

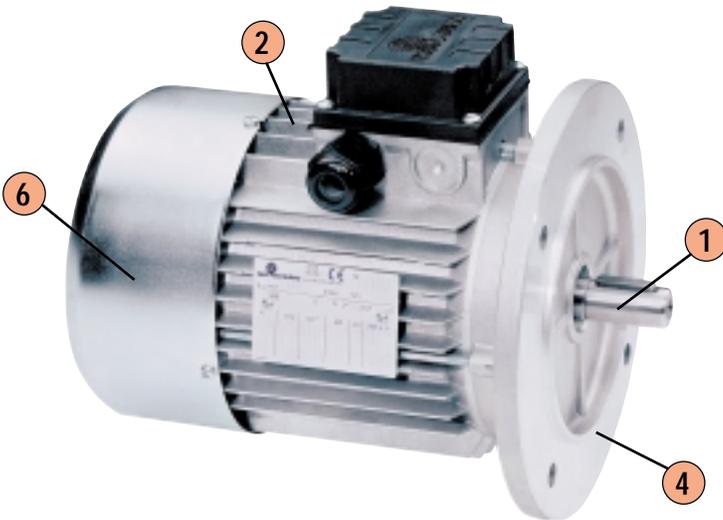
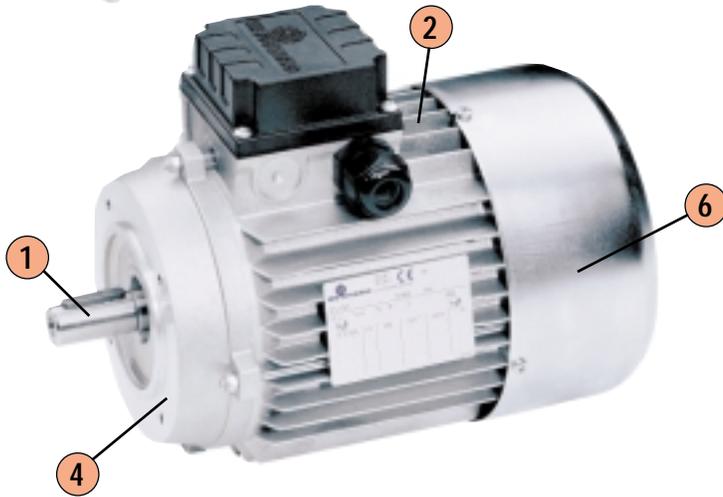
*S m a l l*  
**WONDER**



