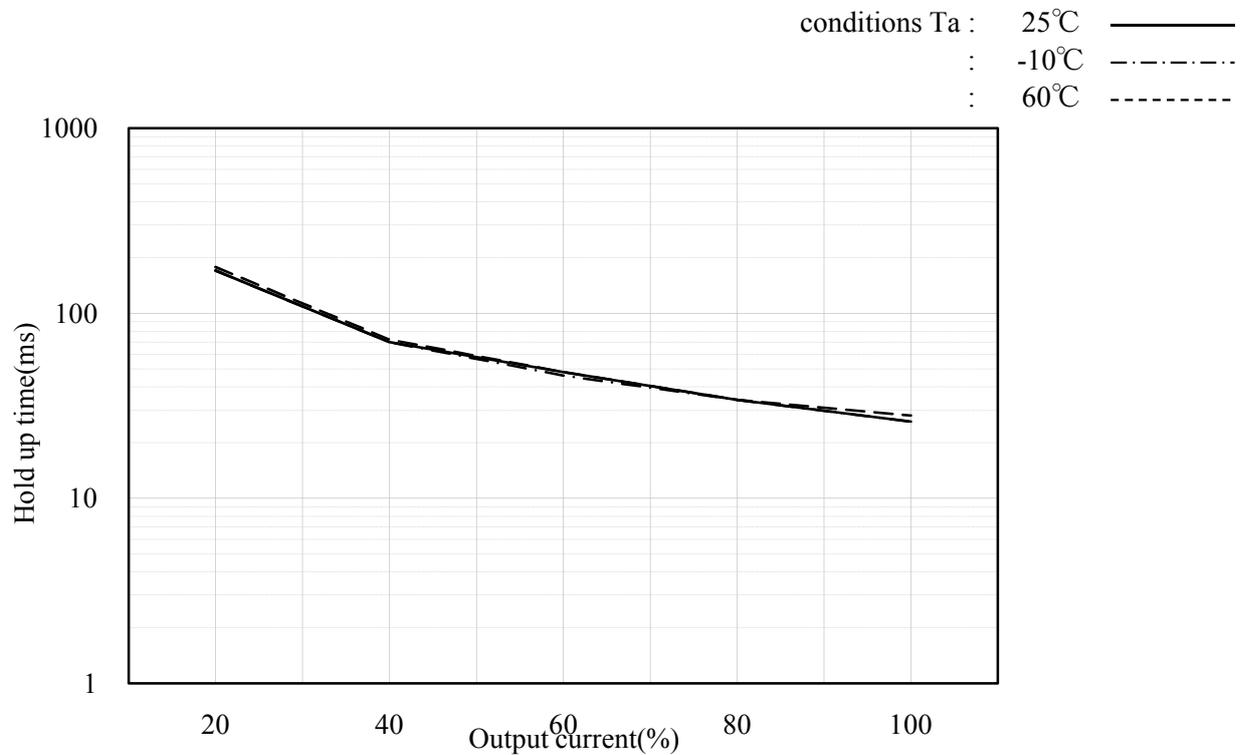
Vin : 500 VAC/DIV  
Vout : 10 VDC/DIV  
TIME : 400 ms/DIV

