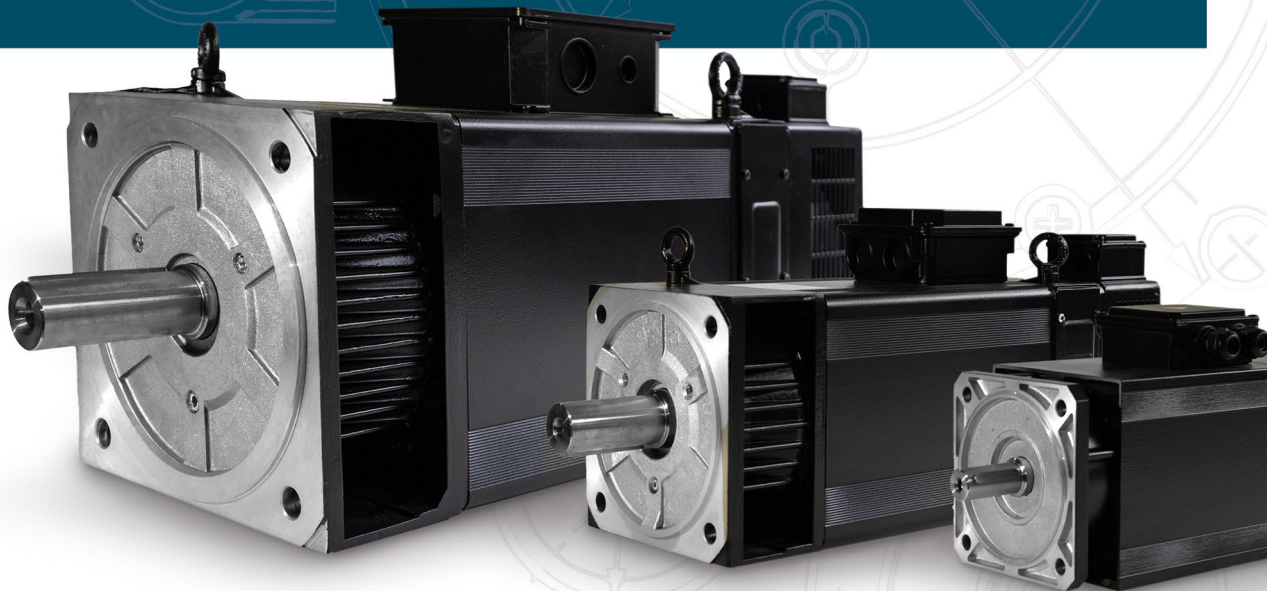
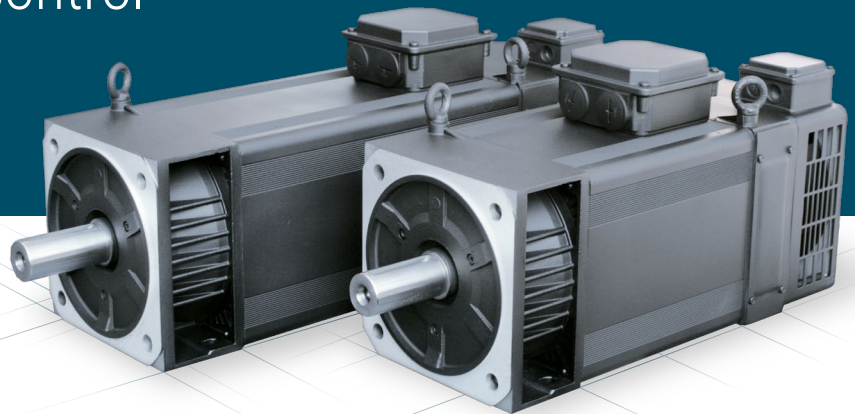


Asynchronous motors for inverter vector control **VT Series**

Italian technology since 1953



Asynchronous motors for inverter vector control VT Series



About

Brusatori offers the VT series of asynchronous, square-case motors, developed to be connected to variable frequency drives. VT motors are 3-phase 4-pole asynchronous motors with squirrel-cage winding and are available in IP23 and IP54 protection ratings. Five mechanical sizes are available (71 - 80 - 90 - 100 - 132) that can meet a power range from 0.37 kW to 55 kW.

