

Motors for use in powered smoke and heat exhaust ventilators – Fire gas version

Motor selection data, 50 Hz, 2- up to 8-pole
3000/1500/1000/750 rpm

Series

K21R/K11R/K22R

mounting dimensions and output correlation acc. to DIN EN 50347

Sizes

56 – 355

Output range

0.09 – 450 kW

Degree of protection

IP 55 acc. to DIN EN 60034-5

Cooling method

IC 411 acc. to DIN EN 60034-6

Types of construction

IM B3, IM B35, IM B5 and derived types of construction acc. to DIN EN 60034-7

Ambient temperatures

-40 °C up to +40 °C

Fire gas classification

in accordance to DIN EN 12101-3,

F200, F300, F400 and F600

The motor version is certified by a Sample Test Certificate
or a Declaration of Incorporation.

Three-phase motors with squirrel-cage rotor for use in mechanical smoke and heat exhaust ventilators acc. to EN 12101-3, class F200

load period and fire gas temperature 2 h 200 °C

with surface ventilation, mode of operation S1, continuous duty

insulation class H, degree of protection IP 55, Cooling method IC 411 (IC 418)

Motor selection data

Design point 400 V, 50 Hz

Type		P	n	η	cos φ	I	I _A /I _N	M _A /M _N	M _S /M _N	M _K /M _N	at IC 418 ≥			
		kW	rpm	%	-	A	-	-	-	-	v	Q _{air}	J	m
											m/s	m³/min	kgm²	kg
Synchronous speed 3000 rpm – 2-pole version														
K21R 71 K2	K20R 63 K2	0.25									11.7		0.00025	6.7
K21R 71 G2	K20R 63 G2	0.37									11.7		0.00032	7.6
K21R 80 K2	K20R 71 K2	0.55									11.2		0.00057	10.7
K21R 80 G2	K20R 71 G2	0.75									11.2		0.00072	11.5
K21R 90 S2	K20R 80 K2	1.1									17.0		0.00132	16.0
K21R 90 L2	K20R 80 G2	1.5									17.0		0.0017	19.0
K21R 100 L2	K20R 90 L2	2.2									19.8		0.00275	25.0
K21R 112 M2	K20R 100 S2	3.0									20.9		0.0045	32
K21R 132 S2 T	K20R 100 L2	4.0									20.9		0.0055	40
K21R 132 SX2 T	K20R 100 LV2	5.5									20.9		0.0068	48
K11R 132 S2	K10R 112 MY2	5.5	2860	85.7	0.86	11	5.5	1.8	1.6	2.2	18.0	6	0.0081	52
K11R 132 SX2	K10R 112 M2	7.5	2900	87.0	0.86	14.5	6.6	1.8	1.3	2.5	18.0	6	0.0110	57
K11R 160 M2	K10R 132 M2	11.0	2900	88.5	0.90	20	7.0	2.4	2.0	3.0	19.0	7	0.0258	81
K11R 160 MX2	K10R 160 S2	15.0	2930	89.4	0.90	27	7.1	2.2	1.7	2.9	19.0	12	0.0575	118
K11R 160 L2	K10R 160 M2	18.5	2920	90.5	0.92	32	7.2	2.1	1.6	2.8	19.0	12	0.0675	134
K11R 180 M2	K10R 180 S2	22	2935	91.8	0.92	37.5	6.8	1.7	1.4	2.6	20.0	14	0.105	165
K11R 200 L2	K10R 180 M2	30	2940	92.8	0.92	50.5	7.3	2.0	1.6	2.9	21.0	14	0.128	195
K11R 200 LX2	K10R 200 M2	37	2940	93.0	0.90	64	7.0	1.8	1.3	2.4	21.0	16	0.193	255
K11R 225 M2	K10R 200 L2	45	2940	93.7	0.91	76	7.5	1.8	1.4	2.7	22.0	16	0.220	290
K11R 250 M2	K10R 225 M2	55	2955	93.7	0.91	93	7.5	2.0	1.5	2.6	23.0	22	0.375	360
K11R 280 S2	K10R 250 S2	75	2970	94.6	0.92	124	7.5	2.0	1.6	2.6	23.0	25	0.650	490
K11R 280 M2	K10R 250 M2	90	2970	94.7	0.91	151	8.5	2.2	1.8	2.8	23.0	25	0.675	510
K11R 315 S2	K10R 280 S2	110	2975	95.4	0.91	183	8.5	1.5	1.3	2.5	23.0	27	1.21	720
K11R 315 M2	K10R 280 M2	132	2975	95.4	0.91	219	8.5	2.0	1.8	2.7	23.0	27	1.44	800
K11R 315 MX2	K10R 315 S2	160	2975	96.0	0.93	259	8.5	2.0	1.6	2.6	23.0	27	1.76	980
K11R 315 MY2	K10R 315 M2	200	2970	96.0	0.92	327	8.2	2.6	2.0	2.6	23.0	27	2.82	1170
K11R 315 L2	K10R 315 L2	250	2973	96.1	0.93	404	7.3	2.1	1.4	2.0	23.0	27	3.66	1460
K11R 315 LX2	K10R 315 LX2	315	2975	96.7	0.92	511	7.4	2.4	1.4	2.0	23.0	27	4.43	1630
K22R 355 M2		355	2980	96.5	0.91	584	7.3	1.3	1.0	2.3	23.0	75	4.20	2000
K22R 355 MX2		400	2985	96.7	0.90	663	8.5	1.9	1.3	3.2	23.0	75	5.50	2200
K22R 355 LY2		450	2983	96.7	0.92	729	7.2	1.3	1.0	2.4	23.0	75	7.10	2400
K22R 355 L2		500	2985	97	0.92	809	8.2	1.8	0.9	2.6	23.0	75	7.10	2400

