



Manufacturer's Statement for E510s series

E510s efficiency according to IEC/EN 61800-9-2

Drive models: E510s series, please refer to the table below for the model list

Efficiency class: IE2

Nominal voltage: Please refer to the tabel below

Nominal frequency: 50Hz

Nominal power: Please refer to the tabel below

Motor control: V/f, Sensorless vector,
PM sensorless vector

Nominal current: Please refer to the tabel below

Nominal apparent power: Please refer to the tabel below

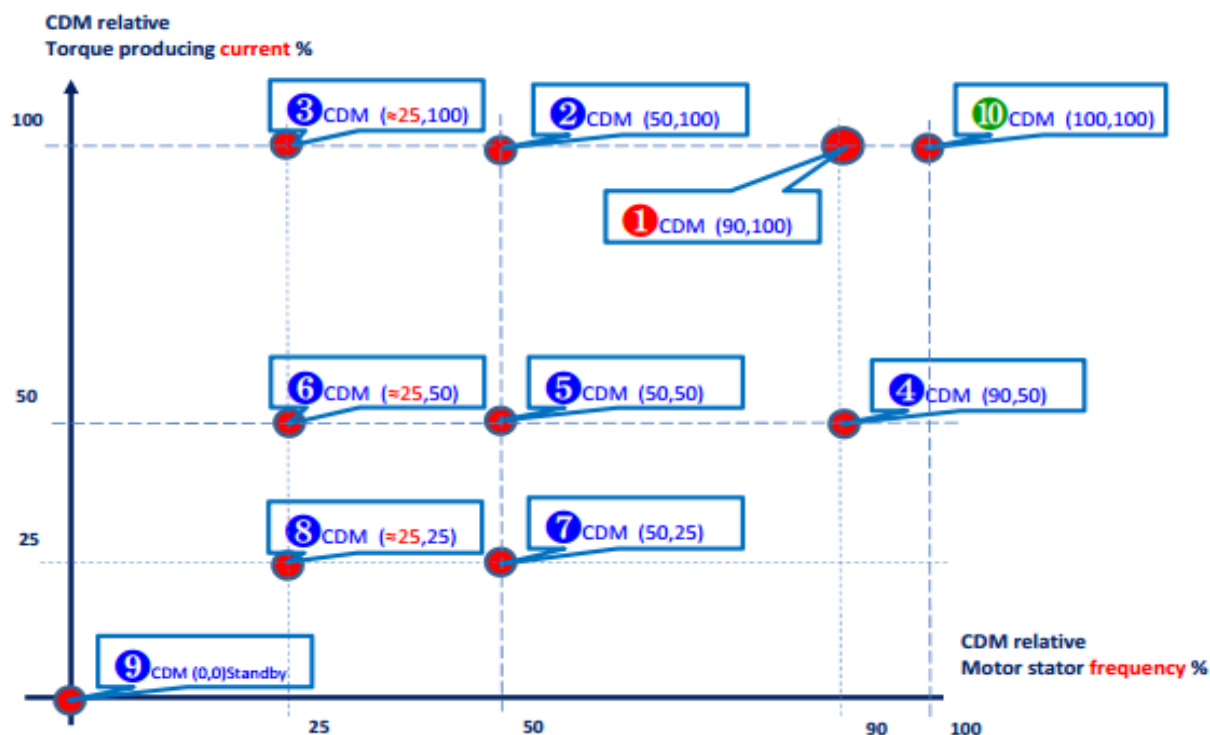
Maximum operating temperature:

IP20: 50°C without dustproof sticker

40°C with dustproof sticker

IP66: 40°C

CDM losses and efficiency (calculated with default settings) point: As the picture right



Manufacturer: TECO Electric & Machinery CO., LTD. — 10F, No.3-1, Park St., Nan-Kang, Taipei, 115603, Taiwan

EU contact: MOTOVARIO S.p.A — Via Quattro Passi 1/3 — 41043 — Formigine (MO) — ITALY. MOTOVARIO EORI number: IT02569681204