Hold up time characteristics

Input Voltage : 100 VAC



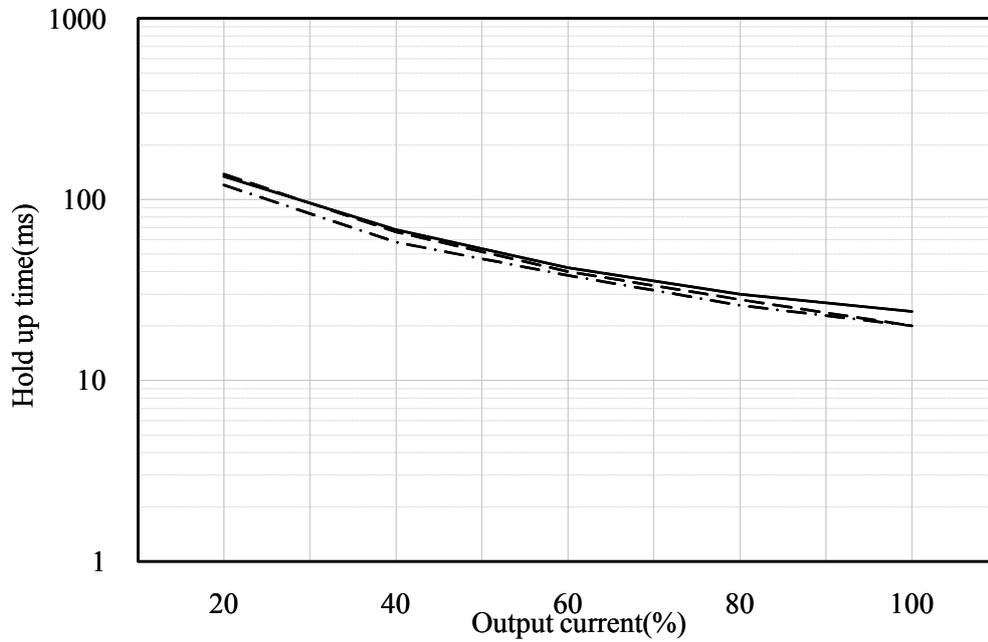
Input Voltage : 200 VAC



Hold up time characteristics

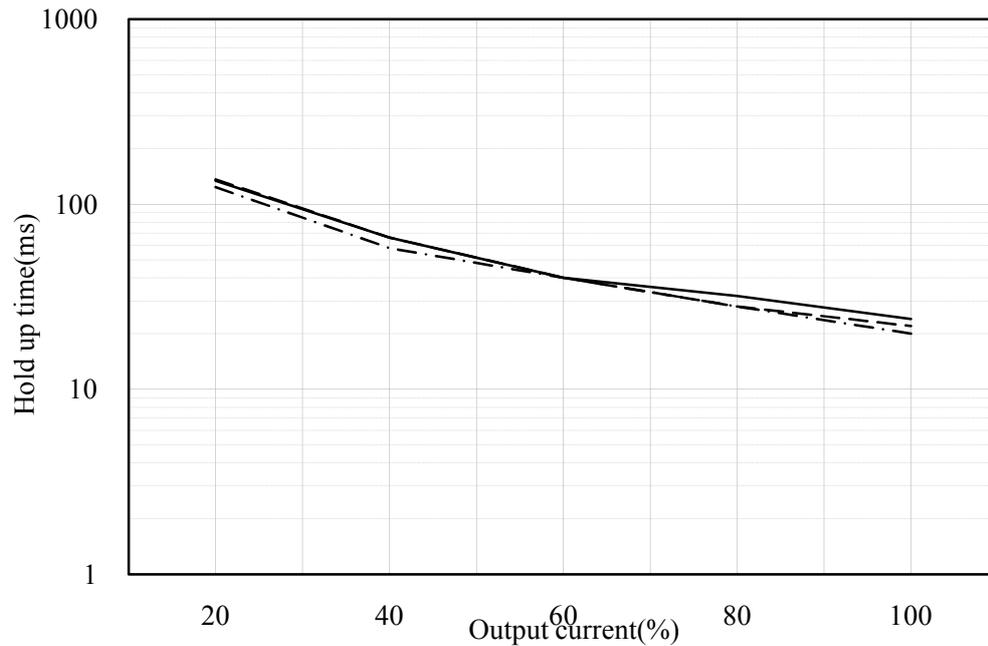
Input Voltage : 100 VAC

conditions Ta : 25°C ———  
: -10°C - · - · - · - ·  
: 60°C - - - - -



Input Voltage : 200 VAC

conditions Ta : 25°C ———  
: -10°C - · - · - · - ·  
: 60°C - - - - -

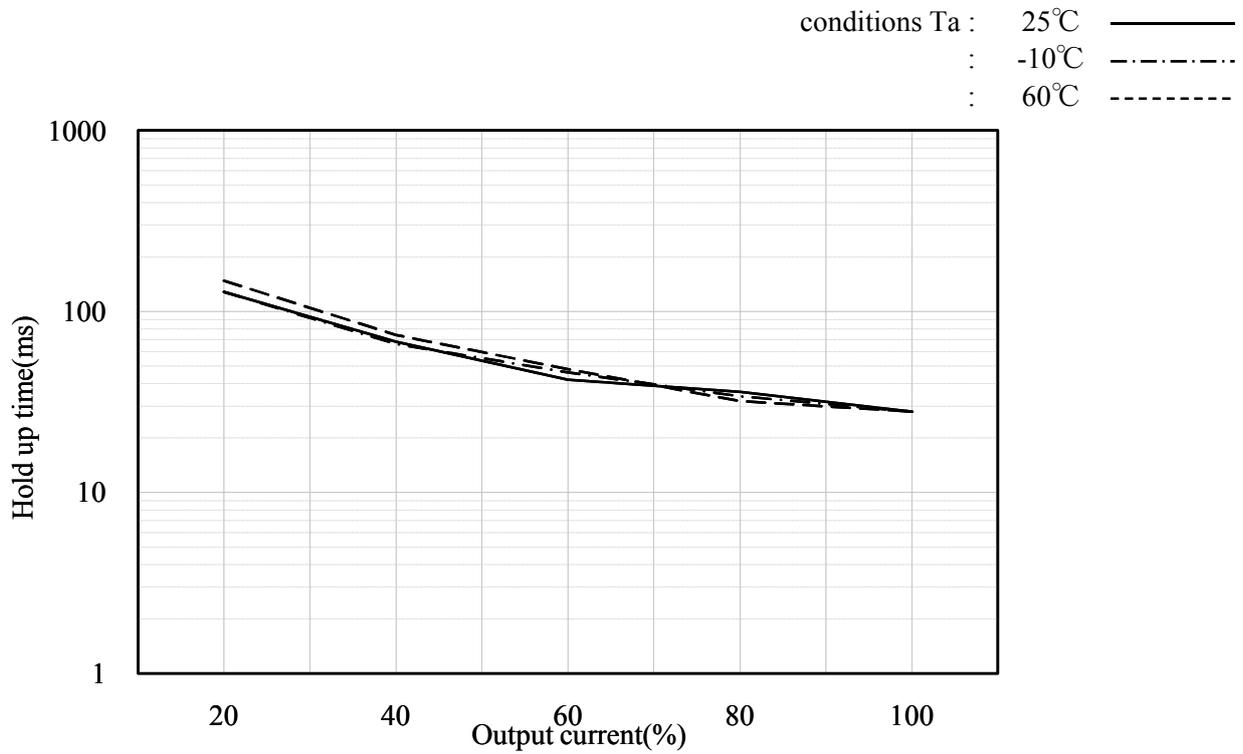




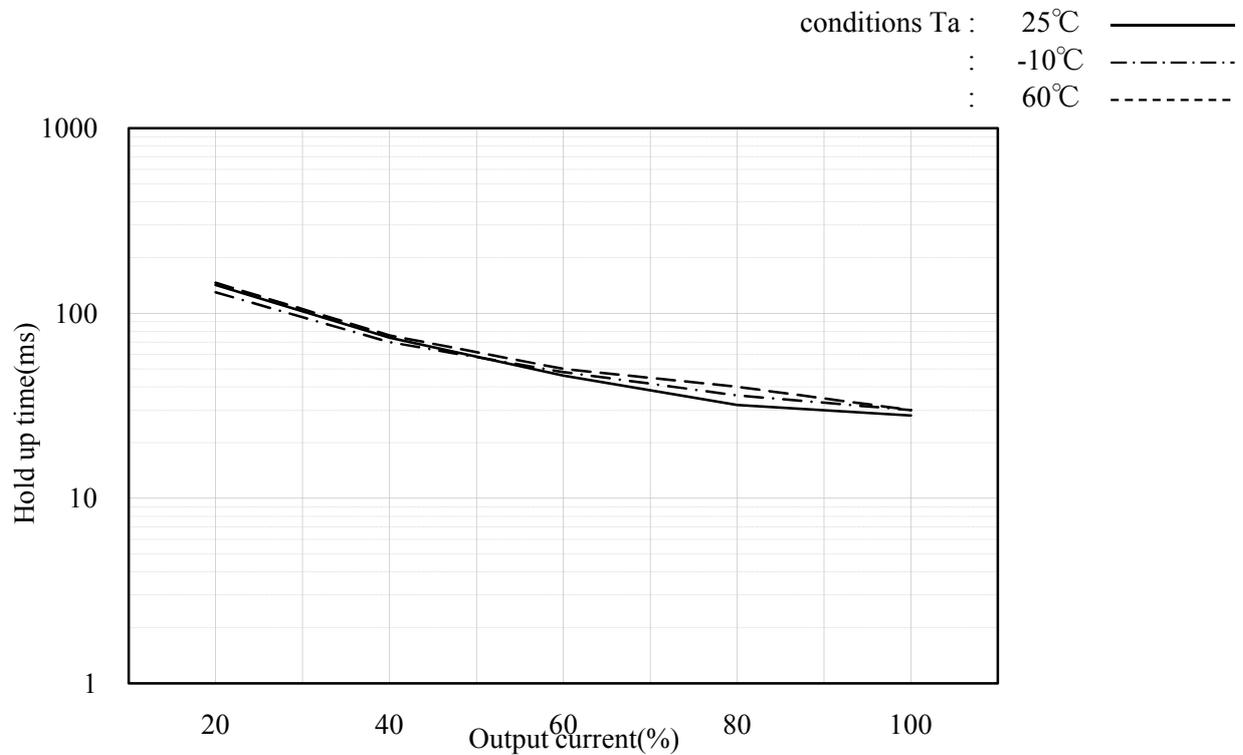


Hold up time characteristics

Input Voltage : 100 VAC

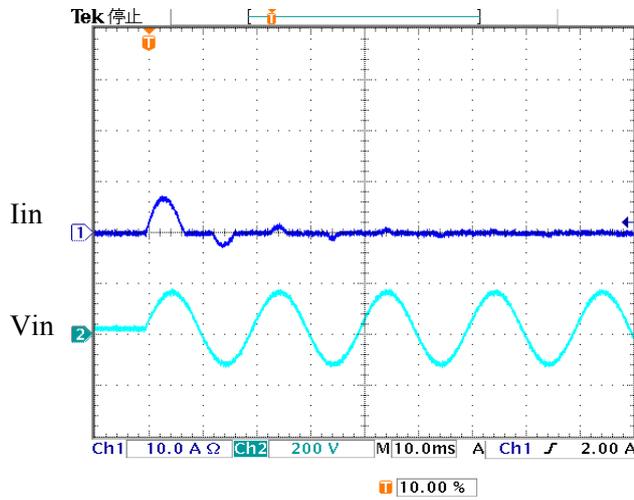


Input Voltage : 200 VAC



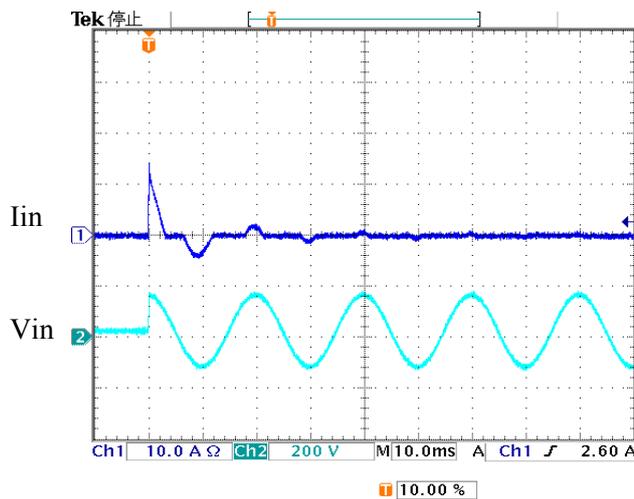
Inrush Current Characteristics

Ta : 25°C

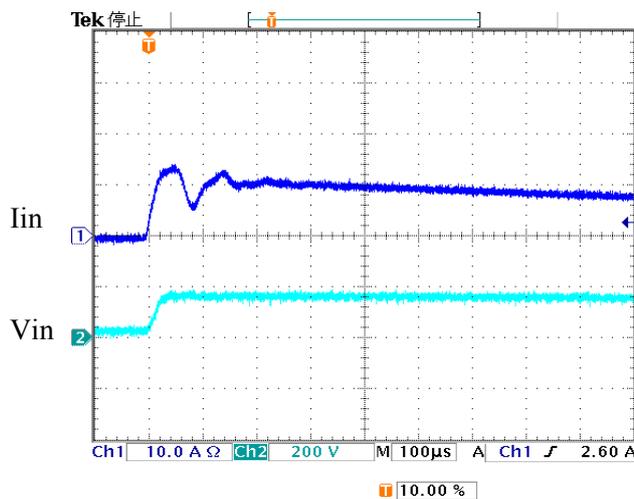


Input Voltage : 100 VAC  
 Output Current : 100 %  
 Switch on phase angle :  $\phi = 0^\circ$   
 Iin : 10 A/DIV  
 Vin : 200 VAC/DIV  
 TIME : 10 ms/DIV