Synchronous speed 1500 rpm – 4-pole version

K21R 71 K4	K20R 63 K4	0.18									5.2		0.00040	6.8
K21R 71 G4	K20R 63 G4	0.25									5.2		0.00050	7.8
K21R 80 K4	K20R 71 K4	0.37									5.4		0.00087	10.6
K21R 80 G4	K20R 71 G4	0.55									5.4		0.00107	11.7
K21R 90 S4	K20R 80 K4	0.75									8.1		0.00207	15.5
K21R 90 L4	K20R 80 G4	1.1									8.1		0.00260	18.0
K21R 100 L4	K20R 90 L4	1.5									9.3		0.00400	23.5
K21R 100 LX4	K20R 100 S4	2.2									10.9		0.00725	30
K21R 112 M4	K20R 100 L4	3.0									10.9		0.00900	37
K21R 132 S4 T	K20R 100 LX4	4.0									10.9		0.01100	47
K11R 132 S4	K10R 112 M4	5.5	1440	85.7	0.89	11.0	6.5	1.9	1.7	3.0	12.0	4	0.01500	50
K11R 132 M4	K10R 132 S4	7.5	1450	87.0	0.84	15	6.0	2.0	1.7	2.9	12.0	6	0.0280	70
K11R 160 M4	K10R 132 M4	11.0	1450	88.4	0.85	21	6.8	2.2	1.9	3.3	12.5	6	0.0350	92
K11R 160 L4	K10R 160 S4	15.0	1465	89.4	0.86	28	7.3	2.5	2.0	3.0	12.5	10	0.0780	120
K11R 180 M4	K10R 160 M4	18.5	1460	90.0	0.86	34.5	6.8	2.5	2.0	2.9	13.5	10	0.0900	136
K11R 180 L4	K10R 180 S4	22	1465	90.5	0.84	42	6.5	2.0	1.8	2.6	13.5	11	0.1380	170
K11R 200 L4	K10R 180 M4	30	1465	91.5	0.85	55.5	7.0	2.0	1.7	2.4	14.0	11	0.1680	200
K11R 225 S4	K10R 200 M4	37	1470	92.5	0.86	67	7.0	2.0	1.7	2.5	14.5	15	0.2750	270
K11R 225 M4	K10R 200 L4	45	1470	93.0	0.86	81	7.0	2.0	1.7	2.5	14.5	15	0.3130	300
K11R 250 M4	K10R 225 M4	55	1475	93.5	0.86	98.5	7.0	2.2	1.7	2.3	15.0	21	0.5250	375
K11R 280 S4	K10R 250 S4	75	1480	94.1	0.86	134	7.0	2.0	1.7	2.2	20.0	32	0.9500	520
K11R 280 M4	K10R 250 M4	90	1480	94.6	0.86	160	7.0	2.1	1.6	2.2	20.0	32	1.10	580
K11R 315 S4	K10R 280 S4	110	1485	95.1	0.86	194	7.5	1.8	1.6	2.2	20.0	45	1.96	740
K11R 315 M4	K10R 280 M4	132	1485	95.1	0.86	233	7.0	1.8	1.5	2.2	20.0	45	2.27	840
K11R 315 MX4	K10R 315 S4	160	1480	95.0	0.87	279	7.0	1.8	1.5	2.0	20.0	45	2.73	1000
K11R 315 MY4	K10R 315 M4	200	1485	96.0	0.88	342	7.5	2.0	1.8	2.4	20.0	45	4.82	1200
K11R 315 L4	K10R 315 L4	250	1485	96.1	0.90	417	8.0	2.0	1.6	2.3	20.0	45	5.93	1510
K11R 315 LX4	K10R 315 LX4	315	1490	96.5	0.88	535	8.6	1.9	1.5	2.5	20.0	45	6.82	1630
K22R 355 M4		355	1490	96.5	0.84	630	8.1	1.8	1.0	3.1	20.0	72	7.9	2150
K22R 355 MX4		400	1494	96.7	0.84	710	8.6	1.3	1.0	3.0	20.0	72	9.5	2400
K22R 355 LY4		450	1490	96.7	0.82	818	8.0	1.2	1.0	3.0	20.0	81	10.00	2500
K22R 355 L4		500	1490	96.4	0.79	945	7.9	1.9	1.0	3.6	20.0	81	10.00	2500

Three-phase motors with squirrel-cage rotor for use in mechanical smoke and heat exhaust ventilators acc. to EN 12101-3, class F200

load period and fire gas temperature 2 h 200 °C

with surface ventilation, mode of operation S1, continuous duty

insulation class H, degree of protection IP 55, Cooling method IC 411 (IC 418)

Motor selection data

Design point 400 V, 50 Hz

											at IC 418 ≥			
Type		P	n	η	cos φ	I	I _A /I _N	M _A /M _N	M _S /M _N	M _K /M _N	v	Q _{air}	J	m
		kW	rpm	%	-	A	-	-	-	-	m/s	m³/min	kgm²	kg
Synchronous speed 1000 rpm – 6-pole version														
K21R 71 K6	K20R 63 K6	0.12									3.6		0.00045	7.4
K21R 71 G6	K20R 63 G6	0.18									3.6		0.00060	8.3
K21R 80 K6	K20R 71 K6	0.25									4.2		0.00130	11.0
K21R 80 G6	K20R 71 G6	0.37									4.2		0.00175	12.5
K21R 90 S6	K20R 80 K6	0.55									5.2		0.00325	16.0
K21R 90 L6	K20R 80 G6	0.75									5.2		0.00425	19.0
K21R 100 L6	K20R 90 L6	1.1									5.7		0.00625	24.0
K21R 112 M6	K20R 100 L6	1.5									6.3		0.01225	33.5
K21R 132 S6T	K20R 100 LX6	2.2									6.3		0.0139	39
K11R 132 S6	K10R 112 M6	3.0	955	78.2	0.82	6.8	5.7	1.8	1.6	2.7	9.5	3	0.0180	46
K11R 132 M6	K10R 112 MX6	4.0	955	80.0	0.80	9	6.0	2.2	2.0	3.1	9.5	3	0.0230	53
K11R 132 MX6	K10R 132 S6	5.5	955	83.0	0.83	11.5	5.0	1.8	1.5	2.3	9.5	4	0.0430	70
K11R 160 M6	K10R 132 M6	7.5	960	85.0	0.82	15.5	5.5	2.0	1.6	2.5	10.5	4	0.0530	86
K11R 160 L6	K10R 160 S6	11.0	965	85.2	0.86	21.5	5.0	2.0	1.7	2.3	10.5	5	0.1130	114
K11R 180 L6	K10R 160 M6	15.0	965	86.0	0.83	30.5	6.0	2.4	2.1	2.7	11.0	5	0.1450	136
K11R 200 L6	K10R 180 S6	18.5	970	88.1	0.87	35	5.5	2.0	1.7	2.4	11.5	8	0.2280	175
K11R 200 LX6	K10R 180 M6	22	970	88.8	0.87	41	6.2	2.2	1.8	2.6	11.5	8	0.2680	200
K11R 225 M6	K10R 200 M6	30	973	90.4	0.89	54	6.5	2.2	1.7	2.5	12.0	10	0.4430	265
K11R 250 M6	K10R 225 M6	37	975	91.0	0.89	66	6.5	2.2	1.7	2.3	12.5	14	0.8250	360
K11R 280 S6	K10R 250 S6	45	980	92.0	0.87	81	6.0	2.0	1.5	2.0	15.0	21	1.28	465
K11R 280 M6	K10R 250 M6	55	980	92.5	0.88	97.5	6.5	2.3	1.7	2.4	15.0	21	1.48	520
K11R 315 S6	K10R 280 S6	75	985	93.7	0.87	133	7.0	2.0	1.6	2.4	20.0	30	2.63	690
K11R 315 M6	K10R 280 M6	90	990	94.4	0.88	156	7.0	2.0	1.7	2.4	20.0	30	3.33	800
K11R 315 MX6	K10R 315 S6	110	990	94.0	0.88	192	7.5	2.2	1.7	2.6	20.0	30	3.60	880
K11R 315 MY6	K10R 315 M6	132	990	95.0	0.88	228	7.5	2.0	1.7	2.4	20.0	30	6.00	1050
K11R 315 L6	K10R 315 L6	160	985	95.3	0.89	272	7.5	2.3	1.9	2.4	20.0	30	6.67	1250
K11R 315 LX6	K10R 315 LX6	200	990	95.0	0.87	349	8.3	2.2	2.0	2.7	20.0	30	8.6	1460
K22R 355 M6		250	994	95.7	0.81	464	7.0	1.8	1.3	2.3	20.0	54	8.2	1650
K22R 355 MX6		315	995	96.5	0.83	568	6.8	1.6	1.3	2.5	20.0	54	12.1	2200
K22R 355 LY6		355	995	95.8	0.78	684	7.4	1.9	1.4	2.6	20.0	54	14.0	2400

