

8JSA5

Technical data



8JSA51.ee045ffgg-0

8JSA52.ee045ffgg-0

8JSA54.ee028ffgg-0

8JSA54.ee050ffgg-0

Motor	4500	4500	2750	5000
Nominal speed n_N [rpm]	4500	4500	2750	5000
Number of pole pairs	5			
Nominal torque M_N [Nm]	2.89	5.02	11.17	6.92
Nominal power P_N [W]	1362	2366	3217	3623
Nominal current I_N [A]	4.49	4.31	5.98	6.11
Stall torque M_0 [Nm]	4.8	8.5	14.4	14.1
Stall current I_0 [A]	7.5	7.4	7.8	12.5
Maximum torque M_{max} [Nm]	15.7	29.9	54.5	53.9
Maximum current I_{max} [A]	37.5	37	38.5	62.5
Maximum speed n_{max} [rpm]	6000			
Torque constant K_T [Nm/A]	0.64	1.16	1.87	1.13
Voltage constant K_E [V/1000 rpm]	41.9	74.9	120.3	72.9
Stator resistance R_{zph} [Ω]	1.16	1.45	1.58	0.65
Stator inductance L_{zph} [mH]	5.2	7.8	9.6	3.5
Electrical time constant t_{el} [ms]	4.48	5.38	6.08	5.38
Thermal time constant t_{therm} [min]	20	24	31	31
Moment of inertia J [kgcm ²]	3.4	6.2	12	12
Weight without brake m [kg]	4.2	5.8	9	9
Holding brakes				
Holding torque of the brake M_{Br} [Nm]	14.5			
Weight of brake [kg]	1.1			
Moment of inertia for the brake J_{Br} [kgcm ²]	0.173			
Recommendations				
ACOPOS servo drive 8Vxxx.00-x1	1090	1090	1090	1180
ACOPOSmulti inverter module 8BV1...	0110			
Cross section for B&R motor cables [mm ²]	1.5	1.5	1.5	4
Connector type	SpeedTec			

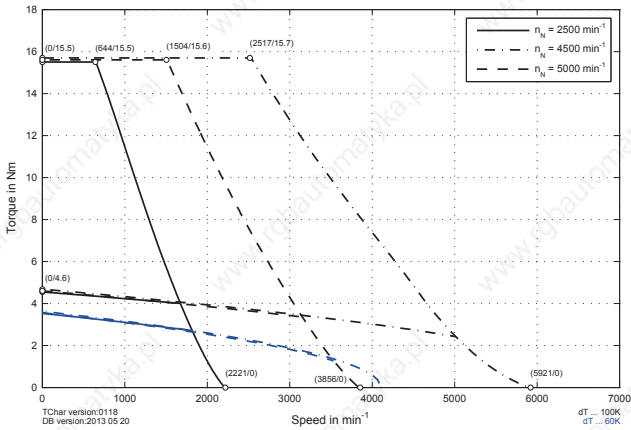
NOTE – Rated / stall torque: see table: "Reduction depending on the motor option"

NOTE – Servo drive: The recommended servo drive / inverter module is designed for 1.1x the stall current. If more than double the amount is needed during the acceleration phase, the next larger servo drive should be selected. This recommendation is only a guideline, detailed inspection of the corresponding speed - torque characteristic curve can result in deviations of the servo drive size (one size larger or smaller).

NOTE – Cable cross section: The B&R motor cables with this cable cross section are produced optimally (cables stripped to the correct length) for the ACOPOS servo drive or the recommended ACOPOS inverter module. B&R motor cables with other cable cross sections can also be used (within the specified terminal cross section range) and can be obtained from B&R in the desired design on request.

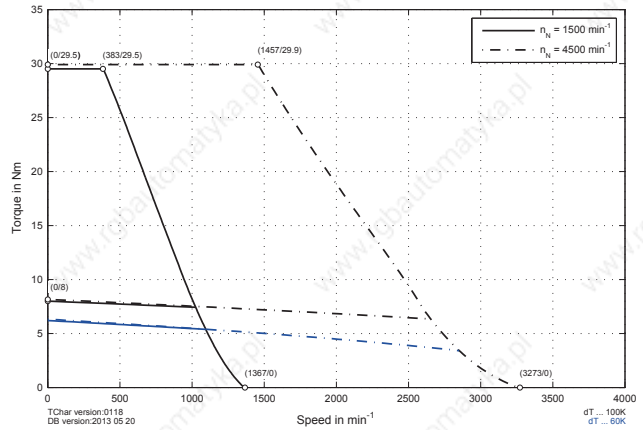
Speed-torque characteristics for DC bus voltage of 325 VDC