Specifications and strengths

VT series three-phase asynchronous motors are designed to be powered by frequency converter in accordance with IEC 60034-25 and to provide the highest performance.

The high power-to-size ratio, accompanied by excellent dynamic response to speed variations, make these motors suitable for a wide variety of applications.

Their overall dimensions and power outputs make them suitable for replacing DC motors.

They are particularly used in industrial applications where high speeds and high performances are required. They are available in a wide variety of configurations and can be customized upon customer request.

Key advantages of VT Series motors

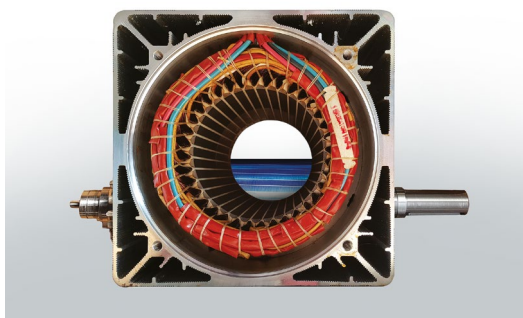
- Component production (flanges, shafts, casings), motor assembly, testing and painting are all carried out within the Brusatori plant in Cuggiono (MI).
- High level of product reliability (some applications have been in operation for more than 20 years)
- Customization of various motor parts to meet customer requirements, such as:
 - shaft diameters and lengths
 - flange sizes (upon request)
 - terminal box position
 - fan position
- Mounting of special transducers (if mechanically possible)

Standard features

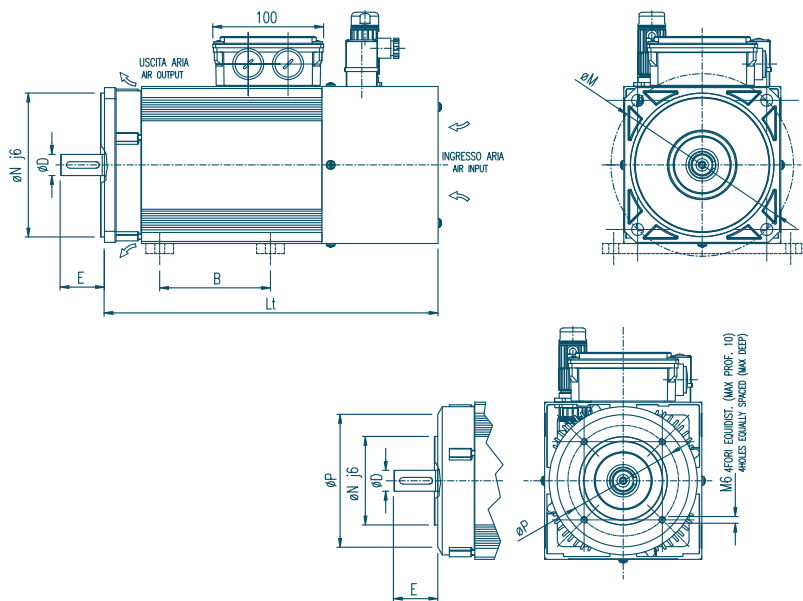
- Winding insulation: class H according to CEI EN 60034-1
- Thermal rating: class F according to CEI EN 60034-1
- Protection rating: IP54 for VT71-80-90-100 motors, IP54 or IP23 for VT132 motors according to CEI EN 60034-5
- Cooling: IC 416 (for IP54 motor); IC 06 (for IP23 motor) according to IEC EN 60034-6
- Balancing grade: G 2.5 according to ISO 1940-1 (half-key balancing for shafts with CEI 2-23 key)
- Construction form: VT71, VT80, VT90 IM B5; VT100, VT132 IM B35 according to IEC EN 60034-7
- Service position: any
- Lifetime lubricated ball bearings
- Thermal protection: thermal protector with normally closed contact. Intervention temperature $140 \pm 5^\circ\text{C}$. (Maximum voltage 250 Vac, maximum current 6 Aac)
- Color: black RAL 9005
- Reference conditions: ambient temperature $+5^\circ\text{C}$ to $+40^\circ\text{C}$, max. altitude 1000m above sea level.
- Storage temperature: -20°C to $+70^\circ\text{C}$