Synchronous speed 750 rpm – 8-pole version

K21R 71 K8	K20R 63 K8	0.06									2.6		0.00050	6.6
K21R 71 G8	K20R 63 G8	0.09									2.6		0.00060	8.1
K21R 80 K8	K20R 71 K8	0.12									2.6		0.00130	10.5
K21R 80 G8	K20R 71 G8	0.18									2.6		0.00175	12.0
K21R 90 S8	K20R 80 K8	0.25									4.0		0.00300	15.0
K21R 90 L8	K20R 80 G8	0.37									4.0		0.00375	18.0
K21R 100 L8	K20R 90 L8	0.55									4.8		0.00625	23.0
K21R 100 LX8	K20R 100 S8	0.75									5.1		0.00900	28.0
K21R 112 M8	K20R 100 L8	1.1									5.1		0.01225	33.5
K21R 132 S8T	K20R 100 LX8	1.5									5.1		0.01390	39.0
K11R 132 S8	K10R 112 M8	2.2	705	75.5	0.76	5.5	4.5	1.7	1.6	2.3	8.0	2	0.01800	46
K11R 132 M8	K10R 112 MX8	3.0	705	78.0	0.75	7.4	4.5	1.7	1.6	2.3	8.0	2	0.0230	53
K11R 160 M8	K10R 132 S8	4.0	710	79.3	0.78	9.3	4.0	1.6	1.3	1.9	8.5	3	0.0430	70
K11R 160 MX8	K10R 132 M8	5.5	710	81.4	0.78	12.5	4.5	1.7	1.6	2.1	8.5	3	0.0530	86
K11R 160 L8	K10R 160 S8	7.5	725	83.0	0.78	16.5	4.5	1.8	1.6	2.1	8.5	4	0.1130	114
K11R 180 L8	K10R 160 M8	11.0	720	85.0	0.78	24	4.5	2.0	1.7	2.1	9.0	4	0.1450	136
K11R 200 L8	K10R 180 S8	15.0	725	86.5	0.79	31.5	5.0	2.0	1.7	2.3	9.5	6	0.228	175
	K10R 180 M8	18.5	725	87.5	0.80	38	5.0	1.9	1.7	2.2	9.5	8	0.268	200
K11R 225 S8		18.5	725	89.2	0.83	36	5.5	2.0	1.6	2.2	10.0	8	0.440	265
K11R 225 M8	K10R 200 M8	22	725	89.2	0.84	42.5	5.0	1.8	1.5	2.2	10.0	11	0.440	265
K11R 250 M8	K10R 225 M8	30	730	90.2	0.79	61	5.5	2.2	1.8	2.2	10.5	16	0.825	360
K11R 280 S8	K10R 250 S8	37	735	91.0	0.80	73.5	5.5	2.0	1.5	2.0	15.0	16	1.35	465
K11R 280 M8	K10R 250 M8	45	735	91.5	0.77	92	6.0	2.3	1.8	2.4	15.0	16	1.55	520
K11R 315 S8	K10R 280 S8	55	740	93.1	0.80	107	6.5	1.8	1.6	2.3	15.0	21	2.63	690
K11R 315 M8	K10R 280 M8	75	740	93.3	0.81	143	6.0	2.0	1.6	2.3	15.0	21	3.33	800
K11R 315 MX8	K10R 315 S8	90	740	93.5	0.81	172	6.0	1.9	1.6	2.2	15.0	21	3.60	880
K11R 315 MY8	K10R 315 M8	110	740	94.6	0.81	207	6.5	2.1	1.8	2.4	15.0	21	6.00	1050
K11R 315 L8	K10R 315 L8	132	740	95.0	0.83	242	6.3	2.0	1.7	2.1	15.0	21	6.76	1250
K11R 315 LX8	K10R 315 LX8	160	740	95.2	0.79	307	7.2	2.2	1.9	2.5	15.0	21	8.71	1430
K22R 355 M8		200	743	95.3	0.77	392	6.5	1.6	1.0	2.7	15.0	40	9.5	1600
K22R 355 MX8		250	744	95.6	0.78	483	6.6	1.3	1.0	2.8	15.0	40	13.4	2200
K22R 355 LY8		280	744	95.1	0.78	544	8.2	1.2	1.0	2.8	15.0	40	15.8	2400

Three-phase motors with squirrel-cage rotor for use in mechanical smoke and heat exhaust ventilators acc. to EN 12101-3, class F300

load period and fire gas temperature 1 h 300 °C

with surface ventilation, mode of operation S1, continuous duty

insulation class H, degree of protection IP 55, Cooling method IC 411 (IC 418)

