

## 2 pole · 3000T/M · 50 Hz

Type	Output		Speed			In (Amps)			Efficiency $\eta\%$	Power Factor $\cos. \varphi\%$	Moment (J)	Tn	Is	Is	Tmax	Noise Level	Weight
	KW	r/min	380V	400V	415V	100% FL	100% FL	kgm <sup>2</sup>	Nm	In	Tn	Tn	Tn	Tn	dB(A)	kg	
JL561-2	0.09	2750	0.32	0.3	0.29	62.0	0.70	0.00018	0.31	5.2	2.1	2.2	57	3.6			
JL562-2	0.12	2750	0.38	0.36	0.34	67.0	0.72	0.00023	0.41	5.2	2.1	2.2	57	3.9			
JL631-2	0.18	2720	0.53	0.5	0.48	65.0	0.80	0.00031	0.61	5.5	2.2	2.3	58	4.8			
JL632-2	0.25	2720	0.69	0.66	0.63	68.0	0.81	0.0006	0.96	5.5	2.2	2.3	58	5.1			
JL711-2	0.37	2740	0.99	0.94	0.91	70.0	0.81	0.00075	1.26	6.1	2.2	2.3	61	6			
JL712-2	0.55	2740	1.4	1.33	1.28	73.0	0.82	0.0009	1.88	6.1	2.2	2.3	61	6.5			
JL801-2	0.75	2840	1.83	1.73	1.68	75.1	0.83	0.0012	2.54	6.1	2.2	2.3	64	8.7			
JL802-2	1.1	2840	2.58	2.45	2.37	77.0	0.84	0.0014	3.72	7.0	2.2	2.3	64	9.5			
JL90S-2	1.5	2840	3.43	3.26	3.14	79.0	0.84	0.0029	5.14	7.0	2.2	2.3	69	11.8			
JL90L-2	2.2	2840	4.85	4.61	4.44	81.1	0.85	0.0055	7.40	7.0	2.2	2.3	69	13.5			
JL100L-2	3	2860	6.33	6.01	5.79	82.8	0.87	0.0109	9.95	7.5	2.2	2.3	73	21			
JL112M-2	4	2880	8.18	7.77	7.49	84.4	0.88	0.0126	13.22	7.5	2.2	2.3	74	28			
JL132S1-2	5.5	2900	11.1	10.5	10.1	85.9	0.88	0.0377	18.11	7.5	2.2	2.3	77	39			
JL132S2-2	7.5	2900	14.9	14.1	13.6	87.2	0.88	0.0499	24.70	7.5	2.2	2.3	77	44.5			
JL160M1-2	11	2930	21.2	20.2	19.4	88.5	0.89	0.055	35.85	7.5	2.2	2.3	83	69.5			
JL160M2-2	15	2930	28.6	27.2	26.2	89.5	0.89	0.075	48.89	7.5	2.2	2.3	83	78.0			
JL160L-2	18.5	2930	34.6	32.9	31.7	90.2	0.90	0.124	60.30	7.5	2.2	2.3	83	88.5			

## 4 pole · 1500T/M · 50 Hz

Type	Output		Speed			In (Amps)			Efficiency $\eta\%$	Power Factor $\cos. \varphi\%$	Moment (J)	Tn	Is	Is	Tmax	Noise Level	Weight
	KW	r/min	380V	400V	415V	100% FL	100% FL	kgm <sup>2</sup>	Nm	In	Tn	Tn	Tn	Tn	dB(A)	kg	
JL561-4	0.06	1325	0.28	0.27	0.26	56.0	0.58	0.0003	0.43	4.0	2.0	2.1	48	3.6			
JL562-4	0.09	1325	0.39	0.37	0.35	58.0	0.61	0.0004	0.64	4.0	2.0	2.1	48	3.6			
JL631-4	0.12	1310	0.44	0.42	0.41	57.0	0.72	0.0005	0.84	4.4	2.1	2.2	48	4.5			
JL632-4	0.18	1310	0.62	0.59	0.57	60.0	0.73	0.0006	1.26	4.4	2.1	2.2	48	4.7			
JL711-4	0.25	1330	0.79	0.75	0.72	65.0	0.74	0.0008	1.73	5.2	2.1	2.2	53	6			
JL712-4	0.37	1330	1.12	1.06	1.02	67.0	0.75	0.0013	2.56	5.2	2.1	2.2	53	6.3			
JL801-4	0.55	1390	1.57	1.49	1.43	71.1	0.75	0.0018	3.75	5.2	2.3	2.3	58	10			
JL802-4	0.75	1390	2.05	1.95	1.88	73.1	0.76	0.0021	5.11	6.0	2.3	2.3	58	11			
JL90S-4	1.1	1390	2.84	2.7	2.6	76.3	0.77	0.0023	7.50	6.0	2.3	2.3	59	13			
JL90L-4	1.5	1390	3.67	3.49	3.36	78.6	0.79	0.0027	10.23	6.0	2.3	2.3	59	14			
JL100L1-4	2.2	1410	5.08	4.83	4.65	81.2	0.81	0.0054	14.80	7.0	2.3	2.3	61	23			
JL100L2-4	3	1410	6.72	6.39	6.15	82.7	0.82	0.0067	20.18	7.0	2.3	2.3	61	25			
JL112M-4	4	1435	8.79	8.35	8.05	84.3	0.82	0.0095	26.53	7.0	2.3	2.3	62	28			
JL132S-4	5.5	1440	11.7	11.1	10.7	85.8	0.83	0.0214	36.48	7.0	2.3	2.3	69	45			
JL132M-4	7.5	1440	15.6	14.8	14.3	87.1	0.84	0.0296	49.74	7.0	2.3	2.3	69	55			
JL160M-4	11	1460	22.5	21.4	20.6	88.5	0.84	0.0747	71.59	7.0	2.3	2.3	72	78			
JL160L-4	15	1460	30	28.5	27.4	89.5	0.85	0.0918	98.12	7.0	2.3	2.3	72	90			

