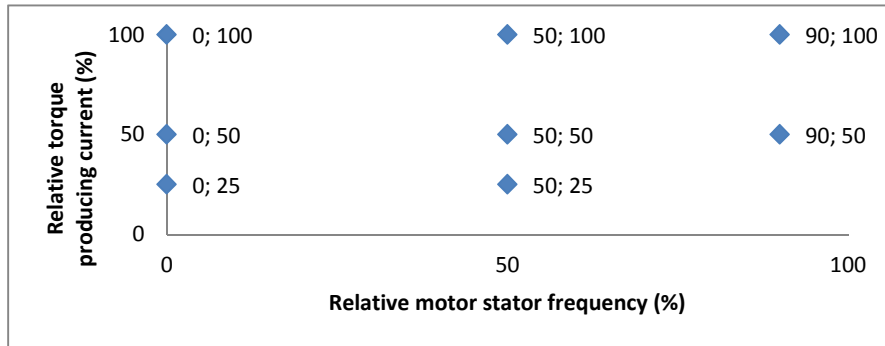


HMAX variable frequency drive watt loss data at operation load levels

Standard EN 50598-2 requires identifying power draw data at 8 different load levels at predefined switching frequency with 480V motors. In the following chart and table, the 8 operation load levels are defined and the losses in kilowatts are stated for the HMAX (380-500V range).



Frame	Current Rating (A)	Switching Frequency (kHz)	Watt loss data (kW) (torque current; stator frequency)								
			(0; 0)	(0; 25)	(0; 50)	(0; 100)	(50; 25)	(50; 50)	(50; 100)	(90; 50)	(90; 100)
FR4	3.4	4	0.014	0.031	0.033	0.038	0.031	0.034	0.041	0.036	0.045
	4.8	4	0.014	0.034	0.037	0.044	0.035	0.039	0.048	0.041	0.054
	5.6	4	0.014	0.040	0.045	0.056	0.041	0.048	0.063	0.052	0.074
	8	4	0.014	0.047	0.065	0.070	0.049	0.057	0.078	0.061	0.088
	9.6	4	0.014	0.057	0.066	0.090	0.059	0.071	0.101	0.077	0.118
	12	4	0.014	0.059	0.074	0.126	0.062	0.082	0.146	0.092	0.177
FR5	16	4	0.015	0.078	0.096	0.149	0.082	0.105	0.172	0.116	0.205
	23	4	0.015	0.102	0.130	0.216	0.108	0.145	0.258	0.164	0.322
	31	4	0.015	0.132	0.174	0.320	0.140	0.192	0.361	0.205	0.435
FR6	37	4	0.018	0.160	0.203	0.336	0.167	0.218	0.376	0.324	0.455
	46	4	0.018	0.183	0.237	0.411	0.191	0.256	0.459	0.289	0.570
	61	4	0.018	0.240	0.323	0.620	0.248	0.342	0.650	0.382	0.780
FR7	72	4	0.030	0.290	0.369	0.610	0.309	0.410	0.700	0.449	0.810
	87	4	0.030	0.320	0.426	0.750	0.345	0.477	0.870	0.530	1.010
	105	4	0.030	0.375	0.510	0.940	0.405	0.570	1.090	0.640	1.280
FR8	140	4	0.044	0.620	0.820	1.410	0.660	0.890	1.580	0.960	1.780
	170	2	0.044	0.580	0.780	1.430	0.630	0.870	1.650	0.970	1.910
	205	2	0.044	0.690	0.960	1.860	0.750	1.070	2.140	1.200	2.500
FR9	261	2	0.043	0.980	1.280	2.260	1.040	1.420	2.570	1.550	2.940
	310	2	0.043	1.140	1.530	2.870	1.220	1.700	3.260	1.880	3.750

Additional Help

In the US or Canada: please contact the Technical Resource Center at 1-877-ETN-CARE or 1-877-326-2273.

All other supporting documentation is located on the Eaton web site at www.eaton.com