Motor selection data

Design point 400 V, 50 Hz

Type		P	n	η	cos φ	I	I _A /I _N	M _A /M _N	M _S /M _N	M _K /M _N	at IC 418 ≥		J	m
		kW	rpm	%	-	A	-	-	-	-	v	Q _{air}	kgm ²	kg
Synchronous speed 3000 rpm – 2-pole version														
K21R 71 K2	K20R 63 K2	0.25									11.7		0.00025	6.7
K21R 71 G2	K20R 63 G2	0.37									11.7		0.00032	7.6
K21R 80 K2	K20R 71 K2	0.55									11.2		0.00057	10.7
K21R 80 G2	K20R 71 G2	0.75									11.2		0.00072	11.5
K21R 90 S2	K20R 80 K2	1.1									17.0		0.00132	16.0
K21R 90 L2	K20R 80 G2	1.5									17.0		0.0017	19.0
K21R 100 L2	K20R 90 L2	2.2									19.8		0.00275	25.0
K21R 112 M2	K20R 100 S2	3.0									20.9		0.0045	32
K21R 132 S2 T	K20R 100 L2	4.0									20.9		0.0055	40
K21R 132 SX2 T	K20R 100 LV2	5.5									20.9		0.0068	48
K11R 132 S2	K10R 112 MY2	4	2860	85.5	0.86	8.0	5.5	1.8	1.6	2.2	18.0	6	0.0081	52
K11R 132 SX2	K10R 112 M2	5.5	2900	87.0	0.86	10.5	6.6	1.8	1.3	2.5	18.0	6	0.0110	57
K11R 160 M2	K10R 132 M2	7.5	2900	88.5	0.90	13.5	7.0	2.4	2.0	3.0	19.0	7	0.0258	81
K11R 160 MX2	K10R 160 S2	11.0	2930	89.0	0.90	20	7.1	2.2	1.7	2.9	19.0	12	0.0575	118
K11R 160 L2	K10R 160 M2	15.0	2920	90.5	0.92	26	7.2	2.1	1.6	2.8	19.0	12	0.0675	134
K11R 180 M2	K10R 180 S2	18.5	2935	91.5	0.92	32	6.8	1.7	1.4	2.6	20.0	14	0.105	165
K11R 200 L2	K10R 180 M2	22	2940	92.5	0.92	37	7.3	2.0	1.6	2.9	21.0	14	0.128	195
K11R 200 LX2	K10R 200 M2	30	2940	93.0	0.90	52	7.0	1.8	1.3	2.4	21.0	16	0.193	255
K11R 225 M2	K10R 200 L2	37	2940	93.5	0.91	63	7.5	1.8	1.4	2.7	22.0	16	0.220	290
K11R 250 M2	K10R 225 M2	45	2955	93.5	0.91	76	7.5	2.0	1.5	2.6	23.0	22	0.375	360
K11R 280 S2	K10R 250 S2	55	2970	94.5	0.92	92	7.5	2.0	1.6	2.6	23.0	25	0.650	490
K11R 280 M2	K10R 250 M2	75	2970	94.5	0.91	126	8.5	2.2	1.8	2.8	23.0	25	0.675	510
K11R 315 S2	K10R 280 S2	90	2975	95.4	0.91	150	8.5	1.5	1.3	2.5	23.0	27	1.21	720
K11R 315 M2	K10R 280 M2	110	2975	95.4	0.91	185	8.5	2.0	1.8	2.7	23.0	27	1.44	800
K11R 315 MX2	K10R 315 S2	132	2975	96.0	0.93	215	8.5	2.0	1.6	2.6	23.0	27	1.76	980
K11R 315 MY2	K10R 315 M2	160	2970	96.0	0.92	265	8.2	2.6	2.0	2.6	23.0	27	2.82	1170
K11R 315 L2	K10R 315 L2	200	2973	96.0	0.93	325	7.3	2.1	1.4	2.0	23.0	27	3.66	1460
K11R 315 LX2	K10R 315 LX2	250	2975	96.5	0.92	410	7.4	2.4	1.4	2.0	23.0	27	4.43	1630
K22R 355 M2		300	2980	96.5	0.91	584	7.3	1.3	1.0	2.3	23.0	75	4.20	2000
K22R 355 MX2		340	2985	96.7	0.90	564	8.5	1.9	1.3	3.2	23.0	75	5.50	2200
K22R 355 LY2		380	2983	96.7	0.92	617	7.2	1.3	1.0	2.4	23.0	75	7.10	2400
K22R 355 L2		420	2985	97	0.92	679	8.2	1.8	0.9	2.6	23.0	75	7.10	2400

Three-phase motors with squirrel-cage rotor for use in mechanical smoke and heat exhaust ventilators acc. to EN 12101-3, class F300

load period and fire gas temperature 1 h 300 °C

with surface ventilation, mode of operation S1, continuous duty

insulation class H, degree of protection IP 55, Cooling method IC 411 (IC 418)

Motor selection data

Design point 400 V, 50 Hz

Type		at IC 418 ≥												
		P kW	n rpm	η %	cos φ -	I A	I _A /I _N -	M _A /M _N -	M _S /M _N -	M _K /M _N -	v m/s	Q _{air} m³/min	J kgm²	m kg
Synchronous speed 1500 rpm – 4-pole version														
K21R 71 K4	K20R 63 K4	0.18									5.2		0.00040	6.8
K21R 71 G4	K20R 63 G4	0.25									5.2		0.00050	7.8
K21R 80 K4	K20R 71 K4	0.37									5.4		0.00087	10.6
K21R 80 G4	K20R 71 G4	0.55									5.4		0.00107	11.7
K21R 90 S4	K20R 80 K4	0.75									8.1		0.00207	15.5
K21R 90 L4	K20R 80 G4	1.10									8.1		0.00260	18.0
K21R 100 L4	K20R 90 L4	1.5									9.3		0.00400	23.5
K21R 100 LX4	K20R 100 S4	2.2									10.9		0.00725	30
K21R 112 M4	K20R 100 L4	3									10.9		0.00900	37
K21R 112 MX4	K20R 100 L4	4									10.9		0.00900	37
K21R 132 S4 T	K20R 100 LX4	4									10.9		0.01100	47
K11R 132 S4	K10R 112 M4	4	1440	85.7	0.89	7.5	6.5	1.9	1.7	3.0	12.0	4	0.01500	50
K11R 132 M4	K10R 132 S4	5.5	1450	87.0	0.84	11	6.0	2.0	1.7	2.9	12.0	6	0.0280	70
K11R 160 M4	K10R 132 M4	7.5	1450	88.4	0.85	14.5	6.8	2.2	1.9	3.3	12.5	6	0.0350	92
K11R 160 L4	K10R 160 S4	11.0	1465	89.4	0.86	21	7.3	2.5	2.0	3.0	12.5	10	0.0780	120
K11R 180 M4	K10R 160 M4	15.0	1460	90.0	0.86	28	6.8	2.5	2.0	2.9	13.5	10	0.0900	136
K11R 180 L4	K10R 180 S4	18.5	1465	90.5	0.84	35	6.5	2.0	1.8	2.6	13.5	11	0.1380	170
K11R 200 L4	K10R 180 M4	22	1465	91.5	0.85	41	7.0	2.0	1.7	2.4	14.0	11	0.1680	200
K11R 225 S4	K10R 200 M4	30	1470	92.5	0.86	54	7.0	2.0	1.7	2.5	14.5	15	0.2750	270
K11R 225 M4	K10R 200 L4	37	1470	93.0	0.86	67	7.0	2.0	1.7	2.5	14.5	15	0.3130	300
K11R 250 M4	K10R 225 M4	45	1475	93.5	0.86	81	7.0	2.2	1.7	2.3	15.0	21	0.5250	375
K11R 280 S4	K10R 250 S4	55	1480	94.1	0.86	98	7.0	2.0	1.7	2.2	20.0	32	0.9500	520
K11R 280 M4	K10R 250 M4	75	1480	94.6	0.86	133	7.0	2.1	1.6	2.2	20.0	32	1.10	580
K11R 315 S4	K10R 280 S4	90	1485	95.1	0.86	159	7.5	1.8	1.6	2.2	20.0	45	1.96	740
K11R 315 M4	K10R 280 M4	110	1485	95.1	0.86	194	7.0	1.8	1.5	2.2	20.0	45	2.27	840
K11R 315 MX4	K10R 315 S4	132	1480	95.0	0.87	231	7.0	1.8	1.5	2.0	20.0	45	2.73	1000
K11R 315 MY4	K10R 315 M4	160	1485	96.0	0.88	273	7.5	2.0	1.8	2.4	20.0	45	4.82	1200
K11R 315 L4	K10R 315 L4	200	1485	96.1	0.90	334	8.0	2.0	1.6	2.3	20.0	45	5.93	1510
K11R 315 LX4	K10R 315 LX4	250	1490	96.5	0.88	425	8.6	1.9	1.5	2.5	20.0	45	6.82	1630
K22R 355 M4		300	1490	96.5	0.84	534	8.1	1.8	1.0	3.1	20.0	72	7.9	2150
K22R 355 MX4		340	1494	96.7	0.84	604	8.6	1.3	1.0	3.0	20.0	72	9.5	2400
K22R 355 LY4		380	1490	96.7	0.82	692	8.0	1.2	1.0	3.0	20.0	81	10.00	2500
K22R 355 L4		420	1490	96.4	0.79	796	7.9	1.9	1.0	3.6	20.0	81	10.00	2500

