

## 4 TRAVELING MOTORS

These motors are driven with fixed voltages and frequencies with the below specified line voltages (=frequency converter supply voltage). Motor nameplate data is the same for all line voltages. Other voltage/frequency versions are not available for these motors.

### 4.1 Frequency converter traveling motors 3000 rpm (100 Hz), 3600 rpm (120 Hz) and 4800 rpm (80 Hz)

Duty type	Motor code		MF06MA100	MF06MA200		MF06LA100	MF06LA200		MF06LA20P	
	Speed control		frequency converter	frequency converter		frequency converter	frequency converter		frequency converter	
	Frequency converter supply voltage		380-480V	380-480V	440-480V	380-480V	380-480V	440-480V	380-480V	440-480V
	Motor voltage		400 V	400 V	460 V	400 V	400 V	460 V	400 V	460 V
	Frequency		80 Hz	100 Hz	120 Hz	80 Hz	100 Hz	120 Hz	100 Hz	120 Hz
Brake type		compact		compact	compact	compact		compact	compact	
	Synchronous speed	rpm	4800	3000	3600	4800	3000	3600	3000	3600
	Brake torque	Nm	2	2	2	2	2	2	2	
	Starting torque	Nm	3.2	3.0	2.9	5.6	7.2	7.1	7.2	7.1
	Electric braking torque	Nm								
	Starting current	A	6.5	4.2	4.3	10.3	8.2	8.5	8.2	8.5
	Maximum torque	Nm	3.2	3.0	2.9	5.6	7.2	7.1	7.2	7.1
	Speed at max. torque	rpm	0	0	0	0	0	0	0	0
	80% of max. torque	Nm	2.6	2.4	2.4	4.5	5.7	5.7	5.7	5.7
	Speed at 80% torque	rpm	3700	2200	2600	3600	2200	2650	2200	2650
	Current at 80% torque	A	3.8	2.1	2.1	6.0	4.8	4.8	4.8	4.8
	Inertia	kgm <sup>2</sup>	0.0004	0.0004	0.0004	0.0007	0.0007	0.0007	0.0007	0.0007
	Inertia with flywheel	kgm <sup>2</sup>								
	Power factor, starting	-	0.74	0.72	0.70	0.75	0.71	0.69	0.71	0.69
	Weight with fan	kg								
	Weight	kg	4.9	4.9	4.9	6.8	6.8	6.8	6.8	6.8
	No-load current	A	1.2	1.0	1.0	1.1	1.6	1.6	1.6	1.6
	Iron losses	W								
	Stator resistance at 20 °C	Ω	19.5	34	34	12.2	14.7	14.7	14.7	14.7
S3-20%	Speed	rpm	4550	2760	3380	4500	2780	3330		
	Power	kW	0.45	0.45	0.45	0.9	0.75	0.75		
	Current	A	2.1	1.4	1.4	2.3	2.3	2.3		
	Starting burden	kgm <sup>2</sup> /h								
	Power factor	-	0.63	0.68	0.63	0.77	0.67	0.67		
	Efficiency	-	0.66	0.66	0.66	0.72	0.74	0.74		
S3-40%	Speed	rpm	4550	2855	3430	4560	2850	3440	2800	3360
	Power	kW	0.45	0.3	0.37	0.65	0.45	0.55	0.65	0.75
	Current	A	2.1	1.2	1.2	2.1	1.8	1.8	2.1	2.1
	Starting burden	kgm <sup>2</sup> /h								
	Power factor	-	0.63	0.57	0.59	0.71	0.52	0.53	0.61	0.61
	Efficiency	-	0.66	0.65	0.65	0.68	0.73	0.74	0.73	0.74
S3-60%	Speed	rpm		2855	3450	4640	2850	3470		
	Power	kW		0.3	0.3	0.45	0.45	0.45		
	Current	A		1.2	1.2	1.8	1.8	1.8		
	Starting burden	kgm <sup>2</sup> /h								
	Power factor	-		0.57	0.59	0.60	0.52	0.52		
	Efficiency	-		0.65	0.65	0.64	0.73	0.73		
S3-100%	Speed	rpm								
	Power	kW								
	Current	A								
	Starting burden	kgm <sup>2</sup> /h								
	Power factor	-								
	Efficiency	-								

...Frequency converter traveling motors, Continued...