Options

- Windings for special voltage/frequency
- Constant power defluxing up to 4 times the rated speed (with special bearings if necessary)
- Incremental encoder, supply voltage 4-32 Vdc, programmable output voltage and number of pulses
- Sinusoidal encoder 1 Vpp - 1024 pulses/revolution
- Single-turn or multi-turn absolute encoder
- 2-pole resolver, 7Vrms, transformation ratio 0.5
- Parking brake
- Keyless shaft
- Roller bearing (VT100-VT132)
- Construction form IM B3/B35/B14 according to CEI EN60034-7 for VT71, VT80, VT90
- Terminal box on the side
- Oil seal ring (to be requested only if oil bath coupling is provided)



Motors VT_71-80-90



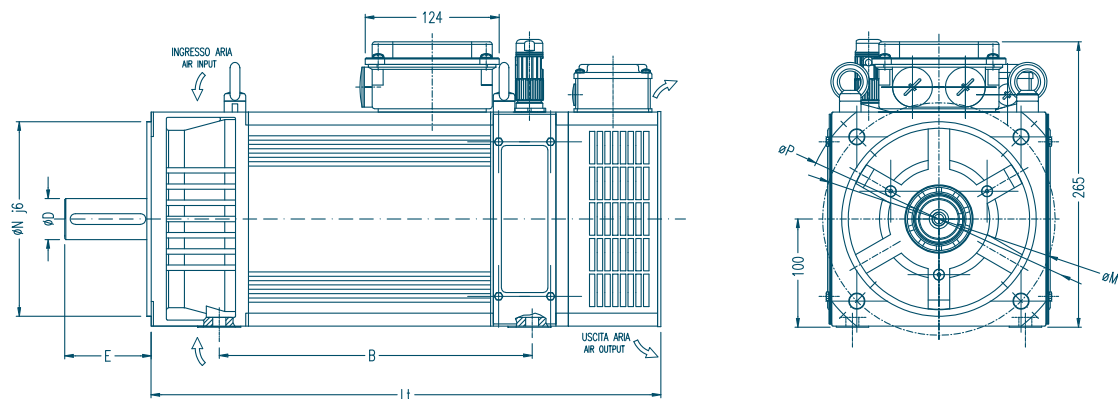
S I Z E	L E N G T H	UL/CSA AVAILABLE (ONLY FOR THE WINDING INSULATION)	S P E E D (rpm)	MOTOR DATA							DIMENSIONS					
				Pn (kW)	Tn (Nm)	Vn (V)	In (A)	n1 (rpm)	Tmax (Nm)	J (kgm²)	B	Lt (B5/B14)	D x E standard / on request	P (B5/B14)	N (B5/B14)	M (B5/B14)
V T 0 7 1	M	YES (OBJY 2/8)	1342	0,37	2,66	376	1,16	2800	5	0,001	90	270*/281*	14 x 30 / 19 x 40	160 / 105	110 / 70	130 / 85
			2508	0,64	2,5	400***	1,86***	5000								
			2907	0,76		400	2,45	5500								
	L	YES (OBJY 2/8)	1500	0,63	4	356	2,16	4500	8	0,001	90	270*/281*	14 x 30 / 19 x 40	160 / 105	110 / 70	130 / 85
			2670	1,09		356	3,75	7000								
			3000	1,10		380	2,85	5500								
V T 0 8 0	S	YES (OBJY 2/8)	1349	0,75	5,3	372	2,13	2500	10	0,002	100	285*	19 x 40 / 24 x 50	200 / 120	130 / 80	165 / 100
			2515	1,30	5	380***	3,37***	4400								
			2910	1,50		380	4,33	5000								
	L	YES (OBJY 2/8)	1349	1,10	7,79	382	2,79	2600	15	0,002	100	285*	19 x 40 / 24 x 50	200 / 120	130 / 80	165 / 100
			2520	1,91	7,5	400***	5,22***	4400								
			2910	2,20		400	5,84	5000								
V T 0 9 0	S	YES (OBJY 2/8)	1327	1,50	10,77	390	3,8	2500	25	0,002	100	294**	24 x 50 / 28 x 60	200 (250 on request) / 140	130 (180 on request) / 95	165 (215 on request) / 115
			2530	2,60	10	400***	5,9***	4350								
			3000	3,15		400	7,1	6000								
	L	YES (OBJY 2/8)	1336	2,20	15,36	390	5,15	2500	29	0,003	125	345**	24 x 50 / 28 x 60	200 (250 on request) / 140	130 (180 on request) / 95	165 (215 on request) / 115
			2487	3,90	15	400***	8,8***	4350								
			3000	4,74		400	10,3	5500								
	P	YES (OBJY 2/8)	1324	3	21,6	372	6,77	3500	35	0,004	125	385**	24 x 50 / 28 x 60	200 (250 on request) / 140	130 (180 on request) / 95	165 (215 on request) / 115
			2505	5,20	20	400***	11***	4000								
			2898	6		400	13,2	5000								
	X	YES (OBJY 2/8)	1336	4	28,7	392	9,3	2700	40	0,006	185	455**	24 x 50 / 28 x 60	200 (250 on request) / 140	130 (180 on request) / 95	165 (215 on request) / 115
			2535	7	27	400***	15,7***	4800								
			2820	8		400	19	5400								