Three-phase motors with squirrel-cage rotor for use in mechanical smoke and heat exhaust ventilators acc. to EN 12101-3, class F300

load period and fire gas temperature 1 h 300 °C

with surface ventilation, mode of operation S1, continuous duty

insulation class H, degree of protection IP 55, Cooling method IC 411 (IC 418)

Motor selection data

Design point 400 V, 50 Hz

											at IC 418 ≥			
Type		P	n	η	cos φ	I	I _A /I _N	M _A /M _N	M ₂ /M _N	M _K /M _N	v	Q _{air}	J	m
		kW	rpm	%	-	A	-	-	-	-	m/s	m³/min	kgm²	kg
Synchronous speed 1000 rpm – 6-pole version														
K21R 71 K6	K20R 63 K6	0.12									3.6		0.00045	7.4
K21R 71 G6	K20R 63 G6	0.18									3.6		0.00060	8.3
K21R 80 K6	K20R 71 K6	0.25									4.2		0.00130	11.0
K21R 80 G6	K20R 71 G6	0.37									4.2		0.00175	12.5
K21R 90 S6	K20R 80 K6	0.55									5.2		0.00325	16.0
K21R 90 L6	K20R 80 G6	0.75									5.2		0.00425	19.0
K21R 100 L6	K20R 90 L6	1.10									5.7		0.00625	24.0
K21R 112 M6	K20R 100 L6	1.5									6.3		0.01225	33.5
K21R 132 S6T	K20R 100 LX6	2.2									6.3		0.0139	39
K11R 132 S6	K10R 112 M6	2.2	955	78.2	0.82	5	5.7	1.8	1.6	2.7	9.5	3	0.0180	46
K11R 132 M6	K10R 112 MX6	3.0	955	80.0	0.80	7	6.0	2.2	2.0	3.1	9.5	3	0.0230	53
K11R 132 MX6	K10R 132 S6	4.0	955	83.0	0.83	8.5	5.0	1.8	1.5	2.3	9.5	4	0.0430	70
K11R 160 M6	K10R 132 M6	5.5	960	85.0	0.82	11.5	5.5	2.0	1.6	2.5	10.5	4	0.0530	86
K11R 160 L6	K10R 160 S6	7.5	965	85.2	0.86	15	5.0	2.0	1.7	2.3	10.5	5	0.1130	114
K11R 180 L6	K10R 160 M6	11.0	965	86.0	0.83	22	6.0	2.4	2.1	2.7	11.0	5	0.1450	136
K11R 200 L6	K10R 180 S6	15.0	970	88.1	0.87	28	5.5	2.0	1.7	2.4	11.5	8	0.2280	175
K11R 200 LX6	K10R 180 M6	18.5	970	88.8	0.87	35	6.2	2.2	1.8	2.6	11.5	8	0.2680	200
K11R 225 M6	K10R 200 M6	22	973	90.4	0.89	40	6.5	2.2	1.7	2.5	12.0	10	0.4430	265
K11R 250 M6	K10R 225 M6	30	975	91.0	0.89	54	6.5	2.2	1.7	2.3	12.5	14	0.8250	360
K11R 280 S6	K10R 250 S6	37	980	92.0	0.87	67	6.0	2.0	1.5	2.0	15.0	21	1.28	465
K11R 280 M6	K10R 250 M6	45	980	92.5	0.88	80	6.5	2.3	1.7	2.4	15.0	21	1.48	520
K11R 315 S6	K10R 280 S6	55	985	93.7	0.87	97	7.0	2.0	1.6	2.4	20.0	30	2.63	690
K11R 315 M6	K10R 280 M6	75	990	94.4	0.88	130	7.0	2.0	1.7	2.4	20.0	30	3.33	800
K11R 315 MX6	K10R 315 S6	90	990	94.0	0.88	157	7.5	2.2	1.7	2.6	20.0	30	3.60	880
K11R 315 MY6	K10R 315 M6	110	990	95.0	0.88	190	7.5	2.0	1.7	2.4	20.0	30	6.00	1050
K11R 315 L6	K10R 315 L6	132	985	95.3	0.89	225	7.5	2.3	1.9	2.4	20.0	30	6.67	1250
K11R 315 LX6	K10R 315 LX6	160	990	95.0	0.87	280	8.3	2.2	2.0	2.7	20.0	30	8.6	1460
K22R 355 M6		200	994	95.7	0.81	372	7.0	1.8	1.3	2.3	20.0	54	8.2	1650
K22R 355 MX6		250	995	96.5	0.83	451	6.8	1.6	1.3	2.5	20.0	54	12.1	2200
K22R 355 LY6		300	995	95.8	0.78	579	7.4	1.9	1.4	2.6	20.0	54	14.0	2400