Duty type	Motor code		MF06LB100		MF06LB200		MF07XA100	MF07XB100	MF07XA200		MF07XB200	
	Speed control		frequency converter		frequency converter		frequency converter	frequency converter	frequency converter		frequency converter	
	Frequency converter supply voltage		380-480V		380-480V	440-480V	380-480V	380-480V	380-480V	440-480V	380-480V	440-480V
	Motor voltage		400 V		400 V	460 V	400 V	400 V	400 V	460 V	400 V	460 V
	Frequency		80 Hz		100 Hz	120 Hz	80 Hz	80 Hz	100 Hz	120 Hz	100 Hz	120 Hz
Brake type		DC		DC	DC	DC	DC	DC	DC	DC	DC	
	Synchronous speed	rpm	4800	3000	3600	4800	4800	4800	3000	3600	3000	3600
	Brake torque	Nm	4	4	4	16	16	16	16	16	16	16
	Starting torque	Nm	10.4	10.5	10.4	11.7	16.5	13.5	12.7	23.5	21.6	
	Electric braking torque	Nm										
	Starting current	A	16.4	12.9	12.6	23.5	32	19.3	19.4	35	34	
	Maximum torque	Nm	10.4	11	10.8	12	17	17.5	16.5	25	23	
	Speed at max. torque	rpm	0	1480	1770	2250	2200	2010	2410	1590	1910	
	80% of max. torque	Nm	8.3	8.9	8.9	9.6	13	14	13.1	20	18	
	Speed at 80% torque	rpm	3350	2350	2820	3770	4050	2620	3140	2470	2970	
	Current at 80% torque	A	9.0	6.6	6.6	10.4	14	10	10.6	15	13.5	
	Inertia	kgm <sup>2</sup>	0.0006	0.0006	0.0006	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012
	Inertia with flywheel	kgm <sup>2</sup>										
	Power factor, starting	-	0.84	0.77	0.74	0.77	0.79	0.67	0.63	0.67	0.64	
	Weight with fan	kg				13	13	13	13	13	13	13
	Weight	kg	7.8	7.8	7.8							
	No-load current	A	2.0	2.2	2.0	2.6	6.0	2.5	2.3	5.4	4.9	
	Iron losses	W										
	Stator resistance at 20 °C	Ω	8.8	10.4	10.4	5.6	3.75	6.3	6.3	3.8	3.8	
S3-20%	Speed	rpm	4450	2720	3320	4440	4420	2820	3370	2840	3440	
	Power	kW	1.3	1.3	1.3	2.2	3.6	1.8	2.2	2.5	3	
	Current	A	3.1	3.3	3.2	5.0	8.8	4.3	4.6	7.2	6.9	
	Starting burden	kgm <sup>2</sup> /h										
	Power factor	-	0.82	0.77	0.74	0.88	0.79	0.79	0.81	0.68	0.71	
	Efficiency	-	0.78	0.73	0.76	0.74	0.74	0.74	0.75	0.74	0.76	
S3-40%	Speed	rpm	4500	2770	3370	4520	4460	2850	3430	2860	3460	
	Power	kW	1.1	1.1	1.1	1.8	3	1.5	1.8	2.2	2.5	
	Current	A	2.9	3.0	2.9	4.3	7.9	3.9	3.9	6.9	6.5	
	Starting burden	kgm <sup>2</sup> /h										
	Power factor	-	0.78	0.73	0.74	0.84	0.78	0.75	0.76	0.66	0.68	
	Efficiency	-	0.78	0.74	0.76	0.75	0.74	0.75	0.76	0.73	0.75	
S3-60%	Speed	rpm	4600	2840	3450	4520	4460	2850	3430	2860	3460	
	Power	kW	0.75	0.65	0.65	1.8	3	1.5	1.8	2.2	2.5	
	Current	A	2.3	2.5	2.4	4.3	7.9	3.9	3.9	6.9	6.5	
	Starting burden	kgm <sup>2</sup> /h										
	Power factor	-	0.65	0.60	0.62	0.84	0.78	0.75	0.76	0.66	0.68	
	Efficiency	-	0.75	0.70	0.71	0.75	0.74	0.75	0.76	0.73	0.75	
S3-100%	Speed	rpm				4520		2850	3430	2890	3480	
	Power	kW				1.8		1.5	1.8	1.8	2.2	
	Current	A				4.3		3.9	3.9	6.4	6.1	
	Starting burden	kgm <sup>2</sup> /h										
	Power factor	-				0.84		0.75	0.76	0.59	0.63	
	Efficiency	-				0.75		0.75	0.76	0.70	0.74	

