

Asynchronous servo motors

IndraDyn A

MAF - with liquid cooling



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IndraDyn A ■ MAF - with liquid cooling**Documentation**

- Application Manual
- Project Planning Manual

**Compact and powerful**

- Rated outputs of up to 120 kW
- Maximum speeds up to 11,000 rpm
- Encoder systems for a wide and diverse range of applications
- High protection category IP65
- Liquid cooling with quick coupling

The liquid-cooled motors in the MAF series are particularly suitable for applications demanding maximum torques in minimum amounts of space. At the same time the integrated cooling system design ensures the thermal isolation of motor and machine and therefore maximum handling precision.

The quick couplings with integrated leak-proofing simplify your maintenance work. Options such as holding brakes, different encoder systems, vibration severity grades and shaft specifications allow you to tailor the MAF motors optimally to your specific application.

Technical data**Electric data**

Type	Rated speed	Maximum speed	Rated torque	Maximum torque	Rated power	Rated current	Maximum current	Moment of inertia
	n_N	n_{Max}	M_N	M_{Max}	P_N	I_N	I_{Max}	J
	[1/min]	[1/min]	[Nm]	[Nm]	[kW]	[A]	[A]	[kgm ²]
MAF100B-0050	500	3000	50	109.7	2.6	8.5	20.29	0.019
MAF100B-0100	1000	6000	46	110	4.82	15.2	33.3	
MAF100B-0150	1500	11000	42	101.4	6.6	18.1	46.17	
MAF100B-0200	2000		38	92.4	8	23.9	51.69	
MAF100B-0250	2500	33	83.6	8.64	26	50.67		
MAF100C-0050	500	3000	70	153.7	3.9	12.1	25.6	0.0284
MAF100C-0100	1000	6000	68	154	7.5	19	41.37	
MAF100C-0150	1500	11000	66	149.5	10.4	27.9	60.39	
MAF100C-0200	2000		64	145.2	13.4	36.7	77.5	
MAF100C-0250	2500	62	138.1	16.23	40.2	85.84		
MAF100D-0050	500	3000	88	193.3	4.6	14.5	29.2	0.032
MAF100D-0100	1000	6000	84	190	8.8	27.1	58.03	
MAF100D-0150	1500	9000	79	185.3	12.4	32.7	68.73	
MAF100D-0200	2000	11000	80	182.3	16.76	43.1	91.33	
MAF100D-0250	2500		75	177.5	19.63	45.76	100.42	

