



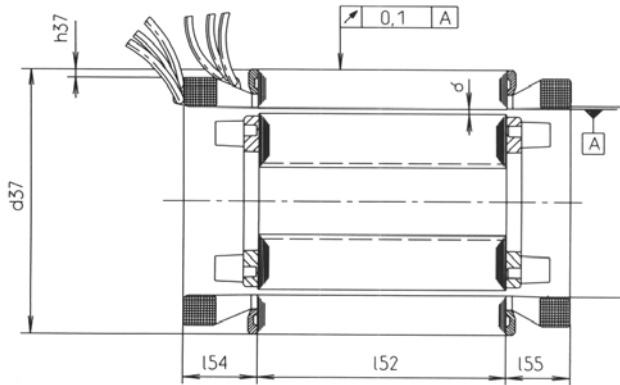
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Product description

It is not always possible to mount or couple a drive motor with a standard foot or flange construction. For such machines, it is recommended to use a built-in motor from the

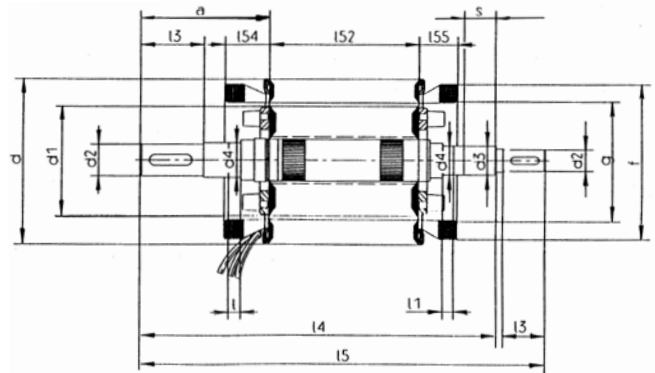
VEM standard series and to incorporate this motor directly. Built-in motors comprise a stator core with winding and a die-cast rotor body with or without shaft.



Built-in motor without shaft

Built-in motors achieve the same output and operating parameters as the corresponding motors of the basic series, subject to equivalent installation and cooling conditions after incorporation into the machine. As this is rarely the case, however, detailed rating plate data can only be specified after testing of the final product.

The fit of the stator housing is dependent on the material used. Minimum clearances must be observed between the winding overhang and the machine housing. The length of the connecting cable must be clarified before ordering.



Built-in motor with shaft

Under normal circumstances, the rotor body is not machined. After pressing the rotor body onto the shaft, the outer diameter must be turned to the required final dimensions and the completed rotor must be balanced dynamically. The motor bearing design should correspond to that of the VEM standard series as far as possible.

Where built-in motors are to be used in special versions, such as semi-hermetic, transformer oil or wastewater pumps or the like, the specific installation and operating demands must be clarified before ordering.

Overview of technical data

The most important technical data are summarised in the following table. Further information can be taken from the catalogue section "Introduction" (chapter 1).

Product group	Squirrel-cage rotor, IEC/DIN
Rated output	0.06 to 710 kW
Sizes	56 to 400
Efficiency classification/ efficiency determination	Suitable for IE1, IE2 or IE3 to IEC/EN 60034-30-1, binding efficiency classification dependent on the circumstances of incorporation into the final product
Housing material	Not applicable, motor for incorporation, without own housing
Rated torque	0.25 to 5768 Nm
Method of connection	Single-speed motors are designed in star-delta configuration as standard.
Stator winding insulation	Thermal class 155, optional 155 [F(B)], 180 to IEC/EN 60034-1
Degree of protection	IP 00 to IEC/EN 60034-5, motor for incorporation, protection must be realised by the customer
Type of cooling	Not defined, cooling must be realised by the customer
Coolant temperature/ installation altitude	Standard -20 °C to +40 °C, Altitude 1000 m above sea level
Rated voltage	Standard voltages to EN 60038 50 Hz: 230 V, 400 V, 500 V, 690 V 60 Hz: 275 V, 460 V, 480 V, 600 V Voltage ranges A and B to IEC/EN 60034-1 (Prior consultation necessary regarding 230 V, 50 Hz and 275 V, 60 Hz for motors from size 315)
Type of construction	IM 5010
Paint finish	Not applicable
Vibration severity grade	Determined by the final product.
Shaft ends	to DIN 748 (IEC 60072), balanced with half-key, only applicable where a complete rotor is supplied
Limit speeds	Please refer to the section of "Limit speeds" in catalogue section "Motors for converter-fed operation", Chapter 4.
Bearing design	Please refer to the tables of "Bearing design data" in catalogue section „Standand motors“, Chapter 2.
Terminal boxes	Not applicable
Documentation	The operating and maintenance manuals of the final product must be observed.
Tolerances	Please refer to the section "Tolerances" in catalogue section "Introduction", Chapter 1.
Options	Please refer to the section "Overview of modifications" in catalogue section "Introduction", Chapter 1.

Motor selection data

Three-phase built-in motors based on Premium Efficiency IE3

Thermal class 155

Output assignments/principal dimensions							
Type	P _B kW	Stator outer diameter	Core length	Air gap	Stator [kg]	Rotor body [kg]	Total [kg]
		d ₃₇ [mm]	l ₅₂ [mm]	δ [mm]			
Synchronous speed 3000 rpm – 2-pole version							
W40R 132 MY2 E	7.5	206	137	0.60	23.2	8.6	32
W40R 160 S2 E	11	255	151	0.70	42.5	15.5	58
W40R 160 M2 E	15	255	190	0.70	52.5	19.1	72
W40R 160 MX2C E	18.5	255	220	0.70	61	30	91
W40R 180 M2C E	22	288	224	0.90	77	40	117
W40R 200 L2 E	30	322	250	1.00	114	40.9	155
W40R 200 L2C E	37	322	250	1.00	114	54	168
W40R 225 M2 E	45	362	247	1.20	114	50.8	165
W40R 250 S2 E	55	410	252	1.20	193	67.5	261
W40R 250 S2 E	75	410	252	1.20	193	67.5	261
W40R 250 M2 E	90	410	280	1.20	211	74.5	286
W40R 280 S2 E	110	465	300	1.45	290	104	394
W40R 280 M2 E	132	465	355	1.45	330	122	452
W40R 315 S2 E	160	465	435	1.45	400	150	550
W40R 315 M2 E	200	520	440	1.60	520	177	697
W40R 315 L2 E	250	520	570	1.60	660	233	893
W40R 315 LX2 E	315	520	690	1.60	775	280	1055
W40R 355 M2 E	355	610	420	1.90	680	251	931
W42R 355 MX2 E	400	610	465	1.90	915	310	1225
W42R 355 L2 E	500	610	700	1.90	1075	381	1456
W42R 400 M2 E	560	700	562	2.00	1330	449	1779
W42R 400 MX2 E	630	700	622	2.00	1460	498	1958
W42R 400 L2 E	710	700	692	2.00	1565	533	2098
Synchronous speed 1500 rpm – 4-pole version							
W40R 132 M4 E	5.5	206	194	0.45	27	13.7	41
W40R 132 MX4 E	7.5	206	240	0.45	33.4	17	50
W40R 160 S4 E	11	255	165	0.45	37	18.8	56
W40R 160 L4C E	15	255	250	0.45	60	38.5	99
W40R 180 M4 E	18.5	288	248	0.55	70.5	33.4	104
W40R 180 MX4 E	22	288	300	0.55	85.5	40.4	126
W40R 200 L4C E	30	322	290	0.65	112	71.5	184
W40R 200 LX4C E	37	322	330	0.65	128	81.5	210
W40R 225 MX4 E	45	362	340	0.70	136	76.5	213
W40R 250 S4 E	55	410	310	0.80	194	91.5	286
W40R 250 M4 E	75	410	364	0.80	227	107	334
W40R 280 S4 E	90	465	345	1.00	275	138	413
W40R 280 S4 E	110	465	345	1.00	275	159	434
W40R 280 M4 E	132	465	400	1.00	310	159	469
W40R 315 S4 E	160	465	480	1.10	360	191	551
W40R 315 M4 E	200	520	480	1.00	450	260	710
W40R 315 L4 E	250	520	600	1.00	550	364	914
W40R 315 LX4 E	315	520	690	1.00	620	374	994
W40R 355 M4 E	355	610	590	1.50	850	357	1207
W42R 355 MX4 E	400	610	712	1.50	990	419	1409
W42R 355 L4 E	500	610	752	1.50	1045	442	1487
W42R 400 M4 E	560	700	542	1.60	1130	437	1567
W42R 400 MX4 E	630	700	612	1.60	1265	489	1754
W42R 400 L4 E	710	700	697	1.60	1390	519	1909