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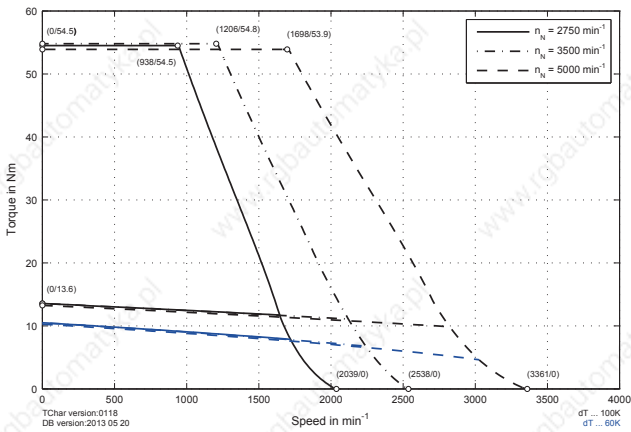
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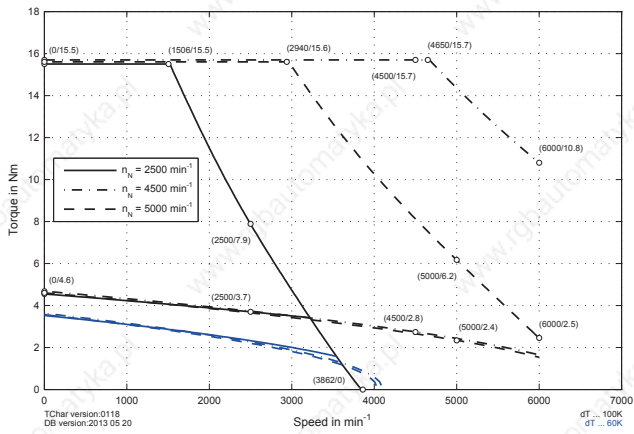


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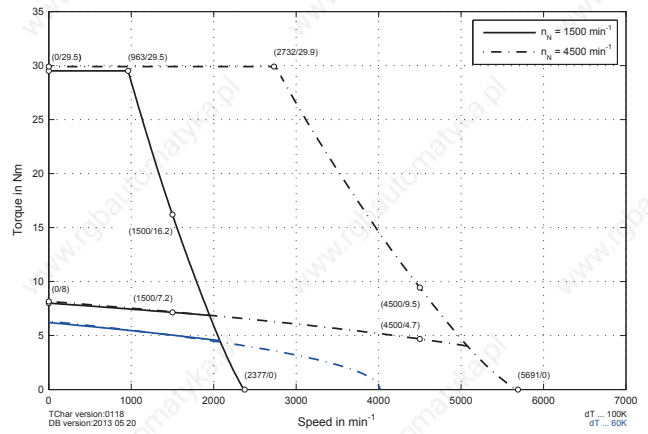
Speed-torque characteristics for DC bus voltage of 560 VDC

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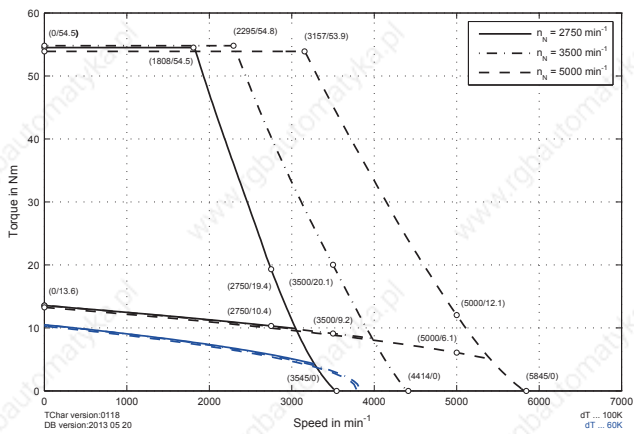
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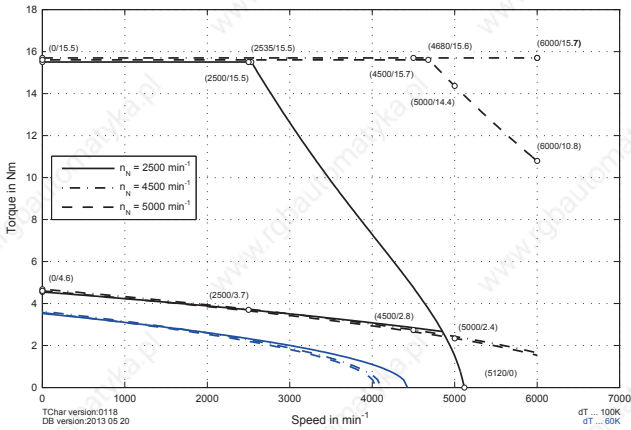
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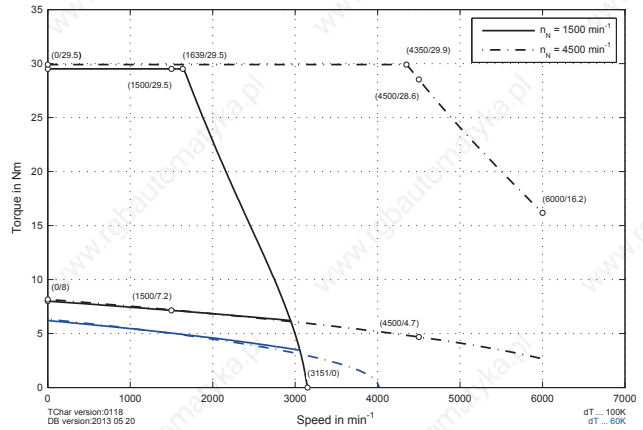
Speed-torque characteristics for DC bus voltage of 750 VDC