Imax : 7.20 A



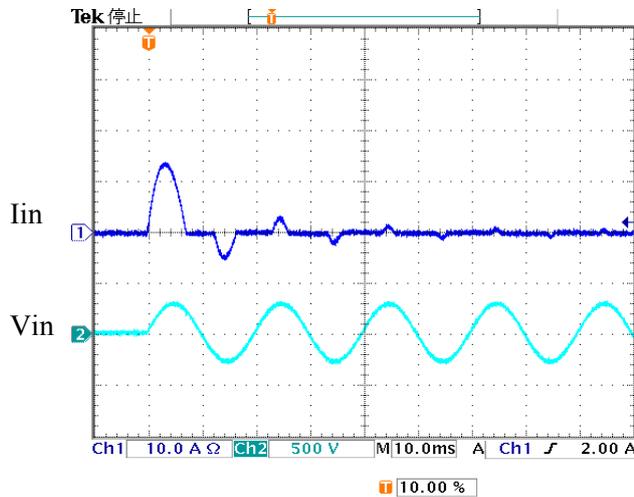
Input Voltage : 100 VAC  
 Output Current : 100 %  
 Switch on phase angle :  $\phi = 90^\circ$   
 Iin : 10 A/DIV  
 Vin : 200 VAC/DIV  
 TIME : 10 ms/DIV



Input Voltage : 100 VAC  
 Output Current : 100 %  
 Switch on phase angle :  $\phi = 90^\circ$   
 Iin : 10 A/DIV  
 Vin : 200 VAC/DIV  
 TIME : 100  $\mu$  s/DIV

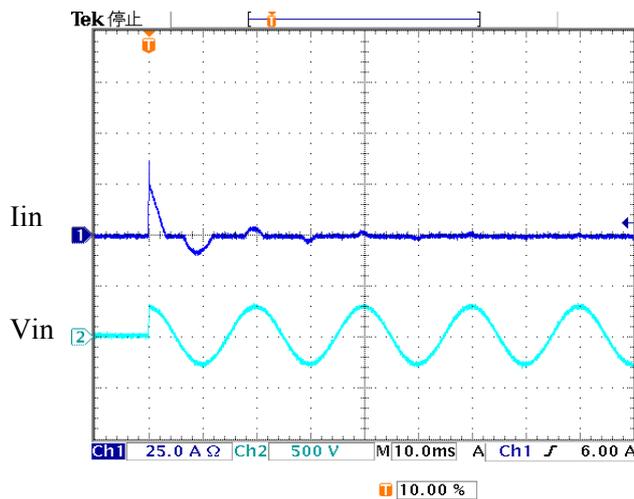
Inrush Current Characteristics

Ta : 25°C

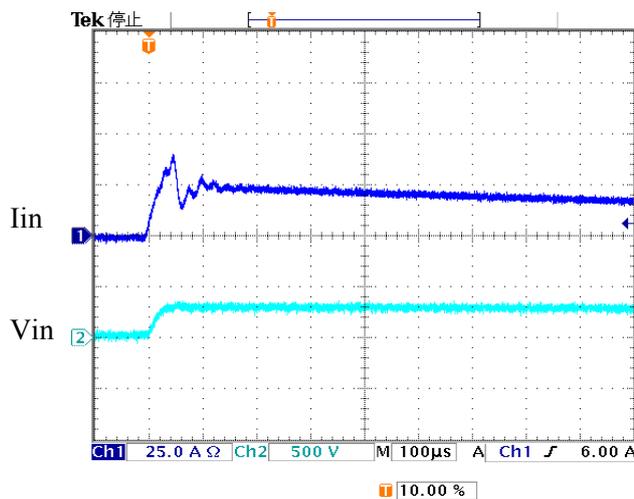


Input Voltage : 200 VAC  
 Output Current : 100 %  
 Switch on phase angle :  $\phi = 0^\circ$   
 Iin : 10 A/DIV  
 Vin : 500 VAC/DIV  
 TIME : 10 ms/DIV

Imax : 13.8 A



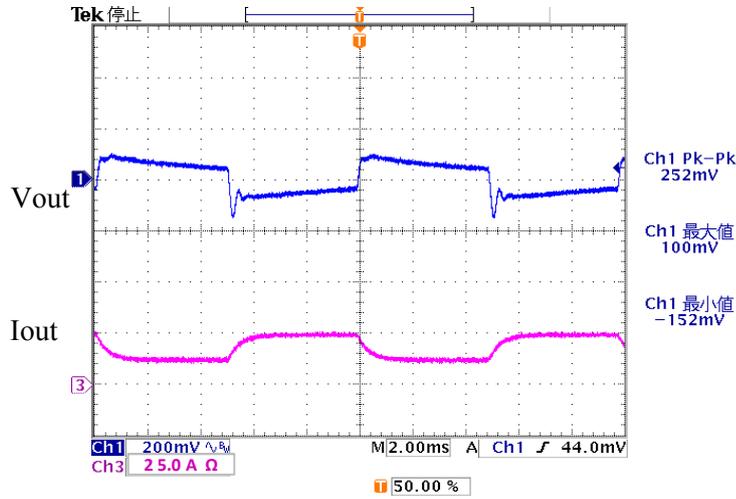
Input Voltage : 200 VAC  
 Output Current : 100 %  
 Switch on phase angle :  $\phi = 90^\circ$   
 Iin : 25 A/DIV  
 Vin : 500 VAC/DIV  
 TIME : 10 ms/DIV



Input Voltage : 200 VAC  
 Output Current : 100 %  
 Switch on phase angle :  $\phi = 90^\circ$   
 Iin : 25 A/DIV  
 Vin : 500 VAC/DIV  
 TIME : 100  $\mu$ s/DIV

Dynamic Load Response Characteristics

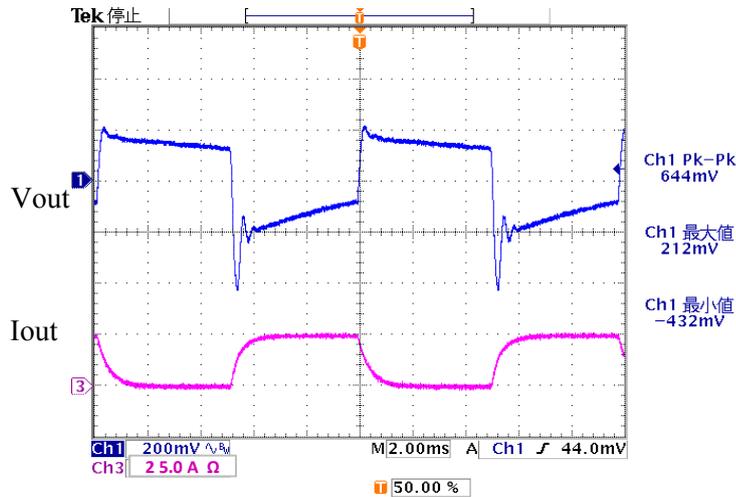
Ta : 25°C



Input Voltage : 100 VAC  
Output Current : 50 ⇔ 100 %  
Response Time : 1.00 ms

Iout : 25 A/DIV  
Vout : 200 mVAC/DIV  
TIME : 2 ms/DIV

Vp-p : 252 mV



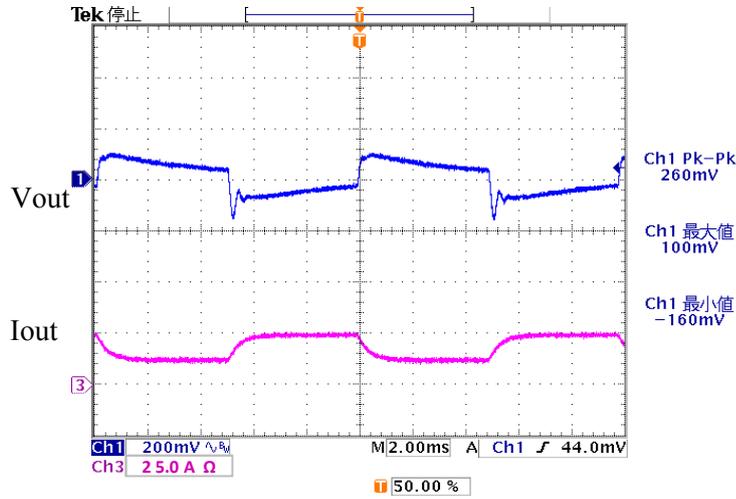
Input Voltage : 100 VAC  
Output Current : 0 ⇔ 100 %  
Response Time : 1.00 ms

Iout : 25 A/DIV  
Vout : 200 mVAC/DIV  
TIME : 2 ms/DIV

Vp-p : 644 mV

Dynamic Load Response Characteristics

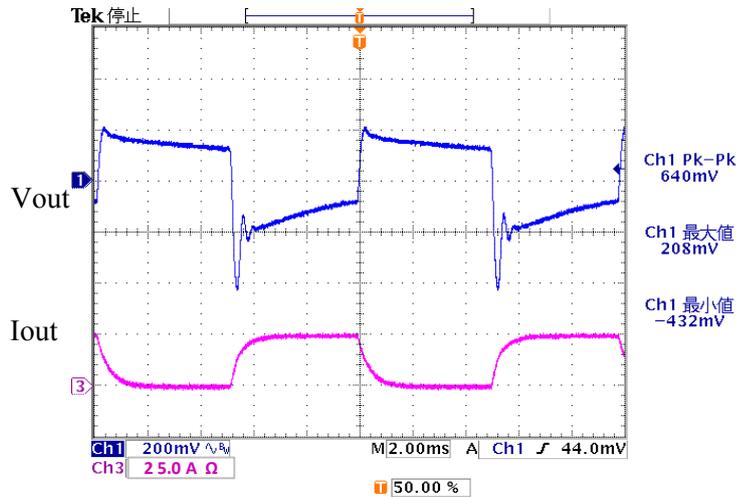
Ta : 25°C



Input Voltage : 200 VAC  
Output Current : 50  $\leftrightarrow$  100 %  
Response Time : 1.00 ms

