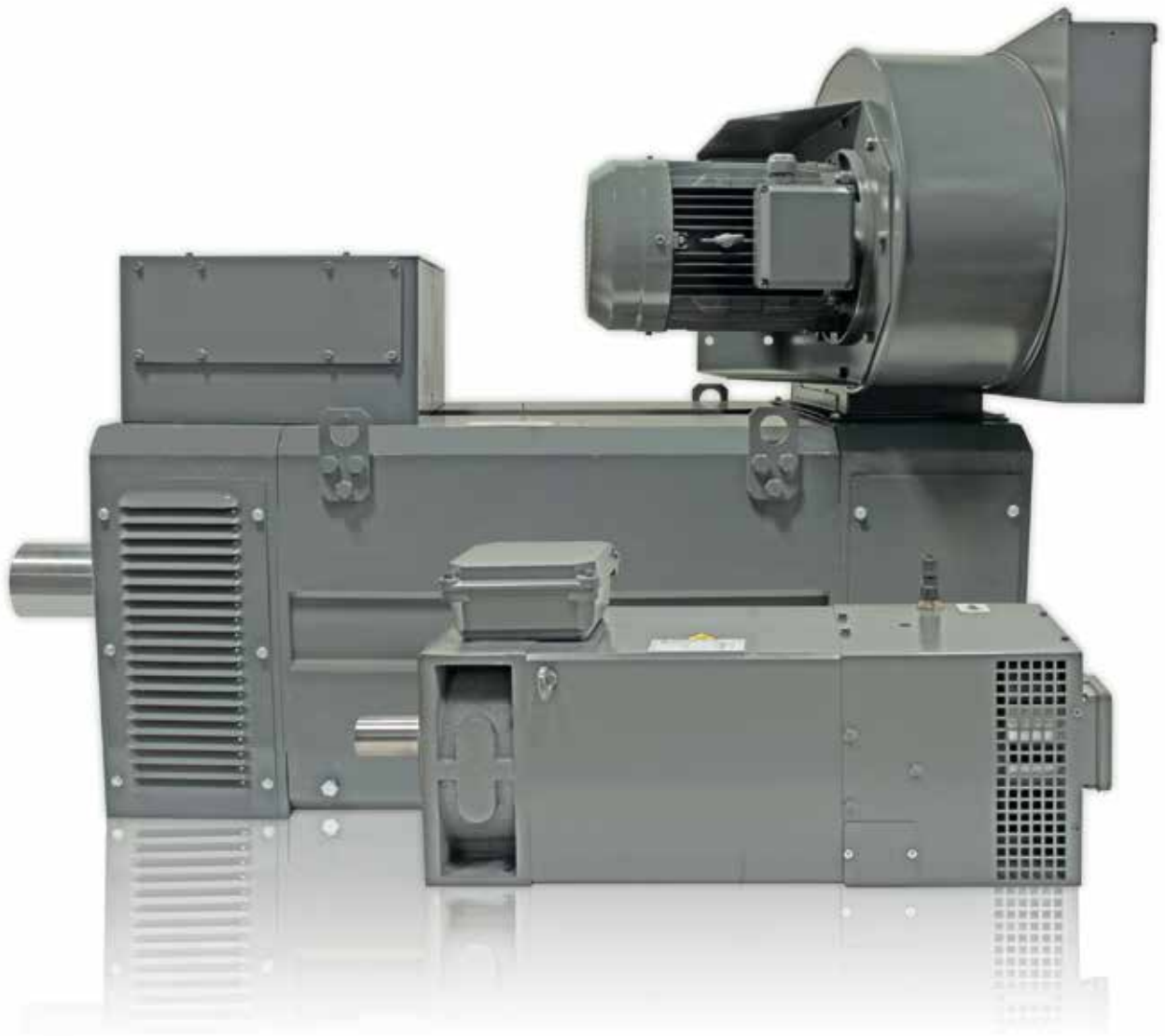


HIGH DYNAMIC ELECTRICAL MACHINES

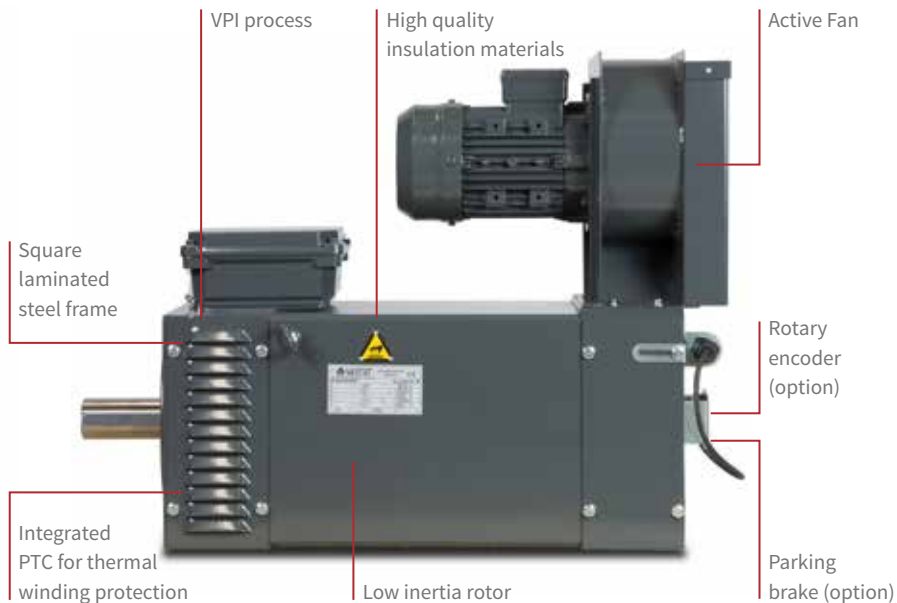


MAC Q Series Asynchronous servomotors

MAC Q Series

Asynchronous servomotors

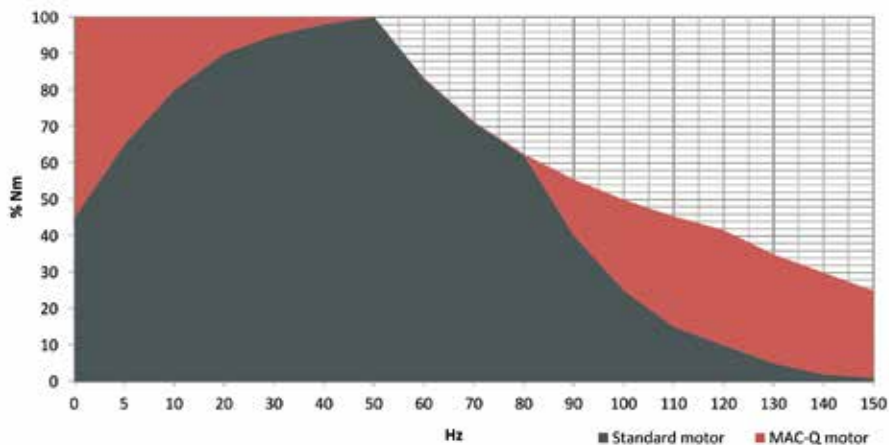
Constructive details



From 2 to 656 kW
Frame sizes 100-315 mm

- Superior dynamic response:
Low inertia
- High power density:
Compactness
- Long life expectancy
- Speed versatility:
from 300 rpm to 10,000 rpm
- Low vibration

Performance curve



Main advantages

- Excellent dynamic performance
- No warming problems in low speed operation
- Exceptional field weakening operation
- High overload capacity
- Repair and maintenance cost savings
- Inverter size optimization:
Customized windings
- Dimension savings:
High power density

MAC QI Series

- Cooling type: IC 06 (Radial fan)
- Protection degree: IP 23
- Nominal speed: 240 – 4100 rpm
- Maximum speed: up to 7500 rpm
- Nominal power: 3 – 656 kW
- Nominal torque: 38 – 7200 Nm

Suitable for use as Direct Drives

Customized Solutions



MOTOR TYPE	Power (kW)	Nominal torque (Nm)	Nominal speed (rpm)	Maximum speed (rpm)	Nominal current (A)	Inertia (Kg/m ²)	Weight (Kg)
MAC-QI-100-	S 3-16	38	700-4100	7500	8-35	0,011	50
