5.4.8 Electrical data BRV9

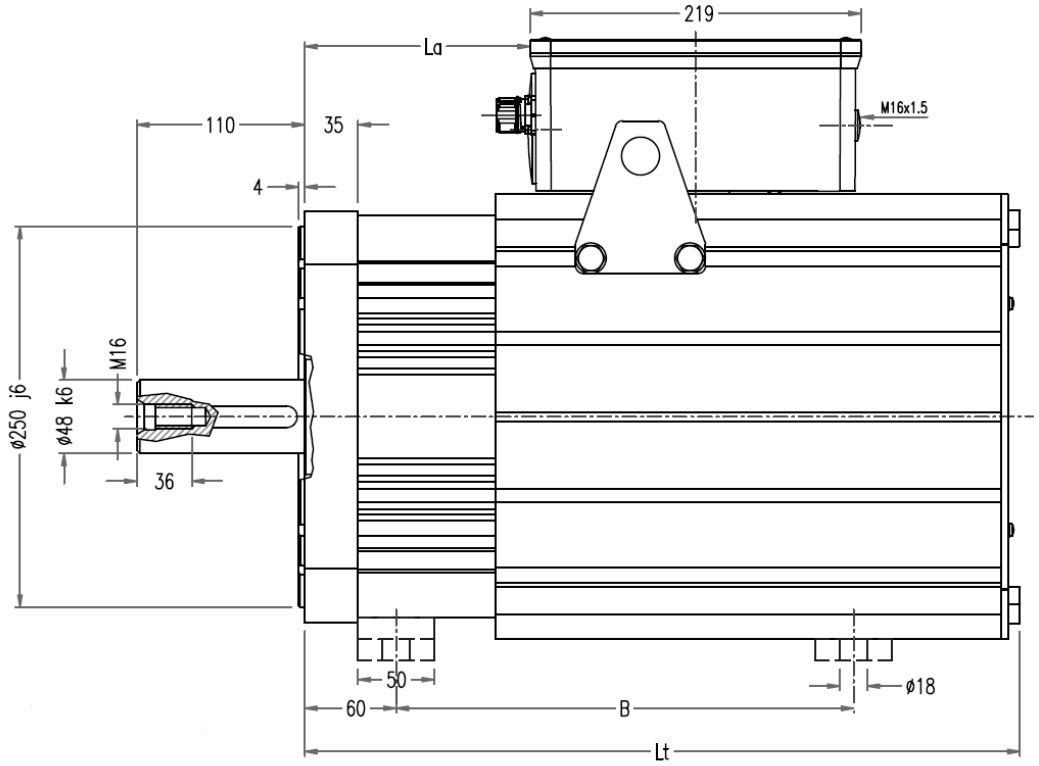
BR motor – With servo-ventilation – 1000 rpm			V92104	V94104	V96104	V98104
Stall torque [1) 3)]	T_0	Nm	145	310	440	580
Nominal power [1)]	P_N	W	14975	30369	41364	55501
Nominal torque [1)]	T_N	Nm	143	290	395	530
Nominal speed	n_N	rpm	1000 [4)]	1000 [4)]	1000	1000 [4)]
Peak torque 20°C	T_{max}	Nm	305	620	840	1100
Nominal current [1)]	I_N	Arms	33.2	63.1	91.7	115.4
Stall current [1) 3)]	I_0	Arms	31.3	62.8	95.0	117.4
Peak current	I_{max}	Arms	69	133	192	235
Rotor inertia	Jm	kgcm²	224	401	577	753
Voltage constant 20°C [2)]	ke	Vs/rad	2.92	3.12	2.92	3.12
Torque constant 20°C with stall rotor [2)]	kt	Nm/Arms	4.91	5.24	4.91	5.24
Ke and kt reduction coeff. over temperature	dk/dt	[%/°C]	-0.11	-0.11	-0.11	-0.11
Winding resistance 20°C [2)]	Rc	Ohm	0.83	0.31	0.16	0.12
Winding inductance [2)]	Lc	mH	13.21	6.5	4.41	4.26
E.M.F at 1000 rpm 20°C [2)]	V1000	V/krpm	306	326	306	326
Nominal voltage [1)]	Vn	Vrms	356	360	336	366
Weight	m	kg	89	126	164	203
Number of poles	2p		8	8	8	8