CDM losses and efficiency table

						9	8	6		3	7	5		2		4		1		10				
Frame	Model Name	Nominal voltage (V)	Nominal current (A)	Nominal power (kW)	Nominal apparent power (KVA)	CDM STANDBY LOSS	CDM (25,25) or (*12Hz,25)		CDM(25;50) or (*12Hz,50)		CDM(25; 100) or (*12Hz,100)		CDM (50,25)		CDM (50,50)		CDM (50,100)		CDM (90,50)		CDM (90,100)		CDM (100,100)	
						p Loss(W)	p Loss(W)	η(%)	p Loss(W)	η(%)	p Loss(W)	η(%)	p Loss(W)	η(%)	p Loss(W)	η(%)	p Loss(W)	η(%)	p Loss(W)	η(%)	p Loss(W)	η(%)	p Loss(W)	η(%)
IP20 220V with Filter																								
1	E510-2P5-SH1F	220	3.1	0.4	1.2	11	23	70.3	23	78.1	27	84.5	23	82.9	24	87.9	27	91.6	25	92.6	29	94.8	30	95.2
1	E510-201-SH1F	220	4.5	0.75	1.7	14	32	74.6	37	83.1	48	87.4	32	85.7	38	90.7	51	93.1	41	94.2	57	95.5	59	95.8
2	E510-202-SH1F	220	7.5	1.5	2.9	20	50	75.5	58	83.6	76	87.7	51	86.1	61	90.9	83	93.2	67	94.2	97	95.4	101	95.7
2	E510-203-SH1F	220	10.5	2.2	4	20	63	77.3	75	84.6	102	88.1	65	87.2	79	91.5	111	93.4	90	94.6	131	95.5	137	95.8
IP20 380V with Filter																								
1	E510-401-SH3F	380	2.5	0.75	1.7	14	28	77.7	32	83.4	39	88.1	28	85.8	32	91.1	41	93.7	33	94.6	46	95.9	47	96.4
1	E510-402-SH3F	380	3.8	1.5	2.9	14	38	78.1	44	85.5	58	89.1	38	88.0	45	92.3	60	94.2	47	95.3	65	96.4	66	96.7
2	E510-403-SH3F	380	5.3	2.2	4	20	52	78.0	60	85.5	79	89.2	53	87.9	62	92.2	82	94.2	65	95.3	88	96.4	90	96.7
2	E510-405-SH3F	380	9.2	4	6.7	23	71	79.6	89	86.3	130	89.4	73	88.9	93	92.7	135	94.4	101	95.6	146	96.5	149	96.8
3	E510-408-SH3F	380	13	5.5	9.9	23	79	86.7	94	90.9	137	92.7	80	92.9	97	95.2	147	96.1	102	97.0	168	97.4	174	97.6
3	E510-410-SH3F	380	17.5	7.5	13.3	33	111	84.8	139	89.5	220	91.4	113	91.9	144	94.4	231	95.4	153	96.6	254	97.1	260	97.3
3	E510-415-SH3F	380	24	11	19.1	33	146	85.7	189	89.9	312	91.4	150	92.4	197	94.6	330	95.4	211	96.7	365	97.1	376	97.3
4	E510-420-SH3F	380	32	15	24	35	175	86.5	229	90.4	381	91.8	181	92.8	240	94.9	408	95.6	262	96.8	464	97.1	481	97.3
4	E510-425-SH3F	380	40	18.5	30.5	35	203	87.4	266	91.0	447	92.3	209	93.3	280	95.2	482	95.8	309	97.0	560	97.2	584	97.4
5	E510-430-SH3F	380	45	22	34.3	35	259	89.9	333	91.4	487	93.3	299	94.3	364	95.3	555	96.1	338	97.5	605	97.5	605	97.8
6	E510-440-SH3F	380	60	30	45.7	40	324	89.9	421	91.4	621	93.3	353	94.5	431	95.5	690	96.3	396	97.6	740	97.6	740	97.8
6	E510-450-SH3F	380	75	37	57.2	40	414	89.5	558	91.0	860	92.9	520	93.3	682	94.3	1190	95.1	622	97.0	1350	97.0	1350	97.4
6	E510-460-SH3F	380	91	45	69.3	40	524	89.6	700	91.1	1069	93.0	692	93.4	896	94.4	1380	95.1	786	97.1	1480	97.1	1480	97.5
6	E510-475-SH3F	380	118	55	89.9	40	679	89.8	902	91.3	1366	93.2	846	93.8	1081	94.8	1630	95.6	985	97.2	1650	97.3	1660	97.7
IP66 with Filter																								
1	E510-2P5-SH1FN4S	220	3.1	0.4	1.2	11	23	70.3	23	78.1	27	84.5	23	82.9	24	87.9	27	91.6	25	92.6	29	94.8	30	95.2
1	E510-201-SH1FN4S	220	4.5	0.75	1.7	14	32	74.6	37	83.1	48	87.4	32	85.7	38	90.7	51	93.1	41	94.2	57	95.5	59	95.8
2	E510-202-SH1FN4S	220	7.5	1.5	2.9	20	50	75.5	58	83.6	76	87.7	51	86.1	61	90.9	83	93.2	67	94.2	97	95.4	101	95.7
2	E510-203-SH1FN4S	220	10.5	2.2	4	20	63	77.3	75	84.6	102	88.1	65	87.2	79	91.5	111	93.4	90	94.6	131	95.5	137	95.8
1	E510-401-SH3FN4S	380	2.5	0.75	1.7	14	28	77.7	32	83.4	39	88.1	28	85.8	32	91.1	41	93.7	33	94.6	46	95.9	47	96.4
1	E510-402-SH3FN4S	380	3.8	1.5	2.9	14	38	78.1	44	85.5	58	89.1	38	88.0	45	92.3	60	94.2	47	95.3	65	96.4	66	96.7
2	E510-403-SH3FN4S	380	5.3	2.2	4	20	52	78.0	60	85.5	79	89.2	53	87.9	62	92.2	82	94.2	65	95.3	88	96.4	90	96.7
2	E510-405-SH3FN4S	380	9.2	4	6.7	23	71	79.6	89	86.3	130	89.4	73	88.9	93	92.7	135	94.4	101	95.6	146	96.5	149	96.8
3	E510-408-SH3FN4S	380	13	5.5	9.9	23	79	86.7	94	90.9	137	92.7	80	92.9	97	95.2	147	96.1	102	97.0	168	97.4	174	97.6
3	E510-410-SH3FN4S	380	17.5	7.5	13.3	33	111	84.8	139	89.5	220	91.4	113	91.9	144	94.4	231	95.4	153	96.6	254	97.1	260	97.3
3	E510-415-SH3FN4S	380	24	11	19.1	33	146	85.7	189	89.9	312	91.4	150	92.4	197	94.6	330	95.4	211	96.7	365	97.1	376	97.3