Three-phase built-in motors based on Premium Efficiency IE3

Thermal class 155

Output assignments/principal dimensions							
Type	P _B kW	Stator outer diameter	Core length	Air gap	Stator [kg]	Rotor body [kg]	Total [kg]
		d ₃₇ [mm]	l ₅₂ [mm]	δ [mm]			
Synchronous speed 1000 rpm – 6-pole version							
W40R 132 S6 E	4	206	151	0.35	19.5	13.9	33
W40R 132 MX6 E	5.5	206	240	0.35	30.9	21.7	53
W40R 160 M6 E	7.5	255	210	0.40	41.5	33.8	75
W40R 160 L6C E	11	255	240	0.40	47.5	48.4	96
W40R 180 M6C E	15	288	248	0.45	57	58	115
W40R 200 L6 E	18.5	322	290	0.45	93	68	161
W40R 200 L6C E	22	322	290	0.45	93	85.5	179
W40R 225 MX6 E	30	362	290	0.50	89	89.5	179
W40R 250 M6 E	37	410	315	0.55	162	123	285
W40R 280 S6 E	45	465	300	0.70	220	159	379
W40R 280 M6 E	55	465	380	0.70	260	197	457
W40R 315 S6 E	75	520	370	0.70	305	213	518
W40R 315 M6 E	90	520	400	0.70	320	206	526
W40R 315 L6 E	110	520	450	0.70	380	350	730
W40R 315 LX6 E	132	520	580	0.70	460	398	858
W40R 355 M6 E	160	610	480	0.90	610	389	999
W42R 355 MX6 E	200	610	595	0.90	865	524	1389
W42R 355 LY6 E	250	610	720	0.90	905	558	1463
W42R 355 L6 E	315	610	720	0.90	915	558	1473
W42R 355 LX6 E	355	610	720	0.90	915	558	1473
W42R 355 LZ6 E	400	610	720	0.90	915	558	1473
W42R 400 MY6 E	355	610	595	0.90	1220	563	1783
W42R 400 M6 E	400	700	595	0.90	1230	563	1793
W42R 400 MX6 E	450	700	562	1.00	1105	644	1749
W42R 400 L6 E	500	700	622	1.00	1190	703	1893
W42R 400 LX6 E	560	700	697	1.00	1200	703	1903
Synchronous speed 750 rpm – 8-pole version							
W40R 132 S8 E	3	206	151	0.35	19.5	13.9	33
W40R 132 MX8 E	4	206	240	0.35	29.7	21.7	51
W40R 160 M8 E	5.5	255	210	0.40	41.5	33.8	75
W40R 160 L8 E	7.5	255	240	0.40	46.5	38.5	85
W40R 180 M8 E	11	288	248	0.45	57	45.8	103
W40R 180 MX8 E	15	288	294	0.45	67.5	55.5	123
W40R 200 L8 E	18.5	322	290	0.45	89.5	68	158
W40R 225 MX8 E	22	362	290	0.50	86	89.5	176
W40R 250 M8 E	30	410	315	0.55	159	123	282
W40R 280 S8 E	37	465	300	0.70	220	159	379
W40R 280 M8 E	45	465	380	0.70	260	197	457
W40R 315 S8 E	55	465	410	0.70	270	213	483
W40R 315 M8 E	75	520	400	0.70	320	206	526
W40R 315 L8 E	90	520	450	0.70	380	350	730
W40R 315 LX8 E	110	520	580	0.70	460	398	858
W40R 355 MY8 E	132	610	430	0.80	510	336	846
W40R 355 M8 E	160	610	480	0.80	580	408	988
W42R 355 MX8 E	250	610	672	0.80	820	559	1379
W42R 355 L8 E	315	610	732	0.80	890	615	1505
W42R 400 M8 E	355	700	607	0.90	920	562	1482
W42R 400 MX8 E	400	700	672	0.90	1100	643	1743
W42R 400 L8 E	450	700	740	0.90	1170	701	1871

Three-phase built-in motors based on High Efficiency IE2

Thermal class 155

Output assignments/principal dimensions							
Type	P _B kW	Stator outer diameter	Core length	Air gap	Stator [kg]	Weight	
		d ₃₇ [mm]	l ₅₂ [mm]	δ [mm]		Rotor body [kg]	Total [kg]
Synchronous speed 3000 rpm – 2-pole version							
W10R 132 MY2 E	7.5	206	137	0.60	23.2	8.6	31.80
W10R 160 S2 E	11.0	255	151	0.70	42.5	15.5	58.00
W10R 160 M2 E	15.0	255	190	0.70	52.5	19.1	71.60
W10R 160 M2 E	18.5	255	190	0.70	52.5	19.1	71.60
W10R 180 S2 E	22	288	174	0.90	61.5	23.6	85.10
W10R 180 M2 E	30	288	224	0.90	77.0	29.7	106.70
W10R 180 MX2 E	37	288	270	0.90	93	35.8	128.80
W10R 200 L2 E	45	322	250	1.00	114	40.9	154.40
W10R 225 M2 E	55	362	247	1.20	146	50.8	196.30
W10R 250 S2 E	75	410	252	1.20	193	67.5	260.50
W10R 250 M2 E	90	410	280	1.20	211	74.5	285.50
W10R 280 S2 E	110	465	300	1.45	290	104	394.00
W10R 280 M2 E	132	465	355	1.45	330	122	452.00
W10R 315 S2 E	160	465	435	1.45	400	150	550.00
W10R 315 M2 E	200	520	440	1.60	520	177	697.00
W10R 315 L2 E	250	520	570	1.60	660	233	893.00
W10R 315 LX2 E	315	520	690	1.60	775	280	1055.00
W22R 355 MY2 E	315	610	420	1.90	680	229	909.00
W22R 355 M2 E	355	610	465	1.90	750	251	1001.00
Synchronous speed 1500 rpm – 4-pole version							
W10R 132 M4 E	5.5	206	194	0.45	27.0	13.7	40.70
W10R 132 M4 E	7.5	206	194	0.45	27.0	13.7	40.70
W10R 132 MX4 E	11.0	206	240	0.45	33.4	17.0	50.40
W10R 160 S4 E	11.0	255	165	0.45	37.0	18.8	55.80
W10R 160 L4 E	15.0	255	250	0.45	60.0	28.3	88.30
W10R 180 S4 E	18.5	288	191	0.55	55.5	26.2	81.70
W10R 180 M4 E	22	288	248	0.55	70.5	33.4	103.90
W10R 200 M4 E	30	322	250	0.65	96.5	47.8	144.30
W10R 200 L4 E	37	322	290	0.65	112	54.5	166.50
W10R 200 LX4 E	45	322	330	0.65	127	62.0	189.00
W10R 225 M4 E	45	362	280	0.70	146	63.0	209.00
W10R 225 MX4 E	55	362	340	0.70	136	76.5	212.50
W10R 250 S4 E	55	410	310	0.80	194	91.5	285.50
W10R 250 S4 E	75	410	310	0.80	194	91.5	285.50
W10R 250 M4 E	90	410	364	0.80	227	107	334.00
W10R 280 S4 E	110	465	345	1.00	275	138	413.00
W10R 280 M4 E	132	465	400	1.00	310	159	469.00
W10R 315 S4 E	160	465	480	1.10	360	191	551.00
W10R 315 M4 E	200	520	480	1.00	450	260	710.00
W10R 315 L4 E	250	520	600	1.00	550	364	914.00
W10R 315 LX4 E	315	520	690	1.00	620	374	994.00
W22R 355 MY4 E	315	610	480	1.50	700	286	986.00
W22R 355 M4 E	355	610	590	1.50	850	357	1207.00