In = Full Load Current · Is = Locked Rotor Current · Ts = Locked Rotor Torque · T-max = Maximum Torque · Tn = Full Load Torque

## 6 pole · 1000T/M · 50 Hz

Type	Output	Speed	In (Amps)			Efficiency $\eta$ %	Power Factor cos. $\varphi$ %	Moment (J)	Tn	Is	Is	Tmax	Noise Level	Weight
	KW	r/min	380V	400V	415V	100% FL	100% FL	kgm <sup>2</sup>	Nm	In	Tn	Tn	dB(A)	kg
JL631-6	0.09	840	0.52	0.49	0.47	44.0	0.60	0.00025	1.80	3.5	1.8	1.9	48	4.8
JL632-6	0.12	850	0.63	0.60	0.58	48.0	0.60	0.0004	2.25	3.5	1.8	1.9	48	5.1
JL711-6	0.18	850	0.74	0.70	0.68	56.0	0.66	0.0011	1.91	4.0	1.9	2.0	49	6.0
JL712-6	0.25	850	0.95	0.90	0.87	59.0	0.68	0.0014	2.65	4.0	1.9	2.0	49	6.3
JL801-6	0.37	885	1.30	1.23	1.19	62.0	0.70	0.0016	3.93	4.7	1.9	2.0	51	8.9
JL802-6	0.55	885	1.78	1.69	1.63	65.0	0.72	0.0019	5.84	4.7	1.9	2.1	51	10.4
JL90S-6	0.75	910	2.29	2.18	2.10	69.0	0.73	0.0029	7.87	5.5	2.0	2.1	54	12.1
JL90L-6	1.1	910	3.18	3.02	2.91	72.1	0.75	0.0035	11.54	5.5	2.0	2.1	54	13.7
JL100L-6	1.5	920	3.99	3.79	3.66	76.1	0.76	0.0069	15.24	5.5	2.0	2.1	58	23
JL112M-6	2.2	935	5.55	5.28	5.08	79.2	0.76	0.0140	22.35	6.5	2.1	2.1	62	28.2
JL132S-6	3	960	7.4	7.03	6.77	81.1	0.76	0.0286	29.84	6.5	2.1	2.1	66	40.3
JL132M1-6	4	960	9.74	9.25	8.92	82.1	0.77	0.0357	39.79	6.5	2.1	2.1	66	43
JL132M2-6	5.5	960	12.9	12.3	11.8	84.1	0.77	0.0449	54.71	6.5	2.1	1.1	66	47.2
JL160M-6	7.5	970	17.2	16.3	15.7	86.1	0.77	0.0810	73.84	6.5	2.1	2.1	70	70.6
JL160L-6	11	970	24.5	23.2	22.4	87.6	0.78	0.1160	108.30	6.5	2.1	2.1	70	85

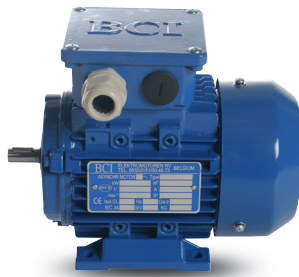
## 8 pole · 750T/M · 50 Hz

Type	Output	Speed	In (Amps)			Efficiency $\eta$ %	Power Factor cos. $\varphi$ %	Moment (J)	Tn	Is	Is	Tmax	Noise Level	Weight
	KW	r/min	380V	400V	415V	100% FL	100% FL	kgm <sup>2</sup>	Nm	In	Tn	Tn	dB(A)	kg
JL711-8	0.09	600	0.60	0.57	0.55	40.0	0.57	0.0080	1.95	2.8	1.8	1.9	48	6
JL712-8	0.12	600	0.71	0.70	0.65	45.0	0.57	0.0010	2.16	2.8	1.8	1.9	48	6.3
JL801-8	0.18	645	0.88	0.84	0.80	51.0	0.61	0.0025	2.5	3.3	1.8	1.9	48	8.9
JL802-8	0.25	645	1.15	1.10	1.06	54.0	0.61	0.0030	3.5	3.3	1.8	1.9	48	10.4
JL90S-8	0.37	670	1.49	1.41	1.36	62.0	0.61	0.0051	5.1	4.0	1.8	1.9	53	12.1
JL90L-8	0.55	670	2.17	2.07	1.99	63.0	0.61	0.0065	7.6	4.0	1.8	2.0	53	13.7
JL100L1-8	0.75	680	2.40	2.28	2.19	71.0	0.67	0.0095	10.2	4.0	1.8	2.0	56	23
JL100L2-8	1.1	680	3.32	3.15	3.04	73.0	0.69	0.0110	15.0	5.0	1.8	2.0	56	25.1
JL112M-8	1.5	690	4.40	4.18	4.03	75.0	0.69	0.0245	20.5	5.0	1.8	2.0	59	28.2
JL132S-8	2.2	705	6.04	5.73	5.53	78.0	0.71	0.0314	29.6	6.0	1.8	2.0	61	40.3
JL132M-8	3	705	7.90	7.51	7.24	79.0	0.73	0.0395	40.4	6.0	1.8	2.0	61	45
JL160M1-8	4	720	10.30	9.76	9.41	81.0	0.73	0.0753	53.1	6.0	1.9	2.0	65	68.5
JL160M2-8	5.5	720	13.60	12.9	12.50	83.0	0.74	0.0931	72.6	6.0	2.0	2.0	65	76.0
JL160L-8	7.5	720	17.80	16.9	16.30	85.5	0.75	0.1260	99.5	6.0	2.0	2.0	65	86.2

