

5.4.9 Electrical data BRW9

Motore BR – Raffreddato a liquido – 1000 rpm			W92104	W94104	W96104	W98104
Stall torque ^{1) 3)}	T ₀	Nm	185	385	555	770
Nominal power ¹⁾	P _N	W	17436	36652	53407	75398
Nominal torque ¹⁾	T _N	Nm	167	350	510	720
Nominal speed	n _N	rpm	1000 ⁴⁾	1000	1000 ⁴⁾	1000 ⁴⁾
Peak torque 20°C	T _{max}	Nm	290	590	810	1100
Current at nominal power ¹⁾	I _N	Arms	48	90	118	181
Stall current ^{1) 3)}	I ₀	Arms	47	97	126	188
Peak current	I _{max}	Arms	85	168	196	287
Inertia	J _m	kgcm ²	224	401	577	753
Voltage constant at 20°C ²⁾	k _e	Vs/rad	2,68	2,70	2,88	2,71
Torque constant at 20°C and 0 rpm ²⁾	k _t	Nm/Arms	4,14	4,15	4,46	4,18
Derating Temp. Coeff. Of Back EMF	dk/dt	[%/°C]	-0,11	-0,11	-0,11	-0,11
Winding Resistance at 20°C ²⁾	R _c	Ohm	0,58	0,21	0,16	0,085
Winding Inductance ²⁾	L _c	mH	12,0	5,0	4,4	3,1
bemf. at 1000 rpm a 20°C ²⁾	V1000	V/krpm	281	283	302	284
Nominal voltage ¹⁾	V _N	Vrms	361	330	358	347
Motor loss	P _{loss}	kW	2,6	3,8	4,1	4,8
Minimum flow rate	Q	L/min	6	8	10	12
Pressure	P	bar	2,7	3,9	3,9	5,5
Weight	m	kg	83	115	147	180
Poles number	2p		8	8	8	8

Motore BR – Raffreddato a liquido – 1800 rpm			W92184	W94184	W96184	W98184
Stall torque ^{1) 3)}	T ₀	Nm	185	385	555	735
Nominal power ¹⁾	P _N	W	29594	62204	90478	129119
Nominal torque ¹⁾	T _N	Nm	157	330	480	685
Nominal speed	n _N	rpm	1800 ⁴⁾	1800 ⁴⁾	1800 ⁴⁾	1800 ⁴⁾
Peak torque 20°C	T _{max}	Nm	290	580	810	1080
Current at nominal power ¹⁾	I _N	Arms	79	149	185	301
Stall current ^{1) 3)}	I ₀	Arms	82	170	209	314
Peak current	I _{max}	Arms	149	288	327	501
Inertia	J _m	kgcm ²	224	401	577	753
Voltage constant at 20°C ²⁾	k _e	Vs/rad	1,53	1,54	1,73	1,55
Torque constant at 20°C and 0 rpm ²⁾	k _t	Nm/Arms	2,37	2,37	2,68	2,39
Derating Temp. Coeff. Of Back EMF	dk/dt	[%/°C]	-0,11	-0,11	-0,11	-0,11
Winding Resistance at 20°C ²⁾	R _c	Ohm	0,19	0,07	0,05	0,027
Winding Inductance ²⁾	L _c	mH	4,4	2,1	1,7	1,06
bemf. at 1000 rpm a 20°C ²⁾	V1000	V/krpm	160	162	181	162
Nominal voltage ¹⁾	V _N	Vrms	365	351	376	350
Motor loss	P _{loss}	kW	2,6	3,8	4,1	4,8
Minimum flow rate	Q	L/min	6	8	10	12
Pressure	P	bar	2,7	3,9	3,9	5,5
Weight	m	kg	83	115	147	180
Poles number	2p		8	8	8	8

