



50 Hz

## IE2/IE3/IE4 - Reg. (EU) 2019/1781 - 50Hz

Motor type	P <sub>n</sub> (kW)	RPM	I <sub>n</sub> (A) 400 V 50 Hz	cos φ	T <sub>n</sub> (Nm)	T <sub>s</sub> / T <sub>n</sub>	I <sub>a</sub> / I <sub>n</sub>	IE	Efficiency 50 Hz			Weight (Kg)
									100%	75%	50%	
2 pole												
SM 56 A2	0.09	2820	0.38	0.60	0.30	3	3.8	***	59.3	55	42	3.0
SMX 56 B2	0.12	2750	0.45	0.72	0.42	3.0	3.3	IE2	53.6	55.0	45.0	3.0
SMX 63 A2	0.18	2800	0.63	0.69	0.61	3.0	3.6	IE2	60.4	59.3	56.6	4.5
SMX 63 B2	0.25	2780	0.73	0.76	0.86	3.5	5.0	IE2	64.8	63.7	60.8	4.5
SMX 71 A2	0.37	2810	1.00	0.76	1.26	2.6	4.5	IE2	69.5	68.4	65.3	5.5
SMX 71 B2	0.55	2810	1.40	0.76	1.86	2.6	4.5	IE2	74.1	73.0	69.7	7.5
SMX 80 A2	0.75	2849	1.74	0.77	2.52	3.6	5.7	IE3	80.7	80.2	76.6	9.5
SMX 80 B2	1.1	2865	2.50	0.77	3.66	3.3	5.4	IE3	82.7	83.0	80.9	10.5
SMX 90 SA2	1.5	2890	3.15	0.81	4.95	3.8	8.2	IE3	84.2	85.1	82.8	15.0
SMX 90 LA2	2.2	2887	4.95	0.75	7.28	4.4	8.4	IE3	85.9	85.7	84.0	16.5
SMX 100 LB2	3.0	2905	6.60	0.76	9.86	4.4	8.8	IE3	87.1	86.3	84.2	23.0
SMX 112 MC2	4.0	2935	7.80	0.84	13.0	4.6	10.5	IE3	88.1	88.5	87.0	32.0
SMX 132 SA2	5.5	2935	10.10	0.88	17.9	4.3	9.5	IE3	89.2	89.6	87.4	55.0
SMX 132 SB2	7.5	2930	13.40	0.89	24.4	4.0	9.0	IE3	90.1	91.0	90.0	60.0
SMX 160 MA2	11.0	2956	20.50	0.85	35.5	4.5	10.2	IE3	91.2	91.9	90.0	95.0
SMX 160 MB2	15.0	2956	27.50	0.86	48.5	4.6	10.3	IE3	91.9	92.0	90.7	103.0
SMX 160 LA2	18.5	2956	33.80	0.86	59.8	4.6	10.3	IE3	92.4	92.6	91.6	134.0
SMX 180 LA2	22.0	2958	36.80	0.93	71.1	4.2	10.8	IE3	92.7	92.0	91.0	180.0
SMX 200 LA2	30.0	2955	51.65	0.90	97.0	4.7	9.8	IE3	93.3	93.5	92.3	240
SMX 200 LB2	37.0	2955	62.70	0.91	119.6	4.7	9.8	IE3	93.7	94.0	92.1	240
4 pole												
SM 56 A4	0.06	1390	0.40	0.48	0.41	3	2.2	***	45	40.5	30	3.0
SM 56 B4	0.09	1320	0.41	0.61	0.65	3	2.2	***	55	50.6	38.6	3.0
SMX 63 A4	0.12	1300	0.36	0.73	0.82	2.2	2.8	IE2	59.1	59.8	54.1	3.0