Iout : 25 A/DIV  
Vout : 200 mVAC/DIV  
TIME : 2 ms/DIV

Vp-p : 260 mV



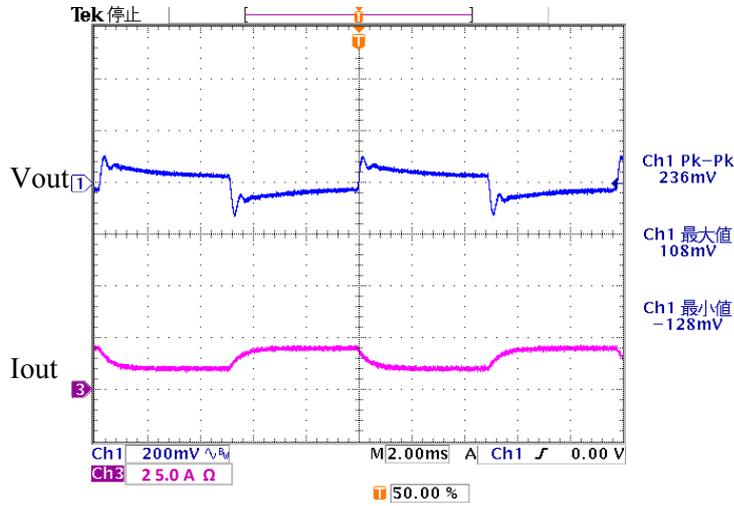
Input Voltage : 200 VAC  
Output Current : 0  $\leftrightarrow$  100 %  
Response Time : 1.00 ms

Iout : 25 A/DIV  
Vout : 200 mVAC/DIV  
TIME : 2 ms/DIV

Vp-p : 640 mV

Dynamic Load Response Characteristics

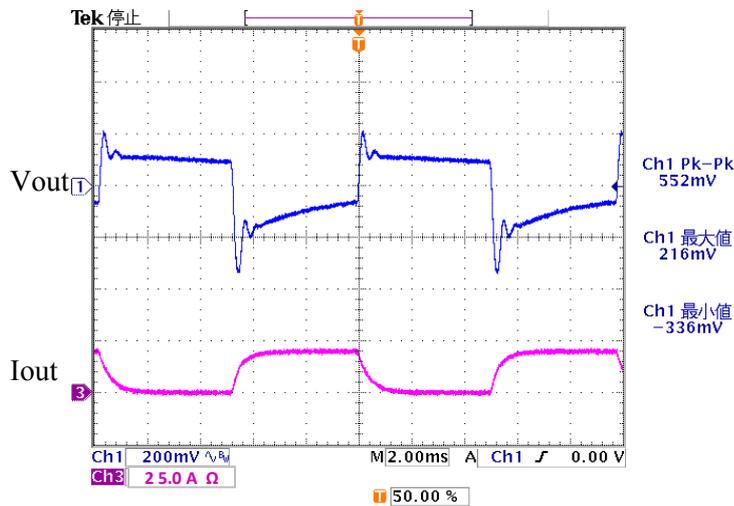
Ta : 25°C



Input Voltage : 100 VAC  
Output Current : 50 ⇔ 100 %  
Response Time : 1.00 ms

Iout : 25 A/DIV  
Vout : 200 mVAC/DIV  
TIME : 2 ms/DIV

Vp-p : 236 mV



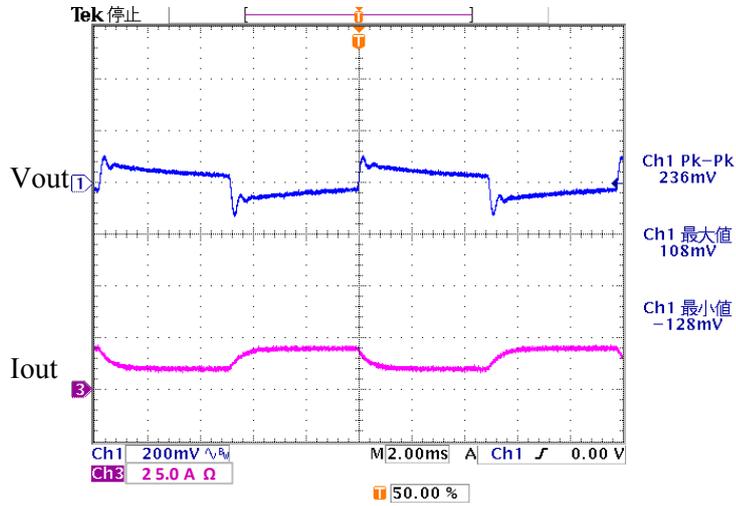
Input Voltage : 100 VAC  
Output Current : 0 ⇔ 100 %  
Response Time : 1.00 ms

Iout : 25 A/DIV  
Vout : 200 mVAC/DIV  
TIME : 2 ms/DIV

Vp-p : 552 mV

Dynamic Load Response Characteristics

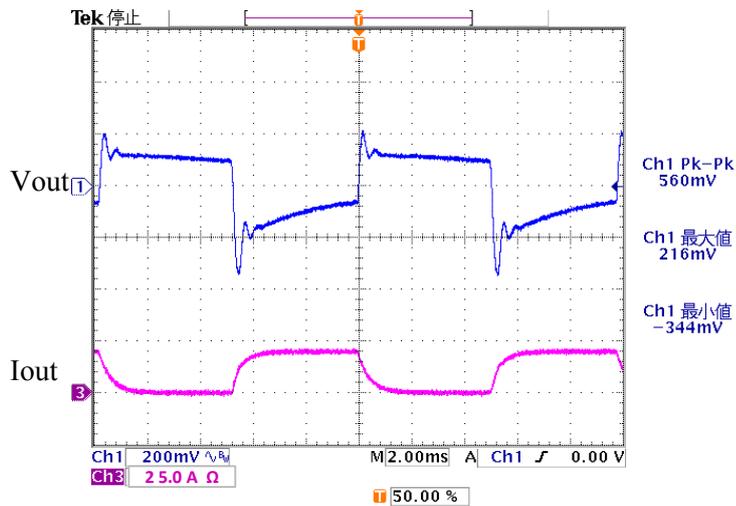
Ta : 25°C



Input Voltage : 200 VAC  
Output Current : 50 ⇔ 100 %  
Response Time : 1.00 ms

Iout : 25 A/DIV  
Vout : 200 mVAC/DIV  
TIME : 2 ms/DIV

Vp-p : 236 mV



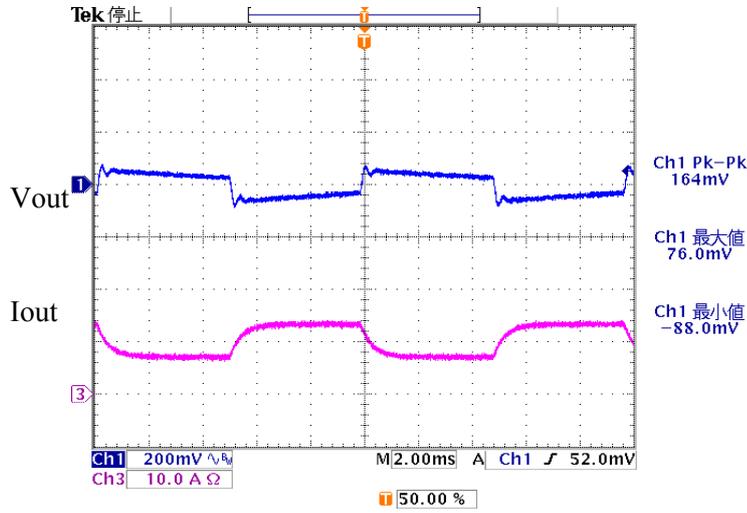
Input Voltage : 200 VAC  
Output Current : 0 ⇔ 100 %  
Response Time : 1.00 ms