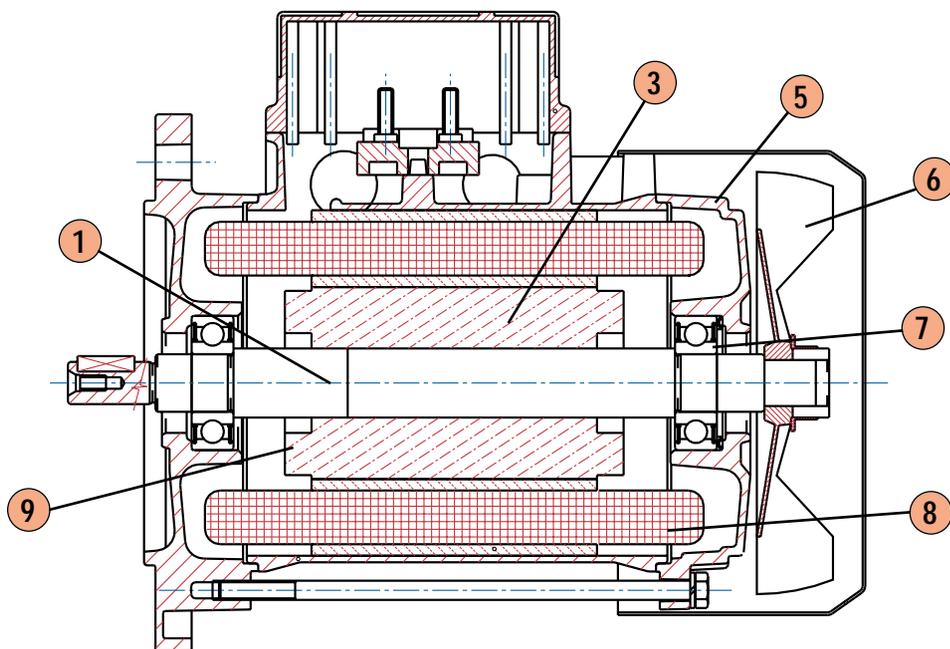
**MOTOVARIO**  
THE INNOVATIVE TEAM IN POWER TRANSMISSION



# AC Motors



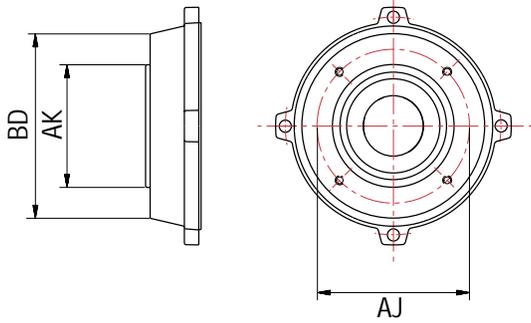
- ① The output shaft is constructed from quality C40 steel for maximum output torque.
- ② The corrosion-resistant aluminum surface cools easily and quickly, thanks to heat sink fin design.
- ③ Die-cast aluminum squirrel-cage rotor allows for maximum start-up torque.
- ④ The B5 and B14 mounting flanges help offer a wide variety of mounting options.
- ⑤ Class F insulation at IP55 meets most washdown needs.
- ⑥ The motor stays cool during normal operation with a standard, fiberglass strengthened, thermoplastic fan.
- ⑦ A pre-loaded rear bearing decreases operating noise and enables axial movement
- ⑧ Copper-glazed wiring in the windings provides considerable strength and prolongs motor life.
- ⑨ The geometric rotor shape ensures the most regular operation in variable speed applications and decreases eddy currents and torque pulses.
- ⑩ Available AC and DC brakes ensure the motor stops when you need it stopped.
- ⑪ Our 100% quality check means our motors meet the strictest testing standards.





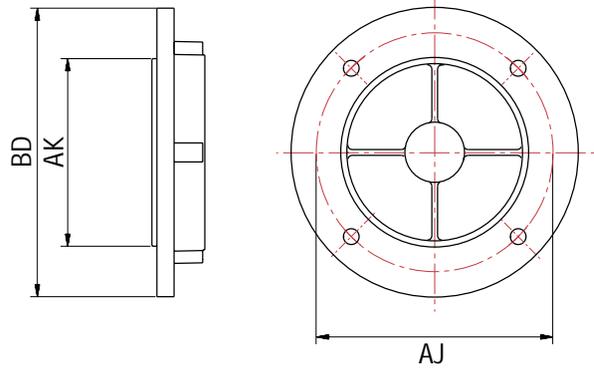
## Output Flange

### B14



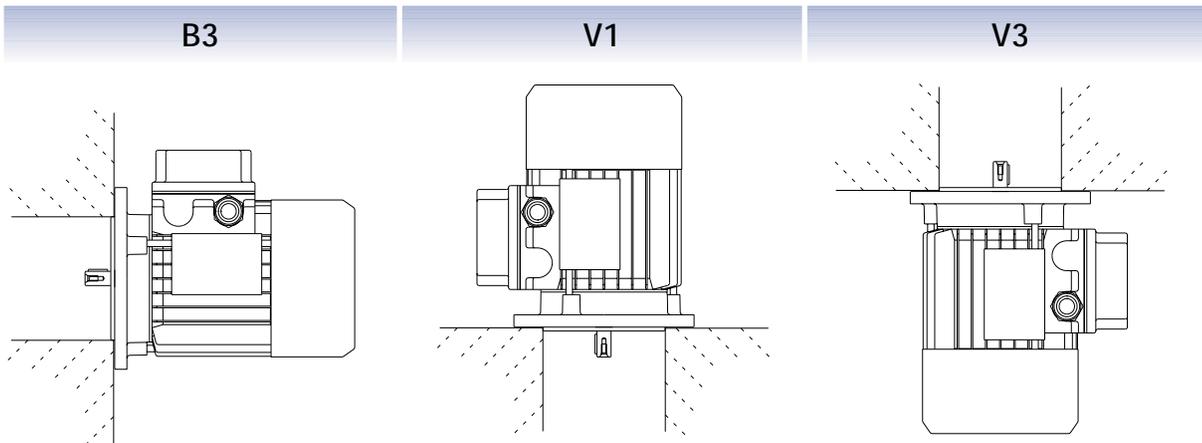
	BD	AK	AJ
63	140	95	115
71	160	110	130
80	200	130	165
90	200	130	165
100	250	180	215
112	250	180	215
132	300	230	265