# JL 56 -160



JL56



JL63

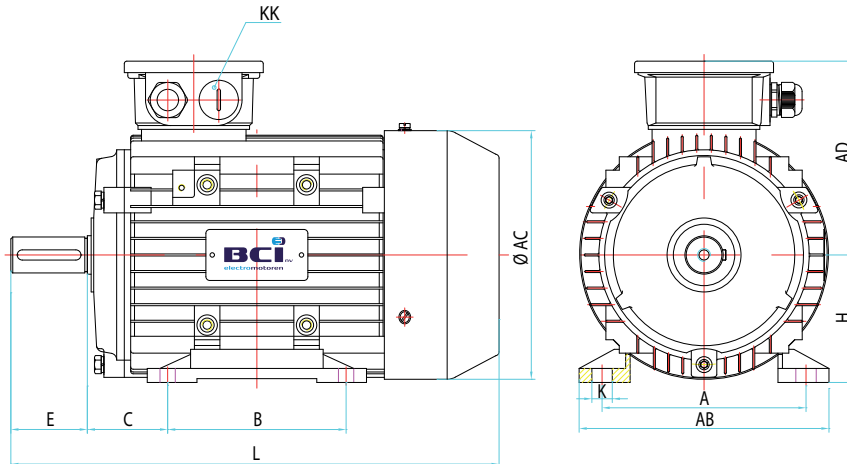


JL71

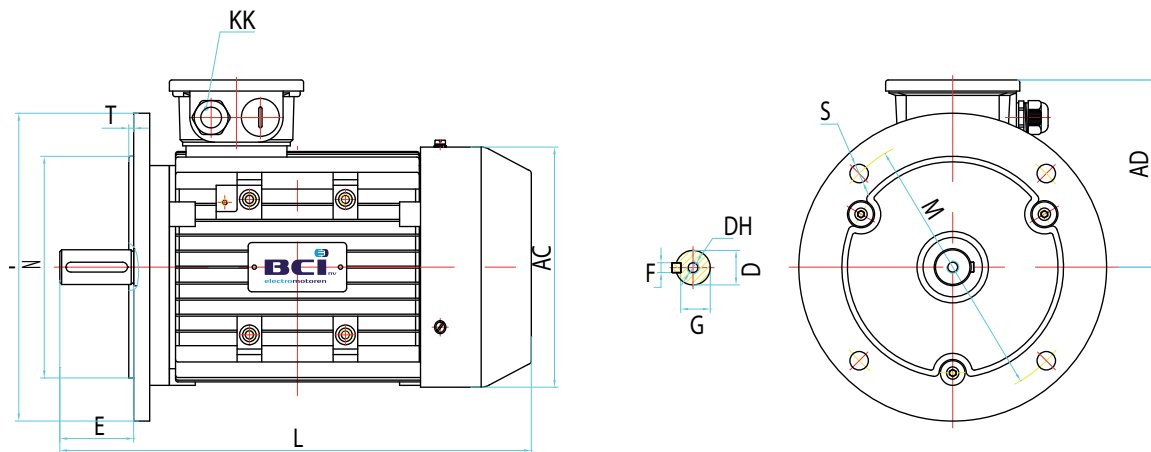


JL80

## B3



## B5

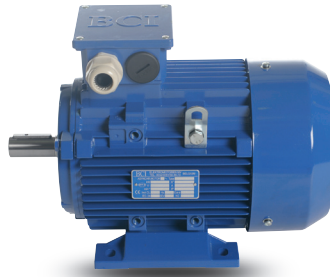


FRAME	B3													B5						
	A	AB	AC	AD	B	C	D	DH	E	F	G	H	K	KK Metric	L	M	N	P	S	T
JL56	90	115	110	100	71	36	9	M4X12	20	3	7.2	56	5.8	2-M20X1.5	170	100	80	120	7	3
JL63	100	135	130	115	80	40	11	M4X12	23	4	8.5	63	7	2-M20X1.5	225	115	95	140	10	3
JL71	112	150	145	120	90	45	14	M5X12	30	5	11	71	7	2-M20X1.5	250	130	110	160	10	3.5
JL80	125	165	175	145	100	50	19	M6X16	40	6	15.5	80	10	2-M25X1.5	295	165	130	200	12	3.5
JL90S	140	180	195	155	100	56	24	M8X19	50	8	20	90	10	2-M25X1.5	315	165	130	200	12	3.5
JL90L	140	180	195	155	125	56	24	M8X19	50	8	20	90	10	2-M25X1.5	340	165	130	200	12	3.5
JL100L	160	205	215	180	140	63	28	M10X22	60	8	24	100	12	2-M32X1.5	385	215	180	250	15	4
JL112M	190	230	240	190	140	70	28	M10X22	60	8	24	112	12	2-M32X1.5	400	215	180	250	15	4
JL132S	216	270	275	210	140	89	38	M12X28	80	10	33	132	12	2-M32X1.5	470	265	230	300	15	4
JL132M	216	70	275	210	178	89	38	M12X28	80	10	33	132	12	2-M32X1.5	510	265	230	300	15	4
JL160M	254	320	330	255	210	108	42	M16X36	110	12	37	160	15	2-M40X1.5	615	300	250	350	19	5
JL160L	254	320	330	255	254	108	42	M16X36	110	12	37	160	15	2-M40X1.5	670	300	250	350	19	5