Iout : 25 A/DIV  
Vout : 200 mVAC/DIV  
TIME : 2 ms/DIV

Vp-p : 560 mV

Dynamic Load Response Characteristics

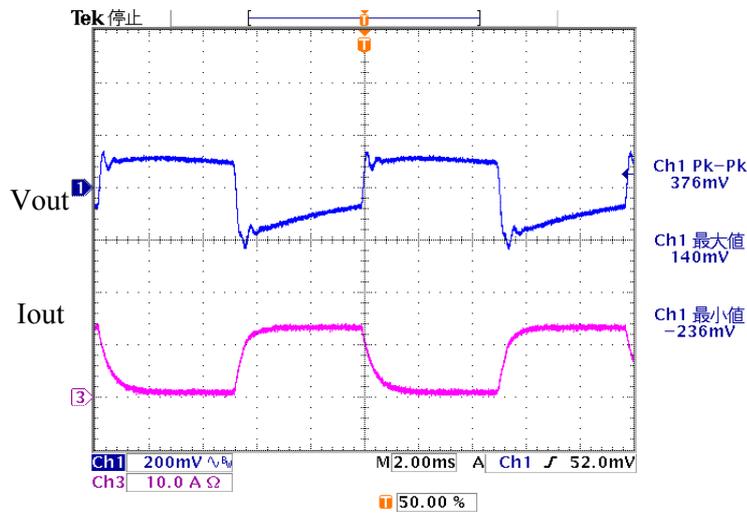
Ta : 25°C



Input Voltage : 100 VAC  
Output Current : 50  $\leftrightarrow$  100 %  
Response Time : 1.00 ms

Iout : 10 A/DIV  
Vout : 200 mVAC/DIV  
TIME : 2 ms/DIV

Vp-p : 164 mV



Input Voltage : 100 VAC  
Output Current : 0  $\leftrightarrow$  100 %  
Response Time : 1.00 ms

Iout : 10 A/DIV  
Vout : 200 mVAC/DIV  
TIME : 2 ms/DIV

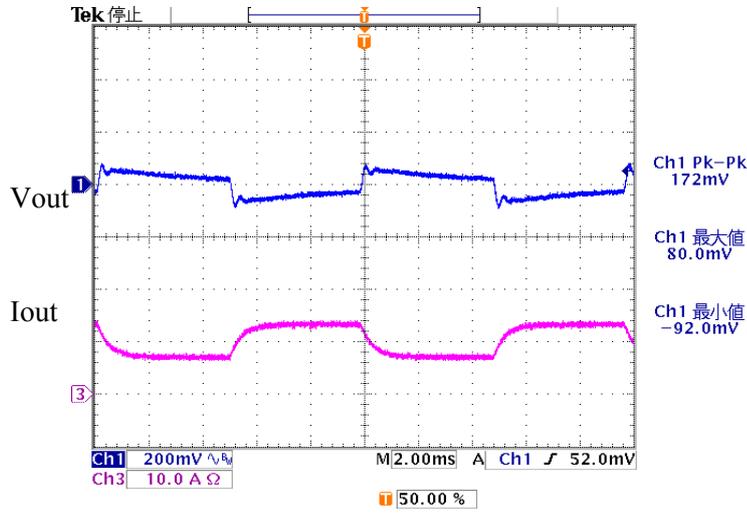
Vp-p : 376 mV

MODEL

PFS300A-24

Dynamic Load Response Characteristics

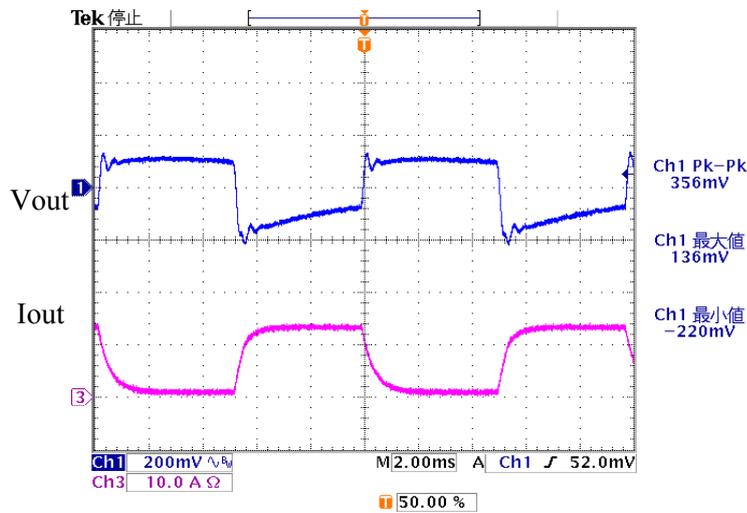
Ta : 25°C



Input Voltage : 200 VAC  
Output Current : 50  $\leftrightarrow$  100 %  
Response Time : 1.00 ms

Iout : 10 A/DIV  
Vout : 200 mVAC/DIV  
TIME : 2 ms/DIV

Vp-p : 172 mV



Input Voltage : 200 VAC  
Output Current : 0  $\leftrightarrow$  100 %  
Response Time : 1.00 ms