## 4.2 Two-speed traveling motors 3000/750 rpm (50 Hz) and 3600/900 rpm (60 Hz)

Duty type	Motor code		MF06MA104		MF06MA104		MF06LA104		MF06LA104	
	Speed control		2-speed		2-speed		2-speed		2-speed	
	Voltage		380V - 415V		440V - 480V		380V - 415V		440V - 480V	
	Frequency		50 Hz		60 Hz		50 Hz		60 Hz	
Brake type		DC		DC		DC		DC		
		High	Low	High	Low	High	Low	High	Low	
	Synchronous speed	rpm	3000	750	3600	900	3000	750	3600	900
	Brake torque	Nm	2	2	2	2	2	2	2	2
	Starting torque	Nm	2.2	1.7	2.2	1.8	3.3	2.5	3.3	2.4
	Electric braking torque	Nm	5.6/2.0		5.6/2.0		8/3.5		8/3.5	
	Starting current	A	3.5	1.0	3.9	1.1	5.0	1.4	5.3	1.5
	Maximum torque	Nm	2.2	1.8	2.2	1.8	3.6	2.7	3.5	2.6
	Speed at max. torque	rpm	2150	400	2750	550	1620	380	2220	530
	80% of max. torque	Nm	1.7	1.4	1.7	1.4	2.8	2.1	2.7	2.0
	Speed at 80% torque	rpm	2500	570	3080	740	2100	530	2800	680
	Current at 80% torque	A	1.5	0.8	1.5	0.8	2.3	1.3	2.2	1.3
	Inertia	kgm <sup>2</sup>	0.0004	0.0004	0.0004	0.0004	0.0006	0.0006	0.0006	0.0006
	Inertia with flywheel	kgm <sup>2</sup>								
	Power factor, starting	-	0.94	0.93	0.91	0.92	0.92	0.93	0.91	0.92
	Weight with fan	kg								
	Weight	kg	5.7	5.7	5.7	5.7	7.8	7.8	7.8	7.8
	No-load current	A	0.9	0.8	0.9	0.8	1.1	1.2	1.1	1.2
	Iron losses	W								
	Stator resistance at 20 °C	Ω	69	280	69	280	50	175	50	175
S3-20%	Speed	rpm	2800	690	3400	810	2760	660	3340	810
	Power	kW	0.3	0.05	0.37	0.07	0.45	0.1	0.55	0.12
	Current	A	1.0	0.8	0.9	0.9	1.3	1.2	1.3	1.2
	Starting burden	kgm <sup>2</sup> /h	2		1.4		3		2.1	
	Power factor	-	0.7	0.77	0.74	0.78	0.83	0.67	0.82	0.80
	Efficiency	-	0.67	0.12	0.67	0.12	0.67	0.20	0.67	0.20
S3-40%	Speed	rpm	2800	690	3400	810	2760	660	3340	810
	Power	kW	0.3	0.05	0.37	0.07	0.45	0.1	0.55	0.12
	Current	A	1.0	0.8	0.9	0.9	1.3	1.2	1.3	1.2
	Starting burden	kgm <sup>2</sup> /h	1.5		1.0		2.5		1.9	
	Power factor	-	0.7	0.77	0.74	0.78	0.83	0.67	0.82	0.80
	Efficiency	-	0.67	0.12	0.67	0.12	0.67	0.20	0.67	0.20
S3-60%	Speed	rpm								
	Power	kW								
	Current	A								
	Starting burden	kgm <sup>2</sup> /h								
	Power factor	-								
	Efficiency	-								
S3-100%	Speed	rpm								
	Power	kW								
	Current	A								
	Starting burden	kgm <sup>2</sup> /h								
	Power factor	-								
	Efficiency	-								

...Two speed traveling motors, Continued...