Motore BR – Raffreddato a liquido – 2600 rpm			W92264	W94264	W96264
Stall torque ^{1) 3)}	T ₀	Nm	185	385	555
Nominal power ¹⁾	P _N	W	39479	84404	121161
Nominal torque ¹⁾	T _N	Nm	145	310	445
Nominal speed	n _N	rpm	2600 ⁴⁾	2600 ⁴⁾	2600 ⁴⁾
Peak torque 20°C	T _{max}	Nm	275	555	794
Current at nominal power ¹⁾	I _N	Arms	116	187	257
Stall current ^{1) 3)}	I ₀	Arms	132	227	314
Peak current	I _{max}	Arms	227	355	505
Inertia	J _m	kgcm ²	224	401	577
Voltage constant at 20°C ²⁾	k _e	Vs/rad	0,96	1,158	1,154
Torque constant at 20°C and 0 rpm ²⁾	k _t	Nm/Arms	1,48	1,780	1,785
Derating Temp. Coeff. Of Back EMF	dk/dt	[%/°C]	-0,11	-0,11	-0,11
Winding Resistance at 20°C ²⁾	R _c	Ohm	0,07	0,038	0,02
Winding Inductance ²⁾	L _c	mH	2,1	1,20	0,8
bemf. at 1000 rpm a 20°C ²⁾	V1000	V/krpm	100	121	121
Nominal voltage ¹⁾	V _N	Vrms	342	366	356
Motor loss	P _{loss}	kW	2,6	3,8	4,1
Minimum flow rate	Q	L/min	6	8	10
Pressure	P	bar	2,7	3,9	3,9
Weight	m	kg	83	115	147
Poles number	2p		8	8	8

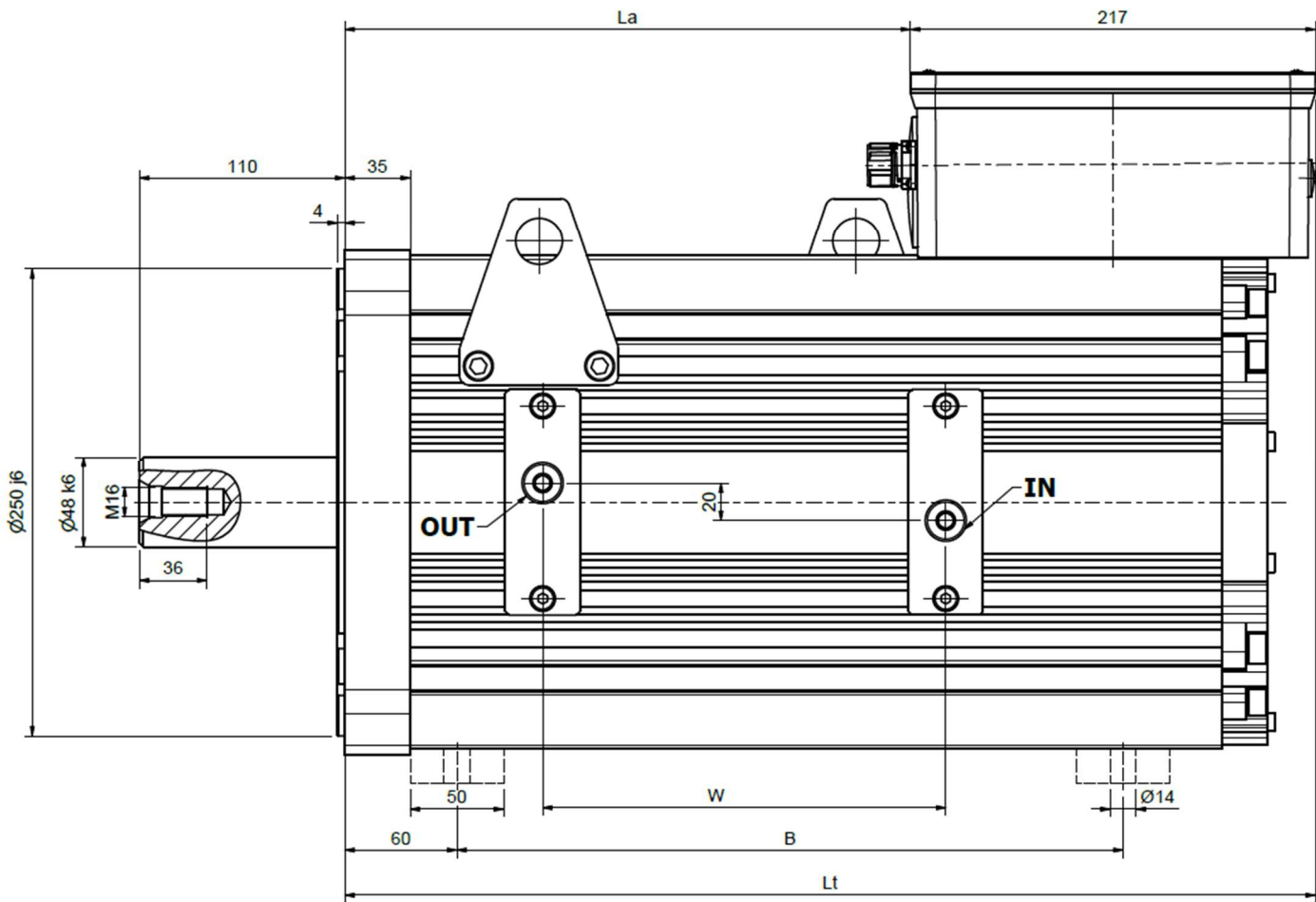
Torque and power values refer to motor flanged and suspended in horizontal positions (steel flange 500x500x40 mm)
Minimum PWM 4kHz at a liquid input temperature of 20°C, DC bus test voltage ≤ 560 Vdc uncontrolled, tested with resolver
¹⁾ Continuous service S1 (dT=105°C)