	M 4-22	52	700-4100		11-48	0,015	60
	L 5,5-27	65	800-4000		14-57	0,019	70
MAC-QI-132-	S 4-34,4	100	380-3290	6000	10-66	0,046	95
	M 5,6-48	140	380-3290		14-92	0,061	115
	L 7,3-61	180	380-3235		18-115	0,077	135
	P 9,5-75	220	400-3260		21-144	0,091	155
	X 9-78	270	320-2750		23-148	0,114	175
MAC-QI-160-	S 18-105	340	500-3000	5000	35-180	0,239	230
	M 23-132	430	500-3000		44-226	0,295	265
	L 25,8-160	510	480-3100		50-285	0,352	301
	P 30-159	570	500-3000		57-275	0,389	325
	X 34-175	640	500-3200		69-318	0,432	355
MAC-QI-200-	S 32-141	650	470-2210	4000	63-258	0,597	380
	M 42-171	850	470-2070		82-316	0,805	455
	L 54-199	1100	470-1810		105-368	1,065	550
	P 64-241	1350	450-1920		129-461	1,324	640
	X 63-276	1600	379-1821		126-514	1,676	760
MAC-QI-250-	S 92-304	1750	500-1661	4000	182-571	1,773	900
	M 95-326	2270	399-1685		189-627	2,303	1050
	L 89-364	2810	302-1546		183-709	2,833	1199
	P 85-434	3350	243-1506		184-844	3,362	1350
	X 86-441	3550	232-1427		184-846	3,574	1425
MAC-QI-315-	S 171-459	4200	390-1510	3500	428-864	8,880	1760
	M 222-554	5200	407-1431		418-1021	10,980	2020
	L 226-648	6200	348-1190		424-1159	13,090	2280
	P 218-656	7200	289-1010		416-1178	15,200	2540