Synchronous speed 750 rpm – 8-pole version

K21R 71 K8	K20R 63 K8	0.06									2.6		0.00050	6.6
K21R 71 G8	K20R 63 G8	0.09									2.6		0.00060	8.1
K21R 80 K8	K20R 71 K8	0.12									2.6		0.00130	10.5
K21R 80 G8	K20R 71 G8	0.18									2.6		0.00175	12.0
K21R 90 S8	K20R 80 K8	0.25									4.0		0.00300	15.0
K21R 90 L8	K20R 80 G8	0.37									4.0		0.00375	18.0
K21R 100 L8	K20R 90 L8	0.55									4.8		0.00625	23.0
K21R 100 LX8	K20R 100 S8	0.75									5.1		0.00900	28.0
K21R 112 M8	K20R 100 L8	1.10									5.1		0.01225	33.5
K21R 132 S8T	K20R 100 LX8	1.5									5.1		0.01390	39.0
K11R 132 S8	K10R 112 M8	1.5	705	75.5	0.76	4	4.5	1.7	1.6	2.3	8.0	2	0.01800	46
K11R 132 M8	K10R 112 MX8	2.2	705	78.0	0.75	5.5	4.5	1.7	1.6	2.3	8.0	2	0.0230	53
K11R 160 M8	K10R 132 S8	3.0	710	79.3	0.78	7	4.0	1.6	1.3	1.9	8.5	3	0.0430	70
K11R 160 MX8	K10R 132 M8	4.0	710	81.4	0.78	9	4.5	1.7	1.6	2.1	8.5	3	0.0530	86
K11R 160 L8	K10R 160 S8	5.5	725	83.0	0.78	12.5	4.5	1.8	1.6	2.1	8.5	4	0.1130	114
K11R 180 L8	K10R 160 M8	7.5	720	85.0	0.78	16.5	4.5	2.0	1.7	2.1	9.0	4	0.1450	136
K11R 200 L8	K10R 180 S8	11.0	725	86.5	0.79	23	5.0	2.0	1.7	2.3	9.5	6	0.228	175
	K10R 180 M8	15.0	725	87.5	0.80	31	5.0	1.9	1.7	2.2	9.5	8	0.268	200
K11R 225 S8		18.5	725	89.2	0.83	36	5.5	2.0	1.6	2.2	10.0	8	0.440	265
K11R 225 M8	K10R 200 M8	18.5	725	89.2	0.84	36	5.0	1.8	1.5	2.2	10.0	11	0.440	265
K11R 250 M8	K10R 225 M8	22	730	90.2	0.79	45	5.5	2.2	1.8	2.2	10.5	16	0.825	360
K11R 280 S8	K10R 250 S8	30	735	91.0	0.80	60	5.5	2.0	1.5	2.0	15.0	16	1.35	465
K11R 280 M8	K10R 250 M8	37	735	91.5	0.77	76	6.0	2.3	1.8	2.4	15.0	16	1.55	520
K11R 315 S8	K10R 280 S8	45	740	93.1	0.80	87	6.5	1.8	1.6	2.3	15.0	21	2.63	690
K11R 315 M8	K10R 280 M8	55	740	93.3	0.81	105	6.0	2.0	1.6	2.3	15.0	21	3.33	800
K11R 315 MX8	K10R 315 S8	75	740	93.5	0.81	143	6.0	1.9	1.6	2.2	15.0	21	3.60	880
K11R 315 MY8	K10R 315 M8	90	740	94.6	0.81	170	6.5	2.1	1.8	2.4	15.0	21	6.00	1050
K11R 315 L8	K10R 315 L8	110	740	95.0	0.83	201	6.3	2.0	1.7	2.1	15.0	21	6.76	1250
K11R 315 LX8	K10R 315 LX8	132	740	95.2	0.79	254	7.2	2.2	1.9	2.5	15.0	21	8.71	1430
K22R 355 M8		160	743	95.3	0.77	315	6.5	1.6	1.0	2.7	15.0	40	9.5	1600
K22R 355 MX8		200	744	95.6	0.78	387	6.6	1.3	1.0	2.8	15.0	40	13.4	2200
K22R 355 LY8		230	744	95.1	0.78	448	8.2	1.2	1.0	2.8	15.0	40	15.8	2400

Three-phase motors with squirrel-cage rotor for use in mechanical smoke and heat exhaust ventilators acc. to EN 12101-3, class F400

load period and fire gas temperature 2 h 400 °C

with surface ventilation, mode of operation S1, continuous duty

insulation class H, degree of protection IP 55, Cooling method IC 411 (IC 418)

Motor selection data

Design point 400 V, 50 Hz

											at IC 418 ≥			
Type		P	n	η	cos φ	I	I _A /I _N	M _A /M _N	M _S /M _N	M _K /M _N	v	Q _{air}	J	m
		kW	rpm	%	-	A	-	-	-	-	m/s	m³/min	kgm²	kg
Synchronous speed 3000 rpm – 2-pole version														
K21R 71 K2	K20R 63 K2	0.25									11.7		0.00025	6.7
K21R 71 G2	K20R 63 G2	0.37									11.7		0.00032	7.6
K21R 80 K2	K20R 71 K2	0.55									11.2		0.00057	10.7
K21R 80 G2	K20R 71 G2	0.75									11.2		0.00072	11.5
K21R 90 S2	K20R 80 K2	1.1									17.0		0.00132	16.0
K21R 90 L2	K20R 80 G2	1.5									17.0		0.0017	19.0
K21R 100 L2	K20R 90 L2	2.2									19.8		0.00275	25.0
K21R 112 MX2	K20R100L2	3.0									20.9		0.0055	38
K21R 112 MV2	K20R100LV2	4.0									20.9		0.0068	46
K11R 132 S2	K10R 112 MY2	3	2860	85.0	0.86	6.0	5.5	1.8	1.6	2.2	18.0	6	0.0081	52
K11R 132 SX2	K10R 112 M2	4	2900	86.5	0.86	8.0	6.6	1.8	1.3	2.5	18.0	6	0.0110	57
K11R 160 M2	K10R 132 M2	5.5	2900	88.0	0.90	10.0	7.0	2.4	2.0	3.0	19.0	7	0.0258	81
K11R 160 MX2	K10R 160 S2	7.5	2930	89.0	0.90	13.5	7.1	2.2	1.7	2.9	19.0	12	0.0575	118
K11R 160 L2	K10R 160 M2	11.0	2920	90.0	0.92	20	7.2	2.1	1.6	2.8	19.0	12	0.0675	134
K11R 180 M2	K10R 180 S2	15.0	2935	91.0	0.92	26	6.8	1.7	1.4	2.6	20.0	14	0.105	165
K11R 200 L2	K10R 180 M2	18.5	2940	92.0	0.92	32	7.3	2.0	1.6	2.9	21.0	14	0.128	195
K11R 200 LX2	K10R 200 M2	30	2940	92.5	0.90	52	7.0	1.8	1.3	2.4	21.0	16	0.193	255
K11R 225 M2	K10R 200 L2	37	2940	93.0	0.91	63	7.5	1.8	1.4	2.7	22.0	16	0.220	290
K11R 250 M2	K10R 225 M2	45	2955	93.0	0.91	77	7.5	2.0	1.5	2.6	23.0	22	0.375	360
K11R 280 S2	K10R 250 S2	55	2970	94.0	0.92	92	7.5	2.0	1.6	2.6	23.0	25	0.650	490
K11R 280 M2	K10R 250 M2	75	2970	94.0	0.91	130	8.5	2.2	1.8	2.8	23.0	25	0.675	510
K11R 315 S2	K10R 280 S2	90	2975	94.5	0.91	155	8.5	1.5	1.3	2.5	23.0	27	1.21	720
K11R 315 M2	K10R 280 M2	110	2975	94.5	0.91	190	8.5	2.0	1.8	2.7	23.0	27	1.44	800
K11R 315 MX2	K10R 315 S2	132	2975	95.0	0.93	220	8.5	2.0	1.6	2.6	23.0	27	1.76	980
K11R 315 MY2	K10R 315 M2	160	2970	95.0	0.92	270	8.2	2.6	2.0	2.6	23.0	27	2.82	1170
K11R 315 L2	K10R 315 L2	200	2973	95.0	0.93	330	7.3	2.1	1.4	2.0	23.0	27	3.66	1460
K11R 315 LX2	K10R 315 LX2	250	2975	95.5	0.92	415	7.4	2.4	1.4	2.0	23.0	27	4.43	1630
K22R 355 M2		300	2980	96	0.91	585	7.3	1.3	1.0	2.3	23.0	75	4.20	2000
K22R 355 MX2		340	2985	96	0.90	570	8.5	1.9	1.3	3.2	23.0	75	5.50	2200
K22R 355 LY2		380	2983	96	0.92	625	7.2	1.3	1.0	2.4	23.0	75	7.10	2400
K22R 355 L2		420	2985	96.5	0.92	685	8.2	1.8	0.9	2.6	23.0	75	7.10	2400