SMX 63 B4	0.18	1340	0.58	0.70	1.28	2.2	2.8	IE2	64.7	62.5	51.4	4.0
SMX 63 C4	0.22	1350	0.70	0.69	1.55	2.6	3.6	IE2	67.1	67.0	66.4	4.5
SMX 71 A4	0.25	1400	0.76	0.69	1.70	2.0	3.6	IE2	68.5	66.3	61.4	5.5
SMX 71 B4	0.37	1375	1.00	0.74	2.62	2.2	3.9	IE2	72.7	73.0	70.3	6.5
SMX 71 C4	0.55	1360	1.43	0.72	3.86	2.4	4.2	IE2	77.1	78.2	75.1	7.5
SMX 80 A4	0.55	1410	1.41	0.72	3.70	2.4	4.3	IE2	77.1	76.4	73.5	10.0
SMX 80 S4	0.72	1400	1.9	0.70	4.98	2.9	5.3	IE2	79.6	79.5	78.0	13.0
SMX 80 B4	0.75	1415	2.0	0.67	5.06	3.1	5.6	IE3	82.5	82.8	81.2	10.0
SMX 90 SA4	1.1	1428	2.6	0.73	7.37	3.4	5.7	IE3	84.1	84.3	82.6	15.0
SMX 90 LA4	1.5	1430	3.5	0.74	10.0	3.5	6.2	IE3	85.3	85.2	83.6	16.5
SMX 100 LS4(**)**	1.85	1432	4.0	0.78	12.3	2.8	6.9	IE3	86.1	86.5	85.4	19.0
SMX 100 LA4	2.2	1440	4.8	0.76	14.5	2.9	7.0	IE3	86.7	87.0	85.4	23.0
SMX 112 MB4	3	1455	6.4	0.77	19.7	4.0	8.6	IE3	87.7	88.7	87.2	32.0
SMX 112 MC4	4	1445	8.4	0.77	26.4	3.7	7.1	IE3	88.6	88.8	87.6	37.0
SMX 132 SB4	5.5	1457	11.0	0.80	36.0	3.5	7.6	IE3	89.6	91.1	89.3	64.0
SMX 132 MA4	7.5	1457	14.9	0.82	49.2	3.3	7.9	IE3	90.4	90.7	90.2	71.0
SMX 160 MB4	11.0	1460	22.3	0.78	71.5	3.8	9.1	IE3	91.4	91.6	91.0	108
SMX 160 LA4	15.0	1470	30.2	0.78	97.4	3.5	9.1	IE3	92.1	92.3	91.8	134
SMX 180 LA4	18.5	1475	37.1	0.78	119.8	3.5	9.1	IE3	92.6	92.6	91.7	180
SMX 180 LB4	22.0	1472	41.7	0.82	142.4	4.3	8.6	IE3	93.0	93.0	92.0	180
SMX 200 LB4	30.0	1475	53.2	0.87	194.2	2.9	8.4	IE3	93.6	93.4	93.4	230
SMX 225 S4	37.0	1480	66.2	0.86	238.7	2.7	8.5	IE3	93.9	94.4	91.9	315
SMX 225 M4	45.0	1480	79.3	0.87	290.4	2.8	8.8	IE3	94.2	94.7	92.2	380
SMX 250 M4	55.0	1480	96.6	0.87	354.9	3.2	9.8	IE3	94.6	95.1	92.6	600
SMX 280 S4	75.0	1490	136.0	0.83	480.6	2.2	7.6	IE4	96.0	96.1	95.3	700
SMX 280 M4	90.0	1490	163.0	0.83	576.8	2.2	7.6	IE4	96.1	96.2	95.4	730
SMX 315 S4	110.0	1491	194.2	0.85	704.5	2.6	9.2	IE4	96.3	96.3	95.5	1005
SMX 315 M4	132.0	1491	232.8	0.85	845.4	2.7	9.2	IE4	96.4	96.4	95.5	1205