Frame	Model Name	Nominal voltage (V)	Nominal current (A)	Nominal power (kW)	Nominal apparent power (KVA)
IP20 380V without Filter					
1	E510-401-SH3	380	2.5	0.75	1.7
1	E510-402-SH3	380	3.8	1.5	2.9
2	E510-403-SH3	380	5.3	2.2	4
2	E510-405-SH3	380	9.2	4	6.7
3	E510-408-SH3	380	13	5.5	9.9
3	E510-410-SH3	380	17.5	7.5	13.3
3	E510-415-SH3	380	24	11	19.1
4	E510-420-SH3	380	32	15	24
4	E510-425-SH3	380	40	18.5	30.5
5	E510-430-SH3	380	45	22	34.3
6	E510-440-SH3	380	60	30	45.7
6	E510-450-SH3	380	75	37	57.2
6	E510-460-SH3	380	91	45	69.3
6	E510-475-SH3	380	118	55	89.9
IP66 380V without Filter					
1	E510-401-SH3N4	380	2.5	0.75	1.7
1	E510-402-SH3N4	380	3.8	1.5	2.9
2	E510-403-SH3N4	380	5.3	2.2	4
2	E510-405-SH3N4	380	9.2	4	6.7
3	E510-408-SH3N4	380	13	5.5	9.9
3	E510-410-SH3N4	380	17.5	7.5	13.3
3	E510-415-SH3N4	380	24	11	19.1
3	E510-420-SH3N4	380	32	15	24
3	E510-425-SH3N4	380	40	18.5	30.5
IP20 220V without Filter					
1	E510-2P5-SH	220	3.1	0.4	1.2
1	E510-201-SH	220	4.5	0.75	1.7
2	E510-202-SH	220	7.5	1.5	2.9
2	E510-203-SH	220	10.5	2.2	4
1	E510-202-SH3	220	7.5	1.5	2.9
2	E510-205-SH3	220	17.5	4	6.7
3	E510-208-SH3	220	26	5.5	9.9
3	E510-210-SH3	220	35	7.5	13.3
4	E510-215-SH3	220	48	11	20.6
4	E510-220-SH3	220	64	15	27.4
5	E510-225-SH3	220	73	18.5	27.8
6	E510-230-SH3	220	85	22	32.4
6	E510-240-SH3	220	115	30	43.8
IP66 220V without Filter					
1	E510-2P5-SHN4	220	3.1	0.4	1.2
1	E510-201-SHN4	220	4.5	0.75	1.7
2	E510-202-SHN4	220	7.5	1.5	2.9
2	E510-203-SHN4	220	10.5	2.2	4
3	E510-205-SH3N4	220	17.5	4	6.7
3	E510-208-SH3N4	220	26	5.5	9.9
3	E510-210-SH3N4	220	35	7.5	13.3
3	E510-215-SH3N4	220	48	11	20.6
3	E510-220-SH3N4	220	64	15	27.4