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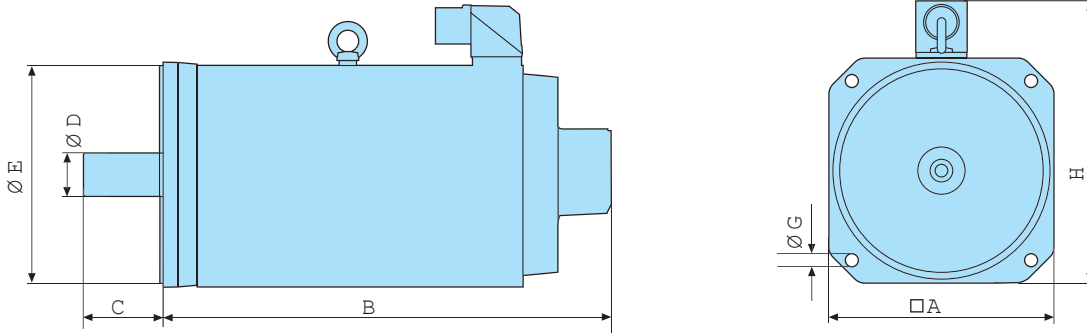
Type	Rated speed	Maximum speed	Rated torque	Maximum torque	Rated power	Rated current	Maximum current	Moment of inertia
	n_N	n_{Max}	M_N	M_{Max}	P_N	I_N	I_{Max}	J
	[1/min]	[1/min]	[Nm]	[Nm]	[kW]	[A]	[A]	[kgm ²]
MAF130B-0050	500	3000	116	254.7	6.1	14.7	30.48	0.079
MAF130B-0100	1000	6000	112		11.7	28.4	60.95	
MAF130B-0150	1500	9000	115	264	18.1	43.7	94.68	
MAF130B-0200	2000	10000	100	220	20.9	52.7	108.94	
MAF130B-0250	2500		90	210	23.56	58.8	126.61	
MAF130C-0050	500	3000	155	340	8.1	21	42.64	0.101
MAF130C-0100	1000	6000	150	330	15.7	38	71.8	
MAF130C-0150	1500	9000	145	329.8	22.8	53.2	111.02	
MAF130C-0200	2000	10000	135	314.7	28.3	69.8	142.91	
MAF130C-0250	2500		125	298.4	32.72	75.5	150.76	
MAF130D-0050	500	3000	230	506.3	12	32.3	64.35	0.151
MAF130D-0100	1000	6000	220	500	23.04	50.71	109.06	
MAF130D-0150	1500	9000	200	484.4	31.4	72.6	155.42	
MAF130D-0200	2000	10000		461.4	41.9	93.9	190.86	
MAF130D-0250	2500		190	450	49.74	113	238	
MAF160B-0050	500	3000	270	594.5	14.1	34.25	65.4	0.23
MAF160B-0100	1000	6000	260	592.7	27.2	73.7	149	
MAF160B-0150	1500		250	570.8	39.3	89.5	179.7	
MAF160B-0200	2000		240	550.1	50.3	108.5	232.7	
MAF160C-0050	500	3000	340	747.8	17.8	47.4	98	0.26
MAF160C-0100	1000	6000	325	746.4	34	91.2	196	
MAF160C-0150	1500		300	681.4	47.1	109.5	212.17	
MAF160C-0200	2000		285	677.4	59.7	136	290.7	
MAF180C-0050	500	3000	435	986.2	22.8	50	104.7	0.49
MAF180C-0100	1000	6000	400	957	41.9	93.5	215	
MAF180C-0150	1500		365	858.1	57.33	128.8	280.86	
MAF180C-0200	2000		318	739.2	66.6	154	318.9	
MAF180D-0050	500	3000	500	1100.2	26.2	60.4	117.34	0.61
MAF180D-0100	1000	6000		1100	52.36	106.5	208.2	
MAF180D-0150	1500	3000	435	1013	68.33	146.1	296.24	
MAF180D-0200	2000	6000	400	1008	83.8	168.5	377.1	
MAF225C-0050	500	3000	860	1750	45.03	98	207.57	1.65
MAF225C-0100	1000	3750	820		85.9	165	355	
MAF225C-0150	1500		764		120.01	211.2	489.2	

All the specifications relate to the basic version of the motor without holding brake.
The maximum speed depends on the bearing version.

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Dimensions



Type	A	B	C	$\varnothing D$	$\varnothing E$	$\varnothing F$	$\varnothing G$	H	Weight
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
MAF100B-0050	192	382	60	38	130	215	14	287	38
MAF100B-0100									
MAF100B-0150									
MAF100B-0200									
MAF100B-0250									
MAF100C-0050		457							64
MAF100C-0100									
MAF100C-0150									
MAF100C-0200									
MAF100C-0250									
MAF100D-0050		532							
MAF100D-0100									
MAF100D-0150									
MAF100D-0200									
MAF100D-0250									

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Type	A	B	C	Ø D	Ø E	Ø F	Ø G	H	Weight						
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]						
MAF130B-0050	260	408	110	42	250	300	18	338	82						
MAF130B-0100															
MAF130B-0150															
MAF130B-0200															
MAF130B-0250															
MAF130C-0050															
MAF130C-0100															
MAF130C-0150															
MAF130C-0200															
MAF130C-0250															
MAF130D-0050															
MAF130D-0100															
MAF130D-0150															
MAF130D-0200															
MAF130D-0250															
MAF160B-0050	316	618	140	60	300	350	18	393	197						
MAF160B-0100															
MAF160B-0150															
MAF160B-0200															
MAF160C-0050															
MAF160C-0100															
MAF160C-0150															
MAF160C-0200															
MAF180C-0050	320	792							140	60	300	350	18	449	322
MAF180C-0100															
MAF180C-0150															
MAF180C-0200															
MAF180D-0050															
MAF180D-0100															
MAF180D-0150															
MAF180D-0200															
MAF225C-0050	434	932	140	75	350	400	18	572							587
MAF225C-0100															
MAF225C-0150															

All the specifications relate to the basic version of the motor without holding brake.

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The data specified above only serve to describe the product.

As our products are constantly being further developed, no statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.