### B5

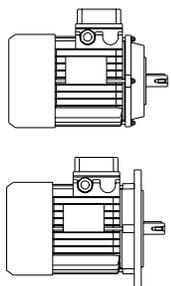


	BD	AK	AJ
63	90	60	75
71	105	70	85
80	120	80	100
90	140	95	115
100	160	110	130
112	160	110	130
132	200	130	165

## Mounting Positions



## Nomenclature

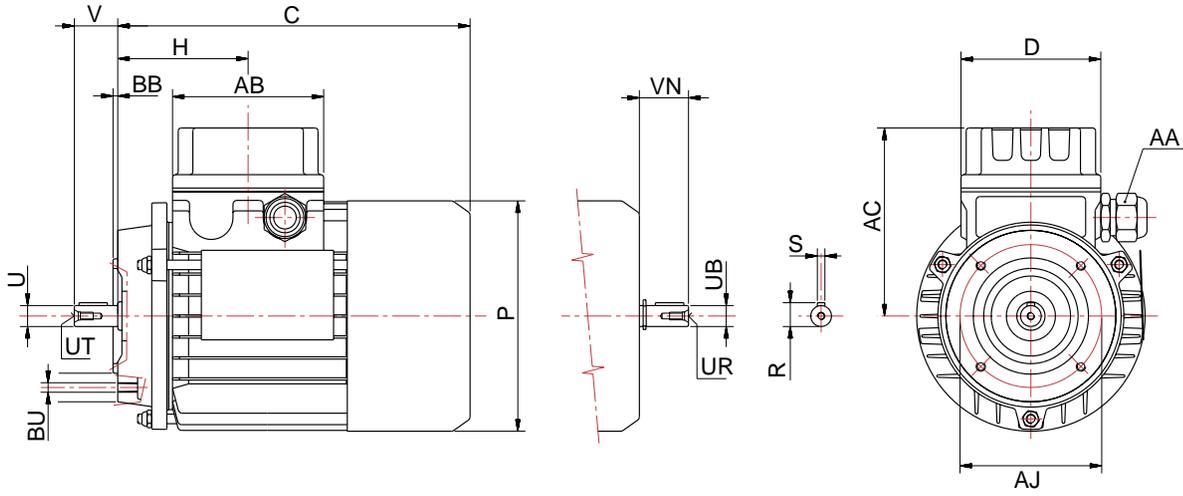


T	71	B	4	B14
<b>Phase</b>	<b>IEC Frame Size</b>	<b>Power</b>	<b>Polarity</b>	<b>Flange Size</b>
T - Three Phase D - Dual Polarity Three Phase S - Single Phase	56 100 63 112 71 132 80 160 90 180	Varies for each motor See charts on following pages	2 - Two Pole 4 - Four Pole 6 - Six Pole	See above