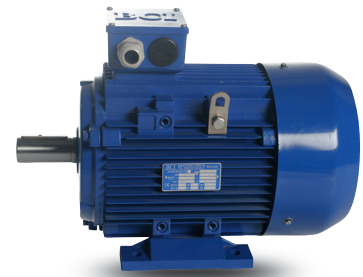
# JL 56 -160



JL90

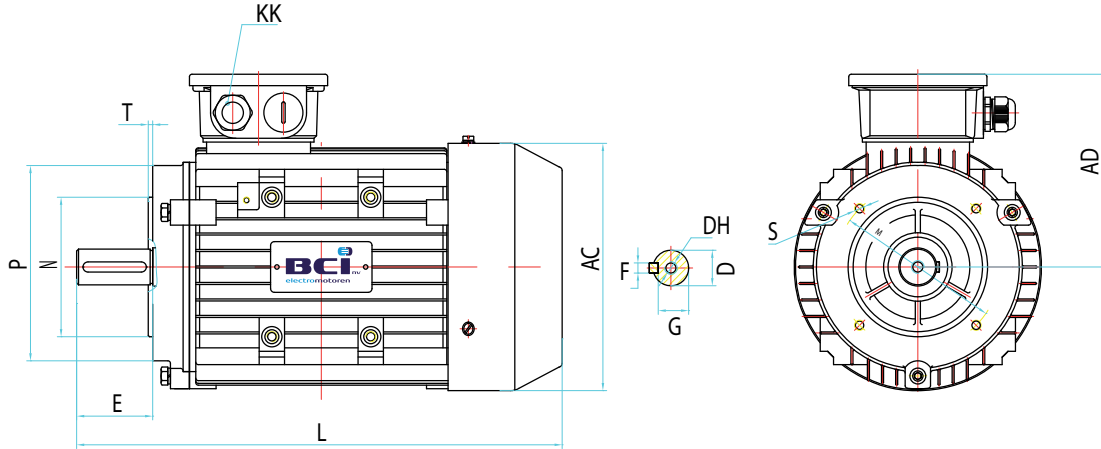


JL112

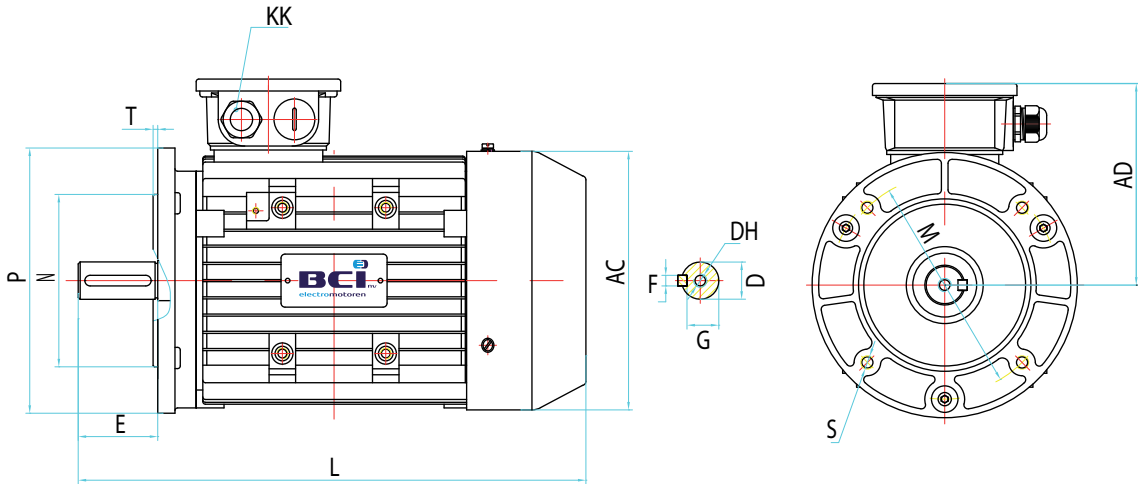


JL132

## B14A



## B14B



FRAME	B14A															B14B				
	AC	AD	D	DH	E	F	G	KK METRIC	L	M	N	P	S	T	M	N	P	S	T	
JL56	110	100	9	M4X12	20	3	7.2	2-M20X1.5	170	65	50	80	M5	2.5	85	70	105	M6	2.5	
JL63	130	115	11	M4X12	23	4	8.5	2-M20X1.5	225	75	60	90	M5	2.5	85	70	105	M6	2.5	standaard
JL71	145	120	14	M5X12	30	5	11	2-M20X1.5	250	85	70	105	M6	2.5	115	95	140	M8	3	JL speciaal
JL80	175	145	19	M6X16	40	6	15.5	2-M25X1.5	295	100	80	120	M6	3	130	110	160	M8	3.5	
JL90S	195	155	24	M8X19	50	8	20	2-M25X1.5	315	115	95	140	M8	3	130	110	160	M8	3.5	
JL90L	195	155	24	M8X19	50	8	20	2-M25X1.5	340	115	95	140	M8	3	130	110	160	M8	3.5	
JL100L	215	180	28	M10X22	60	8	24	2-M32X1.5	385	130	110	160	M8	3.5	165	130	200	M10	3.5	
JL112M	240	190	28	M10X22	60	8	24	2-M32X1.5	400	130	110	160	M8	3.5	165	130	200	M10	3.5	
JL132S	275	210	38	M12X28	80	10	33	2-M32X1.5	470	165	130	200	M10	3.5	215	180	250	M12	4	
JL132M	275	210	38	M12X28	80	10	33	2-M32X1.5	510	165	130	200	M10	3.5	215	180	250	M12	4	
JL160M	330	255	42	M16X36	110	12	37	2-M40X1.5	615	215	180	250	M12	4	-	-	-	-	-	
JL160L	330	255	42	M16X36	110	12	37	2-M40X1.5	670	215	180	250	M12	4	-	-	-	-	-	