Three-phase built-in motors based on High Efficiency IE2

Thermal class 155

Output assignments/principal dimensions							
Type	P _B kW	Stator outer diameter	Core length	Air gap	Stator [kg]	Rotor body [kg]	Total [kg]
		d ₃₇ [mm]	l ₅₂ [mm]	δ [mm]			
Synchronous speed 1000 rpm – 6-pole version							
W10R 132 S6 E	4.0	206	151	0.35	19.5	13.9	33.40
W10R 132 M6 E	5.5	206	194	0.35	25.0	17.5	42.50
W10R 132 MX6 E	7.5	206	240	0.35	31.0	21.7	52.70
W10R 160 S6 E	7.5	255	160	0.40	33.0	26.2	59.20
W10R 160 M6 E	11.0	255	210	0.40	41.5	33.8	75.30
W10R 160 L6 E	15.0	255	240	0.40	47.5	38.6	86.10
W10R 180 S6 E	15.0	288	204	0.45	49.0	38.1	87.10
W10R 180 M6 E	18.5	288	248	0.45	57.0	45.8	102.80
W10R 180 MX6 E	22	288	294	0.45	67.5	55.5	123.00
W10R 200 M6 E	22	322	250	0.45	80	59.0	139.00
W10R 200 L6 E	30	322	290	0.45	93	68.0	161.00
W10R 225 M6 E	30	362	260	0.50	104	80.5	184.50
W10R 225 MX6 E	37	362	290	0.50	89.5	89.5	179.00
W10R 250 S6 E	37	410	252	0.55	133	100	233.00
W10R 250 M6 E	45	410	315	0.55	162	123	285.00
W10R 280 S6 E	55	465	300	0.70	220	159	379.00
W10R 280 M6 E	75	465	380	0.70	260	197	457.00
W10R 315 S6 E	90	465	410	0.70	270	213	483.00
W10R 315 L6 E	110	520	450	0.70	320	350	670.00
W10R 315 M6 E	132	520	450	0.70	320	350	670.00
W10R 315 LX6 E	160	520	580	0.70	460	398	858.00
W10R 315 LX6 E	200	520	580	0.70	460	398	858.00
W22R 355 MY6 E	200	610	430	0.90	590	349	939.00
W22R 355 M6 E	250	610	480	0.90	610	389	999.00
Synchronous speed 750 rpm – 8-pole version							
W10R 132 S8 E	3.0	206	151	0.35	19.5	13.9	33.40
W10R 132 M8 E	4.0	206	194	0.35	25.0	17.5	42.50
W10R 132 MX8 E	5.5	206	240	0.35	30.0	21.7	51.70
W10R 160 S8 E	5.5	255	160	0.40	33.0	26.2	59.20
W10R 160 M8 E	7.5	255	210	0.40	41.5	33.8	75.30
W10R 160 L8 E	11.0	255	240	0.40	46.5	38.6	85.10
W10R 180 S8 E	11.0	288	204	0.45	49.0	38.1	87.10
W10R 180 M8 E	15.0	288	248	0.45	57.0	45.8	102.80
W10R 180 MX8 E	18.5	288	294	0.45	67.5	55.5	123.00
W10R 200 M8 E	18.5	322	250	0.45	77.0	58.6	135.60
W10R 200 L8 E	22	322	290	0.45	89.5	68.0	157.50
W10R 225 M8 E	22	362	260	0.50	101	81	181.50
W10R 225 MX8 E	30	362	290	0.50	86.0	89.5	175.50
W10R 250 S8 E	30	410	252	0.55	129	100	229.00
W10R 250 M8 E	37	410	315	0.55	159	123	282.00
W10R 280 S8 E	55	465	300	0.70	220	159	379.00
W10R 280 M8 E	75	465	380	0.70	260	197	457.00
W10R 315 S8 E	90	465	410	0.70	270	213	483.00
W10R 315 M8 E	110	520	400	0.70	320	206	526.00
W10R 315 L8 E	132	520	450	0.70	380	350	730.00
W10R 315 LX8 E	160	520	580	0.70	460	398	858.00
W22R 355 MY8 E	160	610	430	0.80	510	336	846.00
W22R 355 M8 E	200	610	480	0.80	580	408	988.00

Three-phase built-in motors based on Standard Efficiency IE1

Thermal class 155

Output assignments/principal dimensions							
Type	P _B kW	Stator outer diameter d ₃₇ [mm]	Core length l ₅₂ [mm]	Air gap δ [mm]	Stator [kg]	Weight Rotor body [kg]	Total [kg]
Synchronous speed 3000 rpm – 2-pole version							
K20R 56 K2 E	0.18	84.0	37.0	0.25	1.32	0.39	1.71
K20R 56 G2 E	0.25	84.0	47.0	0.25	1.60	0.47	2.07
K20R 63 K2 E	0.37	96.0	43.0	0.25	1.95	0.58	2.53
K20R 63 G2 E	0.55	96.0	59.0	0.25	2.50	0.77	3.27
K20R 71 K2 E	0.75	110.0	60.0	0.30	3.40	0.96	4.36
K20R 71 G2 E	1.1	110.0	81.0	0.30	4.31	1.25	5.56
K20R 80 K2 E	1.5	126.0	80.0	0.35	5.78	1.65	7.43
K20R 80 G2 E	2.2	126.0	108.0	0.35	7.55	2.18	9.73
K20R 90 L2 E	3.0	140.0	110.0	0.45	9.55	2.95	12.50
K20R 100 S2 E	4.0	158.0	112.0	0.55	12.80	3.77	16.57
K20R 100 L2 E	5.5	158.0	146.0	0.55	16.30	4.82	21.12
K20R 112 MY2 E	5.5	176.0	122.0	0.60	16.0	5.0	21.00
K20R 112 M2 E	7.5	176.0	162.0	0.60	21.0	6.5	27.46
K10R 132 M2 E	11.0	206.0	162.0	0.60	27.0	10.0	36.96
K10R 160 S2 E	15.0	255.0	153.5	0.70	42.5	15.5	57.96
K10R 160 M2 E	18.5	255.0	192.5	0.70	52.5	19.1	71.58
K10R 180 S2 E	22	288.0	176.5	0.90	61.5	23.6	85.10
K10R 180 M2 E	30	288.0	226.5	0.90	77.0	29.7	106.70
K10R 200 M2 E	37	322.0	212.5	1.00	99.0	34.9	133.90
K10R 200 L2 E	45	322.0	252.5	1.00	113.5	40.9	154.40
K10R 225 M2 E	55	362.0	250.5	1.20	145.5	50.8	196.30
K10R 250 S2 E	75	410.0	255.0	1.20	192.5	67.3	259.80
K10R 250 M2 E	90	410.0	283.0	1.20	210.5	74.3	284.80
K10R 280 S2 E	110	465.0	306.0	1.45	290.0	104.0	394.00
K10R 280 M2 E	132	465.0	361.0	1.45	330.0	122.0	452.00
K10R 315 S2 E	160	465.0	441.0	1.45	400.0	150.0	550.00
K10R 315 M2 E	200	520.0	446.0	1.60	520.0	-	520.00
K10R 315 L2 E	250	520.0	576.0	1.60	660.0	-	660.00
K22R 355 MY2 E	315	610.0	432.0	1.90	680.0	-	680.00
K22R 355 M2 E	355	610.0	477.0	1.90	750.0	-	750.00
Synchronous speed 1500 rpm – 4-pole version							
K20R 56 K4 E	0.12	84.0	37.0	0.20	1.22	0.5	1.72
K20R 56 G4 E	0.18	84.0	49.0	0.20	1.52	0.63	2.15
K20R 63 K4 E	0.25	96.0	45.0	0.20	1.85	0.78	2.63
K20R 63 G4 E	0.37	96.0	62.0	0.20	2.43	1.05	3.48
K20R 71 K4 E	0.55	110.0	63.0	0.20	3.09	1.33	4.42
K20R 71 G4 E	0.75	110.0	81.0	0.20	3.88	1.66	5.54
K20R 80 K4 E	1.1	126.0	80.0	0.25	4.92	2.25	7.17
K20R 80 G4 E	1.5	126.0	104.0	0.25	6.23	2.88	9.11
K20R 90 L4 E	2.2	140.0	110.0	0.30	8.35	3.76	12.11
K20R 100 S4 E	3.0	158.0	112.0	0.35	10.60	5.21	15.81
K20R 100 L4 E	4.0	158.0	146.0	0.35	13.50	6.71	20.21
K20R 100 LX4 E	5.5	158.0	180	0.35	16.00	8.27	24.27
K20R 112 M4 E	5.5	176.0	142.0	0.35	15.0	7.1	22.07
K10R 132 S4 E	7.5	206.0	139.0	0.45	20.0	10.0	29.96
K10R 132 M4 E	11.0	206.0	196.0	0.45	27.0	13.7	40.70
K10R 160 S4 E	15.0	255.0	167.5	0.45	37.0	18.8	55.80
K10R 160 M4 E	18.5	255.0	197.5	0.45	46.5	22.0	68.52
K10R 180 S4 E	22	288.0	193.0	0.55	55.5	26.2	81.70
K10R 180 M4 E	30	288.0	250.5	0.55	70.5	33.4	103.90
K10R 200 M4 E	37	322.0	252.5	0.65	96.5	47.8	144.30
K10R 200 L4 E	45	322.0	292.5	0.65	112.0	54.5	166.50
K10R 225 M4 E	55	362.0	283.5	0.70	145.5	63.0	208.50
K10R 250 S4 E	75	410.0	313.0	0.80	193.5	91.2	284.70
K10R 250 M4 E	90	410.0	367.0	0.80	227.0	106.8	333.80
K10R 280 S4 E	110	465.0	351.0	1.00	275.0	138.0	413.00
K10R 280 M4 E	132	465.0	406.0	1.00	310.0	159.0	469.00
K10R 315 S4 E	160	465.0	486.0	1.10	360.0	191.0	551.00
K10R 315 M4 E	200	520.0	486.0	1.00	450.0	-	450.00
K10R 315 L4 E	250	520.0	606.0	1.00	550.0	-	550.00
K22R 355 MY4 E	315	610.0	492.0	1.50	720.0	-	720.00