Synchronous speed 1500 rpm – 4-pole version

K21R 71 K4	K20R 63 K4	0.12									5.2		0.00040	6.8
K21R 71 G4	K20R 63 G4	0.18									5.2		0.00050	7.8
K21R 80 K4	K20R 71 K4	0.25									5.4		0.00087	10.6
K21R 80 G4	K20R 71 G4	0.37									5.4		0.00107	11.7
K21R 90 S4	K20R 80 K4	0.55									8.1		0.00207	15.5
K21R 90 L4	K20R 80 G4	0.75									8.1		0.00260	18.0
K21R 100 L4	K20R 90 L4	1.1									9.3		0.00400	23.5
K21R 100 LX4	K20R 100 S4	1.5									10.9		0.00725	30
K21R 112 M4	K20R 100 L4	2.2									10.9		0.00900	37
K21R 112 MX4	K20R 100 LX4	3.0									10.9		0.01100	45
K11R 132 S4	K10R 112 M4	3	1440	85.5	0.89	5.7	6.5	1.9	1.7	3.0	12.0	4	0.01500	50
K11R 132 M4	K10R 132 S4	4	1450	86.5	0.84	8.0	6.0	2.0	1.7	2.9	12.0	6	0.0280	70
K11R 160 M4	K10R 132 M4	5.5	1450	88.0	0.85	10.5	6.8	2.2	1.9	3.3	12.5	6	0.0350	92
K11R 160 L4	K10R 160 S4	7.5	1465	89.0	0.86	14.0	7.3	2.5	2.0	3.0	12.5	10	0.0780	120
K11R 180 M4	K10R 160 M4	11.0	1460	89.5	0.86	21.0	6.8	2.5	2.0	2.9	13.5	10	0.0900	136
K11R 180 L4	K10R 180 S4	15.0	1465	90.0	0.84	29.0	6.5	2.0	1.8	2.6	13.5	11	0.1380	170
K11R 200 L4	K10R 180 M4	18.5	1465	91.0	0.85	35	7.0	2.0	1.7	2.4	14.0	11	0.1680	200
K11R 225 S4	K10R 200 M4	30	1470	92.0	0.86	55	7.0	2.0	1.7	2.5	14.5	15	0.2750	270
K11R 225 M4	K10R 200 L4	37	1470	92.5	0.86	67	7.0	2.0	1.7	2.5	14.5	15	0.3130	300
K11R 250 M4	K10R 225 M4	45	1475	93.0	0.86	82	7.0	2.2	1.7	2.3	15.0	21	0.5250	375
K11R 280 S4	K10R 250 S4	55	1480	93.5	0.86	99	7.0	2.0	1.7	2.2	20.0	32	0.9500	520
K11R 280 M4	K10R 250 M4	75	1480	94.0	0.86	135	7.0	2.1	1.6	2.2	20.0	32	1.10	580
K11R 315 S4	K10R 280 S4	90	1485	94.5	0.86	160	7.5	1.8	1.6	2.2	20.0	45	1.96	740
K11R 315 M4	K10R 280 M4	110	1485	94.5	0.86	195	7.0	1.8	1.5	2.2	20.0	45	2.27	840
K11R 315 MX4	K10R 315 S4	132	1480	94.5	0.87	235	7.0	1.8	1.5	2.0	20.0	45	2.73	1000
K11R 315 MY4	K10R 315 M4	160	1485	95.5	0.88	275	7.5	2.0	1.8	2.4	20.0	45	4.82	1200
K11R 315 L4	K10R 315 L4	200	1485	95.5	0.90	335	8.0	2.0	1.6	2.3	20.0	45	5.93	1510
K11R 315 LX4	K10R 315 LX4	250	1490	96.0	0.88	430	8.6	1.9	1.5	2.5	20.0	45	6.82	1630
K22R 355 M4		300	1490	96	0.84	540	8.1	1.8	1.0	3.1	20.0	72	7.9	2150
K22R 355 MX4		340	1494	96	0.84	610	8.6	1.3	1.0	3.0	20.0	72	9.5	2400
K22R 355 LY4		380	1490	96	0.82	700	8.0	1.2	1.0	3.0	20.0	81	10.00	2500
K22R 355 L4		420	1490	96	0.79	800	7.9	1.9	1.0	3.6	20.0	81	10.00	2500

Three-phase motors with squirrel-cage rotor for use in mechanical smoke and heat exhaust ventilators acc. to EN 12101-3, class F400

load period and fire gas temperature 2 h 400 °C

with surface ventilation, mode of operation S1, continuous duty

insulation class H, degree of protection IP 55, Cooling method IC 411 (IC 418)