*** Delta motor connection

* with brake: + 40 mm

** with brake: + 50 mm

Motors VT 100

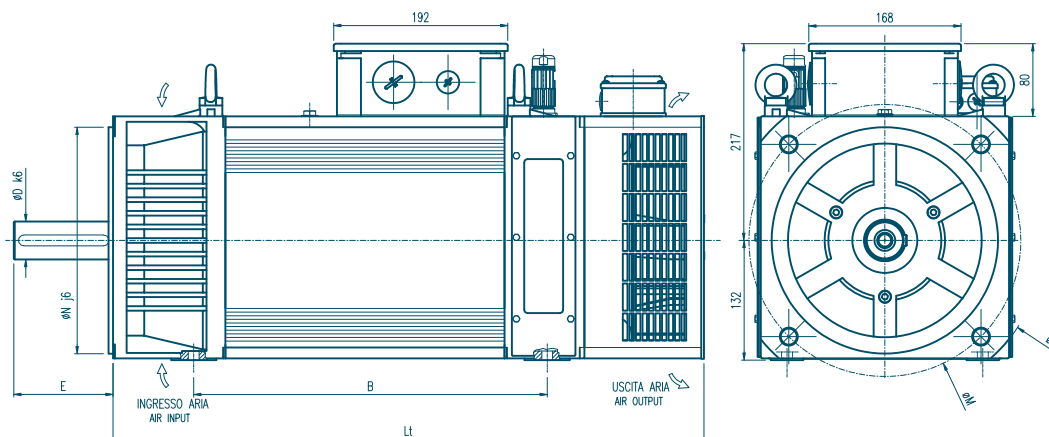


S I Z E	L E N G T H	UL/CSA AVAILABLE	S P E E D (rpm)	MOTOR DATA							DIMENSIONS					
				Pn (kW)	Tn (Nm)	Vn (V)	In (A)	n1 (rpm)	Tmax (Nm)	J (kgm²)	B	Lt	D x E standard / on request	P	N	M
V T 1 0 0	A	NO	1000	2,6	24,8	380	5,81	2000	50	0,009	240	422*	38 x 80 / 28 x 60	250	180	215
			1362	4	27,4	392	9,09	2800	53							
			2020	5,3	25	380	10,6	4200	50							
			2540	6,5	24,6	380***	14,5***	5000	49							
			2938	7,5	24,5	380	15,9	5500	49							
	S	YES	607	2,6	40,9	380	7	1200	80	0,013	290	472*				
			1015	4,3	40,5	380	9,7	2250	90							
			1498	6	38,2	380	10	3750	95							
			2013	7,8	37	380	16,4	5400	100							
			2520	9	34,1	380	18,5	6500	90							
	M	YES	3000	10,2	32,5	380	20,7	7000	85	0,016	320	502*				
			604	3,1	49	380	7,9	1300	105							
			1022	5,2	48,6	380	12,1	2500	115							
			1508	7,2	45,6	380	16,4	4150	120							
			2018	9,1	43,1	380	20	5750	120							
	L	YES	2524	10,5	39,7	380	21,6	6750	105	0,020	365	547*				
			3003	11,8	37,5	380	24	7000	100							
			603	3,8	60,2	380	10,3	1350	135							
			1014	6,2	58,4	380	14,9	2250	130							
			1513	8,5	53,6	380	19,1	4500	160							
	P	YES	2026	10,8	50,9	380	23,3	6450	160	0,025	420	602*				
			2504	12,2	46,5	380	25,2	7000	140							
			3010	13,3	42,2	380	27,1	7000	120							
			609	4,6	72,1	380	11,8	1450	175							
			1020	7,3	68,3	380	17	2900	195							