Three-phase built-in motors based on Standard Efficiency IE1

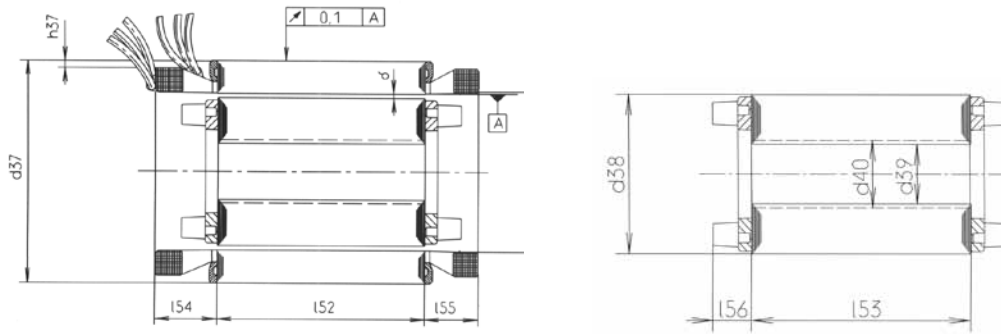
Thermal class 155

Output assignments/principal dimensions							
Type	P _B kW	Stator outer diameter d ₃₇ [mm]	Core length l ₅₂ [mm]	Air gap δ [mm]	Stator [kg]	Weight Rotor body [kg]	Total [kg]
Synchronous speed 1000 rpm – 6-pole version							
K20R 56 K6 E	0.09	84.0	49.0	0.17	1.33	0.63	1.96
K20R 56 G6 E	0.12	84.0	62.0	0.17	1.83	0.79	2.62
K20R 63 K6 E	0.18	96.0	62.0	0.17	2.30	0.91	3.21
K20R 63 G6 E	0.25	96.0	76.0	0.17	2.83	1.25	4.08
K20R 71 K6 E	0.37	110.0	66.0	0.20	2.78	1.70	4.48
K20R 71 G6 E	0.55	110.0	91.0	0.20	3.75	2.33	6.08
K20R 80 K6 E	0.75	126.0	89.0	0.25	4.55	3.13	7.68
K20R 80 G6 E	1.1	126.0	120.0	0.25	6.07	4.15	10.22
K20R 90 L6 E	1.5	140.0	120.0	0.25	7.45	5.13	12.58
K20R 100 L6 E	2.2	158.0	139.0	0.30	10.70	7.63	18.33
K20R 112 M6 E	3.0	176.0	122.0	0.30	12.0	8.2	20.21
K20R 112 MX6 E	4.0	176.0	162.0	0.30	15.5	10.8	26.25
K10R 132 S6 E	5.5	206.0	153.0	0.35	19.5	13.9	33.35
K10R 132 M6 E	7.5	206.0	196.0	0.35	25.0	17.5	42.52
K10R 160 S6 E	11.0	255.0	162.5	0.40	33.0	26.2	59.20
K10R 160 M6 E	15.0	255.0	212.5	0.40	41.5	33.8	75.30
K10R 180 S6 E	18.5	288.0	206.5	0.45	49.0	38.1	87.10
K10R 180 M6 E	22	288.0	250.5	0.45	57.0	45.8	102.80
K10R 200 M6 E	30	322.0	252.5	0.45	80.0	58.6	138.60
K10R 225 M6 E	37	362.0	263.5	0.50	104.0	80.2	184.20
K10R 250 S6 E	45	410.0	255.0	0.55	133.0	99.5	232.50
K10R 250 M6 E	55	410.0	318.0	0.55	161.5	123.1	284.60
K10R 280 S6 E	75	465.0	306.0	0.70	220.0	159.0	379.00
K10R 280 M6 E	90	465.0	386.0	0.70	260.0	197.0	457.00
K10R 315 S6 E	110	465.0	416.0	0.70	270.0	213.0	483.00
K10R 315 M6 E	132	520.0	406.0	0.70	320.0	206.0	526.00
K10R 315 L6 E	160	520.0	456.0	0.70	380.0	350.0	730.00
K10R 315 LX6 E	200	520.0	586.0	0.70	460.0	-	460.00
K22R 355 MY6 E	200	610.0	442.0	0.90	600.0	-	600.00
K22R 355 M6 E	250	610.0	492.0	0.90	610.0	-	610.00
Synchronous speed 750 rpm – 8-pole version							
K20R 63 K8 E	0.09	96.0	62.0	0.20	2.06	1.05	3.11
K20R 63 G8 E	0.12	96.0	73.0	0.20	2.65	1.21	3.86
K20R 71 K8 E	0.18	110.0	66.0	0.20	2.73	1.70	4.43
K20R 71 G8 E	0.25	110.0	91.0	0.20	3.65	2.33	5.98
K20R 80 K8 E	0.37	126.0	80.0	0.25	4.05	2.83	6.88
K20R 80 G8 E	0.55	126.0	104.0	0.25	5.24	3.62	8.86
K20R 90 L8 E	0.75	140.0	110.0	0.25	6.56	4.73	11.29
K20R 100 S8 E	1.1	158.0	100.0	0.30	8.00	5.54	13.54
K20R 100 L8 E	1.5	158.0	139.0	0.30	10.75	7.63	18.38
K20R 112 M8 E	2.2	176.0	122.0	0.30	11.5	8.2	19.71
K20R 112 MX8 E	3.0	176.0	162.0	0.30	15.5	10.8	26.25
K10R 132 S8 E	4.0	206.0	153.0	0.35	19.5	13.9	33.35
K10R 132 M8 E	5.5	206.0	196.0	0.35	24.0	17.5	41.52
K10R 160 S8 E	7.5	255.0	162.5	0.40	31.0	26.2	57.20
K10R 160 M8 E	11.0	255.0	212.5	0.40	40.5	33.8	74.30
K10R 180 S8 E	15.0	288.0	206.5	0.45	48.0	38.1	86.10
K10R 180 M8 E	18.5	288.0	250.5	0.45	57.0	45.8	102.80
K10R 200 M8 E	22	322.0	252.5	0.45	77.0	58.6	135.60
K10R 225 M8 E	30	362.0	263.5	0.50	101.0	80.2	181.20
K10R 250 S8 E	37	410.0	255.0	0.55	129.0	99.5	228.50
K10R 250 M8 E	45	410.0	318.0	0.55	159.5	123.1	282.60
K10R 280 S8 E	55	465.0	306.0	0.70	220.0	159.0	379.00
K10R 280 M8 E	75	465.0	386.0	0.70	260.0	197.0	457.00
K10R 315 S8 E	90	465.0	416.0	0.70	270.0	213.0	483.00
K10R 315 M8 E	110	520.0	406.0	0.70	320.0	206.0	526.00
K10R 315 L8 E	132	520.0	456.0	0.70	380.0	350.0	730.00
K10R 315 LX8 E	160	520.0	486.0	0.70	460.0	-	460.00
K22R 355 MY8 E	160	610.0	442.0	0.80	510.0	-	510.00
K22R 355 M8 E	200	610.0	492.0	0.80	590.0	-	590.00

Dimensions

Three-phase built-in motors

Built-in motor without shaft
 Version for efficiency classes IE1, IE2 und IE3
 Principal dimensions for wound stator core