²⁾ Tolerance ± 10%

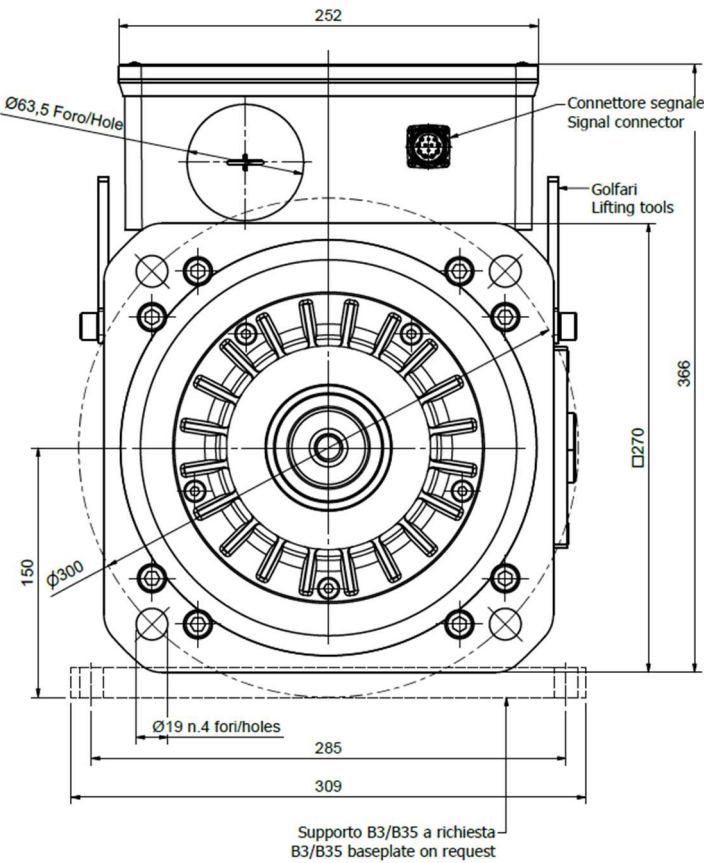
³⁾ Value referred to 100 rpm

⁴⁾ Inverters connected to these motors must have a field weakening option in order to reach nominal speed