MAC QX Series

- Cooling type: IC 06 (Axial fan)
- Protection degree: IP 23
- Nominal speed: 326 – 4100 rpm
- Maximum speed: up to 7500 rpm
- Nominal power: 3 – 248 kW
- Nominal torque: 35 – 1440 Nm

Suitable for use as Direct Drives

Customized Solutions



MOTOR TYPE	Power (kW)	Nominal torque (Nm)	Nominal speed (rpm)	Maximum speed (rpm)	Nominal current (A)	Inertia (Kg/m ²)	Weight (Kg)
MAC-QX-100-	S 3-15	35	740-4100	7500	8-33	0,011	45
	M 3,7-20,6	48	740-4100		10-45	0,015	55
	L 5-24,7	60	810-3950		13-54	0,019	65
MAC-QX-132-	S 3,5-31	90	380-3290	6000	9-61	0,046	95
	M 5-43	126	380-3290		13-85	0,061	115
	L 6,5-55	162	380-3230		16-106	0,077	135
	P 8,6-68	198	410-3270		20-133	0,091	155
	X 8,4-71	247	326-2755		20-136	0,114	175
MAC-QX-160-	S 16,6-96	310	510-2970	5000	32-166	0,239	235
	M 31-122	395	510-2940		41-210	0,295	265
	L 24-147	470	480-3190		47-266	0,352	305
	P 28-150	525	510-2980		53-261	0,389	330
	X 32-162	590	510-3220		65-300	0,432	360
MAC-QX-200-	S 30-132	600	470-2210	4000	59-244	0,597	375
	M 38-157	780	470-2070		76-295	0,805	450
	L 49-182	1000	470-1810		97-343	1,065	545
	P 58-221	1240	450-1920		121-434	1,324	635
	X 57-248	1440	380-1820		115-475	1,676	755

MAC QE Series

- Cooling type: IC 416 (Axial fan)
- Protection degree: IP 54
- Nominal speed: 271 – 3650 rpm
- Maximum speed: up to 7500 rpm
- Nominal power: 2,1 – 178 kW
- Nominal torque: 20 – 1700 Nm

Suitable for use as Direct Drives

Customized Solutions



MOTOR TYPE	Power (kW)	Nominal torque (Nm)	Nominal speed (rpm)	Maximum speed (rpm)	Nominal current (A)	Inertia (Kg/m ²)	Weight (Kg)
MAC-QE-100-	K 2,1-7,6	20	980-3650	7500	5,7-17,5	0,0066	35
	S 2,6-10	30	800-3183		6,9-22,6	0,011	45
	M 3,3-13	40	789-3097		9,1-29,3	0,015	55
	L 4,6-17,2	50	880-3281		11,6-39,5	0,019	65
MAC-QE-132-	K 3-11,8	50	569-2248	6000	7,5-24,3	0,035	70
	S 3,1-18,3	70	421-2491		8-37	0,046	85
	M 4,4-25,5	100	424-2433		11-53	0,061	105
	L 5,6-33,8	125	425-2585		13-69	0,077	125
	P 7,1-41,9	155	440-2585		16-85	0,091	145
	X 7,1-39,6	185	365-2227		17-80	0,114	165
MAC-QE-160-	K 9,1-31,6	150	577-2318	5000	17-57	0,173	195
	S 12,7-44,4	210	579-2291		24-79	0,239	235
	M 16,1-54	265	580-2291		30-97	0,295	270
	L 17,3-58,4	300	552-2323		32-109	0,352	306
	P 20,7-39,9	340	582-2383		38-127	0,389	330
	X 23,2-75,2	380	582-2113		46-144	0,432	360
MAC-QE-200-	S 21-55	350	560-1760	4000	40-107	0,597	375
	M 26-65	450	560-1680		52-130	0,805	450
	L 34-83	580	560-1580		66-162	1,065	545
	P 40-100	705	540-1460		83-202	1,324	640
	X 40-117	820	465-1465		80-226	1,676	760
MAC-QE-250-	S 49-108	830	570-1391	4000	106-233	1,773	915
	M 49-135	1080	430-1190		106-287	2,303	1065
	L 49-159	1340	350-1130		105-334	2,833	1215
	P 49-177	1600	290-1252		106-390	3,362	1365
	X 48-178	1700	271-1172		106-393	3,574	1435



High dynamic electrical machines

Main industry sectors for MAC Q motors



Converting and printing machines



Testing systems



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Innovative software tools

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High dynamic electrical machines

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