

5.4.6 Electrical data BRV8

BR motor – With servo-ventilation – 1000 rpm			V82104	V84104	V86104	V88104
Stall torque ¹⁾³⁾	T ₀	Nm	45	89	130	163
Nominal power ¹⁾	P _N	W	4472	9111	12985	16127
Nominal torque ¹⁾	T _N	Nm	42.7	87	124	154
Nominal speed	n _N	rpm	1000	1000	1000	1000
Peak torque 20°C	T _{max}	Nm	100	218	300	400
Nominal current ¹⁾	I _N	Arms	9.08	20.4	26.4	33.8
Stall current ¹⁾³⁾	I ₀	Arms	9.3	20.2	26.9	34.7
Peak current	I _{max}	Arms	21.9	52.4	65.6	90.2
Rotor inertia	J _m	kgcm ²	49	89	128	167
Voltage constant 20°C ²⁾	k _e	Vs/rad	2.99	2.72	2.99	2.9
Torque constant 20°C with stall rotor ²⁾	k _t	Nm/Arms	5.03	4.57	5.03	4.88
Ke and kt reduction coeff. over temperature	dk/dt	[%/°C]	-0.11	-0.11	-0.11	-0.11
Winding resistance 20°C ²⁾	R _c	Ohm	4.86	1.34	0.9	0.62
Winding inductance ²⁾	L _c	mH	47.8	19.8	15.9	11.2
E.M.F at 1000 rpm 20°C ²⁾	V1000	V/krpm	314	285	314	304
Nominal voltage ¹⁾	V _n	Vrms	380	332	355	338
Weight	m	kg	37	49	64	78
Number of poles	2p		8	8	8	8

BR motor – With servo-ventilation – 2000 rpm			V82204	V84204	V86204	V88204
Stall torque ¹⁾³⁾	T ₀	Nm	45	89	130	163
Nominal power ¹⁾	P _N	W	8796	17802	24714	30159
Nominal torque ¹⁾	T _N	Nm	42	85	118	144
Nominal speed	n _N	rpm	2000	2000	2000	2000
Peak torque 20°C	T _{max}	Nm	100	218	300	400
Nominal current ¹⁾	I _N	Arms	19.7	37.3	55.2	63.2
Stall current ¹⁾³⁾	I ₀	Arms	20.5	37.9	59.1	69.5
Peak current	I _{max}	Arms	48.1	98.3	144	180
Rotor inertia	J _m	kgcm ²	49	89	128	167
Voltage constant 20°C ²⁾	k _e	Vs/rad	1.36	1.45	1.36	1.45
Torque constant 20°C with stall rotor ²⁾	k _t	Nm/Arms	2.29	2.44	2.29	2.44
Ke and kt reduction coeff. over temperature	dk/dt	[%/°C]	-0.11	-0.11	-0.11	-0.11
Winding resistance 20°C ²⁾	R _c	Ohm	0.95	0.39	0.19	0.16
Winding inductance ²⁾	L _c	mH	9.9	5.6	3.3	2.81
E.M.F at 1000 rpm 20°C ²⁾	V1000	V/krpm	143	152	143	152
Nominal voltage ¹⁾	V _n	Vrms	321	336	308	322
Weight	m	kg	37	49	64	78
Number of poles	2p		8	8	8	8

BR motor – With servo-ventilation – 3000 rpm			V82304	V84304	V86304	V88304
Stall torque ¹⁾³⁾	T ₀	Nm	45	89	130	163
Nominal power ¹⁾	P _N	W	13509	25133	34872	43040
Nominal torque ¹⁾	T _N	Nm	43	80	111	137
Nominal speed	n _N	rpm	3000	3000	3000	3000
Peak torque 20°C	T _{max}	Nm	100	218	300	400
Nominal current ¹⁾	I _N	Arms	27.4	56.1	64.9	80.1
Stall current ¹⁾³⁾	I ₀	Arms	27.9	60.7	73.9	92.7
Peak current	I _{max}	Arms	65.6	157	180	241
Rotor inertia	J _m	kgcm ²	49	89	128	167
Voltage constant 20°C ²⁾	k _e	Vs/rad	1.00	0.91	1.09	1.09
Torque constant 20°C with stall rotor ²⁾	k _t	Nm/Arms	1.68	1.52	1.83	1.83
Ke and kt reduction coeff. over temperature	dk/dt	[%/°C]	-0.11	-0.11	-0.11	-0.11
Winding resistance 20°C ²⁾	R _c	Ohm	0.49	0.15	0.13	0.09
Winding inductance ²⁾	L _c	mH	5.3	2.19	2.11	1.49
E.M.F at 1000 rpm 20°C ²⁾	V1000	V/krpm	105	95	114	114
Nominal voltage ¹⁾	V _n	Vrms	346	306	360	351
Weight	m	kg	37	49	64	78
Number of poles	2p		8	8	8	8

Torque and power values refer to motor flanged and suspended in horizontal positions (steel flange 500x500x40 mm)