BR motor – With servo-ventilation – 2000 rpm			V92204	V94204	V96204	V98204
Stall torque [1) 3)]	T_0	Nm	145	310	440	580
Nominal power [1)]	P_N	W	26180	54454	73304	98437
Nominal torque [1)]	T_N	Nm	125	260	350	470
Nominal speed	n_N	rpm	2000 [4)]	2000 [4)]	2000 [4)]	2000 [4)]
Peak torque 20°C	T_{max}	Nm	305	620	840	950
Nominal current [1)]	I_N	Arms	54.4	110.2	135.5	204.7
Stall current [1) 3)]	I_0	Arms	58.7	127.3	158.3	239.3
Peak current	I_{max}	Arms	130	265	319	406
Rotor inertia	Jm	kgcm²	224	401	577	753
Voltage constant 20°C [2)]	ke	Vs/rad	1.56	1.56	1.75	1.56
Torque constant 20°C with stall rotor [2)]	kt	Nm/Arms	2.62	2.62	2.95	2.62
Ke and kt reduction coeff. over temperature	dk/dt	[%/°C]	-0.11	-0.11	-0.11	-0.11
Winding resistance 20°C [2)]	Rc	Ohm	0.23	0.07	0.049	0.027
Winding inductance [2)]	Lc	mH	4.4	2.13	1.7	1.06
E.M.F at 1000 rpm 20°C [2)]	V1000	V/krpm	163	163	184	163
Nominal voltage [1)]	Vn	Vrms	363	356	387	348
Weight	m	kg	89	126	164	203
Number of poles	2p		8	8	8	8

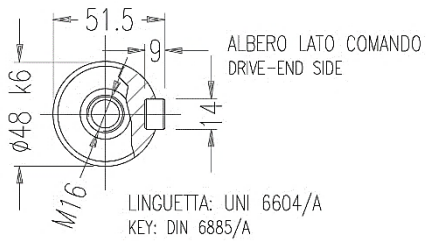
BR motor – With servo-ventilation – 2800 rpm			V92284	V94284	V96284	V98284
Stall torque [1) 3)]	T_0	Nm	145	300	440	580
Nominal power [1)]	P_N	W	34306	67440	87965	93829
Nominal torque [1)]	T_N	Nm	117	230	300	320
Nominal speed	n_N	rpm	2800 [4)]	2800 [4)]	2800 [4)]	2800 [4)]
Peak torque 20°C	T_{max}	Nm	305	600	750	880
Nominal current [1)]	I_N	Arms	67.9	133.5	174.2	185.8
Stall current [1) 3)]	I_0	Arms	78.3	161.9	237.5	313.1
Peak current	I_{max}	Arms	174	342	428	502
Rotor inertia	Jm	kgcm²	224	401	577	753
Voltage constant 20°C [2)]	ke	Vs/rad	1.17	1.17	1.17	1.17
Torque constant 20°C with stall rotor [2)]	kt	Nm/Arms	1.96	1.96	1.96	1.96
Ke and kt reduction coeff. over temperature	dk/dt	[%/°C]	-0.11	-0.11	-0.11	-0.11
Winding resistance 20°C [2)]	Rc	Ohm	0.12	0.038	0.022	0.015
Winding inductance [2)]	Lc	mH	2.4	1.2	0.8	0.6
E.M.F at 1000 rpm 20°C [2)]	V1000	V/krpm	122	122	122	122
Nominal voltage [1)]	Vn	Vrms	368	363	353	341
Weight	m	kg	89	126	164	203
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 4kHz, 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