## Vergelijking van de jaarlijkse kostenbesparing tussen IE2 en IE1 4-polige elektromotoren.

Elektriciteitsprijs 0,10 €/kWh

Kostenbesparing Per Motor		0.75kW	1.1kW	1.5kW	2.2kW	3kW	4kW	5.5kW	7.5kW	11kW	15kW	18.5kW
<b>2.000 uren</b>	kWh	196.02	230.63	262.82	301.25	344.42	389.08	444.25	530.92	615.27	709.29	863.20
<b>8 uur per dag</b>	€	19.60	23.06	26.28	30.12	34.44	38.91	44.43	53.09	61.53	70.93	86.32
<b>4.000 uren</b>	kWh	392.04	461.26	525.64	602.50	688.84	778.16	888.51	1,061.85	1,230.54	1,418.58	1,726.39
<b>16 uur per dag</b>	€	39.20	46.13	52.56	60.25	68.88	77.82	88.95	106.18	123.05	141.86	172.64
<b>8.760 uren</b>	kWh	858.58	1,010.16	1,151.16	1,319.47	1,508.56	1,704.17	1,945.83	2,325.45	2,694.88	3,106.68	3,780.80
<b>Continue bedrijf</b>	€	85.86	101.02	115.12	131.95	150.86	170.42	194.58	232.55	269.49	310.67	378.08
<b>Efficiency %</b>	IE1	72.1	75	77.2	79.7	81.5	83.1	84.7	86	87.6	88.7	89.3
	IE2	79.6	81.4	82.8	84.3	85.5	86.6	87.7	88.7	89.8	90.6	91.2
	IE3	82.5	84.1	85.3	86.7	87.7	88.6	89.6	90.4	91.4	92.1	92.6

Kostenbesparing Per Motor		22kW	30kW	37kW	45kW	55kW	75kW	90kW	110kW	132kW	160kW	200-375kW
<b>2.000 uren</b>	kWh	908.20	1,146.73	1,312.95	1,475.88	1,788.34	2,237.83	2,465.58	2,994.27	3,577.86	3,954.34	4,922.03
<b>8 uur per dag</b>	€	90.83	114.67	131.30	147.59	178.83	223.78	246.56	299.43	357.79	395.43	492.20
<b>4.000 uren</b>	kWh	1,816.67	2,293.47	2,625.90	2,951.76	3,576.67	4,475.66	4,931.17	5,988.53	7,155.72	7,908.67	9,844.06
<b>16 uur per dag</b>	€	181.67	229.35	262.59	295.18	357.67	447.57	493.12	598.85	715.57	790.87	984.41
<b>8.760 uren</b>	kWh	3,978.50	5,022.69	5,750.72	6,464.36	7,832.92	9,801.69	10,799.26	13,114.89	15,671.04	17,319.99	21,558.49
<b>Continue bedrijf</b>	€	397.85	502.27	575.07	646.44	783.29	980.17	1,079.93	1,311.49	1,567.10	1,732.00	2,155.85
<b>Efficiency %</b>	IE1	89.9	90.7	91.2	91.7	92.1	92.7	93	93.3	93.5	93.8	94
	IE2	91.6	92.3	92.7	93.1	93.5	94	94.2	94.5	94.7	94.9	95.1
	IE3	93	93.6	93.9	94.2	94.6	95	95.2	95.4	95.6	95.8	96

## 2 pole • 3000T/M • 50 Hz

Type	Output	Speed	Efficiency $\eta$ % (IE2)	Efficiency $\eta$ %	Power Factor cos. $\varphi$ %	In (Amps)			Tn	$I_s$ / Tn	Tmax / Tn	$I_s$ / In	Weight
	KW	r/min	100%FL	100%FL	100%FL	380V	400V	415V	Nm				(kg)
JL1-801-2	0.75	2875	77.4	77.6	0.83	1.77	1.68	1.62	2.49	2.5	3	5.30	12
JL1-802-2	1,1	2875	79,6	79,7	0,84	2,50	2,37	2,29	3,65	3,2	3,8	7,00	13,5
JL1-905-2	1,5	2890	81,3	81,6	0,84	3,32	3,16	3,04	4,96	2,7	3,5	7,10	17,5
JL1-90L-2	2.2	2890	83.2	83.3	0.85	4.72	4.48	4.32	7.27	2.4	3	6.90	22
JL1-100L-2	3	2891	84.6	84.9	0.87	6.17	5.86	5.65	9.91	3.2	4	8.00	29
JL1-112M-2	4	2914	85,8	85,9	0,88	8,04	7,64	7,36	13,11	2,5	3	7,50	32
JL1-13251-2	5.5	2937	87.0	87.1	0.86	11.2	10.6	10.2	17.88	2.7	3.5	7.50	47.5
JL1-13252-2	7.5	2940	88.1	88.4	0.88	14.6	13.9	13.4	24.36	2.4	3.3	7.50	53
JL1-160M1-2	11	2930	89.4	89.5	0.89	21.0	19.9	19.2	35.85	2.2	2.9	7.60	96
JL1-160M2-2	15	2930	90.3	90.3	0.89	28.4	26.9	26.0	48.89	2.3	3	7.60	105
JL1-160L-2	18.5	2937	90.9	91.0	0.89	34.7	33.0	31.8	60.15	2.3	3.1	7.40	115
JL1180M-2	22	2940	92,3	92,3	0,90	40,2	38,2	36,8	71.46	1.9	3	8,2	125