Duty type	Motor code		MF07X-104		MF07X-104		MF07XA104		MF07XA104		MF10M-104		MF10M-104	
	Speed control		2-speed		2-speed		2-speed		2-speed		2-speed		2-speed	
	Voltage		380V - 415V		440V - 480V		380V - 415V		440V - 480V		380V - 415V		440V - 480V	
	Frequency		50 Hz		60 Hz		50 Hz		60 Hz		50 Hz		60 Hz	
	Brake type		DC		DC		DC		DC		DC		DC	
		High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	
Synchronous speed	rpm	3000	750	3600	900	3000	750	3600	900	3000	750	3600	900	
Brake torque	Nm	8	8	8	8	8	8	8	8	21	21	21	21	
Starting torque	Nm	5.8	5.2	5.6	4.8	7.5	5.4	6.9	5.0	10	8	10	8	
Electric braking torque	Nm		10/9		10/9		11/9		11/9		33/13		33/13	
Starting current	A	8.0	2.4	8.0	2.3	9.9	3.1	10	3.1	12.8	3.0	13.7	3.3	
Maximum torque	Nm	5.9	5.2	5.7	4.8	7.5	5.4	6.9	5.0	10.3	8	10.3	8	
Speed at max. torque	rpm	1700	0	2040	0	0	0	0	0	1380	0	1650	0	
80% of max. torque	Nm	4.6	4.1	4.5	3.8	6	4.3	5.5	4	8	6.4	8	6.4	
Speed at 80% torque	rpm	2400	590	2880	710	2360	505	2830	605	2380	570	2850	680	
Current at 80% torque	A	3.9	2.3	3.6	2.3	4.9	2.4	4.7	2.4	5.5	1.7	5.6	1.7	
Inertia	kgm <sup>2</sup>	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0027	0.0027	0.0027	0.0027	
Inertia with flywheel	kgm <sup>2</sup>	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	0.018	0.018	0.018	0.018	
Power factor, starting	-	0.90	0.80	0.89	0.78	0.89	0.79	0.88	0.76	0.83	0.84	0.79	0.81	
Weight with fan	kg													
Weight with flywheel	kg	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	26	26	26	26	
No-load current	A	2.2	1.7	1.9	1.7	3.2	2.2	3.0	2.2	1.3	1.2	1.2	1.2	
Iron losses	W													
Stator resistance at 20 °C	Ω	23	75	23	75	19	72	19	72	13.5	69	13.5	69	
S3-20%	Speed	rpm	2720	590	3370	750	2730	590	3310	740	2500	585	3200	750
	Power	kW	0.75	0.18	0.9	0.2	0.9	0.2	1.1	0.25	1.5	0.35	1.8	0.4
	Current	A	2.7	1.9	2.7	1.9	3.5	2.3	3.4	2.3	4.6	1.6	3.8	1.6
	Starting burden	kgm <sup>2</sup> /h	7		4.9		7.1		5		10		6.9	
	Power factor	-	0.80	0.67	0.79	0.64	0.74	0.70	0.77	0.63	0.92	0.77	0.91	0.75
	Efficiency	-	0.57	0.24	0.62	0.26	0.59	0.21	0.62	0.25	0.62	0.45	0.68	0.50
S3-40%	Speed	rpm	2720	590	3370	750	2730	590	3310	740	2700	630	3310	780
	Power	kW	0.75	0.18	0.9	0.2	0.9	0.2	1.1	0.25	1.3	0.3	1.5	0.35
	Current	A	2.7	1.9	2.7	1.9	3.5	2.3	3.4	2.3	3.0	1.4	3.0	1.4
	Starting burden	kgm <sup>2</sup> /h	6.5		4.5		6.6		4.6		8		5.6	
	Power factor	-	0.80	0.67	0.79	0.64	0.74	0.70	0.77	0.63	0.89	0.70	0.89	0.68
	Efficiency	-	0.57	0.24	0.62	0.26	0.59	0.21	0.62	0.25	0.69	0.47	0.70	0.51
S3-60%	Speed	rpm	2720	590	3370	750				2700	630	3310	780	
	Power	kW	0.75	0.18	0.9	0.2				1.3	0.3	1.5	0.35	
	Current	A	2.7	1.9	2.7	1.9				3.0	1.4	3.0	1.4	
	Starting burden	kgm <sup>2</sup> /h	5.8		4					6		4.2		
	Power factor	-	0.80	0.67	0.79	0.64				0.89	0.70	0.89	0.68	
	Efficiency	-	0.57	0.24	0.62	0.26				0.69	0.47	0.70	0.51	
S3-100%	Speed	rpm								2700	630	3310	780	
	Power	kW								1.3	0.3	1.5	0.35	
	Current	A								3.0	1.4	3.0	1.4	
	Starting burden	kgm <sup>2</sup> /h								4		2.8		
	Power factor	-								0.89	0.70	0.89	0.68	
	Efficiency	-								0.69	0.47	0.70	0.51	