Built-in motors			d_{37}	d_{37} (Oversize)	d_{41}	h_{37}	l_{52}	l_{54}	l_{55}	δ	d_{38} (Finished size)	d_{38} (Delivered size)	d_{38} (Delivered size)	d_{40} (Finished size, max.)	l_{53}	l_{56}
for IE1	for IE2	for IE3	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
Synchronous speed 3000 rpm – 2-pole version																
K20R 56 K2 E			84	83.8	49.0	3.5	37.0	27.0	27.0	0.25	45.5	46.0	17.0	19.0	37.0	12.0
K20R 56 G2 E			84	83.8	49.0	3.5	47.0	27.0	27.0	0.25	45.5	46.0	17.0	19.0	47.0	12.0
K20R 63 K2 E			96	95.8	56.0	4.0	43.0	35.0	35.0	0.25	52.5	53.0	20.0	23.0	43.0	16.5
K20R 63 G2 E			96	95.8	56.0	4.0	59.0	31.0	31.0	0.25	52.5	53.0	20.0	23.0	59.0	16.5
K20R 71 K2 E			110	109.8	63.0	4.0	60.0	36.0	35.0	0.30	59.4	60.0	25.0	27.0	60.0	17.5
K20R 71 G2 E			110	109.8	63.0	4.0	81.0	36.0	35.0	0.30	59.4	60.0	25.0	27.0	81.0	17.5
K20R 80 K2 E			126	125.8	73.0	5.0	80.0	43.0	42.0	0.35	68.3	69.0	30.0	32.0	80.0	19.0
K20R 80 G2 E			126	125.8	73.0	5.0	108.0	43.0	42.0	0.35	68.3	69.0	30.0	32.0	108.0	19.0
K20R 90 L2 E			140	139.8	82.0	4.5	110.0	45.0	45.0	0.45	77.1	78.0	32.0	34.0	110.0	24.0
K20R 100 S2 E			158	157.8	92.0	4.5	112.0	56.0	53.0	0.55	86.9	88.0	35.0	37.0	112.0	33.5
K20R 100 L2 E			158	157.8	92.0	4.5	146.0	56.0	53.0	0.55	86.9	88.0	35.0	37.0	146.0	33.5
K10R 112 MY2 E			176	175.8	99.0	5.5	122.0	61.0	61.0	0.60	96.8	98.0	44.0	46.0	120.0	32.5
K10R 112 M2 E			176	175.8	99.0	5.5	162.0	61.0	61.0	0.60	96.8	98.0	44.0	46.0	160.0	32.5
	W10R 132 MY2 E	W40R 132 MY2 E	206	205.8	121.0	6.0	137.0	66.0	66.0	0.60	118.8	120.0	52.0	54.0	137.0	32.5
K10R 132 M2 E			206	205.8	121.0	6.0	162.0	66.0	66.0	0.60	118.8	120.0	52.0	54.0	160.0	32.5
K10R 160 S2 E	W10R 160 S2 E	W40R 160 S2 E	255	254.8	148.0	6.5	153.5	76.0	76.0	0.70	145.6	147.0	55.0	58.0	151.0	35.0
K10R 160 M2 E	W10R 160 M2 E	W40R 160 M2 E	255	254.8	148.0	6.5	192.5	76.0	76.0	0.70	145.6	147.0	55.0	58.0	190.0	35.0
		W40R 160 MX2 E	255	254.8	148.0	6.5	220.0	76.0	76.0	0.70	145.6	147.0	55.0	58.0	220.0	35.0
K10R 180 S2 E	W10R 180 S2 E		288	287.8	168.0	6.5	176.5	81.0	81.0	0.90	165.2	167.0	62.0	65.0	174.0	55.0
K10R 180 M2 E	W10R 180 M2 E	W40R 180 M2 E	288	287.8	168.0	6.5	226.5	81.0	81.0	0.90	165.2	167.0	62.0	65.0	224.0	55.0
	W10R 180 MX2 E		288	287.8	168.0	6.5	270.0	81.0	81.0	0.90	165.2	167.0	62.0	65.0	270.0	55.0
K10R 200 M2 E		W40R 200 M2 E	322	321.8	187.0	9.0	212.5	99.0	99.0	1.00	184.0	186.0	75.0	78.0	210.0	55.0
K10R 200 L2 E	W10R 200 L2 E	W40R 200 L2 E	322	321.8	187.0	9.0	252.5	99.0	99.0	1.00	184.0	186.0	75.0	78.0	250.0	55.0
K10R 225 M2 E	W10R 225 M2 E	W40R 225 M2 E	362	361.8	211.0	11.0	250.5	115.0	115.0	1.20	207.6	210.0	85.0	88.0	247.0	57.5
K10R 250 S2 E	W10R 250 S2 E	W40R 250 S2 E	410	409.8	241.0	14.0	255.0	135.0	135.0	1.20	237.6	240.0	95.0	98.0	252.0	65.0
K10R 250 M2 E	W10R 250 M2 E	W40R 250 M2 E	410	409.8	241.0	14.0	283.0	135.0	135.0	1.20	237.6	240.0	95.0	98.0	280.0	65.0
K10R 280 S2 E	W10R 280 S2 E	W40R 280 S2 E	465	464.8	273.0	14.0	306.0	170.0	140.0	1.45	269.1	272.0	105.0	108.0	300.0	70.0
K10R 280 M2 E	W10R 280 M2 E	W40R 280 M2 E	465	464.8	273.0	14.0	361.0	170.0	140.0	1.45	269.1	272.0	105.0	108.0	355.0	70.0
K10R 315 S2 E	W10R 315 S2 E		465	464.8	273.0	14.0	441.0	170.0	140.0	1.45	269.1	272.0	105.0	108.0	435.0	70.0
		W40R 315 S2 E	520	519.8	306.0	14.0	376.0	185.0	165.0	1.60	301.8	305.0	105.0	108.0	370.0	65.0
K10R 315 M2 E	W10R 315 M2 E	W40R 315 M2 E	520	519.8	306.0	14.0	446.0	185.0	165.0	1.60	301.8	305.0	130.0	133.0	440.0	80.0
K10R 315 L2 E	W10R 315 L2 E	W40R 315 L2 E	520	519.8	306.0	14.0	576.0	185.0	165.0	1.60	301.8	305.0	130.0	133.0	570.0	80.0
K10R 315 LX2 E	W10R 315 LX2 E	W40R 315 LX2 E	520	519.8	306.0	14.0	696.0	185.0	165.0	1.60	301.8	305.0	130.0	133.0	690.0	80.0
	W22R 355 MY2 E	W40R 355 MY2 E	610	609.8	352.0	25.0	432.0	225.0	185.0	1.90	347.2	351.0	130.0	133.0	420.0	80.0
	W22R 355 M2 E	W40R 355 M2 E	610	609.8	352.0	25.0	477.0	225.0	185.0	1.90	347.2	351.0	130.0	133.0	465.0	90.0
	W22R 355 MX2 E		610	609.8	352.0	25.0	591.0	225.0	185.0	1.90	347.2	351.0	130.0	133.0	580.0	80.0
		W42R 355 MX2 E	610	609.8	352.0	25.0	591.0	225.0	185.0	1.90	347.2	351.0	130.0	133.0	579.0	80.0
	W22R 355 L2 E		610	609.8	352.0	25.0	712.0	225.0	185.0	1.90	347.2	351.0	130.0	133.0	710.0	80.0
		W42R 355 L2 E	610	609.8	352.0	25.0	712.0	225.0	185.0	1.90	347.2	351.0	130.0	133.0	700.0	80.0
		W42R 400 M2 E	700	699.8	405.0	15.0	622.0	275.0	235.0	2.50	399.0	404.0	150.0	153.0	610.0	90.0
		W42R 400 MX2 E	700	699.8	405.0	15.0	692.0	275.0	235.0	2.50	399.0	404.0	150.0	153.0	680.0	90.0
		W42R 400 L2 E	700	699.8	405.0	15.0	742.0	275.0	235.0	2.50	399.0	404.0	150.0	153.0	730.0	90.0

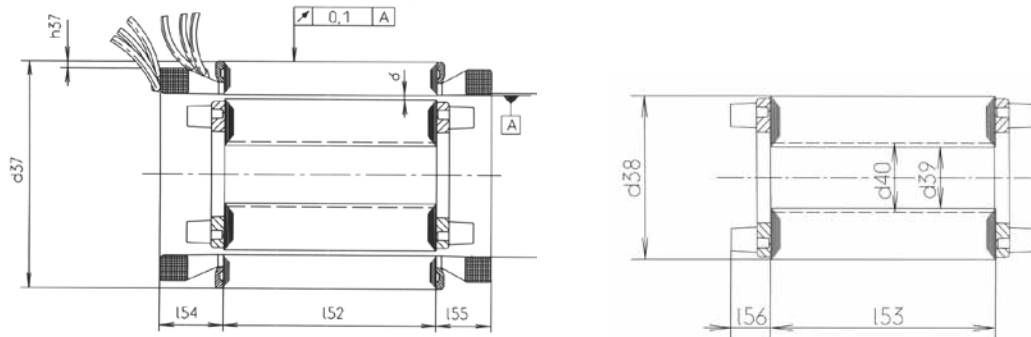
Three-phase built-in motors

Built-in motor without shaft
 Version for efficiency classes IE1, IE2 und IE3
 Principal dimensions for wound stator core