ACOPOSmulti



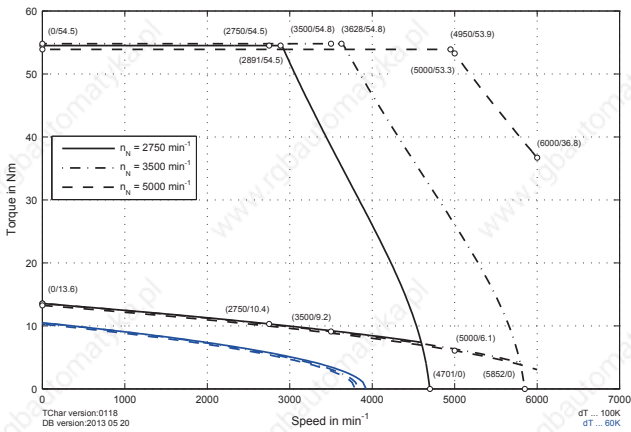
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ACOPOSmulti



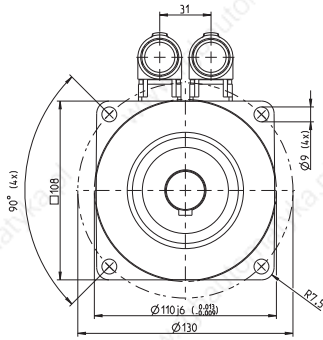
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ACOPOSmulti

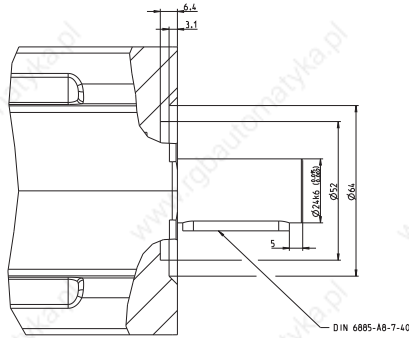
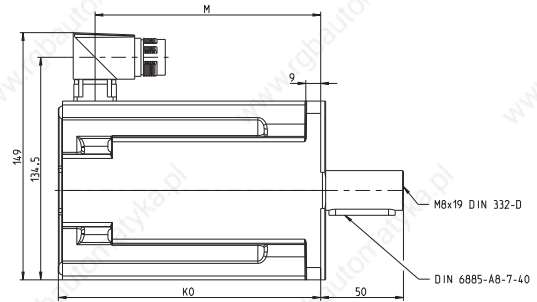


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A side flange detail



EnDat feedback

Model number	K_0	M	Extension of K_0 depending on the motor option [mm]	Holding brake	Oil seal
8JSA51.Exnnffgg-0	146	105.3	43	---	---
8JSA52.Exnnffgg-0	177	136.3	43	---	---
8JSA54.Exnnffgg-0	239	198.3	43	---	---

Resolver feedback

Model number	K_0	M	Extension of K_0 depending on the motor option [mm]	Holding brake	Oil seal
8JSA51.R0nnffgg-0	127.5	105.3	45	---	---
8JSA52.R0nnffgg-0	158.5	136.3	45	---	---
8JSA54.R0nnffgg-0	220.5	198.3	45	---	---