## 4 pole • 1500T/M • 50 Hz

Type	Output	Speed	Efficiency $\eta$ % (IE2)	Efficiency $\eta$ %	Power Factor cos. $\varphi$ %	In (Amps)			Tn	$I_s$ / Tn	Tmax / Tn	$I_s$ / In	Weight
	KW	r/min	100%FL	100%FL	100%FL	380V	400V	415V	Nm				(kg)
JL1-802-4	0,75	1400	79,6	79,8	0,76	1,88	1,78	1,72	5,12	2,4	2,9	5	14,5
JL1-905-4	1,1	1440	81.4	81,6	0,77	2,66	2,53	2,44	7,3	3	3,5	6	18,5
JL1-90L-4	1,5	1445	82,8	82,9	0,77	3,57	3,39	3,27	9,91	3,2	3,8	6.8	21
JL1-100L1-4	2,2	1440	84,3	84,5	0,81	4,88	4,64	4,47	14,6	3	3,5	7	31
JL1-100L2-4	3	1440	85,5	85,5	0,82	6,50	6,18	5,95	19,9	2,6	3,3	7	37
JL1-112M-4	4	1445	86.6	86.7	0.82	8.55	8.12	7.83	26.4	3.5	4	7.5	42
JL1-1325-4	5,5	1455	87,7	87,8	0,83	11,5	10,9	10,5	36,1	2,2	2,8	7	52,5
JL1-132M-4	7.5	1455	88.7	88.7	0.84	15.3	14.5	14.0	49.2	2.4	3	7	64
JL1-160M-4	11	1460	89,8	89,9	0,84	22,1	21,0	20,3	71,9	2,5	2,9	6,9	99
JL1-160L-4	15	1460	90,6	90,7	0,85	29,6	28,1	27,1	98,1	2,5	3	7,5	114
JL1-180M-4	18.5	1470	91.2	91.3	0.86	35.8	34.0	32.8	120.2	2.6	3.1	7.8	120
JL1-180L-4	22	1470	91,6	91,8	0,86	42,3	40,2	38,8	142,9	2,6	3,1	7,5	134

## 6 pole • 1000T/M • 50 Hz

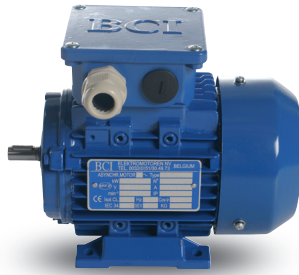
Type	Output	Speed	Efficiency $\eta$ % (IE2)	Efficiency $\eta$ %	Power Factor cos. $\varphi$ %	In (Amps)			Tn	$I_s$ / Tn	Tmax / Tn	$I_s$ / In	Weight
	KW	r/min	100%FL	100%FL	100%FL	380V	400V	415V	Nm				(kg)
JL1-905-6	0.75	934	75.9	76.1	0.72	2.08	1.98	1.90	7.67	2.2	2.4	4.5	18.5
JL1-90L-6	1,1	945	78,1	78,1	0,72	2,97	2,82	2,72	11,1	2,4	2,6	4,5	21
JL1-100L-6	1,5	945	79,8	79,9	0,75	3,80	3,61	3,48	15,2	1,8	2,2	4,2	28,5
JL1-112M-6	2.2	960	81,8	81,9	0,76	5,37	5,10	4,92	21,9	2,3	2,8	4,5	33,5
JL1-1325-6	3	964	83.3	83.4	0.76	7.19	6.83	6.58	29.7	1.8	2.4	4.5	44
JL1-132M1-6	4	965	84,6	84,8	0,76	9,43	8,96	8,63	39,6	2,3	2,7	5	53
JL1-132M2-6	5.5	965	86,0	86,2	0,77	12,6	12,0	11,5	54,4	1,9	2,8	5.5	63,5
JL1-160M-6	7.5	970	87.2	87.3	0.78	16.7	15.9	15.3	73.8	2	3	6.5	100
JL1-160L-6	11	970	88,7	88,8	0,78	24,1	22,9	22,1	108,3	2,4	3,3	7,5	113
JL1-180L-6	15	975	89,7	89,7	0,81	31,4	29,8	28,7	146,9	2	2,7	6,4	126

In= Full Load Current  $I_s$ =Locked Rotor Current  $T_s$ =Locked Rotor Torque **Tmax**= Maximum Torque **Tn**= Full Load Torque  $T_s/T_n$ : ratio of locked rotor torque and rated torque **Tmax/Tn**: ratio of break-down torque and rated torque  $I_s/I_n$ : ratio of locked rotor amps and rated amps