5.5.9 Overall dimensions – BRV9 (except BRV98284)

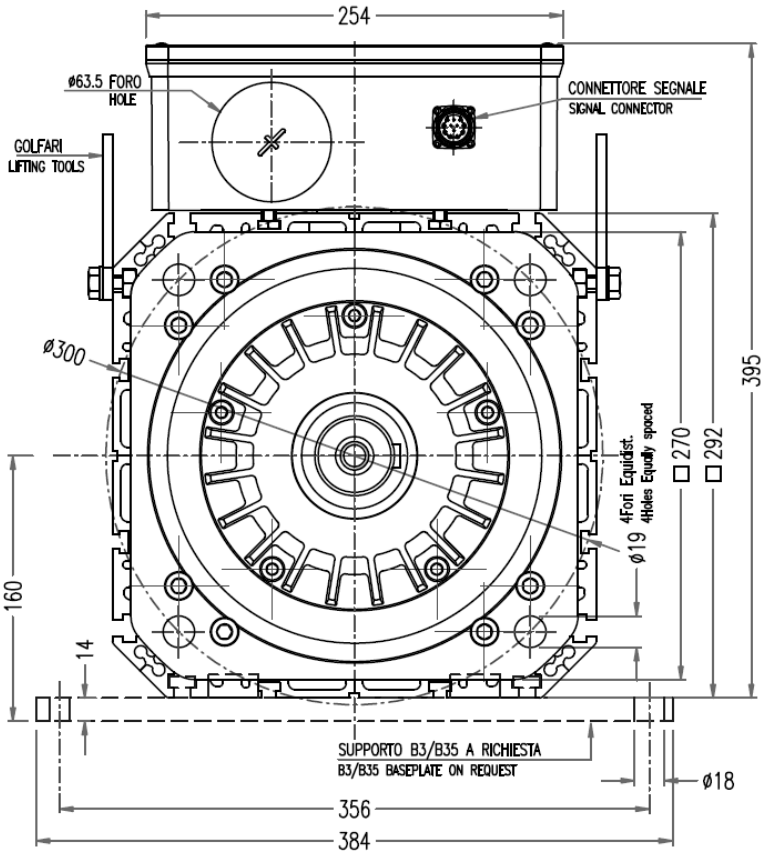


VENTILATION: FORCED CONVECTION **IC416**

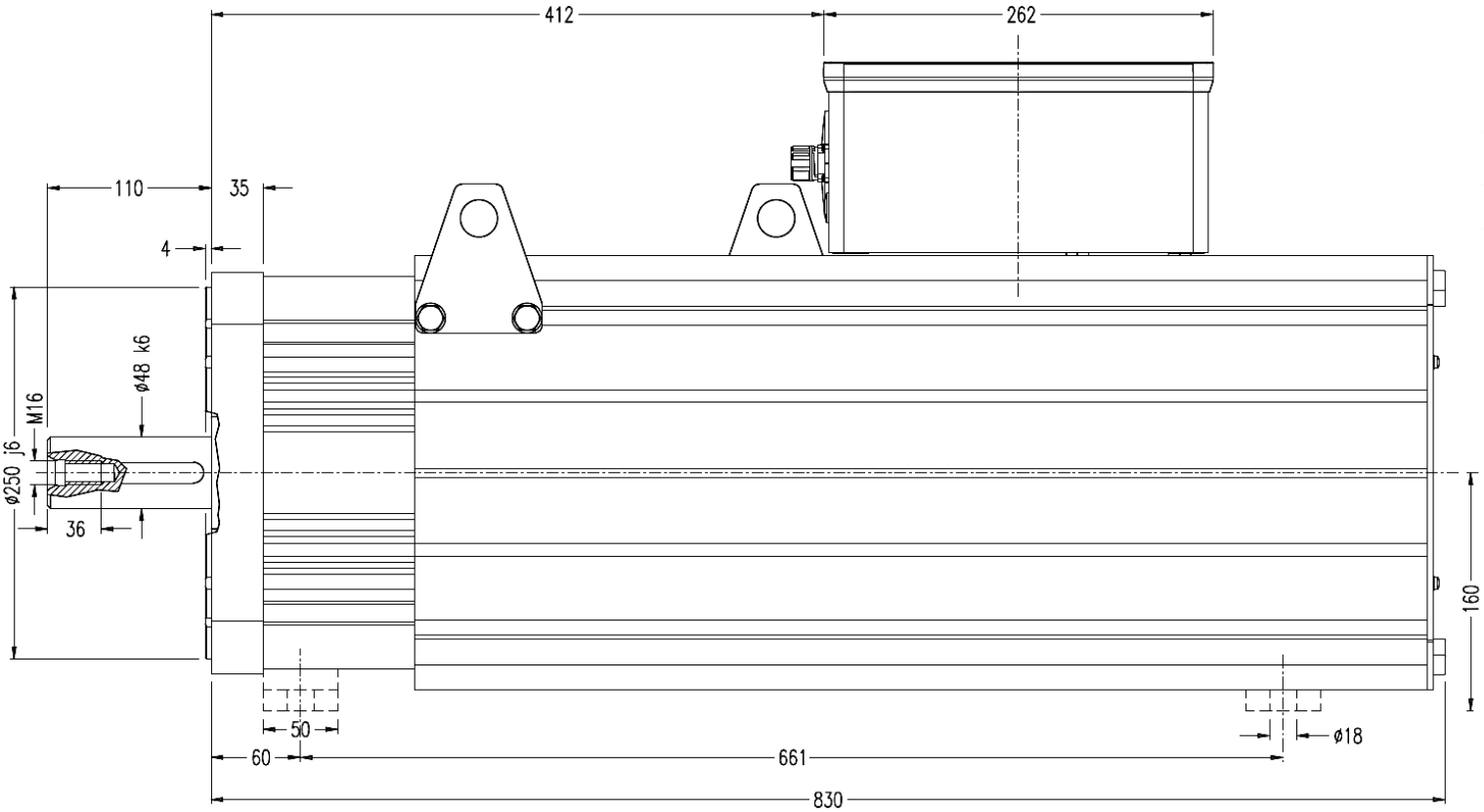


	Without brake		
	B	**La**	**Lt**
BRV92	300	146.5	470
BRV94	407	253.5	577
BRV96	514	360.5	684
BRV98	621	467.5	791

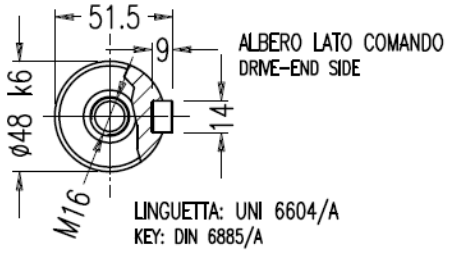