Built-in motors			d_{37}	d_{37} (Oversize)	d_{41}	h_{37}	l_{52}	l_{54}	l_{55}	δ	d_{38} (Finished size)	d_{38} (Delivered size)	d_{39} (Delivered size)	d_{40} (Finished size, max.)	l_{53}	l_{56}
for IE1	for IE2	for IE3	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
Synchronous speed 1500 rpm – 4-pole version																
K20R 56 K4 E			84	83.8	54.0	3.5	37.0	27.0	27.0	0.20	50.6	51.0	17.0	20.0	37.0	10.0
K20R 56 G4 E			84	83.8	54.0	3.5	49.0	27.0	27.0	0.20	50.6	51.0	17.0	20.0	49.0	10.0
K20R 63 K4 E			96	95.8	62.0	4.0	45.0	31.0	29.0	0.20	58.6	59.0	20.0	23.0	45.0	15.0
K20R 63 G4 E			96	95.8	62.0	4.0	62.0	31.0	29.0	0.20	58.6	59.0	20.0	23.0	62.0	15.0
K20R 71K4 E			110	109.8	70.0	4.0	63.0	35.0	33.0	0.20	66.6	67.0	25.0	27.0	63.0	17.5
K20R 71G4 E			110	109.8	70.0	4.0	81.0	35.0	33.0	0.20	66.6	67.0	25.0	27.0	81.0	17.5
K20R 80 K4 E			126	125.8	82.0	5.0	80.0	39.0	38.0	0.25	77.5	78.0	30.0	34.0	80.0	14.5
K20R 80 G4 E			126	125.8	82.0	5.0	104.0	39.0	38.0	0.25	77.5	78.0	30.0	34.0	104.0	14.5
K20R 90 L4 E			140	139.8	90.0	4.5	110.0	43.0	42.0	0.30	85.4	86.0	32.0	36.0	110.0	24.0
K20R 100 S4 E			158	157.8	103.0	4.5	112.0	49.0	48.0	0.35	98.3	99.0	35.0	39.0	112.0	33.5
K20R 100 L4 E			158	157.8	103.0	4.5	146.0	49.0	48.0	0.35	98.3	99.0	35.0	39.0	146.0	33.5
K20R 100 LX4 E			158	157.8	103.0	4.5	180.0	49.0	48.0	0.35	98.3	99.0	35.0	39.0	180.0	33.5
K10R 112 M4 E			176	175.8	111.0	5.5	142.0	64.0	56.0	0.35	109.3	110.0	44.0	46.0	142.0	32.5
K10R 132 S4 E		W40R 132 S4 E	206	205.8	129.0	6.0	139.0	71.0	61.0	0.45	127.1	128.0	52.0	54.0	137.0	32.5
K10R 132 M4 E	W10R 132 M4 E	W40R 132 M4 E	206	205.8	129.0	6.0	196.0	71.0	61.0	0.45	127.1	128.0	52.0	54.0	194.0	32.5
	W10R 132 MX4 E	W40R 132 MX4 E	206	205.8	129.0	6.0	240.0	71.0	61.0	0.45	127.1	128.0	52.0	54.0	240.0	32.5
K10R 160 S4 E	W10R 160 S4 E	W40R 160 S4 E	255	254.8	159.0	6.5	165.0	83.0	71.0	0.45	157.2	158.0	62.0	66.0	165.0	35.0
K10R 160 M4 E			255	254.8	159.0	6.5	195.0	83.0	71.0	0.45	157.2	158.0	62.0	66.0	195.0	35.0
	W10R 160 L4 E	W40R 160 L4 E	255	254.8	159.0	6.5	250.0	83.0	71.0	0.45	157.2	158.0	62.0	66.0	250.0	35.0
K10R 180 S4 E	W10R 180 S4 E		288	287.8	179.0	6.5	191.0	88.0	76.0	0.55	176.9	178.0	72.0	76.0	191.0	43.5
K10R 180 M4 E	W10R 180 M4 E	W40R 180 M4 E	288	287.8	179.0	6.5	248.0	88.0	76.0	0.55	176.9	178.0	72.0	76.0	248.0	43.5
		W40R 180 MX4 E	288	287.8	179.0	6.5	300.0	88.0	76.0	0.55	176.9	178.0	72.0	76.0	300.0	43.5
K10R 200 M4 E	W10R 200 M4 E		322	321.8	201.0	9.0	250.0	99.0	91.0	0.65	198.7	200.0	85.0	90.0	250.0	45.0
K10R 200 L4 E	W10R 200 L4 E	W40R 200 L4 E	322	321.8	201.0	9.0	290.0	99.0	91.0	0.65	198.7	200.0	85.0	90.0	290.0	45.0
	W10R 200 LX4 E	W40R 200 LX4 E	322	321.8	201.0	9.0	330.0	99.0	91.0	0.65	198.7	200.0	85.0	90.0	330.0	45.0
K10R 225 M4 E	W10R 225 M4 E		362	361.8	227.0	11.0	280.0	112.0	97.0	0.70	224.6	226.0	95.0	110.0	280.0	49.0
	W10R 225 MX4 E	W40R 225 MX4 E	362	361.8	227.0	11.0	340.0	112.0	97.0	0.70	224.6	226.0	95.0	110.0	340.0	49.0
K10R 250 S4 E	W10R 250 S4 E	W40R 250 S4 E	410	409.8	259.0	14.0	310.0	125.0	105.0	0.80	256.4	258.0	105.0	110.0	310.0	50.0
K10R 250 M4 E	W10R 250 M4 E	W40R 250 M4 E	410	409.8	259.0	14.0	364.0	125.0	105.0	0.80	256.4	258.0	105.0	110.0	364.0	50.0
K10R 280 S4 E	W10R 280 S4 E	W40R 280 S4 E	465	464.8	296.0	14.0	351.0	145.0	120.0	1.00	293.0	295.0	115.0	120.0	345.0	65.0
K10R 280 M4 E	W10R 280 M4 E	W40R 280 M4 E	465	464.8	296.0	14.0	406.0	145.0	120.0	1.00	293.0	295.0	115.0	120.0	400.0	65.0
K10R 315 S4 E	W10R 315 S4 E		465	464.8	296.0	14.0	486.0	145.0	120.0	1.10	292.8	295.0	115.0	120.0	480.0	65.0
		W40R 315 S4 E	520	519.8	341.0	14.0	406.0	155.0	125.0	1.00	338.0	340.0	130.0	135.0	400.0	65.0
K10R 315 M4 E	W10R 315 M4 E	W40R 315 M4 E	520	519.8	341.0	14.0	486.0	155.0	125.0	1.00	338.0	340.0	130.0	135.0	480.0	75.0
K10R 315 L4 E	W10R 315 L4 E	W40R 315 L4 E	520	519.8	341.0	14.0	606.0	155.0	125.0	1.00	338.0	340.0	130.0	135.0	600.0	75.0
K10R 315 LX4 E	W10R 315 LX4 E	W40R 315 LX4 E	520	519.8	341.0	14.0	696.0	155.0	125.0	1.00	338.0	340.0	130.0	135.0	690.0	75.0
K22R 355 MY4 E	W22R 355 MY4 E	W40R 355 MY4 E	610	609.8	376.0	25.0	492.0	215.0	175.0	1.50	372.0	375.0	150.0	155.0	480.0	75.0
K22R 355 M4 E	W22R 355 M4 E	W40R 355 M4 E	610	609.8	376.0	25.0	492.0	215.0	175.0	1.50	372.0	375.0	150.0	155.0	590.0	89.0
	W22R 355 MX4 E		610	609.8	376.0	25.0	712.0	215.0	175.0	1.50	372.0	375.0	150.0	155.0	700.0	89.0
		W42R 355 MX4 E	610	609.8	376.0	25.0	712.0	215.0	175.0	1.50	372.0	375.0	150.0	155.0	700.0	82.0
	W22R 355 L4 E		610	609.8	376.0	25.0	752.0	215.0	175.0	1.50	372.0	375.0	150.0	155.0	740.0	89.0
		W42R 355 L E	610	609.8	376.0	25.0	752.0	215.0	175.0	1.50	372.0	375.0	150.0	155.0	740.0	82.0
		W42R 400 M4 E	700	699.8	441.0	15.0	292.0	255.0	215.0	1.60	436.8	440.0	155.0	160.0	580.0	80.0
		W42R 400 MX4 E	700	699.8	441.0	15.0	662.0	255.0	215.0	1.60	436.8	440.0	155.0	160.0	650.0	80.0
		W42R 400 L4 E	700	699.8	441.0	15.0	747.0	255.0	215.0	1.60	436.8	440.0	155.0	160.0	735.0	80.0

Three-phase built-in motors with squirrel-cage rotor

Built-in motor without shaft
 Version for efficiency classes IE1, IE2 und IE3
 Principal dimensions for wound stator core