## 5 TROLLEY SPEED TABLES

### 5.1 Trolley traveling speed range, Frequency converter control

#### Low headroom trolley, Frequency converter control

Frame	Rope Reeving	Duty		Gear type		Wheel diameter [mm]	Motor type	Nr of motors	Speed range [m/min] <sup>1)</sup>		
									Min	380V-415V Max	460V-480V Max
NB	02		M5	M6	GEK 106	80	MF06MA200	1	10	20	24
	02		M5	M6	GEK 106	80	MF06MA100	1	16	32	32
	04		M5	M6	GEK 106	80	MF06MA200	1	10	20	24
	04		M5	M6	GEK 106	80	MF06MA100	1	16	32	32
NC	A2		M5	M6	GEK 106	100	MF06MA200	1	10	20	24
	A2		M5	M6	GEK 106	100	MF06MA100	1	16	32	32
	A4		M5	M6	GEK 106	100	MF06MA200	1	10	20	24
	A4		M5	M6	GEK 106	100	MF06MA100	1	16	32	32
	02	M4	M5	M6	GEK 106	100	MF06LA200	1	10	20	24
	02	M4	M5	M6	GEK 106	100	MF06LA100	1	16	32	32
	04		M5	M6	GEK 106	100	MF06LA200	1	10	20	24
	04		M5	M6	GEK 106	100	MF06LA100	1	16	32	32
	04	M4			GEK 106	125	MF06LA200	1	10	20	24
	04	M4			GEK 106	125	MF06LA100	1	16	32	32
ND	02	M4	M5	M6	GEK 106	125	MF06MA200	2	10	20	24
	02	M4	M5	M6	GEK 106	125	MF06LA100	2	16	32	32
	04		M5	M6	GEK 106	125	MF06LA200	2	10	20	24
	04		M5	M6	GEK 106	125	MF06LA100	2	16	32	32
	04	M4			GEK 106	150	MF06LA200	2	12.5	25	30
	04	M4			GEK 106	150	MF06LA100	2	20	40	40

<sup>1)</sup> The maximum speed depends on the line voltage. With higher line voltage greater speeds can be achieved.

The table is calculated with maximum loads for the hoists. With derated loads it may be possible to use smaller frequency converters. In these cases the frequency converter selection must be verified with KC Drive or Markman.



Normal headroom trolley, Frequency converter control

Frame	Rope Reeving	Duty		Gear type	Wheel diameter [mm]	Motor type	Nr of motors	Speed range [m/min] <sup>1)</sup>			
								Min	380V-415V Max	460V-480V Max	
NB	02		M5	M6	GEK 106	100	MF06LA200	1	10	20	24
	02		M5	M6	GEK 106	100	MF06LA100	1	16	32	32
	04		M5	M6	GEK 106	100	MF06LA200	1	10	20	24
	04		M5	M6	GEK 106	100	MF06LA100	1	16	32	32
NC	02		M5	M6	GEK 106	100	MF06LA200	1	10	20	24
	02		M5	M6	GEK 106	100	MF06LA100	1	16	32	32
	04		M5	M6	GEK 106	100	MF06LA200	1	10	20	24
	04		M5	M6	GEK 106	100	MF06LA100	1	16	32	32
ND	02/22		M5	M6	GEK 106	100	MF06MA200	2	10	20	24
	02/22		M5	M6	GEK 106	100	MF06LA100	2	16	32	32
	04/24		M5	M6	GEK 106	100	MF06LA200	2	10	20	24
	04/24		M5	M6	GEK 106	100	MF06LA100	2	16	32	32
	06/26		M5	M6	GEK 106	125	MF06MA200	4	10	20	24
	06/26		M5	M6	GEK 106	125	MF06LA100	4	16	32	32
	08/28		M5	M6	GEK 106	125	MF06MA200	4	10	20	24
	08/28		M5	M6	GEK 106	125	MF06LA100	4	16	32	32
NE	02/22	M4	M5	M6	GEK 106	125	MF06LA200	2	10	20	25
	02/22	M4	M5	M6	GEK 106	125	MF06LA100	2	16	32	32
	04	M4	M5	M6	GES 320	180	MF06LA200	3	10	20	24
	04	M4	M5	M6	GES 320	180	MF06LA100	4	16	32	32
	24	M4	M5	M6	GEK 106	125	MF06LA200	3	10	20	24
	24	M4	M5	M6	GEK 106	125	MF06LA100	4	16	32	32
	06/26	M4	M5	M6	GES 320	180	MF06LA200	3	10	20	24
	06/26	M4	M5	M6	GES 320	180	MF06LA100	4	16	32	32
28	M4	M5		GES 320	180	MF06LA200	4	10	20	24	

<sup>1)</sup> The maximum speed depends on the line voltage. With higher line voltage greater speeds can be achieved.