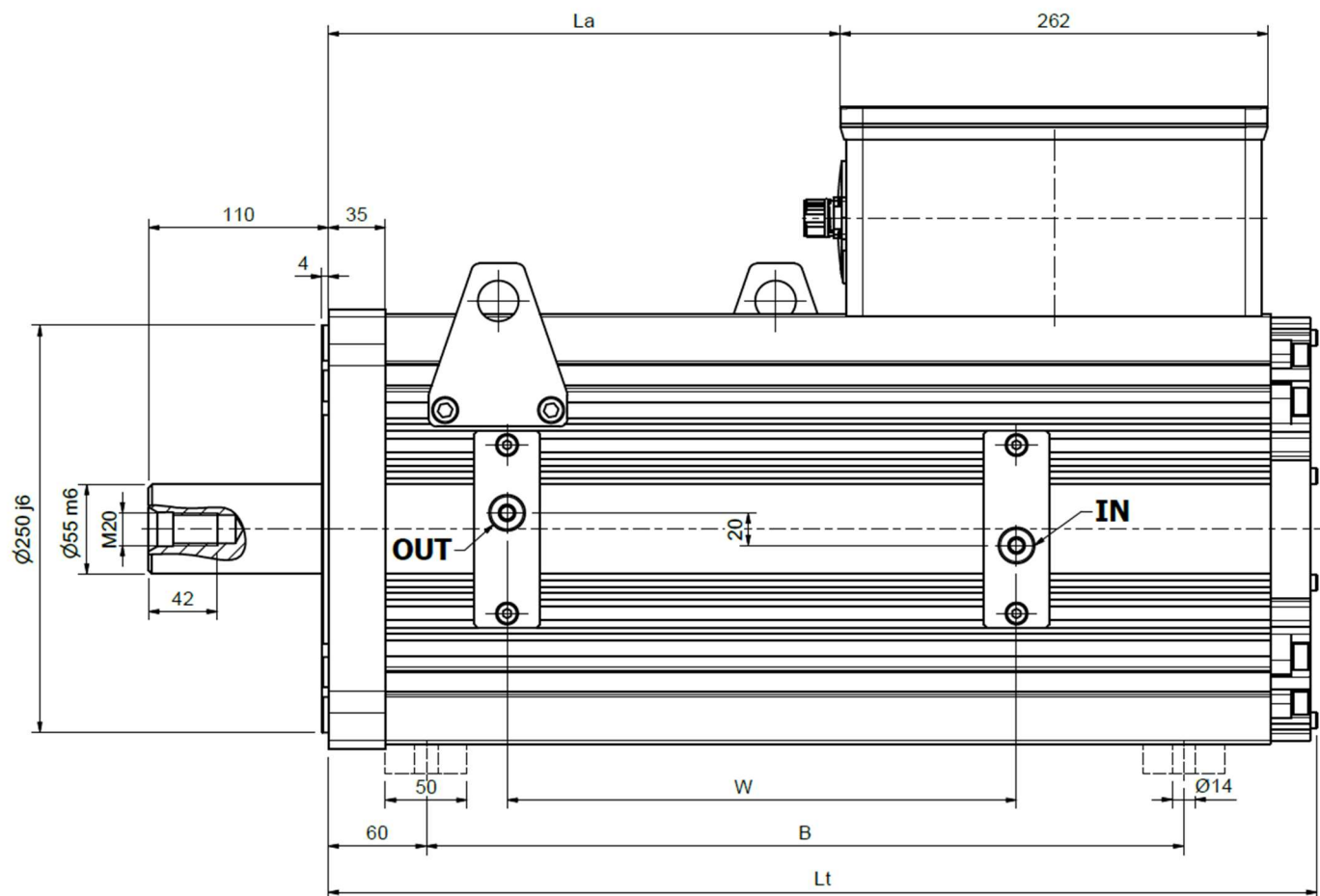
5.5.11 Overall dimensions – BRW92-94



	BRW92-94 without brake			
	B	La	Lt	W 3/8 GAS
BRW92	250	196	413	120
BRW94	357	303	520	216



5.5.12 Overall dimensions – BRW96-98



	BRW96-98 without brake			
	B	La	Lt	W 3/8 GAS
BRW96	464	314	606	312
BRW98	567	417	709	408