Built-in motors			d ₃₇	d ₃₇ (Oversize)	d ₄₁	h ₃₇	l ₅₂	l ₅₄	l ₅₅	δ	d ₃₈ (Finished size)	d ₃₈ (Delivered size)	d ₃₉ (Delivered size)	d ₄₀ (Finished size, max.)	l ₅₃	l ₅₆
for IE1	for IE2	for IE3	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
Synchronous speed 1000 rpm – 6-pole version																
K20R 56 K6 E			84	83.8	54.0	3.5	49.0	25.0	25.0	0.20	50.66	51.0	17.0	20.0	49.0	10.0
K20R 56 G6 E			84	83.8	54.0	3.5	62.0	25.0	25.0	0.20	50.66	51.0	17.0	20.0	62.0	10.0
K20R 63 K6 E			96	95.8	62.0	4.0	62.0	24.0	24.0	0.20	58.66	59.0	20.0	24.0	62.0	8.5
K20R 63 G6 E			96	95.8	62.0	4.0	76.0	25.0	25.0	0.20	58.66	59.0	20.0	24.0	76.0	8.5
K20R 71 K6 E			110	109.8	76.0	4.0	66.0	30.0	30.0	0.20	72.6	73.0	25.0	30.0	66.0	12.5
K20R 71 G6 E			110	109.8	76.0	4.0	91.0	30.0	30.0	0.20	72.6	73.0	25.0	30.0	91.0	12.5
K20R 80 K6 E			126	125.8	88.0	5.0	89.0	36.0	35.0	0.25	85.5	86.0	30.0	36.0	89.0	13.0
K20R 80 G6 E			126	125.8	88.0	5.0	120.0	36.0	35.0	0.25	85.5	86.0	30.0	36.0	120.0	13.0
K20R 90 L6 E			140	139.8	98.0	4.5	120.0	35.0	35.0	0.25	94.5	95.0	32.0	40.0	120.0	19.0
K20R 100 L6 E			158	157.8	112.0	4.5	139.0	41.0	40.0	0.30	106.4	107.0	35.0	43.0	139.0	20.0
K10R 112 M6 E			176	175.8	121.0	5.5	122.0	59.0	51.0	0.30	119.4	120.0	44.0	52.0	120.0	32.5
K10R 112 MX6 E			176	175.8	121.0	5.5	162.0	59.0	51.0	0.30	119.4	120.0	44.0	52.0	160.0	32.5
K10R 132 S6 E	W10R 132 S6 E	W40R 132 S6 E	206	205.8	143.0	6.0	153.0	66.0	56.0	0.35	141.3	142.0	52.0	60.0	151.0	32.5
K10R 132 M6 E	W10R 132 M6 E		206	205.8	143.0	6.0	196.0	66.0	56.0	0.35	141.3	142.0	52.0	60.0	194.0	32.5
	W10R 132 MX6 E	W40R 132 MX6 E	206	205.8	143.0	6.0	240.0	66.0	56.0	0.35	141.3	142.0	52.0	60.0	240.0	32.5
K10R 160 S6 E			255	254.8	177.0	6.5	162.5	78.0	66.0	0.40	175.2	176.0	62.0	68.0	160.0	35.0
K10R 160 M6 E	W10R 160 M6 E	W40R 160 M6 E	255	254.8	177.0	6.5	212.5	78.0	66.0	0.40	175.2	176.0	62.0	68.0	210.0	35.0
	W10R 160 L6 E	W40R 160 L6 E	255	254.8	177.0	6.5	240.0	78.0	66.0	0.40	175.2	176.0	62.0	68.0	240.0	35.0
K10R 180 S6 E			288	287.8	201.0	6.5	206.5	83.0	71.0	0.45	199.1	200.0	72.0	80.0	204.0	43.5
K10R 180 M6 E	W10R 180 M6 E	W40R 180 M6 E	288	287.8	201.0	6.5	250.5	83.0	71.0	0.45	199.1	200.0	72.0	80.0	248.0	43.5
K10R 180 MX6 E	W10R 180 MX6 E		288	287.8	201.0	6.5	294.0	83.0	71.0	0.45	199.1	200.0	72.0	80.0	294.0	43.5
K10R 200 M6 E	W10R 200 M6 E		322	321.8	225.0	9.0	252.5	96.0	81.0	0.45	223.1	224.0	85.0	95.0	250.0	45.0
	W10R 200 L6 E	W40R 200 L6 E	322	321.8	225.0	9.0	290.0	96.0	81.0	0.45	223.1	224.0	85.0	95.0	290.0	45.0
K10R 225 M6 E	W10R 225 M6 E		362	361.8	253.0	11.0	263.5	107.0	92.0	0.50	251.0	252.0	95.0	105.0	260.0	49.0
	W10R 225 MX6 E	W40R 225 MX6 E	362	361.8	253.0	11.0	290.0	107.0	92.0	0.50	251.0	252.0	95.0	105.0	290.0	49.0
K10R 250 S6 E	W10R 250 S6 E	W40R 250 S6 E	410	409.8	289.0	14.0	255.0	115.0	95.0	0.55	286.9	288.0	105.0	110.0	252.0	50.0
K10R 250 M6 E	W10R 250 M6 E	W40R 250 M6 E	410	409.8	289.0	14.0	318.0	115.0	95.0	0.55	286.9	288.0	105.0	110.0	315.0	50.0
K10R 280 S6 E	W10R 280 S6 E	W40R 280 S6 E	465	464.8	329.0	14.0	306.0	145.0	120.0	0.70	326.6	328.0	115.0	120.0	300.0	65.0
K10R 280 M6 E	W10R 280 M6 E	W40R 280 M6 E	465	464.8	329.0	14.0	386.0	145.0	120.0	0.70	326.6	328.0	115.0	120.0	380.0	65.0
K10R 315 S6 E	W10R 315 S6 E		465	464.8	329.0	14.0	416.0	135.0	115.0	0.70	326.6	328.0	115.0	120.0	410.0	65.0
		W40R 315 S6 E	520	519.8	376.0	14.0	376.0	145.0	125.0	0.70	373.6	375.0	130.0	135.0	370.0	50.0
K10R 315 M6 E	W10R 315 M6 E	W40R 315 M6 E	520	519.8	376.0	14.0	406.0	145.0	125.0	0.70	373.6	375.0	130.0	135.0	400.0	65.0
K10R 315 L6 E	W10R 315 L6 E	W40R 315 L6 E	520	519.8	376.0	14.0	456.0	145.0	125.0	0.70	373.6	375.0	130.0	135.0	450.0	65.0
K10R 315 LX6 E	W10R 315 LX6 E	W40R 315 LX6 E	520	519.8	376.0	14.0	586.0	145.0	125.0	0.70	373.6	375.0	130.0	135.0	580.0	65.0
K22R 355 MY6 E	W22R 355 MY6 E	W40R 355 MY6 E	610	609.8	409.0	25.0	442.0	175.0	145.0	0.90	406.2	408.0	150.0	155.0	430.0	78.0
K22R 355 M6 E	W22R 355 M6 E	W40R 355 M6 E	610	609.8	409.0	25.0	492.0	175.0	145.0	0.90	406.2	408.0	150.0	155.0	480.0	68.0
	W22R 355 MX6 E		610	609.8	409.0	25.0	697.0	175.0	145.0	0.90	406.2	408.0	150.0	155.0	685.0	78.0
		W42R 355 MX6 E	610	609.8	409.0	25.0	697.0	175.0	145.0	0.90	406.2	408.0	150.0	155.0	685.0	85.0
		W42R 355 LY6 E	610	609.8	409.0	25.0	732.0	175.0	145.0	0.90	406.2	408.0	150.0	155.0	720.0	85.0
	W22R 355 L6 E		610	609.8	409.0	25.0	732.0	175.0	145.0	0.90	406.2	408.0	150.0	155.0	730.0	78.0
		W42R 355 L6 E	610	609.8	409.0	25.0	732.0	175.0	145.0	0.90	406.2	408.0	150.0	155.0	720.0	85.0
		W42R 355 LX6 E	610	609.8	409.0	25.0	732.0	175.0	145.0	0.90	406.2	408.0	150.0	155.0	720.0	85.0
		W42R 355 LZ6 E	610	609.8	409.0	25.0	732.0	175.0	145.0	0.90	406.2	408.0	150.0	155.0	720.0	85.0
		W42R 400 M6 E	700	699.8	473.0	15.0	607.0	225.0	175.0	1.30	469.4	472.0	170.0	175.0	595.0	75.0
		W42R 400 MX6 E	700	699.8	473.0	15.0	692.0	225.0	175.0	1.30	469.4	472.0	170.0	175.0	680.0	75.0
		W42R 400 L6 E	700	699.8	473.0	15.0	752.0	225.0	175.0	1.30	469.4	472.0	170.0	175.0	740.0	75.0

Three-phase built-in motors with squirrel-cage rotor

Built-in motor without shaft
Version for efficiency classes IE1, IE2 und IE3
Principal dimensions for wound stator core