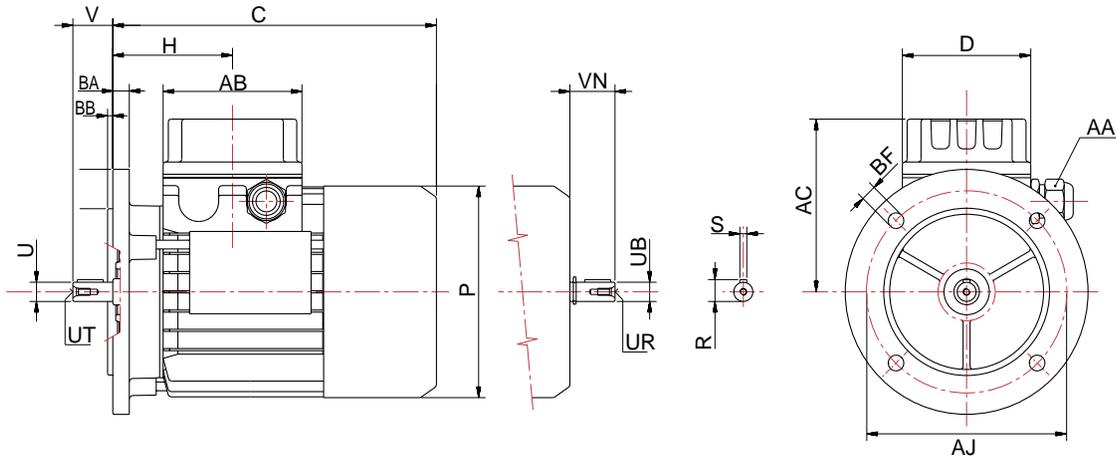


# AC Motors Dimensions

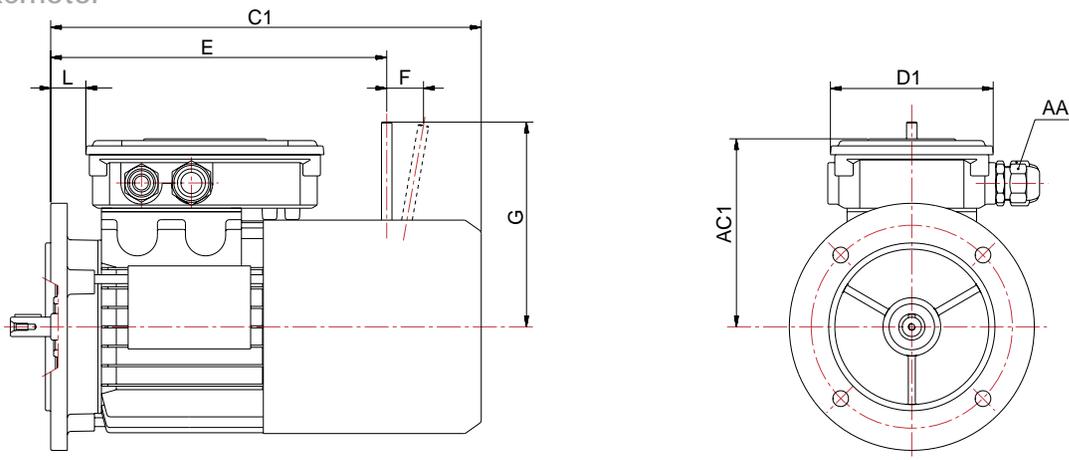
B14



B5



Brakemotor



# AC Motors Dimensions



## Motor Frame Size

	63	71	80	90S	90L	100	112	132S	132M
AA	PG11	PG16	PG16	PG16	PG16	PG16	PG16	PG21	PG21
AB	80	80	80	98	98	98	98	118	118
AC	98.5	110.5	121.5	129.5	129.5	138.5	153.5	194	194
AC1	106.5	118	129	129.5	129.5	138.5	153.5	194	194
AJ	75	85	100	115	115	130	130	165	165
AJ1	115	130	165	165	165	215	215	265	265
BB1	3	3.5	3.5	3.5	3.5	4	4	4	4
BF	9	9.5	11	11	11	147	14	14	14
BU	M5, 10.5 deep	M6, 10.5 deep	M6, 10.5 deep	M8, 11.5 deep	M8, 11.5 deep	M8, 11.5 deep	M8, 11.5 deep	M10, 20.5 deep	M10, 20.5 deep
BB	2.5	2.5	3	3	3	3.5	3.5	3.5	3.5
C	186.5	208	231	246.5	271.5	307.5	323	372.5	410.5
C1	246	273	304	324.5	349.5	389.5	419	461.5	513.5
D	74	74	74	98	98	98	98	118	118
D1	93	93	93	98	98	98	98	118	118
E MS Brake	192	211.5	238	252.5	279	307	330	364	404.5
FM Brake	192	214	237	255	279	307	326	359	403.5
F MS Brake	21	23	23	27.5	28	28	34.5	34.5	37.5
FM Brake	17.5	19	22.5	28	27.5	27.5	35	35.5	39
G MS Brake	116	124	134	160	160	160	198	200	217
FM Brake	96	101.5	129	159.5	159.5	159.5	199	204	226
H	69	73	77	89.5	89.5	97.5	100	115.5	115.5
L	29	33	37	40.5	40.5	18.5	51	56.5	56.5
P	121	139	158	173	173	191	210.5	248.4	248.4
R	12.5	16	21.5	27	27	31	31	41	41
S	4	5	6	8	8	8	8	10	10
U	11	14	19	24	24	28	28	38	38
UB	11	14	19	24	24	28	28	38	38
UR	M4	M5	M6	M8	M8	M10	M10	M12	M12
UT	M4	M5	M6	M8	M8	M10	M10	M12	M12
V	23	30	40	50	50	60	60	80	80
VN	26	33	43	53	53	64	64	84	84