	With brake		
	B	**La**	**Lt**
BRV92	435	281.5	605
BRV94	542	388.5	712
BRV96	649	495.5	819
BRV98	756	602.5	926

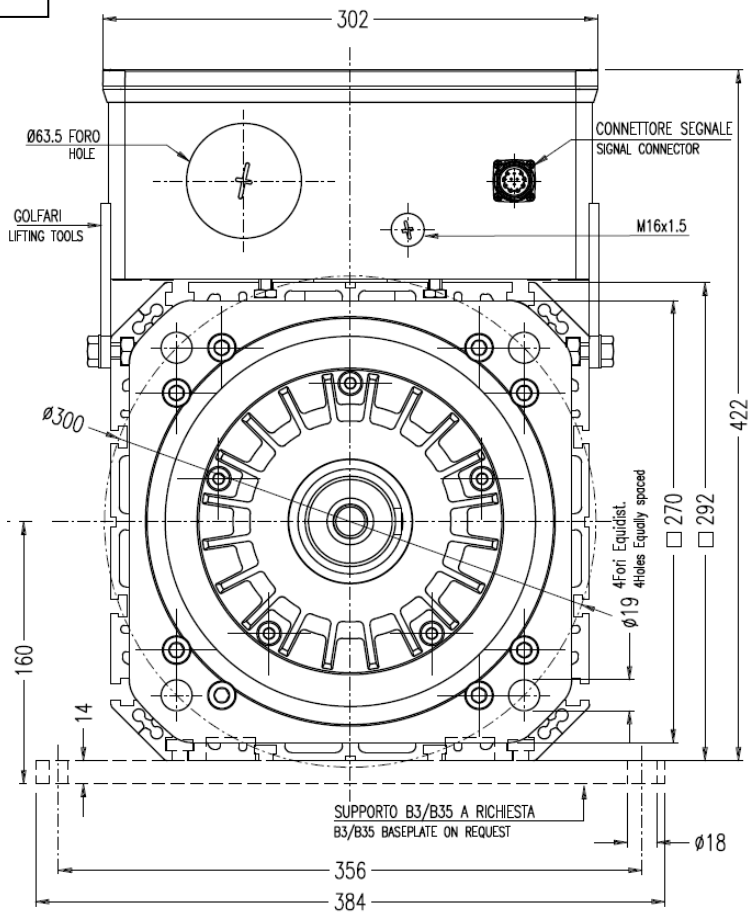


5.5.10 Overall dimensions – BRV98284



VENTILATION: FORCED CONVECTION **IC416**





	BRV98284		
	B	**La**	**Lt**
Without brake	661	412	830
With brake	796	547	965