# JL180 -160 IE2



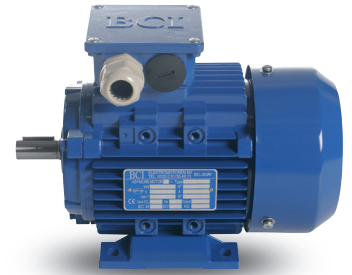
JL156



JL163

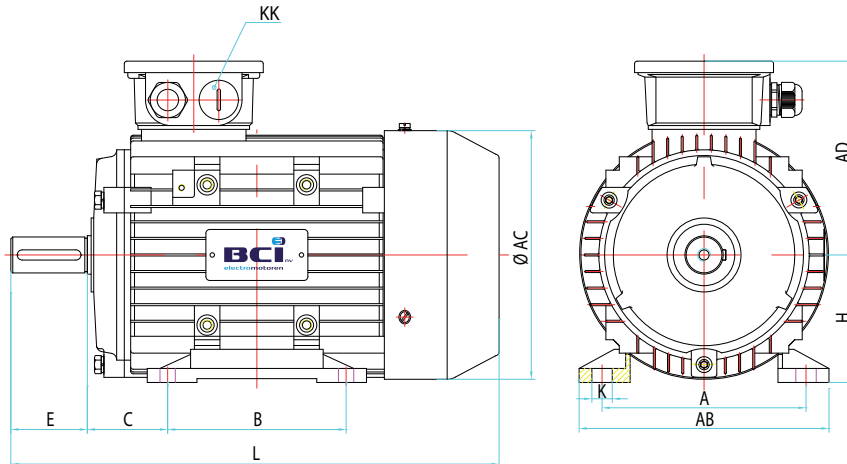


JL171

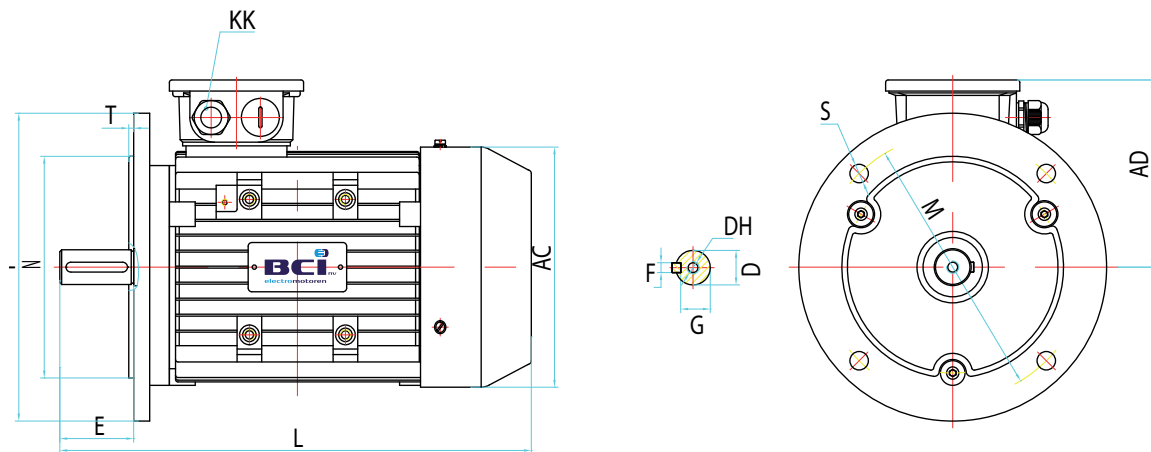


JL180

## B3

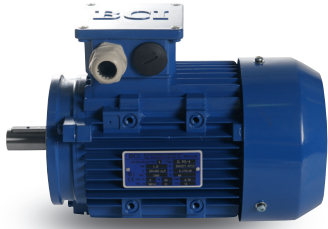


## B5

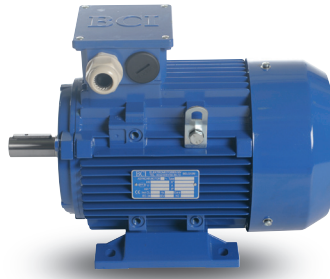


FRAME	B3															B5				
	A	AB	AC	AD	B	C	D	DH	E	F	G	H	K	KK Metric	L	M	N	P	S	T
80	125	157	158	129	100	50	19	M6X16	40	6	15.5	80	10X14	1-M25X1,5	290	165	130	200	12	3.5
90S	140	173	175	140	100	56	24	M8X19	50	8	20	90	10X14	1-M25X1,5	325	165	130	200	12	3.5
90L	140	173	175	140	125	56	24	M8X19	50	8	20	90	10X14	1-M25X1,5	350	165	130	200	12	3.5
100L	160	196	198	156	140	63	28	M10X22	60	8	24	100	12X16	1-M32X1,5	398	215	180	250	14.5	4
112M	190	227	219	166	140	70	28	M10X22	60	8	24	112	12X16	2-M32X1,5	447	215	180	250	14.5	4
132S	216	262	258	188	140	89	38	M12X28	80	10	33	132	12X16	2-M32X1,5	475	265	230	300	14.5	4
132M	216	262	258	188	178	89	38	M12X28	80	10	33	132	12X16	2-M32X1,5	513	265	230	300	14.5	4
160M	254	304	315	242	210	108	42	M16X36	110	12	37	160	15X18	2-M40X1,5	609	300	250	350	18.5	5
160L	254	304	315	242	254	108	42	M16X36	110	12	37	160	15x18	2-M40X1,5	653	300	250	350	18.5	5
180M	279	350	355	272	241	121	48	M16X36	110	14	42,5	180	15X18	2-M40X1,5	727	300	250	350	18.5	5
180L	279	350	355	272	279	121	48	M16X36	110	14	42,5	180	15x18	2-M40X1,5	765	300	250	350	18.5	5