	1519	10	62,9	380	22	4850	200									
	2000	12,5	59,7	380	28,5	6650	200									
	2502	14	53,4	380	29,1	6700	160									
	3010	15,5	49,2	380	32,3	6700	140									

*** Delta motor connection

* with brake: + 84 mm

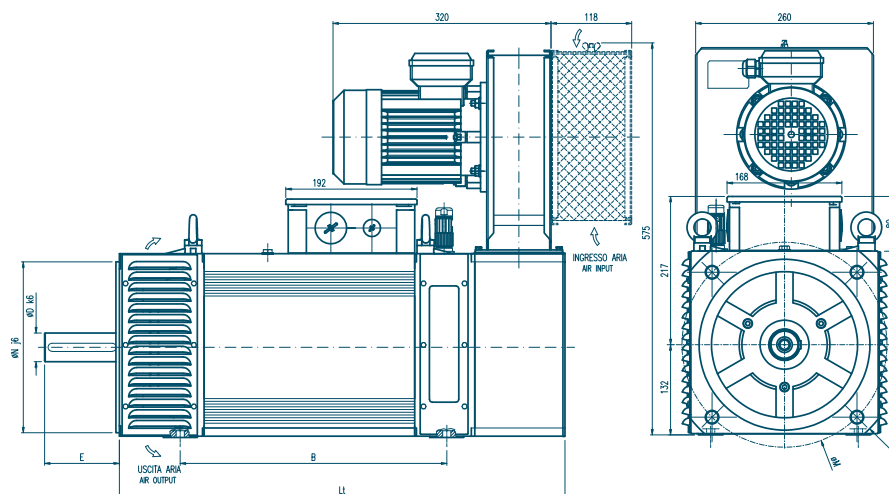
Motors VT 132 IP54



S I Z E	L E N G T H	UL/CSA AVAILABLE	S P E E D (rpm)	MOTOR DATA							DIMENSIONS					
				Pn (kW)	Tn (Nm)	Vn (V)	In (A)	n1 (rpm)	Tmax (Nm)	J (kgm²)	B	Lt	D x E standard / on request	P standard / on request	N standard / on request	M standard / on request
V T 1 3 2 I P 5 4	S	YES	1066	8	71,7	380	18,1	2800	190	0,052	320	585*	42 x 110 / 48 x 110 / 38 x 80	350 / 350 / 300	250 / 250 / 230	300 / 300 / 265
			1581	12	72,5	380	25,7	4200	195							
			2104	17	77,2	380	36,4	6000	220							
			2654	20	72	380	42,2	6400	210							
			3167	24	72,4	380	50,7	6400	220							
	M	YES	1059	12	108	380	26,3	2800	290	0,073	390	655*				
			1581	17	103	380	35,2	3900	250							
			2101	22	100	380	46,2	6400	300							
			2652	28	101	380	57,8	6400	300							
			3150	33	100	380	67,9	6400	300							
	L	YES	1062	17	153	380	36,4	2800	410	0,099	480	745*				
			1581	24	145	380	49,2	4100	370							
			2101	32	145	380	65,2	5600	390							
			2651	38	137	380	80,4	6400	480							
			3152	44	133	380	90,2	6400	420							
	P	YES	1060	20	180	380	42,5	2800	500	0,122	560	825*				
			1584	28	169	380	57,3	4200	450							
			2102	37	168	380	74,6	5400	450							
			2653	44	158	380	88,7	5400	460							
			3153	50	151	380	99,7	5400	430							