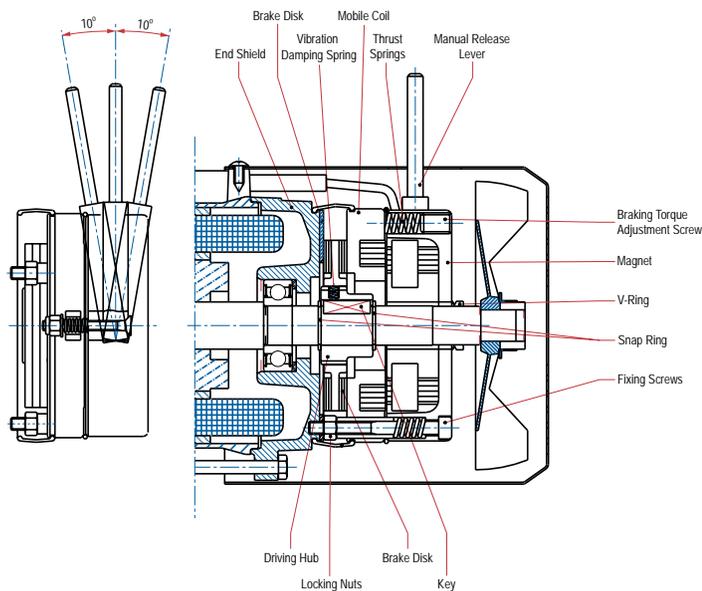


# AC Motors

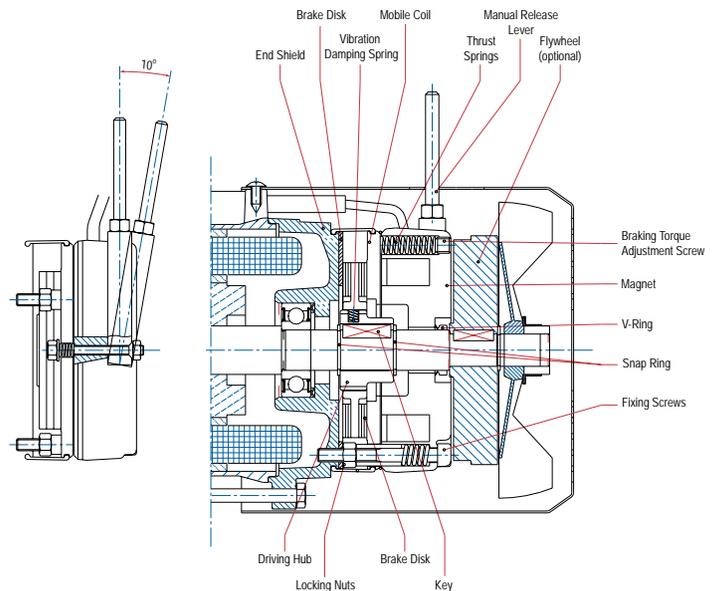
## Three Phase, Four Pole, 60hz Ratings

Power kW	IEC Frame Size	Motor Voltage Vac, 3 phase	Brake Voltage Vac, 3 phase	Braking Torque in-lbs	Nominal Air Gap mm	Weight lbs	Part Number	
							B14 Flange	B5 Flange
0.12	63A4	230/460	230/460	18	0.2	11	358651	656036
0.18	63B4	230/460	230/460	35	0.2	13	326502	320568
0.22	63C4	230/460	230/460	35	0.2	13	132065	651799
0.25	71A4	230/460	230/460	44	0.2	17	365035	132044
0.37	71B4	230/460	230/460	62	0.2	18	751333	320687
0.55	71C4	230/460	230/460	62	0.2	20	132992	320365
0.55	80A4	230/460	230/460	89	0.2	27	651379	320356
0.75	80B4	230/460	230/460	133	0.3	30	320981	320659
0.92	80C4	230/460	230/460	133	0.3	32	981999	320669
1.1	90S4	230/460	230/460	177	0.3	39	135666	321669
1.5	90L4	230/460	230/460	266	0.3	44	465110	651323
1.84	90LL4	230/460	230/460	266	0.3	47	132022	364998
2.2	100LA4	230/460	230/460	354	0.3	54	546521	132797
3	100LB4	230/460	230/460	354	0.3	63	132066	326119
4	112M4	230/460	230/460	531	0.35	86	132900	432031
4.8	112MS4	230/460	230/460	620	0.35	89	987168	132111
5.5	132S4	230/460	230/460	885	0.35	116	987788	491515
7.5	132L4	230/460	230/460	1328	0.35	148	140012	140011
9.2	132M4	230/460	230/460	1328	0.4	153	132610	132688

