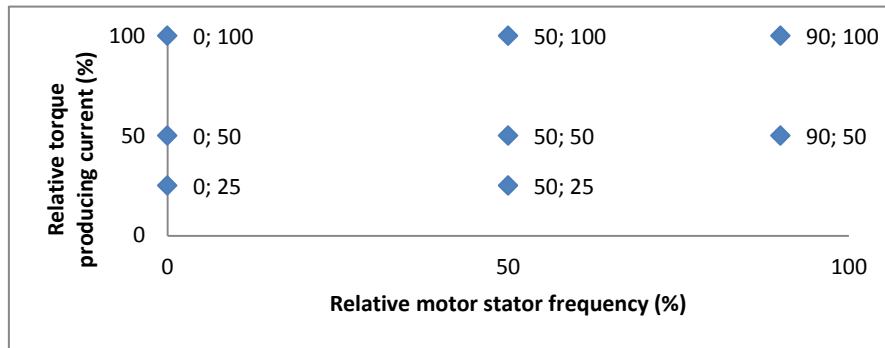


SVX and SPX variable frequency drive watt loss data at operation load levels

Standard EN 50598-2 outlines how to identify power draw data at 8 different load levels at a predefined switching frequency with 480V motors. In the following chart and table, the 8 operation load levels (plus 0;0 for idle) are defined and the losses in Watts are stated for the SVX/SPX (380-500V range) variable frequency drives.



Frame	VT Current Rating (A)	Switching Frequency (kHz)	Watt loss data (W) (torque current; stator frequency)									
			(0; 0)	(0; 25)	(0; 50)	(0; 100)	(50; 25)	(50; 50)	(50; 100)	(90; 50)	(90; 100)	
FR4	3.3	4.0	20	34	36	42	34	38	46	40	50	
	4.3	4.0	20	37	41	50	39	44	55	46	62	
	5.6	4.0	20	45	51	65	47	55	74	59	85	
	7.6	4.0	20	52	59	79	54	65	91	71	109	
	9.0	4.0	20	62	74	103	65	81	118	89	140	
FR5	12	4.0	20	62	78	129	66	88	155	100	193	
	16	4.0	23	79	99	165	84	110	191	122	225	
	23	4.0	23	105	136	237	111	151	271	170	326	
FR6	31	4.0	23	130	172	311	140	197	375	229	471	
	38	4.0	24	166	215	374	179	244	443	277	538	
	46	4.0	24	193	255	462	209	291	549	333	675	
FR7	61	4.0	24	256	349	663	275	394	779	459	978	
	72	4.0	40	270	360	640	290	400	740	450	900	
	87	4.0	40	300	420	820	330	480	950	550	1,180	
	105	4.0	40	360	520	1,040	390	580	1,210	680	1,530	



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Frame	VT Current Rating (A)	Switching Frequency (kHz)	Watt loss data (W) (torque current; stator frequency)								
			(0; 0)	(0; 25)	(0; 50)	(0; 100)	(50; 25)	(50; 50)	(50; 100)	(90; 50)	(90; 100)
FR8	140	4.0	60	550	720	1,280	580	810	1,520	950	1,980
	170	2.0	60	530	700	1,280	570	810	1,540	940	1,950
	205	2.0	60	620	850	1,620	680	980	1,970	1,160	2,560
FR9	261	2.0	90	940	1,220	2,210	1,000	1,360	2,520	1,520	2,940
	300	2.0	90	1,090	1,470	2,860	1,170	1,650	3,230	1,850	3,800
FR10	385	2.0	170	1,450	1,840	3,150	1,550	2,060	3,660	2,300	4,300
	460	2.0	170	1,650	2,190	4,040	1,780	2,460	4,640	2,750	5,430
	520	2.0	170	1,650	2,190	4,040	1,780	2,460	4,640	2,750	5,430
FR11	590	2.0	260	2,230	2,870	5,020	2,390	3,200	5,750	3,540	6,640
	650	2.0	260	2,410	3,170	5,780	2,580	3,540	6,620	3,940	7,680
	730	2.0	260	2,620	3,520	6,740	2,820	3,960	7,700	4,420	8,990
FR12	820	2.0	340	3,090	4,010	7,150	3,310	4,490	8,210	4,990	9,550
	920	2.0	340	3,310	4,390	8,130	3,560	4,930	9,330	5,500	10,900
	1,030	2.0	340	3,590	4,870	9,430	3,870	5,480	10,790	6,150	12,670
FR13	1,150	2.0	430	4,080	5,350	9,620	4,400	6,040	11,180	6,760	13,160
	1,300	2.0	430	4,810	6,320	11,530	5,160	7,080	13,220	7,870	15,380
	1,450	2.0	430	5,220	7,030	13,440	5,620	7,900	15,360	8,840	17,980
FR14	1,770	2.0	810	7,100	9,000	15,180	7,610	10,080	17,670	11,220	20,750

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