Built-in motors			d_{37}	d_{37} (Oversize)	d_{41}	h_{37}	l_{52}	l_{54}	l_{55}	δ	d_{38} (Finished size)	d_{38} (Delivered size)	d_{39} (Delivered size)	d_{40} (Finished size, max.)	l_{53}	l_{56}
for IE1	for IE2	for IE3	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
Synchronous speed 750 rpm – 8-pole version																
K20R 63 K8 E			96	95.8	62.0	4.0	62.0	24.0	24.0	0.20	58.6	59.0	20.0	24.0	62.0	8.5
K20R 63 G8 E			96	95.8	62.0	4.0	73.0	24.0	24.0	0.20	58.6	59.0	20.0	24.0	73.0	8.5
K20R 71 K8 E			110	109.8	76.0	4.0	66.0	30.0	30.0	0.20	72.6	73.0	25.0	30.0	66.0	12.5
K20R 71 G8 E			110	109.8	76.0	4.0	91.0	30.0	30.0	0.20	72.6	73.0	25.0	30.0	91.0	12.5
K20R 80 K8 E			126	125.8	88.0	5.0	80.0	36.0	35.0	0.25	85.5	86.0	30.0	36.0	80.0	13.0
K20R 80 G8 E			126	125.8	88.0	5.0	104.0	36.0	35.0	0.25	85.5	86.0	30.0	36.0	104.0	13.0
K20R 90 L8 E			140	139.8	98.0	4.5	110.0	35.0	35.0	0.25	94.5	95.0	32.0	40.0	110.0	24.0
K20R 100 S8 E			158	157.8	112.0	4.5	100.0	40.0	40.0	0.25	106.4	107.0	35.0	43.0	100.0	20.0
K20R 100 L8 E			158	157.8	112.0	4.5	139.0	40.0	40.0	0.30	106.4	107.0	35.0	43.0	139.0	20.0
K10R 112 M8 E			176	175.8	121.0	5.5	122.0	59.0	51.0	0.30	119.4	120.0	44.0	52.0	120.0	32.5
K10R 112 MX8 E			176	175.8	121.0	5.5	162.0	59.0	51.0	0.30	119.4	120.0	44.0	52.0	160.0	32.5
K10R 132 S8 E	W10R 132 S8 E	W40R 132 S8 E	206	205.8	143.0	6.0	153.0	66.0	56.0	0.35	141.3	142.0	52.0	60.0	151.0	32.5
K10R 132 M8 E	W10R 132 M8 E		206	205.8	143.0	6.0	196.0	66.0	56.0	0.35	141.3	142.0	52.0	60.0	194.0	32.5
	W10R 132 MX8 E	W40R 132 MX8 E	206	205.8	143.0	6.0	240.0	66.0	56.0	0.35	141.3	142.0	52.0	60.0	240.0	32.5
K10R 160 S8 E	W10R 160 S8 E	W40R 160 S8 E	255	254.8	177.0	6.5	162.5	78.0	66.0	0.40	175.2	176.0	62.0	68.0	160.0	35.0
K10R 160 M8 E	W10R 160 M8 E	W40R 160 M8 E	255	254.8	177.0	6.5	212.5	78.0	66.0	0.40	175.2	176.0	62.0	68.0	210.0	35.0
	W10R 160 L8 E	W40R 160 L8 E	255	254.8	177.0	6.5	240.0	78.0	66.0	0.40	175.2	176.0	62.0	68.0	240.0	35.0
K10R 180 S8 E	W10R 180 S8 E	W40R 180 S8 E	288	287.8	201.0	6.5	206.5	83.0	71.0	0.45	199.1	200.0	72.0	80.0	204.0	43.5
K10R 180 M8 E	W10R 180 M8 E		288	287.8	201.0	6.5	250.5	83.0	71.0	0.45	199.1	200.0	72.0	80.0	248.0	43.5
		W40R 180 MX8 E	288	287.8	201.0	6.5	294.0	83.0	71.0	0.45	199.1	200.0	72.0	80.0	294.0	43.5
K10R 200 M8 E	W10R 200 M8 E		322	321.8	225.0	9.0	252.5	96.0	81.0	0.45	223.1	224.0	85.0	95.0	250.0	45.0
	W10R 200 L8 E	W40R 200 L8 E	322	321.8	225.0	9.0	290.0	96.0	81.0	0.45	223.1	224.0	85.0	95.0	290.0	45.0
K10R 225 M8 E	W10R 225 M8 E	W40R 225 M8 E	362	361.8	253.0	11.0	263.5	107.0	92.0	0.50	251.0	252.0	95.0	105.0	260.0	49.0
	W10R 225 MX8 E	W40R 225 MX8 E	362	361.8	253.0	11.0	290.0	107.0	92.0	0.50	251.0	252.0	95.0	105.0	290.0	49.0
K10R 250 S8 E	W10R 250 S8 E	W40R 250 S8 E	410	409.8	289.0	14.0	255.0	110.0	90.0	0.55	286.9	288.0	105.0	110.0	252.0	50.0
K10R 250 M8 E	W10R 250 M8 E	W40R 250 M8 E	410	409.8	289.0	14.0	318.0	110.0	90.0	0.55	286.9	288.0	105.0	110.0	315.0	50.0
K10R 280 S8 E	W10R 280 S8 E	W40R 280 S8 E	465	464.8	329.0	14.0	306.0	140.0	115.0	0.70	326.6	328.0	115.0	120.0	300.0	65.0
K10R 280 M8 E	W10R 280 M8 E	W40R 280 M8 E	465	464.8	329.0	14.0	386.0	140.0	115.0	0.70	326.6	328.0	115.0	120.0	380.0	65.0
K10R 315 S8 E	W10R 315 S8 E		465	464.8	329.0	14.0	416.0	135.0	115.0	0.70	326.6	328.0	115.0	120.0	410.0	65.0
		W40R 315 S8 E	465	464.8	329.0	14.0	376.0	145.0	125.0	0.70	373.6	375.0	130.0	135.0	370.0	50.0
K10R 315 M8 E	W10R 315 M8 E	W40R 315 M8 E	520	519.8	376.0	14.0	406.0	145.0	125.0	0.70	373.6	375.0	130.0	135.0	400.0	65.0
K10R 315 L8 E	W10R 315 L8 E	W40R 315 L8 E	520	519.8	376.0	14.0	456.0	145.0	125.0	0.70	373.6	375.0	130.0	135.0	450.0	65.0
K10R 315 LX8 E	W10R 315 LX8 E	W40R 315 LX8 E	520	519.8	376.0	14.0	486.0	145.0	125.0	0.70	373.6	375.0	130.0	135.0	480.0	65.0
K22R 355 MY8 E	W22R 355 MY8 E	W40R 355 MY8 E	610	609.8	421.0	24.0	442.0	175.0	140.0	0.80	418.4	420.0	150.0	155.0	430.0	90.0
K22R 355 M8 E	W22R 355 M8 E	W40R 355 M8 E	610	609.8	421.0	24.0	492.0	175.0	140.0	0.80	418.4	420.0	150.0	155.0	480.0	90.0
	W22R 355 MX8 E		610	609.8	421.0	25.0	492.0	175.0	140.0	0.8	418.4	420.0	150.0	155.0	660.0	90.0
		W42R 355 MX8 E	610	609.8	421.0	25.0	492.0	175.0	140.0	0.8	418.4	420.0	150.0	155.0	660.0	85.0
	W22R 355 L8 E		610	609.8	421.0	25.0	492.0	175.0	140.0	0.8	418.4	420.0	150.0	155.0	730.0	90.0
		W42R 355 L8 E	610	609.8	421.0	25.0	492.0	175.0	140.0	0.8	418.4	420.0	150.0	155.0	720.0	85.0
		W42R 400 M8 E	700	699.8	473.0	25.0	607.0	225.0	175.0	1	470.0	472.0	170.0	175.0	595.0	75.0
		W42R 400 MX8 E	700	699.8	473.0	25.0	692.0	225.0	175.0	1	470.0	472.0	170.0	175.0	680.0	75.0
		W42R 400 L8 E	700	699.8	473.0	25.0	752.0	225.0	175.0	1	470.0	472.0	170.0	175.0	740.0	75.0

VEM Holding GmbH

Pirnaer Landstraße 176
01257 Dresden
Germany

Sales

Low voltage department

Tel. +49 3943 68-3127
Fax +49 3943 68-2440
E-mail: low-voltage@vem-group.com

High voltage department

Tel. +49 351 208-3237
Fax +49 351 208-1108
E-mail: high-voltage@vem-group.com

Drive systems department

Tel. +49 351 208-1180
Fax +49 351 208-1185
E-mail: drive-systems@vem-group.com

VEM Service

Tel. +49 351 208-3237
Fax +49 351 208-1108
E-mail: service@vem-group.com



For detailed information
please visit our website.

www.vem-group.com