Motor selection data

Design point 400 V, 50 Hz

		at IC 418 ≥												
Type		P kW	n rpm	η %	cos φ -	I A	I _A /I _N -	M _A /M _N -	M ₂ /M _N -	M _K /M _N -	v m/s	Q _{air} m³/min	J kgm²	m kg
Synchronous speed 1500 rpm – 6-pole version														
K21R 71 K6	K20R 63 K6	0.09									3.6		0.00045	7.4
K21R 71 G6	K20R 63 G6	0.12									3.6		0.00060	8.3
K21R 80 K6	K20R 71 K6	0.18									4.2		0.00130	11.0
K21R 80 G6	K20R 71 G6	0.25									4.2		0.00175	12.5
K21R 90 S6	K20R 80 K6	0.37									5.2		0.00325	16.0
K21R 90 L6	K20R 80 G6	0.55									5.2		0.00425	19.0
K21R 100 L6	K20R 90 L6	0.75									5.7		0.00625	24.0
K21R 112 M6	K20R 100 L6	1.1									6.3		0.01225	33.5
K21R 112 MX6	K20R 100 LX6	1.5									6.3		0.0139	37
K21R 112 MV6	K20R 100 LV6	2.2									6.3		0.01500	39.0
K11R 132 S6	K10R 112 M6	1.5	955	78.0	0.82	3.5	5.7	1.8	1.6	2.7	9.5	3	0.0180	46
K11R 132 M6	K10R 112 MX6	2.2	955	79.5	0.80	5.0	6.0	2.2	2.0	3.1	9.5	3	0.0230	53
K11R 132 MX6	K10R 132 S6	3.0	955	82.5	0.83	6.5	5.0	1.8	1.5	2.3	9.5	4	0.0430	70
K11R 160 M6	K10R 132 M6	4.0	960	84.5	0.82	8.5	5.5	2.0	1.6	2.5	10.5	4	0.0530	86
K11R 160 L6	K10R 160 S6	5.5	965	84.5	0.86	11.0	5.0	2.0	1.7	2.3	10.5	5	0.1130	114
K11R 180 L6	K10R 160 M6	7.5	965	85.5	0.83	15.5	6.0	2.4	2.1	2.7	11.0	5	0.1450	136
K11R 200 L6	K10R 180 S6	11.0	970	87.5	0.87	21.0	5.5	2.0	1.7	2.4	11.5	8	0.2280	175
K11R 200 LX6	K10R 180 M6	15.0	970	88.0	0.87	28	6.2	2.2	1.8	2.6	11.5	8	0.2680	200
K11R 225 M6	K10R 200 M6	22	973	90.0	0.89	40	6.5	2.2	1.7	2.5	12.0	10	0.4430	265
K11R 250 M6	K10R 225 M6	30	975	90.5	0.89	55	6.5	2.2	1.7	2.3	12.5	14	0.8250	360
K11R 280 S6	K10R 250 S6	37	980	91.5	0.87	67	6.0	2.0	1.5	2.0	15.0	21	1.28	465
K11R 280 M6	K10R 250 M6	45	980	92.0	0.88	80	6.5	2.3	1.7	2.4	15.0	21	1.48	520
K11R 315 S6	K10R 280 S6	55	985	93.0	0.87	98	7.0	2.0	1.6	2.4	20.0	30	2.63	690
K11R 315 M6	K10R 280 M6	75	990	94.0	0.88	131	7.0	2.0	1.7	2.4	20.0	30	3.33	800
K11R 315 MX6	K10R 315 S6	90	990	93.5	0.88	158	7.5	2.2	1.7	2.6	20.0	30	3.60	880
K11R 315 MY6	K10R 315 M6	110	990	94.5	0.88	191	7.5	2.0	1.7	2.4	20.0	30	6.00	1050
K11R 315 L6	K10R 315 L6	132	985	95.0	0.89	225	7.5	2.3	1.9	2.4	20.0	30	6.67	1250
K11R 315 LX6	K10R 315 LX6	160	990	94.5	0.87	280	8.3	2.2	2.0	2.7	20.0	30	8.6	1460
K22R 355 M6		200	994	95	0.81	375	7.0	1.8	1.3	2.3	20.0	54	8.2	1650
K22R 355 MX6		250	995	96	0.83	455	6.8	1.6	1.3	2.5	20.0	54	12.1	2200
K22R 355 LY6		300	995	95	0.78	585	7.4	1.9	1.4	2.6	20.0	54	14.0	2400

Synchronous speed 750 rpm – 8-pole version

K21R 71 G8	K20R 63 G8	0.06									2.6		0.00060	8.1
K21R 80 K8	K20R 71 K8	0.09									2.6		0.00130	10.5
K21R 80 G8	K20R 71 G8	0.12									2.6		0.00175	12.0
K21R 90 S8	K20R 80 K8	0.18									4.0		0.00300	15.0
K21R 90 L8	K20R 80 G8	0.25									4.0		0.00375	18.0
K21R 100 L8	K20R 90 L8	0.37									4.8		0.00625	23.0
K21R 100 LX8	K20R 100 S8	0.55									5.1		0.00900	28.0
K21R 112 M8	K20R 100 L8	0.75									5.1		0.01225	33.5
K21R 112 MX8	K20R 100 LX8	1.1									5.1		0.01390	37.0
K21R 112 MV8	K20R 100 LV8	1.5									5.1		0.01500	39.0
K11R 132 S8	K10R 112 M8	1.1	705	75.0	0.76	2.8	4.5	1.7	1.6	2.3	8.0	2	0.01800	46
K11R 132 M8	K10R 112 MX8	1.5	705	77.5	0.75	3.7	4.5	1.7	1.6	2.3	8.0	2	0.0230	53
K11R 160 M8	K10R 132 S8	2.2	710	79.0	0.78	5.2	4.0	1.6	1.3	1.9	8.5	3	0.0430	70
K11R 160 MX8	K10R 132 M8	3.0	710	81.0	0.78	7.0	4.5	1.7	1.6	2.1	8.5	3	0.0530	86
K11R 160 L8	K10R 160 S8	4.0	725	82.5	0.78	9.0	4.5	1.8	1.6	2.1	8.5	4	0.1130	114
K11R 180 L8	K10R 160 M8	5.5	720	84.5	0.78	12.0	4.5	2.0	1.7	2.1	9.0	4	0.1450	136
K11R 200 L8	K10R 180 S8	7.5	725	86.0	0.79	16.0	5.0	2.0	1.7	2.3	9.5	6	0.228	175
	K10R 180 M8	11.0	725	87.0	0.80	23.0	5.0	1.9	1.7	2.2	9.5	8	0.268	200
K11R 225 S8		18.5	725	88.5	0.83	36.5	5.5	2.0	1.6	2.2	10.0	8	0.440	265
K11R 225 M8	K10R 200 M8	18.5	725	88.5	0.84	36	5.0	1.8	1.5	2.2	10.0	11	0.440	265
K11R 250 M8	K10R 225 M8	22	730	89.5	0.79	45	5.5	2.2	1.8	2.2	10.5	16	0.825	360
K11R 280 S8	K10R 250 S8	30	735	90.5	0.80	60	5.5	2.0	1.5	2.0	15.0	16	1.35	465
K11R 280 M8	K10R 250 M8	37	735	91.0	0.77	76	6.0	2.3	1.8	2.4	15.0	16	1.55	520
K11R 315 S8	K10R 280 S8	45	740	92.5	0.80	88	6.5	1.8	1.6	2.3	15.0	21	2.63	690
K11R 315 M8	K10R 280 M8	55	740	93.0	0.81	105	6.0	2.0	1.6	2.3	15.0	21	3.33	800
K11R 315 MX8	K10R 315 S8	75	740	93.0	0.81	145	6.0	1.9	1.6	2.2	15.0	21	3.60	880
K11R 315 MY8	K10R 315 M8	90	740	94.0	0.81	170	6.5	2.1	1.8	2.4	15.0	21	6.00	1050
K11R 315 L8	K10R 315 L8	110	740	94.5	0.83	205	6.3	2.0	1.7	2.1	15.0	21	6.76	1250
K11R 315 LX8	K10R 315 LX8	132	740	94.5	0.79	255	7.2	2.2	1.9	2.5	15.0	21	8.71	1430
K22R 355 M8		160	743	95	0.77	315	6.5	1.6	1.0	2.7	15.0	40	9.5	1600
K22R 355 MX8		200	744	95	0.78	390	6.6	1.3	1.0	2.8	15.0	40	13.4	2200
K22R 355 LY8		230	744	94.5	0.78	450	8.2	1.2	1.0	2.8	15.0	40	15.8	2400