

Product series	Rated output power	Rated output current	Rated apparent power	(24; 25)	(24; 50)	(24; 100)	(50; 25)	(50; 50)	(50; 100)	(90; 50)	(90; 100)	IE class	Standby loss	Comparative losses relative to the reference converter at the nominal point (90, 100)
	P	I _N	S	Relative losses p _{L,CDM} (% of rated frequency; % of rated torque-producing current) referring to the converter apparent power S _{r,requ}										
	kW	A	kVA	%	%	%	%	%	%	%	%		W	
ST500	0.75	2.5	1.5	1.6	1.7	2.0	1.6	1.8	2.2	1.9	2.4	IE2	4	22.1
ST500	1.5	3.8	2.7	1.2	1.4	1.8	1.2	1.5	2.0	1.6	2.3	IE2	4	27.5
ST500	2.2	5.1	4	1.1	1.2	1.5	1.1	1.3	1.7	1.4	2.0	IE2	6	27.1
ST500	4	9	7	1.3	1.4	2.0	1.1	1.3	2.0	1.5	2.2	IE2	6	34.5
ST500	5.5	13	9	1.0	1.4	2.2	1.0	1.3	2.2	1.6	2.6	IE2	7	43.7
ST500	7.5	17	13	0.8	1.1	2.0	0.7	1.0	2.1	1.2	2.6	IE2	7	44.1
ST500	11	25	17.8	1.0	1.3	2.0	1.1	1.3	2.1	1.6	2.8	IE2	7	50.8
ST500	15	32	22.2	0.7	0.9	1.3	0.8	1.0	1.6	1.3	2.2	IE2	8	41.6
ST500	18	37	26.4	0.6	0.8	1.4	0.7	0.9	1.7	1.2	2.4	IE2	9	46.8
ST500	22	45	31.2	0.7	0.9	1.5	0.7	0.9	1.6	1.2	2.1	IE2	13	42.9
ST500	30	60	42.5	0.6	0.8	1.1	0.5	0.8	1.5	1.1	2.1	IE2	25	43.0
ST500	37	75	52	0.7	1.0	1.6	0.8	1.1	1.7	1.2	2.3	IE2	25	47.3
ST500	45	90	62.4	0.6	0.8	1.4	0.7	0.9	1.5	1.0	2.0	IE2	34	41.7
ST500	55	110	76.2	0.6	0.8	1.4	0.7	0.9	1.5	1.0	1.9	IE2	34	39.5
ST500	75	150	100.9	0.7	0.9	1.5	0.7	1.0	1.6	1.1	2.1	IE2	34	44.4
ST500	90	176	123.3	0.6	0.8	1.7	0.6	0.9	1.8	1.0	2.1	IE2	38	44.4
ST500	110	210	142	0.7	0.9	1.5	0.7	1.0	1.7	1.1	2.0	IE2	38	49.6
ST500	132	253	173.2	0.9	1.1	1.7	0.9	1.1	1.8	1.2	2.1	IE2	60	51.6
ST500R	160	304	209.2	0.9	1.0	1.6	0.9	1.1	1.8	1.2	2.1	IE2	65	50.6
ST500R	187	340	242	0.7	0.9	1.4	0.8	1.0	1.6	1.1	1.9	IE2	65	45.7
ST500R	200	380	256.3	0.7	0.9	1.5	0.8	1.0	1.7	1.1	2.0	IE2	65	48.2
ST500R	220	426	285	0.8	1.0	1.6	0.8	1.0	1.8	1.1	2.1	IE2	65	50.3
ST500R	250	465	330.5	0.7	0.9	1.5	0.7	1.0	1.7	1.1	2.0	IE2	85	48.1
ST500R	400	725	506.3	0.7	0.9	1.4	0.7	0.9	1.5	1.0	1.9	IE2	85	45.9

Remarks

- 1) Pure loss data of the frequency converters without optional components such as braking resistor or choke.
Maximum ambient temperature without derating: 40°C
- 2) Reference line voltage for loss data calculation: 380V 3ph AC/50Hz
- 3) The calculated data includes a safety margin of 10%, all loss values refer to the converter's default output pulse frequency.

Inverter output pulse frequency	
Power(kW)	Default pulse frequency (kHz)
0.75~11	6
15~37	4
45 and above	2

- 4) Rated output based on the rated output current I_N
- 5) The rated output current I_N is based on the load cycle for high overload HO
- 6) In standby mode, the inverter is powered up but doesn't supply power to the motor
- 7) Operating points (xx;xxx) are given as relative motor stator frequency in [%] and relative torque-producing current in [%]
- 8) Regarding comparative losses according to reference converter at the nominal point (90;100), relative losses are calculated according to the formula $[P_{L,CDM(90,100)}/P_{LR,CDM(90,100)}]$ where P_L is the loss of the converter under test and P_{LR} is the loss of the reference converter
- 9) All converters meet the requirements of [Commission Regulation \(EU\) 2019/1781](#), Annex I §3, by having losses of less than 75% of the reference values in Table 6 at operating point (90;100); losses are determined according to Annex II
- 10) As demanded by Annex I §4, power losses are given *“in % of the rated apparent output power at the following different operating points for relative motor stator frequency versus relative torque-producing current: (0;25) (0;50) (0;100) (50;25) (50;50) (50;100) (90;50) (90;100)”*, where according to Annex II §2, losses at zero Hz are measured at 12Hz instead, which is 24% of the nominal frequency of 50Hz, thus replacing the first three operating points with (24;25) (24;50) and (24;100)