⑨	⑤		⑥		⑧		⑦		⑤		②		①		①		⑩	
CDM STANDBY LOSS	CDM (25,25) or (*12Hz,25)		CDM(25;50) or (*12Hz,50)		CDM(25; 100) or (*12Hz,100)		CDM (50,25)		CDM (50,50)		CDM (50,100)		CDM (90,50)		CDM (90,100)		CDM (100,100)	
p Loss(W)	p Loss(W)	η(%)	p Loss(W)	η(%)	p Loss(W)	η(%)	p Loss(W)	η(%)	p Loss(W)	η(%)	p Loss(W)	η(%)	p Loss(W)	η(%)	p Loss(W)	η(%)	p Loss(W)	η(%)
13	27	77.8	31	83.5	38	88.2	27	85.9	31	91.2	40	93.8	32	94.7	45	96.0	46	96.5
13	37	78.2	43	85.6	57	89	37	88.1	44	92.4	59	94.3	46	95.4	64	96.5	65	96.8
19	51	78.1	59	85.6	78	89.3	52	88.0	61	92.3	81	94.3	64	95.4	87	96.5	89	96.8
22	69	79.7	87	86.4	129	89.5	71	89.0	91	92.8	134	94.5	99	95.7	145	96.6	148	96.9
22	78	86.8	93	91.0	135	92.8	79	93.0	96	95.3	145	96.2	101	97.1	166	97.5	172	97.7
32	109	84.9	137	89.6	218	91.5	111	92.0	142	94.5	229	95.5	151	96.7	252	97.2	258	97.4
32	144	85.8	187	90.0	310	91.5	148	92.5	195	94.7	328	95.5	209	96.8	363	97.2	374	97.4
34	172	86.6	226	90.5	378	91.9	178	92.9	237	95.0	405	95.7	259	96.9	461	97.2	478	97.4
34	200	87.5	263	91.1	444	92.4	206	93.4	277	95.3	479	95.9	306	97.1	557	97.3	581	97.5
34	261	89.9	337	91.3	494	93.2	304	94.2	372	95.2	550	96.0	352	97.4	600	97.4	600	97.7
39	327	89.9	426	91.3	631	93.2	360	94.4	441	95.4	685	96.2	413	97.5	735	97.5	735	97.7
39	414	89.5	558	91.0	860	92.9	520	93.3	682	94.3	1185	95.1	622	97.0	1345	97.0	1345	97.4
39	524	89.6	700	91.1	1069	93.0	681	93.5	879	94.5	1375	95.2	758	97.2	1475	97.2	1475	97.5
39	679	89.8	902	91.3	1366	93.2	832	93.9	1059	94.9	1625	95.7	949	97.3	1645	97.4	1655	97.7
13	27	77.8	31	83.5	38	88.2	27	85.9	31	91.2	40	93.8	32	94.7	42	96.2	43	96.5
13	37	78.2	43	85.6	57	89.2	37	88.1	44	92.4	59	94.3	46	95.4	64	96.5	65	96.8
19	51	78.1	59	85.6	78	89.3	52	88.0	61	92.3	81	94.3	64	95.4	87	96.5	89	96.8
22	69	79.7	87	86.4	129	89.5	71	89.0	91	92.8	111	94.5	99	95.7	134	97.4	148	96.9
22	78	86.8	93	91.0	135	92.8	79	93.0	96	95.3	145	96.2	101	97.1	172	97.2	187	97.7
32	109	84.9	137	89.6	218	91.5	111	92.0	142	94.5	229	95.5	151	96.7	254	97.2	258	97.4