Iout : 10 A/DIV  
Vout : 200 mVAC/DIV  
TIME : 2 ms/DIV

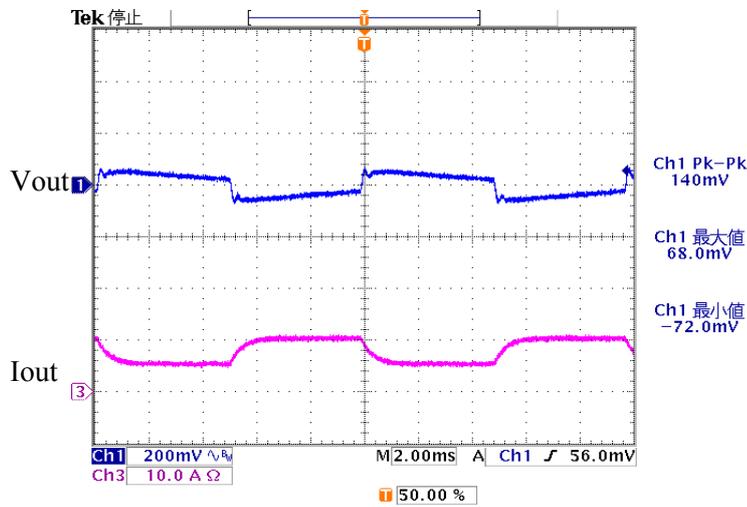
Vp-p : 356 mV

MODEL

PFS300A-30

Dynamic Load Response Characteristics

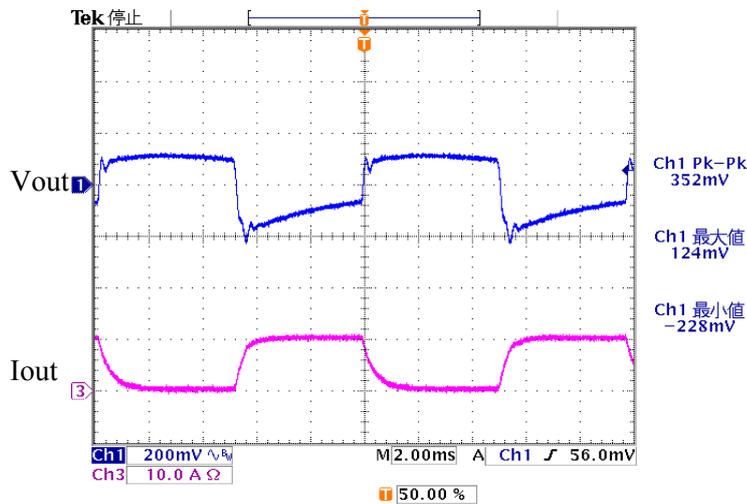
Ta : 25°C



Input Voltage : 100 VAC  
Output Current : 50 ⇔ 100 %  
Response Time : 1.00 ms

Iout : 10 A/DIV  
Vout : 200 mVAC/DIV  
TIME : 2 ms/DIV

Vp-p : 140 mV



Input Voltage : 100 VAC  
Output Current : 0 ⇔ 100 %  
Response Time : 1.00 ms

Iout : 10 A/DIV  
Vout : 200 mVAC/DIV  
TIME : 2 ms/DIV

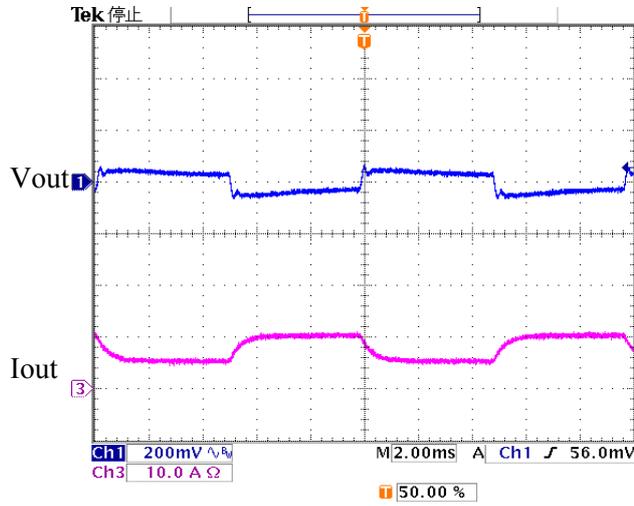
Vp-p : 352 mV

MODEL

PFS300A-30

Dynamic Load Response Characteristics

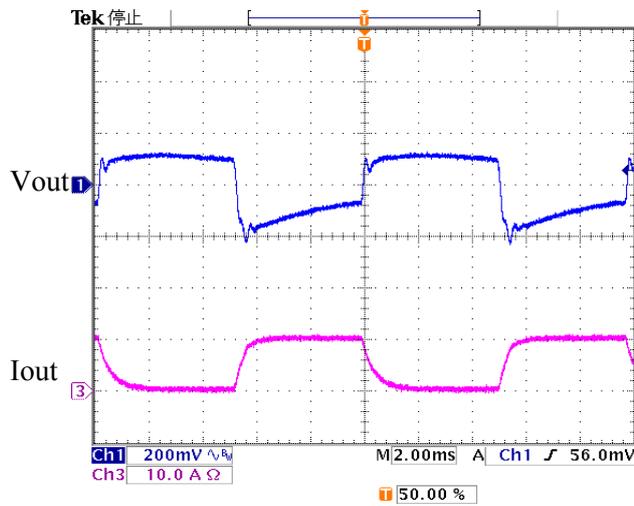
Ta : 25°C



Input Voltage : 200 VAC  
Output Current : 50 ⇔ 100 %  
Response Time : 1.00 ms

Iout : 10 A/DIV  
Vout : 200 mVAC/DIV  
TIME : 2 ms/DIV

Vp-p : 132 mV



Input Voltage : 200 VAC  
Output Current : 0 ⇔ 100 %  
Response Time : 1.00 ms

Iout : 10 A/DIV  
Vout : 200 mVAC/DIV  
TIME : 2 ms/DIV

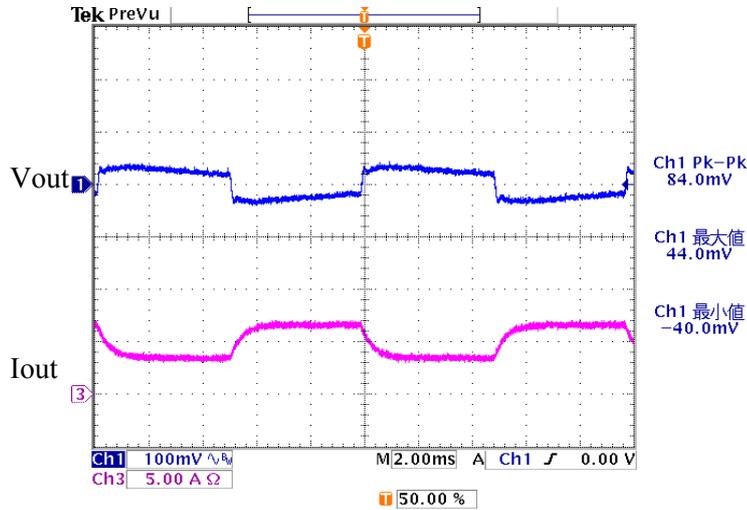
Vp-p : 360 mV

MODEL

PFS300A-48

### Dynamic Load Response Characteristics

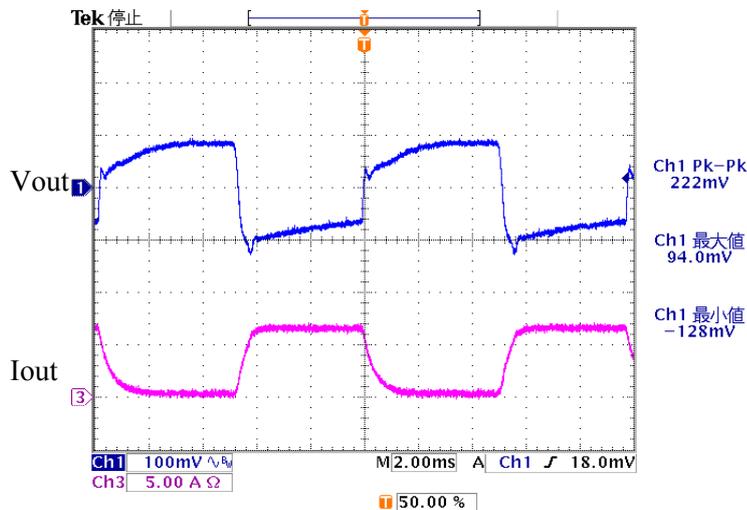
Ta : 25°C



Input Voltage : 100 VAC  
Output Current : 50  $\leftrightarrow$  100 %  
Response Time : 1.00 ms

Iout : 5 A/DIV  
Vout : 100 mVAC/DIV  
TIME : 2 ms/DIV

Vp-p : 84.0 mV



Input Voltage : 100 VAC  
Output Current : 0  $\leftrightarrow$  100 %  
Response Time : 1.00 ms

Iout : 5 A/DIV  
Vout : 100 mVAC/DIV  
TIME : 2 ms/DIV

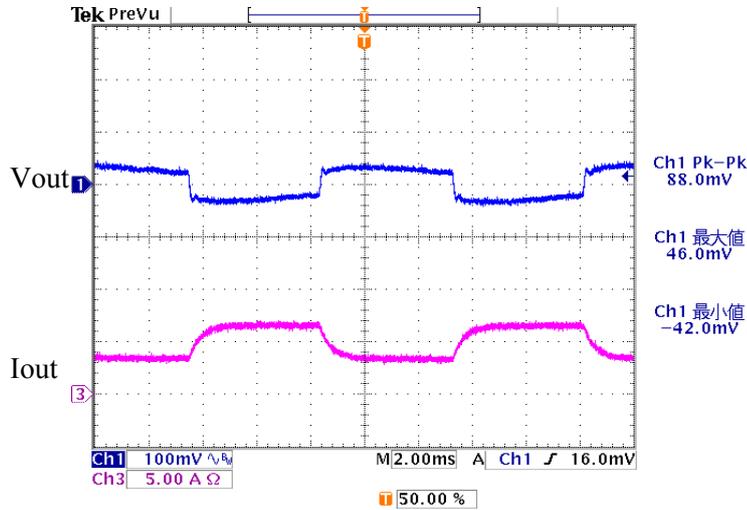
Vp-p : 222 mV

MODEL

PFS300A-48

### Dynamic Load Response Characteristics

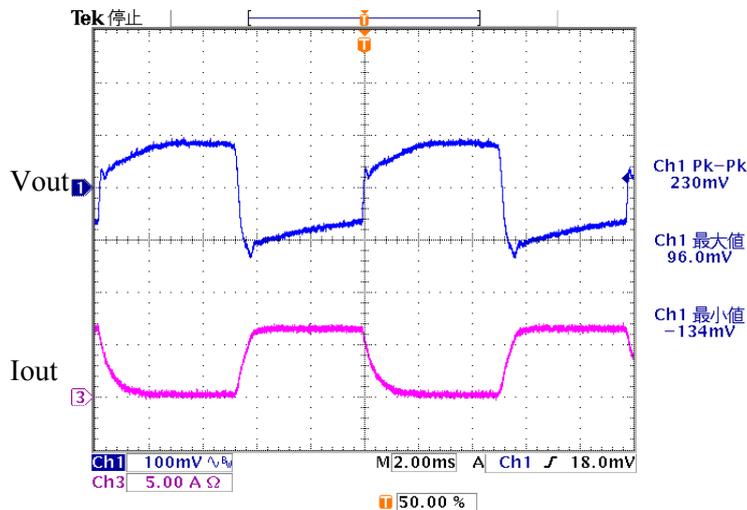
Ta : 25°C



Input Voltage : 200 VAC  
Output Current : 50  $\leftrightarrow$  100 %  
Response Time : 1.00 ms

Iout : 5 A/DIV  
Vout : 100 mVAC/DIV  
TIME : 2 ms/DIV

Vp-p : 88.0 mV



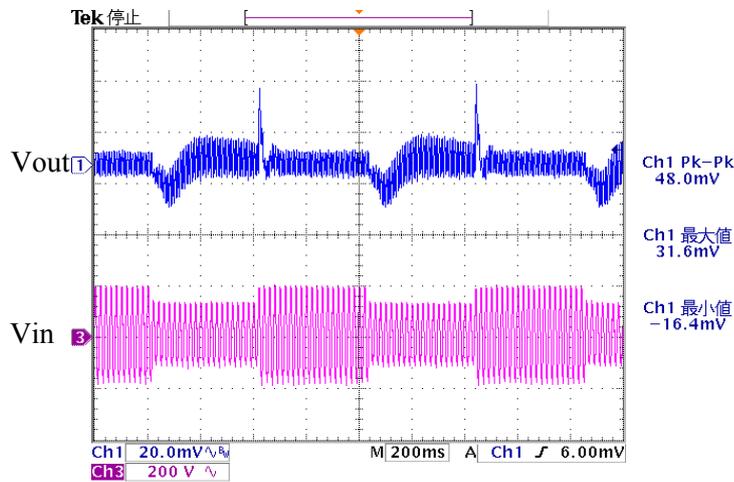
Input Voltage : 200 VAC  
Output Current : 0  $\leftrightarrow$  100 %  
Response Time : 1.00 ms