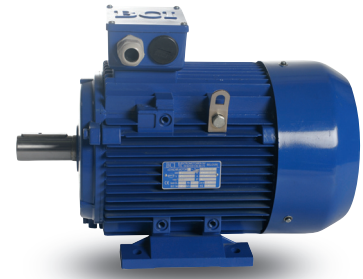
# JL1 80 -160 IE2



JL190

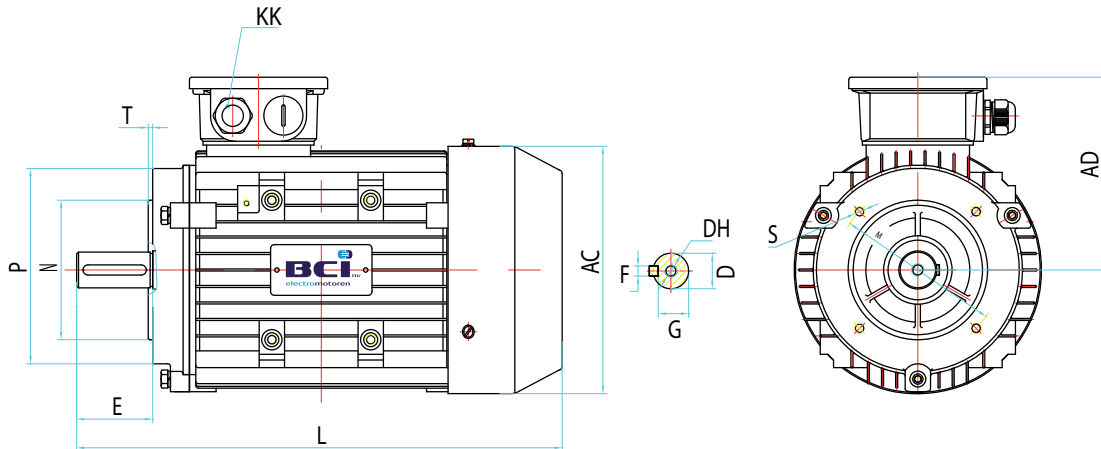


JL1112

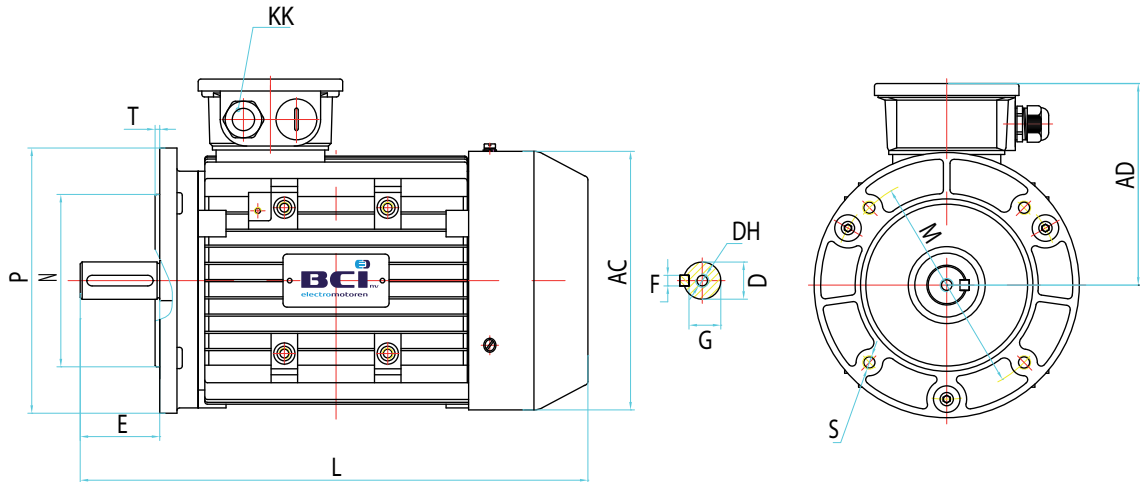


JL1132

## B14A



## B14B



FRAME											B14A					B14B				
	AC	AD	D	DH	E	F	G	KK	METRIC	L	M	N	P	S	T	M	N	P	S	T
80	158	129	19	M6X16	40	6	15.5	1-M25X1.5	290	100	80	120	M6	3	130	110	160	M8	3.5	
90S	175	140	24	M8X19	50	8	20	1-M25X1.5	325	115	95	140	M8	3	130	110	160	M8	3.5	
90L	175	140	24	M8X19	50	8	20	1-M25X1.5	350	115	95	140	M8	3	130	110	160	M8	3.5	
100L	198	156	28	M10X22	60	8	24	1-M32X1.5	398	130	110	160	M8	3.5	165	130	200	M10	3.5	
112M	219	166	28	M10X22	60	8	24	2-M32X1.5	447	130	110	160	M8	3.5	165	130	200	M10	3.5	
132S	258	188	38	M12X28	80	10	33	2-M32X1.5	475	165	130	200	M10	3.5	215	180	250	M12	4	
132M	258	188	38	M12X28	80	10	33	2-M32X1.5	513	165	130	200	M10	3.5	215	180	250	M12	4	
160M	315	242	42	M16X36	110	12	37	2-M40X1.5	609	215	180	250	M12	4	265	230	300	M12	4	
160L	315	242	42	M16X36	110	12	37	2-M40X1.5	653	215	180	250	M12	4	265	230	300	M12	4	