32	144	85.8	187	90.0	310	91.5	148	92.5	195	94.7	328	95.5	209	96.8	359	94.9	374	97.4
34	172	86.6	226	90.5	378	91.9	178	92.9	237	95.0	405	95.7	259	96.9	461	97.22	478	97.4
34	200	87.5	263	91.1	444	92.4	206	93.4	277	95.3	479	95.9	306	97.1	557	97.31	581	97.5
10	22	70.4	22	78.2	26	84.6	22	83.0	23	88.0	26	91.7	24	92.7	28	94.9	29	95.3
13	31	74.7	36	83.2	47	87.5	31	85.8	37	90.8	50	93.2	40	94.3	56	95.6	58	95.9
19	49	75.6	57	83.7	75	87.8	50	86.2	60	91.0	82	93.3	66	94.3	81	96.2	100	95.8
19	62	77.4	74	84.7	101	88.2	64	87.3	78	91.6	110	93.5	89	94.7	130	95.6	136	95.9
13	45	77.0	54	84.5	74	88.0	46	87	56	91.6	78	93.5	59	94.9	86	96.0	88	96.3
20	91	79.6	110	86.1	158	88.9	94	88.7	117	92.4	172	93.9	131	95.1	205	95.9	215	96.1
30	102	83.7	129	88.7	203	90.9	105	91.2	135	94.0	220	95.0	149	96.3	259	96.7	271	96.9
30	127	84.8	165	89.2	273	90.9	133	91.7	177	94.1	303	94.9	202	96.2	371	96.5	392	96.7
30	167	85.3	222	89.4	381	90.7	175	92.0	239	94.2	425	94.8	275	96.2	525	96.4	556	96.6
31	236	84.5	321	88.6	563	89.8	253	91.4	356	93.6	648	94.1	426	95.7	832	95.7	888	95.9
32	405	84.3	436	88.5	617	91.2	358	92.7	459	93.7	692	94.4	465	96.2	850	96.3	900	96.7
35	472	84.7	500	88.9	696	91.7	426	93.0	540	93.9	855	94.7	504	96.6	965	96.7	975	97.1
35	646	84.9	678	89.1	934	91.9	548	94.0	673	94.9	1035	95.2	656	96.8	1095	96.9	1125	97.0
10	22	70.4	22	78.2	26	84.6	22	83.0	23	88.0	26	91.7	24	92.7	28	94.9	29	95.3
13	31	74.7	36	83.2	47	87.5	31	85.8	37	90.8	50	93.2	40	94.3	56	95.6	58	95.9
19	49	75.6	57	83.7	75	87.8	50	86.2	60	91.0	82	93.3	66	94.3	96	95.5	100	95.8
19	62	77.4	74	84.7	101	88.2	64	87.3	78	91.6	110	93.5	89	94.7	130	95.6	136	95.9
20	91	79.6	110	86.1	158	88.9	94	88.7	117	92.4	172	93.9	131	95.1	205	95.9	215	96.1
30	102	83.7	129	88.7	203	90.9	105	91.2	135	94.0	220	95.0	149	96.3	259	96.7	271	96.9
30	127	84.8	165	89.2	273	90.9	133	91.7	177	94.1	303	94.9	202	96.2	371	96.5	392	96.7
30	167	85.3	222	89.4	381	90.7	175	92.0	239	94.2	425	94.8	275	96.2	525	96.4	556	96.6
31	236	84.5	321	88.6	563	89.8	253	91.4	356	93.6	648	94.1	426	95.7	832	95.7	888	95.9