Iout : 5 A/DIV  
Vout : 100 mVAC/DIV  
TIME : 2 ms/DIV

Vp-p : 230 mV

Dynamic Line Response Characteristics

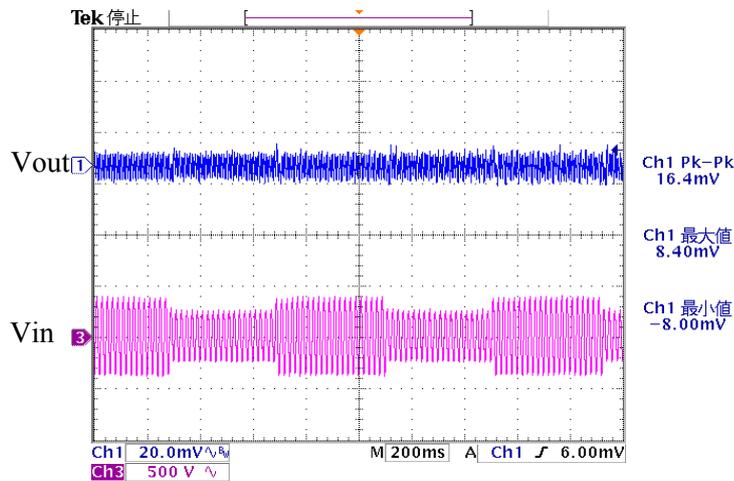
Ta : 25°C



Input Voltage : 85 ⇔ 132 VAC  
Output Current : 100 %

Vin : 200 VAC/DIV  
Vout : 20 mVAC/DIV  
TIME : 200 ms/DIV

normal / event duration : 400 ms  
Vp-p : 48.0 mV



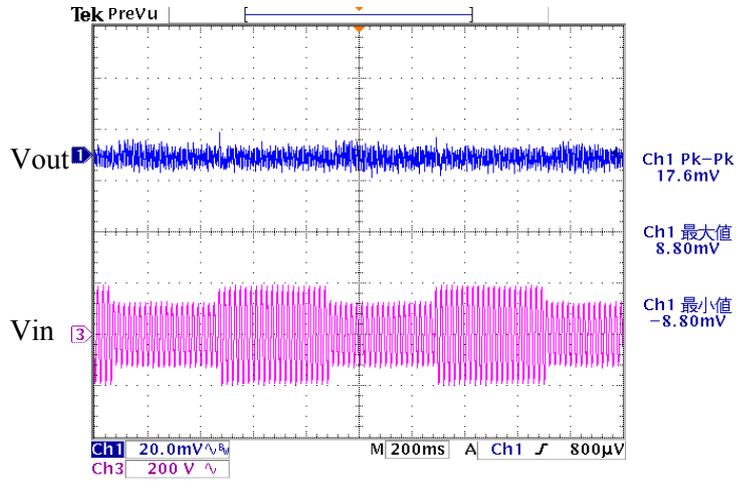
Input Voltage : 170 ⇔ 264 VAC  
Output Current : 100 %

Vin : 500 VAC/DIV  
Vout : 20 mVAC/DIV  
TIME : 200 ms/DIV

normal / event duration : 400 ms  
Vp-p : 16.4 mV

Dynamic Line Response Characteristics

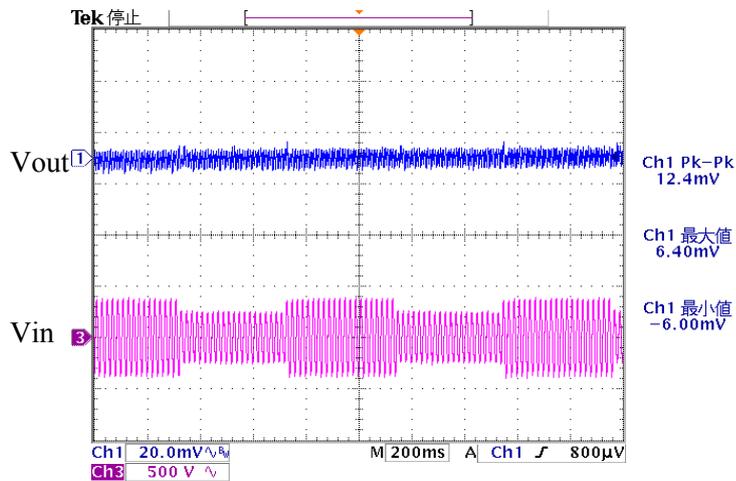
Ta : 25°C



Input Voltage : 85 ⇔ 132 VAC  
Output Current : 100 %

Vin : 200 VAC/DIV  
Vout : 20 mVAC/DIV  
TIME : 200 ms/DIV

normal / event duration : 400 ms  
Vp-p : 17.6 mV



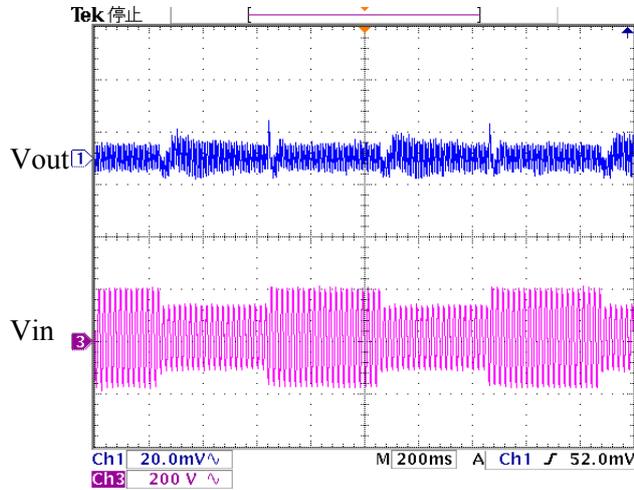
Input Voltage : 170 ⇔ 264 VAC  
Output Current : 100 %

Vin : 500 VAC/DIV  
Vout : 20 mVAC/DIV  
TIME : 200 ms/DIV

normal / event duration : 400 ms  
Vp-p : 12.4 mV

Dynamic Line Response Characteristics

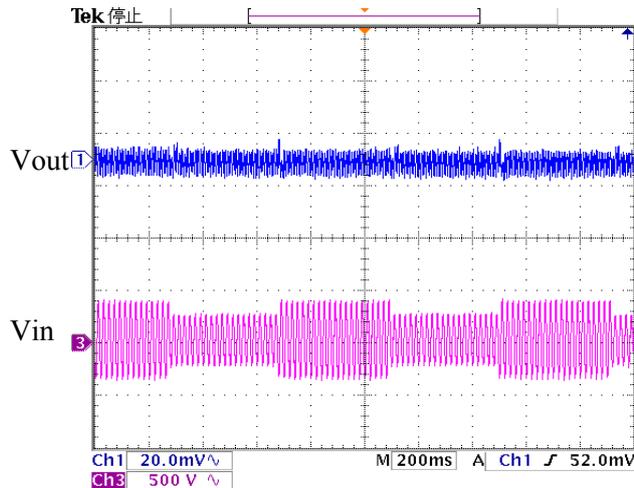
Ta : 25°C



Input Voltage : 85 ⇔ 132 VAC  
Output Current : 100 %

Vin : 200 VAC/DIV  
Vout : 20 mVAC/DIV  
TIME : 200 ms/DIV

normal / event duration : 400 ms  
Vp-p : 22.4 mV



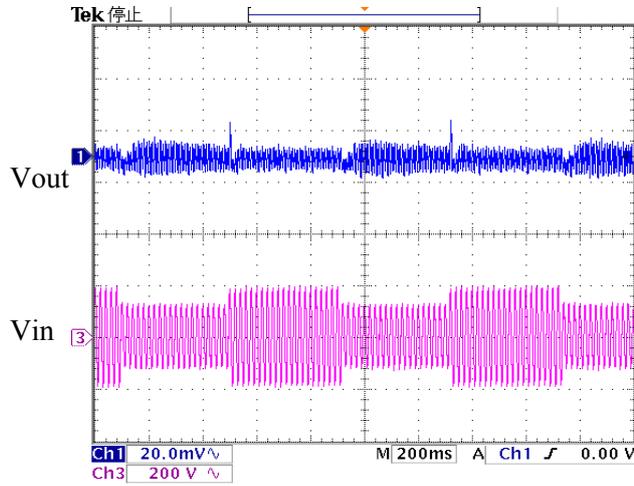
Input Voltage : 170 ⇔ 264 VAC  
Output Current : 100 %