The table is calculated with maximum loads for the hoists. With derated loads it may be possible to use smaller frequency converter. In these cases the frequency converter selection must be verified with KC Drive or Markman.



Double girder trolley, Frequency converter control

Frame	Rope reeving	Load	End truck	Gear	Motor	Nr of motors	Speed Range [m/min] <sup>1)</sup>		
							Min	380V-415V Max	460V-480V Max
NB	02	1.6t M5	QNC 09	GES 342	MF06MA200	1	10	20	24
	02	1.6t M5	QNC 09	GES 342	MF06MA100	1	16	32	32
	04	3.2t M5	QNC 09	GES 342	MF06MA200	1	10	20	24
	04	3.2t M5	QNC 09	GES 342	MF06MA100	1	16	32	32
NC	02	3.2t M4	QNC 09	GES 342	MF06LA200	1	10	20	24
	02	3.2t M4	QNC 09	GES 342	MF06LA100	1	16	32	32
	04	5t M5	QNC 09	GES 342	MF06LA200	1	10	20	24
	04	5t M5	QNC 09	GES 342	MF06LA100	1	16	32	32
	04	6.3t M4	QNC 09	GES 342	MF06LA200	1	10	20	24
	04	6.3t M4	QNC 09	GES 342	MF06LA100	1	16	32	32
ND	02/22	6.3t M4	QNC 11	GES 342	MF06MA200	2	10	20	24
	02/22	6.3t M4	QNC 11	GES 342	MF06LA100	2	20	40	40
	04/24	10t M5	QNC 11	GES 342	MF06MA200	2	10	20	24
	04/24	10t M5	QNC 11	GES 342	MF06LA100	2	20	40	40
	04	12.5t M4	QNC 11	GES 342	MF06LA200	2	10	20	24
	04	12.5t M4	QNC 11	GES 342	MF06LA100	2	20	40	40
	06/26	15t M5	QNC 14	GES 342	MF06LA20P	2	15	32	32
	08/28	20t M4	QNC 14	GES 342	MF06LA20P	2	10	32	32
NE	02/22	10t M4	QNC 14	GES 342	MF06LA200	2	16	32	32
	04/24	20t M4	QNC 14	GES 342	MF06LA20P	2	10	32	32
	06/26	30t M4	QNC 20	GES 490	MF06LA20P	2	10	20	24
	06/26	30t M4	QNC 20	GES 490	MF06LB100	2	10	32	32
	08/28	40t M4	QNC 20	GES 490	MF06LB200	2	10	20	24
	08/28	40t M4	QNC 20	GES 490	MF06LB100	2	10	32	32
NF	22	20t M4	QNC 20	GES 490	MF06LA200	2	10	20	24
	22	20t M4	QNC 20	GES 490	MF06LB100	2	10	32	32
	24	40t M4	QNC 20	GES 490	MF06LB200	2	10	20	24
	24	40t M4	QNC 20	GES 490	MF06LB100	2	10	32	32
	26	60t M4	QNC 25	GES 590	MF07XA200	2	10	25	25
	26	60t M4	QNC 25	GES 572	MF07XA200	2	10	32	32
	28	80t M4	QNC 25B	GES 590	MF07XA200	2	10	25	25
	28	80t M4	QNC 25B	GES 572	MF07XB200	2	10	32	32

<sup>1)</sup> The maximum speed depends on the line voltage. With higher line voltage greater speeds can be achieved.

The table is calculated with maximum loads for the hoists. With derated loads it may be possible to use smaller frequency converter. In these cases the frequency converter selection must be verified with KC Drive or Markman.