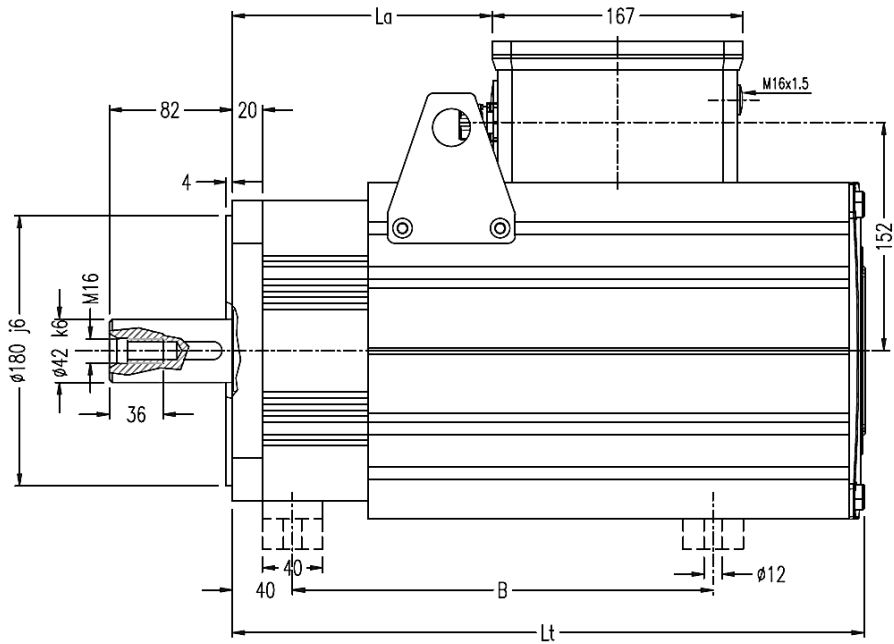
Minimum PWM 8kHz, DC bus test voltage ≤ 560 Vdc uncontrolled, tested with resolver

¹⁾ Continuous service S1 (dT=105°C)

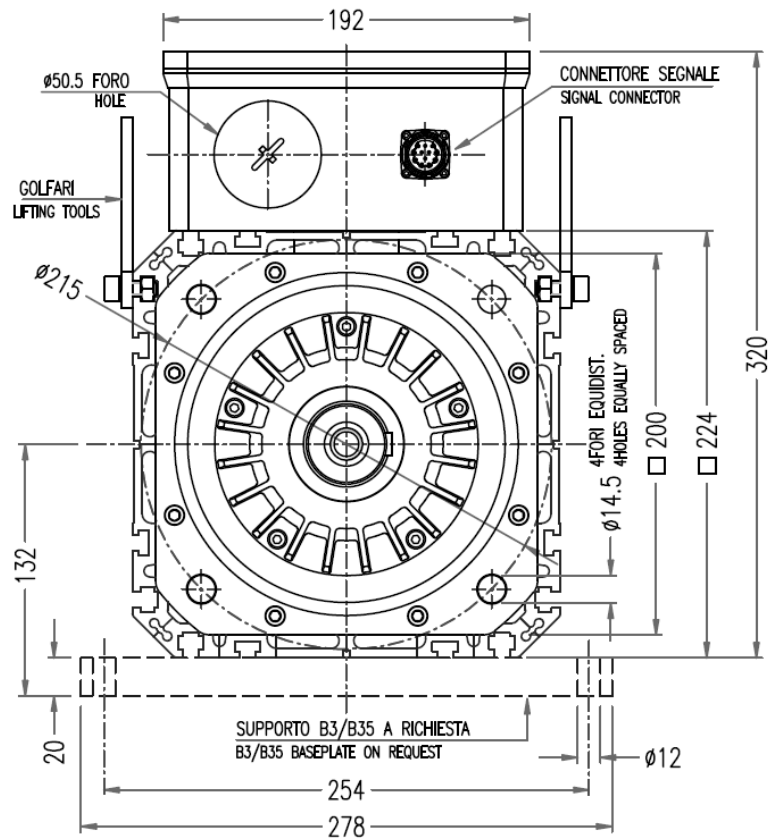
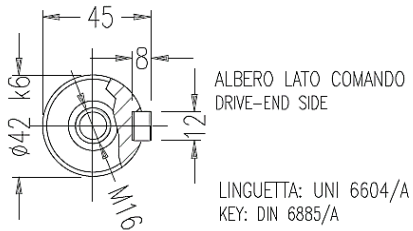
²⁾ Tolerance ± 10%

³⁾ Value referred to 100 rpm

5.5.6 Overall dimensions – BRV8



VENTILATION: FORCED CONVECTION IC416



	Without brake		
	B	La	Lt
BRV82	205	98	353
BRV84	280	173	428
BRV86	354	248	502
BRV88	429	323	577

	With brake		
	B	La	Lt
BRV82	325	218	473
BRV84	400	293	548
BRV86	474	368	622
BRV88	549	443	697