Vin : 500 VAC/DIV  
Vout : 20 mVAC/DIV  
TIME : 200 ms/DIV

normal / event duration : 400 ms  
Vp-p : 15.6 mV

Dynamic Line Response Characteristics

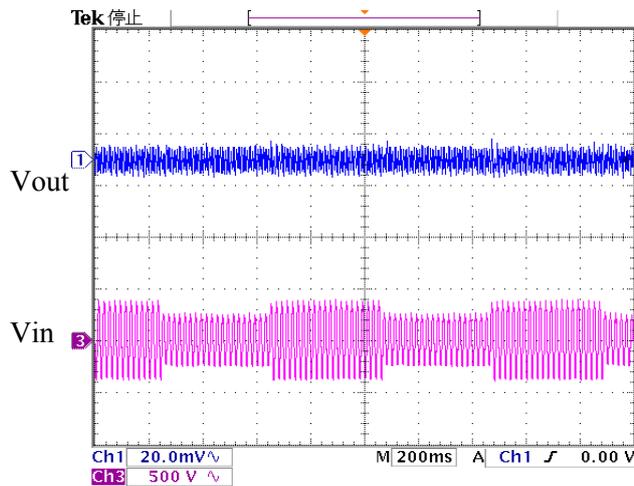
Ta : 25°C



Input Voltage : 85 ⇔ 132 VAC  
Output Current : 100 %

Vin : 200 VAC/DIV  
Vout : 20 mVAC/DIV  
TIME : 200 ms/DIV

normal / event duration : 400 ms  
Vp-p : 22.4 mV



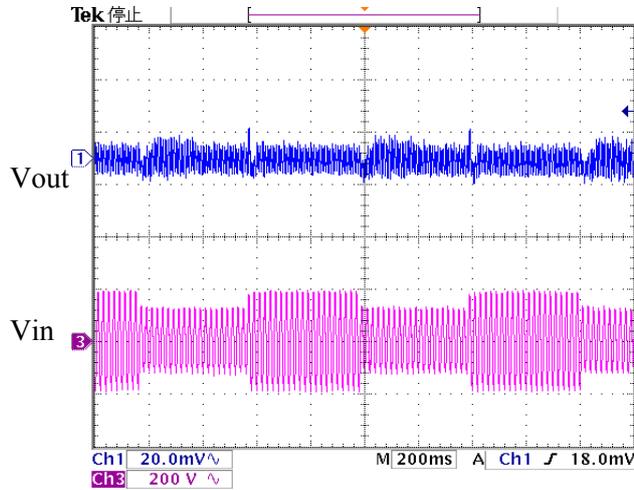
Input Voltage : 170 ⇔ 264 VAC  
Output Current : 100 %

Vin : 500 VAC/DIV  
Vout : 20 mVAC/DIV  
TIME : 200 ms/DIV

normal / event duration : 400 ms  
Vp-p : 15.2 mV

Dynamic Line Response Characteristics

Ta : 25°C

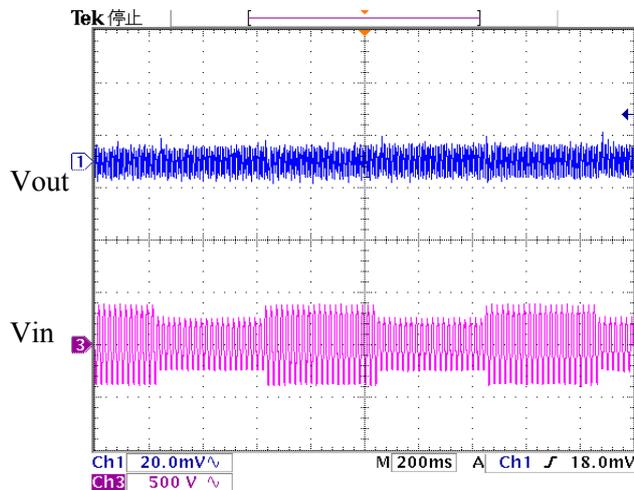


Input Voltage : 85 ⇔ 132 VAC  
Output Current : 100 %

Ch1 Pk-Pk 21.2mV  
Ch1 最大值 11.6mV  
Ch1 最小值 -9.60mV

Vin : 200 VAC/DIV  
Vout : 20 mVAC/DIV  
TIME : 200 ms/DIV

normal / event duration : 400 ms  
Vp-p : 21.2 mV



Input Voltage : 170 ⇔ 264 VAC  
Output Current : 100 %

Ch1 Pk-Pk 19.6mV  
Ch1 最大值 11.2mV  
Ch1 最小值 -8.40mV

Vin : 500 VAC/DIV  
Vout : 20 mVAC/DIV  
TIME : 200 ms/DIV

normal / event duration : 400 ms  
Vp-p : 19.6 mV

Leakage Current Characteristics

Measurement Condition

Input Voltage : 85 - 264VAC

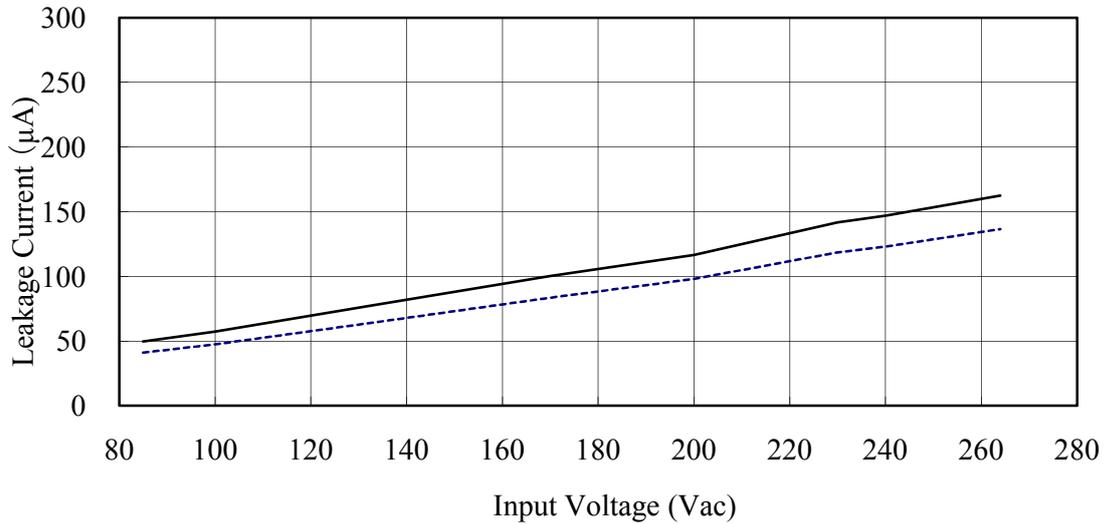
Output Current : 0% load

Ta : 25°C

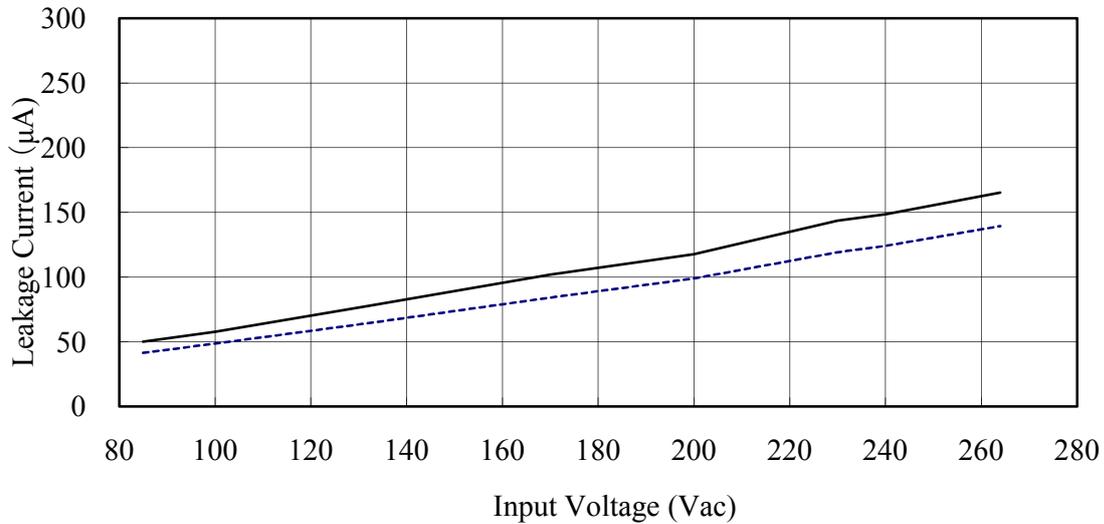
f : 50Hz -----

f : 60Hz ———

■ L-FG



■ N-FG



Measurement Position