## 5.2 Trolley traveling speeds, Contactor control

### Low headroom trolley

Frame	Reeving	Duty		Gear type	Wheel diameter	Motor type	Nr of motors	50 Hz		60 Hz	
								High	Low	High	Low
NB	02	M5	M6	GEK 106PT1B0	80	MF06MA104	1	20	5	24	6
	04	M5	M6	GEK 106PT1B0	80	MF06MA104	1	20	5	24	6
NC	A2	M5	M6	GEK 106PT1B0	100	MF06MA104	1	20	5	24	6
	A4	M5	M6	GEK 106PT1B0	100	MF06MA104	1	20	5	24	6
	02	M4	M5	GEK 106PT1B0	100	MF06MA104	1	20	5	24	6
	04	M4	M5	GEK 106PT1B0	100	MF06MA104	1	20	5	24	6
ND	02	M4	M5	GEK 106PT1B0	125	MF06MA104	2	20	5	24	6
	04	M5	M6	GEK 106PT1B0	125	MF06MA104	2	20	5	24	6
	04	M4		GEK 106PT1B0	150	MF06LA104	2	24	6	29	7

### Normal headroom trolley

Frame	Reeving	Duty		Gear type	Wheel diameter	Motor type	Nr of motors	50 Hz		60 Hz	
								High	Low	High	Low
NB	02	M5	M6	GEK 106PT1B0	100	MF06LA104	1	20	5	24	6
	04	M5	M6	GEK 106PT1B0	100	MF06LA104	1	20	5	24	6
NC	02	M5	M6	GEK 106PT1B0	100	MF06LA104	1	20	5	24	6
	04	M5	M6	GEK 106PT1B0	100	MF06LA104	1	20	5	24	6
ND	02/22	M5	M6	GEK 106PT1B0	100	MF06MA104	2	20	5	24	6
	04/24	M5	M6	GEK 106PT1B0	100	MF06MA104	2	20	5	24	6
	06/26	M5		GEK 106PT1B0	125	MF06MA104	4	20	5	24	6
	08/28	M4		GEK 106PT1B0	125	MF06MA104	4	20	5	24	6
NE	02/22	M4	M5	GEK 106PT1B0	125	MF06LA104	2	20	5	24	6
	04	M4	M5	GES 320PT3B0	180	MF06LA104	3	20	5	24	6
	24	M4	M5	GEK 106PT1B0	125	MF06LA104	3	20	5	24	6
	06/26	M4	M5	GES 320PT3B0	180	MF06LA104	3	20	5	24	6
	28	M5	M6	GES 320PT3B0	180	MF06LA104	4	20	5	24	6

### Double girder trolley

Frame	Reeving	Load	End truck		Gear		Motor	Nr of motors	Speed 50Hz		Speed 60Hz		Note!
									High	Low	High	Low	
NB	02	1.6t M5	QNC	9	GES	342	MF06MA104	1	20	5	24	6	
	04	3.2t M5	QNC	9	GES	342	MF06MA104	1	20	5	24	6	
NC	02	3.2t M4	QNC	9	GES	342	MF06MA104	1	20	5	24	6	
	04	6.3t M4	QNC	9	GES	342	MF06LA104	1	20	5	24	6	
ND	02/22	6.3t M4	QNC	11	GES	342	MF06MA104	2	20	5	24	6	
	04/24	12.5t M4	QNC	11	GES	342	MF06LA104	2	20	5	24	6	
	06/26	15t M5	QNC	20	GES	490	MF06LA104	2	20	5	24	6	*
	08/28	20t M4	QNC	20	GES	490	MF06LA104	2	20	5	24	6	*
NE	02/22	10t M4	QNC	20	GES	490	MF06LA104	2	20	5	24	6	*
	04/24	20t M4	QNC	20	GES	490	MF06LA104	2	20	5	24	6	*
	06/26	30t M4	QNC	25	GES	5B5	MF07X-104	2	20	5	24	6	*
	08/28	40t M4	QNC	25	GES	5B5	MF07X-104	2	20	5	24	6	*
NF	22	20t M4	QNC	20	GES	490	MF06LA104	2	20	5	24	6	
	24	40t M4	QNC	25	GES	5B5	MF07X-104	2	20	5	24	6	*
	26	60t M4	QNC	25	GES	5B5	MF10M-104	2	20	5	24	6	
	28	80t M4	QNC	25B	GES	5B5	MF10M-104	2	20	5	24	6	

\*) Note: Trolley higher than with frequency converter traveling, consult factory for further information.