

Asynchronous servo motors

**IndraDyn A**

**MAF with liquid cooling**



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

- Application description
- Project planning manual

**Compact and powerful**

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

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 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 versions allow you to tailor the MAF motors optimally to your specific application.

**Technical data****Electrical data**

Type	Rated speed	Maximum speed	Rated torque	Maximum torque	Rated power	Rated current	Maximum current	Moment of inertia
	$n_N$ [1/min]	$n_{Max}$ [1/min]	$M_N$ [Nm]	$M_{Max}$ [Nm]	$P_N$ [kW]	$I_N$ [A]	$I_{Max}$ [A]	J [kgm <sup>2</sup> ]
MAF100B-0050	500	11,000	50	109.7	2.6	8.5	20.29	0.019
MAF100B-0100	1,000		46	110	4.82	15.2	33.3	
MAF100B-0150	1,500		42	101.4	6.6	18.1	46.17	
MAF100B-0200	2,000		38	92.4	8	23.9	51.69	
MAF100B-0250	2,500		33	83.6	8.64	26	50.67	
MAF100C-0050	500	11,000	70	153.7	3.9	12.1	25.6	0.0284
MAF100C-0100	1,000		68	154	7.5	19	41.37	
MAF100C-0150	1,500		66	149.5	10.4	27.9	60.39	
MAF100C-0200	2,000		64	145.2	13.4	36.7	77.5	
MAF100C-0250	2,500		62	138.1	16.23	40.2	85.84	
MAF100D-0050	500	11,000	88	193.3	4.6	14.5	29.2	0.032
MAF100D-0100	1,000		84	190	8.8	27.1	58.03	
MAF100D-0150	1,500		79	185.3	12.4	32.7	68.73	
MAF100D-0200	2,000		80	182.3	16.76	43.1	91.33	
MAF100D-0250	2,500		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 <sup>2</sup> ]
MAF130B-0050	500	3,000	116	254.7	6.1	14.7	30.48	0.079
MAF130B-0100	1,000	6,000	112		11.7	28.4	60.95	
MAF130B-0150	1,500	9,000	115	264	18.1	43.7	94.68	
MAF130B-0200	2,000	10,000	100	220	20.9	52.7	108.94	
MAF130B-0250	2,500		90	210	23.56	58.8	126.61	
MAF130C-0050	500	3,000	155	340	8.1	21	42.64	0.101
MAF130C-0100	1,000	6,000	150	330	15.7	38	71.8	
MAF130C-0150	1,500	9,000	145	329.8	22.8	53.2	111.02	
MAF130C-0200	2,000	10,000	135	314.7	28.3	69.8	142.91	
MAF130C-0250	2,500		125	298.4	32.72	75.5	150.76	
MAF130D-0050	500	3,000	230	506.3	12	32.3	64.35	0.151
MAF130D-0100	1,000	6,000	220	500	23.04	50.71	109.06	
MAF130D-0150	1,500	9,000	200	484.4	31.4	72.6	155.42	
MAF130D-0200	2,000	10,000		461.4	41.9	93.9	190.86	
MAF130D-0250	2,500		190	450	49.74	113	238	
MAF160B-0050	500	3,000	270	594.5	14.1	34.25	65.4	0.23
MAF160B-0100	1,000	6,000	260	592.7	27.2	73.7	149	
MAF160B-0150	1,500		250	570.8	39.3	89.5	179.7	
MAF160B-0200	2,000		240	550.1	50.3	108.5	232.7	
MAF160C-0050	500	3,000	340	747.8	17.8	47.4	98	0.26
MAF160C-0100	1,000	6,000	325	746.4	34	91.2	196	
MAF160C-0150	1,500		300	681.4	47.1	109.5	212.17	
MAF160C-0200	2,000		285	677.4	59.7	136	290.7	
MAF180C-0050	500	3,000	435	986.2	22.8	50	104.7	0.49
MAF180C-0100	1,000	6,000	400	957	41.9	93.5	215	
MAF180C-0150	1,500		365	858.1	57.33	128.8	280.86	
MAF180C-0200	2,000		318	739.2	66.6	154	318.9	
MAF180D-0050	500	3,000	500	1,100.2	26.2	60.4	117.34	0.61
MAF180D-0100	1,000	6,000		1,100	52.36	106.5	208.2	
MAF180D-0150	1,500	3,000	435	1,013	68.33	146.1	296.24	
MAF180D-0200	2,000	6,000	400	1,008	83.8	168.5	377.1	
MAF225C-0050	500	3,000	860	1,750	45.03	98	207.57	1.65
MAF225C-0100	1,000	3,750	820		85.9	165	355	
MAF225C-0150	1,500		764		120.01	211.2	489.2	

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

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## Dimensions

Type	A	B	C	Ø D	Ø E	Ø F	Ø 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									38												
MAF100B-0150									38												
MAF100B-0200									38												
MAF100B-0250									38												
MAF100C-0050		457							60	38	130	215	14	287	52						
MAF100C-0100															52						
MAF100C-0150															52						
MAF100C-0200															52						
MAF100C-0250															52						
MAF100D-0050		532													60	38	130	215	14	287	64
MAF100D-0100																					64
MAF100D-0150																					64
MAF100D-0200																					64
MAF100D-0250																					64

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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									82						
MAF130B-0150									82						
MAF130B-0200									82						
MAF130B-0250									82						
MAF130C-0050		478							608	106					
MAF130C-0100										106					
MAF130C-0150										106					
MAF130C-0200										106					
MAF130C-0250										106					
MAF130D-0050		608								147					
MAF130D-0100										147					
MAF130D-0150										147					
MAF130D-0200										147					
MAF130D-0250										147					
MAF160B-0050		316								618	60	300	350	18	449
MAF160B-0100	197														
MAF160B-0150	197														
MAF160B-0200	197														
MAF160C-0050	708		140	227											
MAF160C-0100				227											
MAF160C-0150				227											
MAF160C-0200				227											
MAF180C-0050	320	792		140	75	350	400	572	322						
MAF180C-0100									322						
MAF180C-0150									322						
MAF180C-0200									322						
MAF180D-0050		902							140	382					
MAF180D-0100										382					
MAF180D-0150										382					
MAF180D-0200										382					
MAF225C-0050	434	932								140	75	350	400	572	587
MAF225C-0100															587
MAF225C-0150															587

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

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It must be remembered that our products are subject to a natural process of wear and aging.