AC Brake, Type MS



DC Brake, Type FM



# AC Motors

## AC and DC Brake Ratings



Power kW	IEC Frame Size	Motor Voltage Vac, 1 phase	Brake Voltage Vdc, 1 phase	Braking Torque in-lbs	Nominal Air Gap mm	Rectifier	Weight lbs	Part Number	
								B14 Flange	B5 Flange
0.12	63A4	230	208	18	0.2	FW	11	984382	650683
		460						987858	210659
0.18	63B4	230	208	35	0.2	FW	12	978485	321230
		460						305905	103250
0.22	63C4	230	208	35	0.2	FW	12	650320	987851
		460						456058	327882
0.25	71A4	230	208	44	0.2	FW	16	132782	843620
		460						780689	980325
0.37	71B4	230	208	62	0.2	FW	18	780359	987703
		460						654068	780658
0.55	71C4	230	208	62	0.2	FW	19	456068	980358
		460						987433	103258
0.55	80A4	230	208	89	0.3	FW	26	840693	765086
		460						980370	465406
0.75	80B4	230	208	133	0.3	FW	29	496515	650860
		460						796409	130258
0.92	80C4	230	208	133	0.3	FW	31	540683	985403
		460						654952	320269
1.1	90S4	230	208	177	0.3	FW	37	465408	321087
		460						742077	320815
1.5	90L4	230	208	266	0.3	FW	43	654069	650681
		460						320161	109066
1.84	90LL4	230	208	266	0.3	FW	45	809846	420250
		460						720741	320678
2.2	100LA4	230	208	354	0.3	FW	53	657877	981095
		460						404650	302219
3	100LB4	230	208	354	0.3	FW	61	103214	980628
		460						301330	504658
4	112M4	230	208	531	0.35	FW	83	132026	980550
		460						709580	103215
4.8	112MS4	230	208	620	0.35	FW	86	654098	980202
		460						130202	987015
5.5	132S4	230	208	885	0.35	FW	114	870328	765688
		460						780368	320578
7.5	132L4	230	208	1328	0.35	FW	143	765025	765905
		460						780685	450382
9.2	132M4	230	208	1328	0.35	FW	148	456589	654985
		460						650382	798058



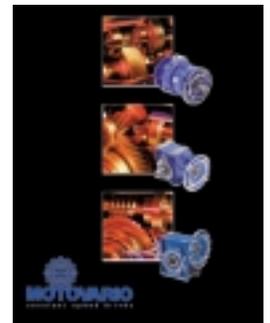
Motovario first began manufacturing power transmission components in 1965. The earliest products were mechanical variable speed drives for ceramic tile manufacturing machinery. Over the years Motovario has developed a vast range of products and has won acclaim in all areas of the industry. Continuous research has also led to the development of a complete range of other power transmission products. Motovario is now a global leader in the manufacture and sale of constant speed drives.

Motovario manufactures a complete line of IEC and NEMA type motors, worm, in-line helical and helical-bevel gear reducers and gearmotors. Motovario's innovative cast aluminum alloy gear reducer housings have revolutionized the power transmission industry. By dissipating heat generated by worm gear reducers, the aluminum alloy housing has aided in eliminating oil leaks. The housing also allows for universal mounting of Motovario gear reducers. The innovative Motovario design is an industry leader and has led many of our competitors to add aluminum alloy housed gearbox designs to their product lines.

Our manufacturing and heat treating plants in Spezzano, Italy and distribution centers in major marketing hubs in Great Britain, France, Germany, Denmark, Sweden and the United States offer a worldwide network for better customer service. Our Alpharetta, Georgia facility began operation in 1998 and is fully staffed with sales, marketing and assembly personnel and distribution facilities. Motovario has high speed, quality machinery that can completely assemble in-line helical and helical-bevel gear reducers in minutes for fast turn around of customer orders.

Motovario Corporation is dedicated to producing and distributing the industry's finest gear reducers, gearmotors, mechanical variable speed drives and related products and to providing the best and fastest customer service in the power transmission industry.

For more information about Motovario products, contact Motovario for a copy of our new Constant Speed Drives Catalog.



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