* with brake: + 120 mm

Motors VT 132 IP23



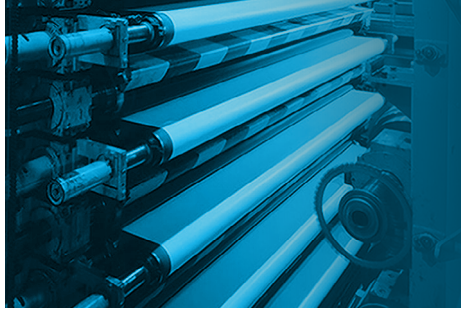
S I Z E	L E N G T H	UL/CSA AVAILABLE	S P E E D (rpm)	MOTOR DATA							DIMENSIONS					
				Pn (kW)	Tn (Nm)	Vn (V)	In (A)	n1 (rpm)	Tmax (Nm)	J (kgm²)	B	Lt	D x E standard / on request	P standard / on request	N standard / on request	M standard / on request
V T 1 3 2 I P 2 3	S	YES	1055	11	100	380	24,9	2300	220	0,052	320	585	42 x 110 / 48 x 110 / 38 x 80	350 / 350 / 300	250 / 250 / 230	300 / 300 / 265
			1575	15,5	94	380	33,6	3800	220							
			2100	22	100	380	49,5	5800	270							
			2651	27	97	380	60,3	6400	280							
			3162	31	94	380	66,3	6400	260							
	M	YES	1048	17	155	380	37,7	2300	340	0,073	390	655				
			1578	24	145	380	52,1	4100	370							
			2094	30	137	380	62,9	5400	350							
			2647	37	133	380	77	6400	350							
			3146	44	134	380	92,1	6400	380							
	L	YES	1058	22	199	380	49	2700	510	0,099	480	745				
			1581	31	187	380	66,2	4400	520							
			2101	38	173	380	79,2	6000	500							
			2646	44	159	380	90,9	6400	470							
			3147	50	152	380	101	6400	420							
	P	YES	1057	27	244	380	60,2	2900	680	0,122	560	825				
			1584	42	254	380	83,8	4800	700							
2103			44	200	380	91,2	5400	590								
2658			50	180	380	107	5400	640								
3160			55	166	380	118	5400	620								

Applications



TEXTILE

Ironers, dryers, vaporizers, calenders



PRINTING

Rotogravure printing machines, flexographic printing machines, converting lines, laminators, coating lines



PLASTICS

Extrusion lines, pipe machines, profile machines, stretch lines, tape lines, recycling lines



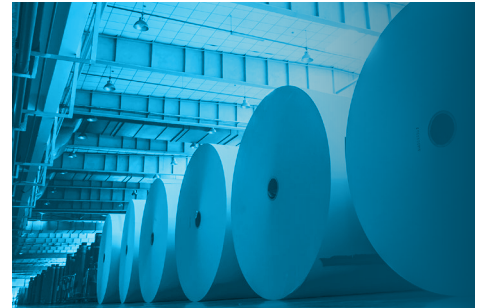
MACHINE TOOLS

Grinders, milling machines, machining centers, sawing machines



METALS

Winders-unwinders, loaders and stackers, tube lines, drawing lines, cable production lines, longitudinal and transverse cutting lines



PAPER

Winders-unwinders, cutters, rewinders, wrappers



Operational headquarters | Via Meucci 5/7 | 20012 | Cuggiono (MI) | ITALY

Ph | +39 02 25068401

E-mail | info@brusatori.eu

Website | brusatori.eu