

Technical specifications

IE2 Frame size 80 - 160

Operating values at rated output

Type	$P_{rated, 50 Hz}$	$P_{rated, 60 Hz}$	Frame size	$n_{rated, 50 Hz}$	$T_{rated, 50 Hz}$	IE class	$\eta_{rated, 50 Hz, 4/4}$	$\eta_{rated, 50 Hz, 3/4}$	$\eta_{rated, 50 Hz, 2/4}$	cos- $\phi_{rated, 50 Hz}$	$I_{rated, 50 Hz, 400 V}$	T_{LR} / T_{rated}	I_{LR} / I_{rated}	T_B / T_{rated}	$L_{pfA, 50 Hz}$	$L_{WA, 50 Hz}$	$m_{IM B3}$	J	Torque class
	kW	kW		FS	rpm		Nm	60Hz	%		%	%	A	dB(A)		kg			
<ul style="list-style-type: none"> • Cooling: self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 416) • Efficiency: High Efficiency IE2, service factor (SF) 1.15 • Insulation: thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B) 																			
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																			
1TZ9 80M-2	0.75	0.86	80 M	2805	2.6	IE2	77.4	79.5	78.8	0.84	1.67	1.9	4.9	2.3	60	71	9.0	0.00080	16
1TZ9 80M-2	1.1	1.27	80 M	2835	3.7	IE2	79.6	81.3	80.8	0.83	2.40	2.7	6.0	3.1	60	71	11	0.0011	16
1TZ9 90S-2	1.5	1.75	90 S	2885	5.0	IE2	81.3	82.3	80.8	0.84	3.15	2.7	6.9	3.6	65	77	13	0.0017	16
1TZ9 90L-2	2.2	2.55	90 L	2890	7.3	IE2	83.2	83.9	82.3	0.85	4.5	2.5	7.1	3.7	65	77	15	0.0021	16
1TZ9 100L-2	3	3.45	100 L	2905	9.9	IE2	84.6	85.2	84.7	0.84	6.1	2.3	7.0	3.3	67	79	21	0.0044	16
1TZ9 112M-2	4	4.55	112 M	2950	13	IE2	85.8	86.7	86.1	0.86	7.8	2.4	7.4	3.3	69	81	27	0.0092	16
1TZ9 132S-2	5.5	6.3	132 S	2950	18	IE2	87.0	88.0	87.4	0.87	10.5	1.8	6.6	2.9	68	80	39	0.020	16
1TZ9 132S-2	7.5	8.6	132 S	2950	24	IE2	88.1	88.7	88.6	0.87	14.1	2.2	7.5	3.1	68	80	43	0.024	16
1TZ9 160M-2	11	12.6	160 M	2955	36	IE2	89.4	90.0	89.1	0.87	20.5	2.1	7.4	3.2	70	82	67	0.045	16
1TZ9 160M-2	15	17.3	160 M	2955	48	IE2	90.3	90.9	90.3	0.88	27	2.4	7.6	3.4	70	82	75	0.053	16
1TZ9 160L-2	18.5	21.3	160 L	2955	60	IE2	90.9	91.2	90.4	0.88	33.5	2.9	7.9	3.6	70	82	84	0.061	16
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																			
1TZ9 80M-4	0.55	0.63	80 M	1440	3.7	-	78.1	78.9	76.1	0.74	1.37	2.2	5.3	3.1	53	64	10	0.0017	16
1TZ9 80M-4	0.75	0.86	80 M	1440	5.0	IE2	79.6	80.2	78.0	0.76	1.79	2.2	5.6	3.1	53	64	11	0.0021	16
1TZ9 90S-4	1.1	1.27	90 S	1425	7.4	IE2	81.4	81.7	79.9	0.78	2.5	2.3	5.6	2.9	56	68	13	0.0028	16
1TZ9 90L-4	1.5	1.75	90 L	1435	10	IE2	82.8	83.5	82.0	0.79	3.3	2.6	6.4	3.4	56	68	16	0.0036	16
1TZ9 100L-4	2.2	2.55	100 L	1455	14	IE2	84.3	85.1	84.3	0.81	4.65	2.1	6.9	3.3	60	72	21	0.0086	16
1TZ9 100L-4	3	3.45	100 L	1455	20	IE2	85.5	86.7	86.0	0.82	6.2	2.0	6.9	3.1	60	72	25	0.011	16
1TZ9 112M-4	4	4.55	112 M	1460	26	IE2	86.6	87.3	86.5	0.81	8.2	2.5	7.1	3.2	58	70	29	0.014	16
1TZ9 132S-4	5.5	6.3	132 S	1465	36	IE2	87.7	89.0	87.7	0.80	11.3	2.3	6.9	2.9	64	76	42	0.027	16
1TZ9 132M-4	7.5	8.6	132 M	1465	49	IE2	88.7	90.3	88.8	0.83	14.7	2.3	6.9	2.9	64	76	49	0.034	16
1TZ9 160M-4	11	12.6	160 M	1470	71	IE2	89.8	90.9	90.8	0.85	21	2.1	6.7	2.8	65	77	71	0.065	16
1TZ9 160L-4	15	17.3	160 L	1475	97	IE2	90.6	91.3	91.0	0.85	28	2.3	7.3	3.0	65	77	83	0.083	16
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																			
1TZ9 80M-6	0.37	0.43	80 M	925	3.85	-	71.4	71.5	66.5	0.69	1.08	2.1	4.0	2.4	42	53	9	0.0017	16
1TZ9 80M-6	0.55	0.63	80 M	935	5.6	-	74.0	74.0	70.5	0.66	1.63	2.5	4.4	2.9	42	53	12	0.0025	16
1TZ9 90S-6	0.75	0.86	90 S	925	7.7	IE2	75.9	76.0	73.0	0.70	2.05	2.0	4.1	2.5	43	55	13	0.0030	16
1TZ9 90L-6	1.1	1.27	90 L	935	11.2	-	78.1	78.5	75.0	0.70	2.90	2.2	4.4	2.6	43	55	16	0.0040	16
1TZ9 100L-6	1.5	1.75	100 L	970	15	IE2	79.8	80.2	79.0	0.73	3.7	2.0	6.2	2.9	59	71	25	0.011	16
1TZ9 112M-6	2.2	2.55	112 M	965	22	IE2	81.8	82.5	81.3	0.75	5.2	2.1	6.0	3.1	57	69	29	0.014	16
1TZ9 132S-6	3	3.45	132 S	970	30	IE2	83.3	84.0	82.8	0.74	7.0	1.6	5.6	2.6	63	75	38	0.024	13
1TZ9 132M-6	4	4.55	132 M	970	39	IE2	84.6	85.8	85.0	0.78	8.7	1.6	5.6	2.5	63	75	43	0.029	13
1TZ9 132M-6	5.5	6.3	132 M	970	54	IE2	86.0	87.4	87.0	0.77	12	1.9	6.1	2.8	63	75	52	0.037	16
1TZ9 160M-6	7.5	8.6	160 M	975	73	IE2	87.2	88.0	87.3	0.74	16.8	1.9	4.7	2.2	67	79	77	0.075	16
1TZ9 160L-6	11	12.6	160 L	975	108	IE2	88.7	89.6	89.2	0.76	23.5	1.9	4.8	2.2	67	79	93	0.098	16