TECHNICAL NOTE #:	**TN_VFD_GEN_017-G**
EFFECTIVE DATE:	**9/27/01**
SUPERSEDES DATE:	
ORIGINATOR:	**DICK WICKENS**
NO. OF PAGES:	**2**

SERIES 10 Inverter Efficiencies

DERIVATION OF VALUES :

Efficiency = Po / Pin = P out / Pout + watt loss
Pout = Vout x Aout x √3 x PF
Pin = Vout x Aout x √3 x PF + watt loss

Where : PF = Power Factor (.95 for Inverters)
Efficiencies are based on 100% load

230 VAC					
Model #	**Rated Current ***	**Efficiency %**	**Watts Loss**	**Efficiency %**	**Watts Loss**
		2 kHz		**15 kHz**	
GP102F25-1	1.5	92.0	25	90.5	30
GP102F50-1	3	93.5	35	91.7	45
GP102001-1	5	94.9	50	94.0	60
GP102002-1	8	95.7	80	94.1	110
GP102003-1	11	95.9	110	94.9	140
GP102005-1	17	96.2	170	95.4	210
GP102010-1	25	96.5	290	95.3	370
GP102015-1	33	96.4	410	95.2	550
GP102020-1	46	96.9	500	95.9	670
GP102025-1	59	96.8	630	95.8	840
GP102030-1	74	96.5	770	95.5	1030
GP102040-1	87	97.2	950	**10 kHz**	
				96.8	1100
GP102050-1	115	97.0	1250	96.7	1400
GP102060-1	145	97.1	1500	96.6	1750
GP102075-1	180	97.3	1700	96.6	1950
GP102100-1	215	97.4	2200	97.0	2500
GP102125-1	283	97.4	2650	**6 kHz**	
				97.2	2800
GP102150-1	346	97.4	3200	97.3	3350

460 VAC					
Model #	Rated Current *	Efficiency %	Watts Loss	Efficiency %	Watts Loss
		2 kHz		15 kHz	
GP104F50-1	1.5	93.5	35	89.3	60
GP104001-1	2.5	95.4	45	91.7	85
GP104002-1	3.7	96.7	60	94.1	110
GP104003-1	5.5	97.0	80	94.5	150
GP104005-1	9	97.1	130	95.0	230
GP104010-1	13	97.3	210	95.4	370
GP104015-1	18	97.6	300	95.9	520
GP104020-1	23	97.9	360	96.5	610
GP104025-1	30	97.8	460	96.4	770
GP104030-1	39	97.8	530	96.4	870
GP104040-1	45	97.8	750	10 kHz	
				96.9	1050
GP104050-1	60	97.7	950	96.9	1300
GP104060-1	75	97.8	1100	97.0	1550
GP104075-1	91	97.8	1350	97.0	1900
GP104100-1	112	97.8	1800	97.1	2450
GP104125-1	150	98.1	1850	6 kHz	
				97.8	2200
GP104150-1	176	98.0	2400	97.8	2750
GP104200-1	210	98.0	2900	97.7	3350
GP104250-1	253	98.1	3250	97.8	3800
GP104300-1	304	98.1	4250	97.8	4900
GP104350-1	377	98.2	4350	97.9	5100
GP104400-1	415	98.1	5100	97.8	5900
GP104500-1	520	98.2	6900	97.9	8050
GP104700-1	650	98.2	8900	97.9	10400
GP104800-1	740	98.1	10300	97.8	12100

*** All current ratings are based on the GP10 constant torque Inverter ratings.**