

To minimize harmonic input distortion GPD505/506/PC5 models 0.4kW - 15kW (for both 200V and 400V) are available with DC reactor as option. GPD505/506/PC5 models 18.5kW - 75kW (200V class) and 18.5 - 160kW (400V class) come equipped with built-in DC reactor. When 12-pulse input is utilized on GPD505/506/PC5 models, a transformer with a dual star-delta secondary is required for the input power supply.

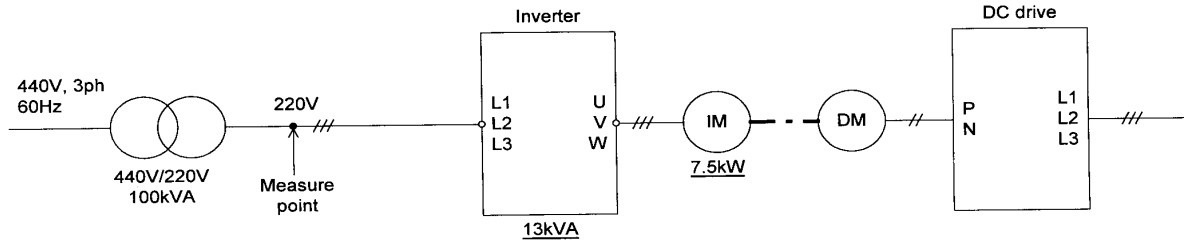
The 12-pulse option can improve current distortion by 76% over a standard inverter.

No.	Functions	Harmonic current distortion
1	standard (direct to network supply)	88 %
2	with AC reactor	39 %
3	with DC reactor	32 %
4	with 12-pulse input	12 %
5	with PWM transistor converter	3 %
6	with transformer	41 %

Harmonics Current (1)

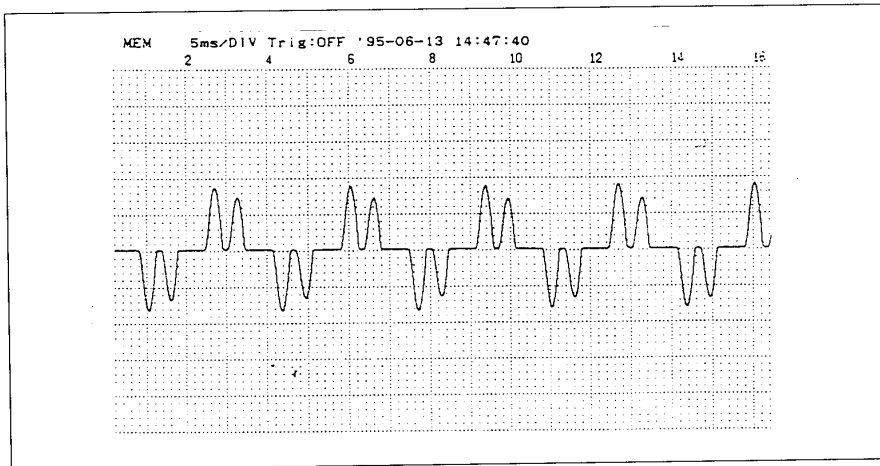
Direct to network power supply 1

[System Configuration]

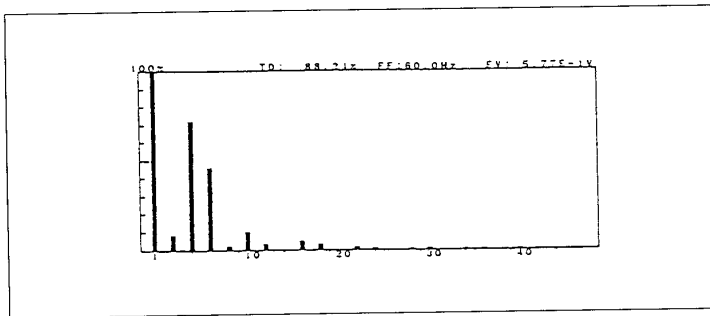


[Wave-form]

Load **100%**
Fundamental Current **28.9 A**



[Spectrum]



[Harmonics Analysis]

HIGHER HARMONICS CH1			
Trig time '95-06-13 14:46:17			
Fundamental		60.0Hz	5.77E-1V
Total Harmonic Distortion			88.24%
Order	(Vrms)	(deg)	
100.00%	7.77	-1V	3279.7
0.40%	0.31	-3V	318.5
8.88%	6.84	-1V	318.5
0.34%	2.64	-3V	136.4
73.10%	55.40	-1V	103.6
0.75%	5.84	-1V	113.7
48.53%	37.28	-1V	113.7
0.48%	3.72	-3V	330.4
2.99%	23.28	-2V	319.7
0.06%	0.48	-1V	75
10.79%	82.28	-2V	330.4
0.41%	3.12	-3V	156.6
3.62%	28.28	-1V	244.4
0.25%	1.92	-3V	144
0.25%	1.92	-3V	278.5
0.231%	1.81	-3V	77
0.231%	1.81	-3V	377
5.64%	43.84	-1V	289.7
0.13%	1.02	-1V	16
0.56%	4.38	-2V	289.7
0.08%	0.62	-1V	321
0.48%	3.72	-3V	112
0.22%	1.72	-3V	111
0.24%	1.88	-2V	100
0.11%	0.86	-1V	13
0.59%	4.62	-1V	100
0.18%	1.42	-1V	15
0.10%	0.78	-1V	115
1.12%	8.72	-3V	215
0.21%	1.62	-3V	166
0.05%	0.38	-1V	139
0.03%	0.24	-1V	348
0.14%	1.08	-1V	319
0.82%	6.38	-3V	32
0.18%	1.42	-3V	70
0.88%	6.88	-3V	290
0.14%	1.08	-1V	70
0.38%	2.98	-1V	329
0.09%	0.72	-1V	70
0.11%	0.86	-4V	329
0.85%	6.58	-3V	75
0.14%	1.08	-3V	39
0.11%	0.86	-1V	4
44.00%	339.8	-1V	240
44.00%	339.8	-1V	85
44.00%	339.8	-1V	156
44.00%	339.8	-1V	57
44.00%	339.8	-1V	137