Manufacturer: Gefran S.p.A. Drive&Motion Control Unit

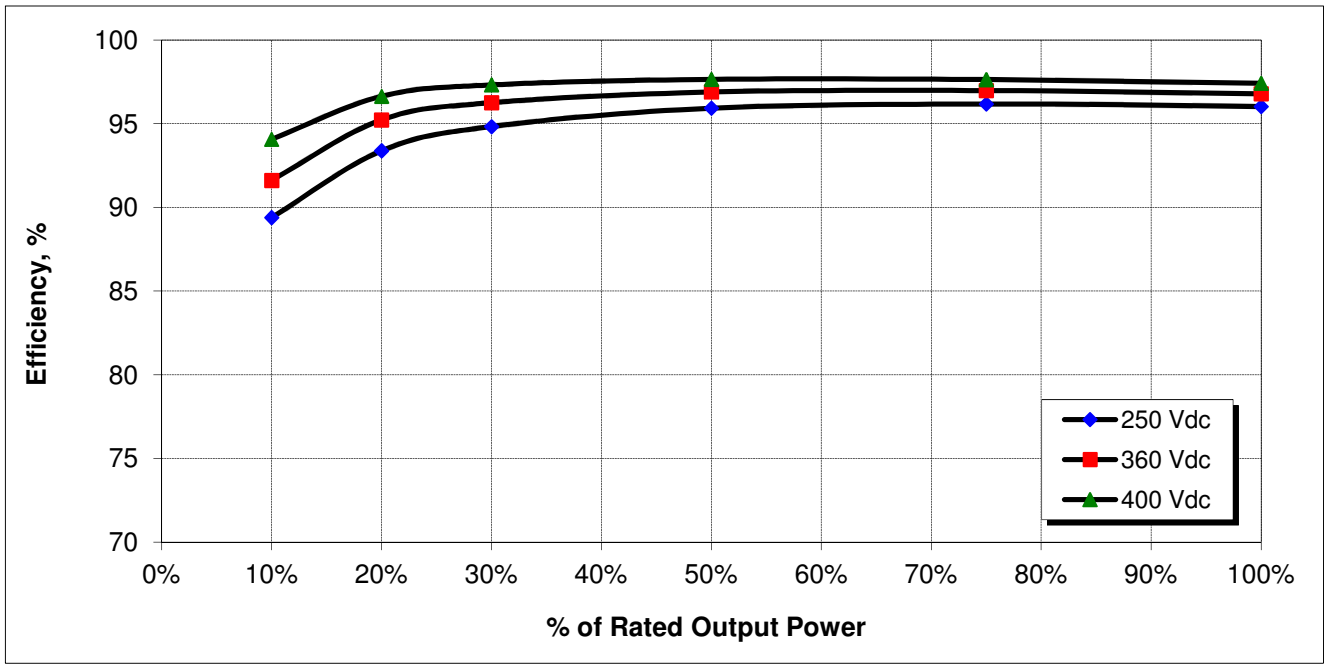
Model #: APV 3100-2M-TL-US (277 Vac)

Rated Maximum Continuous Output Power: 2.80 kW Night Tare Loss: 0.19 W

Vmin: 250 Vdc Vnom: 360 Vdc Vmax: 400 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		0.28	0.56	0.84	1.40	2.10	2.80	Wtd
Vmin	250	89.4	93.4	94.8	95.9	96.2	96.0	95.5
Vnom	360	91.6	95.2	96.3	96.9	97.0	96.8	96.6
Vmax	400	94.1	96.6	97.3	97.7	97.6	97.4	97.4

CEC Efficiency = 96.5%



Inverter Efficiency Data

Minimum of 5 samples required

Specified		Sample #1			Sample #2			Sample #3			Sample #4			Sample #5		
Output Power	Input Voltage	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency
(% of rated)	(Vdc)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)
10%	Vmin	0.2461	250.32	89.215	0.246	250.56	89.270	0.247	250.6	89.629	0.246	250.59	89.373	0.247	250.48	89.464
20%	Vmin	0.5407	250.32	93.419	0.541	250.5	93.376	0.541	250.31	93.393	0.541	250.41	93.356	0.539	250.45	93.358
30%	Vmin	0.8024	250.43	94.833	0.801	250.49	94.822	0.801	250.71	94.831	0.801	250.5	94.828	0.802	250.46	94.831
50%	Vmin	1.3629	250.43	95.929	1.36	250.45	95.929	1.363	250.4	95.929	1.362	250.63	95.930	1.362	250.47	95.934
75%	Vmin	1.9943	250.33	96.170	1.994	250.47	96.174	1.995	250.45	96.173	1.995	250.55	96.176	1.995	250.53	96.181
100%	Vmin	2.8105	250.38	96.009	2.817	250.61	96.119	2.812	250.43	96.002	2.813	250.45	95.999	2.817	250.63	95.998
10%	Vnom	0.2472	360.52	91.710	0.247	360.45	91.563	0.246	360.69	91.528	0.246	360.35	91.548	0.247	360.51	91.718
20%	Vnom	0.5414	360.57	95.349	0.54	360.6	95.190	0.54	360.45	95.190	0.54	360.68	95.194	0.54	360.49	95.208
30%	Vnom	0.8015	360.3	96.265	0.802	360.52	96.261	0.8	360.36	96.251	0.801	360.36	96.248	0.801	360.51	96.252
50%	Vnom	1.3623	360.43	96.892	1.362	360.42	96.898	1.362	360.62	96.894	1.366	360.52	96.903	1.362	360.54	96.897
75%	Vnom	1.9944	360.56	96.984	1.994	360.66	96.979	1.995	360.57	96.983	1.996	360.73	96.984	1.991	360.33	96.983
100%	Vnom	2.8126	360.54	96.789	2.816	360.43	96.785	2.814	360.33	96.784	2.81	360.69	96.787	2.813	360.52	96.786
10%	Vmax	0.2463	400.46	94.065	0.247	400.43	94.089	0.246	400.29	94.064	0.246	400.48	94.061	0.246	400.67	94.070
20%	Vmax	0.5417	400.22	96.652	0.541	400.35	96.648	0.541	400.56	96.636	0.54	400.39	96.623	0.541	400.41	96.635
30%	Vmax	0.8016	400.46	97.322	0.801	400.58	97.322	0.803	400.59	97.317	0.803	400.51	97.318	0.802	400.51	97.317
50%	Vmax	1.3643	400.54	97.648	1.366	400.49	97.651	1.363	400.47	97.651	1.364	400.37	97.653	1.365	400.36	97.652
75%	Vmax	1.9911	400.68	97.636	1.992	400.6	97.637	1.995	400.54	97.640	1.995	400.49	97.639	1.996	400.34	97.643
100%	Vmax	2.8138	400.3	97.410	2.811	400.46	97.412	2.81	400.24	97.411	2.813	400.53	97.412	2.812	400.37	97.410

Specified		Sample #6			Sample #7			Sample #8			Sample #9			Sample #10		
Output Power	Input Voltage	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency
(% of rated)	(Vdc)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)
10%	Vmin															
20%	Vmin															
30%	Vmin															
50%	Vmin															
75%	Vmin															
100%	Vmin															
10%	Vnom															
20%	Vnom															
30%	Vnom															
50%	Vnom															
75%	Vnom															
100%	Vnom															
10%	Vmax															
20%	Vmax															
30%	Vmax															
50%	Vmax															
75%	Vmax															
100%	Vmax															