\*\*\* La norma EN 60034-30-1 specifica le classi di efficienza IE per motori con potenza compresa tra 0.12 kW e 1000 kW. Per motori con potenza inferiore a 0.12 kW non è quindi possibile definire la classe di efficienza, inoltre questi motori sono fuori dallo scopo del regolamento EU 2019/1781. The EN 60034-30-1 standard specifies the IE efficiency classes for motors with power between 0.12 kW and 1000 kW. For motors with power lower than 0.12 kW it is therefore not possible to define the efficiency class, moreover these motors are outside the scope of the EU regulation 2019/1781.

1. I valori indicati si riferiscono al funzionamento del motore con alimentazione a 400V 50 Hz, temperatura esterna max 40 °C, altitudine fino a 1000 m s.l.m., servizio continuo (S1). - Motor characteristic values reported in the tables refer to continuous duty (S1), 50 Hz frequency, ambient temperature max. 40 °C, altitude up to 1000 m above sea level operating condition.

2. Il motore contrassegnato con \* può essere fornito con albero e flangia ridotta con le dimensioni relative all'altezza d'asse 90. - The motor marked with \* can be supplied with reduced shaft and flange with the dimensions

related to the frame size 90.

3. I motori riportano in targa i dati relativi al funzionamento sia a 50 Hz che a 60 Hz con il medesimo valore di potenza ad esclusione dei motori contrassegnati con \*\*. - The motors nameplates have the data relating to operation at both 50 Hz and 60 Hz with the same power value except for the motors marked with \*\*.

4. La MGM motori elettrici SpA si adopera per mantenere i dati forniti il più possibile aggiornati e corretti. Dal momento che i prodotti sono oggetto di continue modifiche e miglioramenti i dati indicati non possono

tuttavia essere considerati impegnativi. I dati indicati inoltre si devono intendere come informazioni di carattere generale sul prodotto. Per specifiche applicazioni Vi raccomandiamo di contattare lo staff della MGM. - MGM keeps the data provided as up-to-date and correct as possible. Since the products are subject to changes and improvements, the data indicated cannot be considered binding. The data indicated must also be understood as being general in nature. For specific applications, please contact the MGM staff.



50 Hz

## IE2/IE3 - Reg. (EU) 2019/1781 - 50Hz

Motor type	P <sub>n</sub> (kW)	RPM	I <sub>n</sub> (A) 400 V 50 Hz	cos φ	T <sub>n</sub> (Nm)	T <sub>s</sub> / T <sub>n</sub>	I <sub>a</sub> / I <sub>n</sub>	IE	Efficiency			Weight (Kg)
									100%	75%	50%	
6 pole												
SM 56 B6	0.06	850	0.45	0.71	0.67	1.9	0.5	***	25.6	24.0	17.0	3.0
SM 63 C6	0.09	890	0.50	0.56	0.97	2.4	1.9	***	42.7	38.5	30.6	4.5
SMX 63 D6	0.12	865	0.62	0.55	1.3	2.7	1.9	IE2	50.6	50.4	48.5	5.0
SMX 71 A6	0.18	900	0.61	0.69	2.1	2.0	2.6	IE2	56.6	56.7	52.8	7.0
SMX 71 B6	0.25	875	0.80	0.70	2.8	1.6	2.8	IE2	61.6	62.1	57.4	8.0
SMX 80 A6	0.37	940	1.3	0.57	3.8	2.7	3.5	IE2	67.6	67.5	60.8	10.0
SMX 80 B6	0.55	920	1.7	0.63	5.7	2.8	3.5	IE2	73.1	72.8	69.2	11.0
SMX 90 SA6**	0.75	935	2.1	0.66	7.7	2.5	5.5	IE3	78.9	79.4	77.2	15.0
SMX 90 LA6**	1.1	935	3.3	0.61	11.2	3.1	4.6	IE3	81.0	81.4	79.2	16.5
SMX 100 LA6**	1.5	955	4.0	0.66	15.2	3.0	5.3	IE3	82.5	82.1	79.1	23.0
SMX 112 MC6**	2.2	960	5.0	0.75	21.9	2.4	6.4	IE3	84.3	84.4	82.5	37.0
SMX 132 SB6**	3.0	965	6.8	0.75	29.7	3.1	8.1	IE3	85.6	85.8	83.8	56.0
SMX 132 MA6**	4.0	965	9.2	0.72	39.6	3.1	6.7	IE3	86.8	88.2	87.1	67.0
SMX 132 MB6**	5.5	965	12.5	0.72	54.4	3.0	6.6	IE3	88.0	88.2	86.6	73
SMX 160 MB6	7.5	965	15.8	0.76	74.2	3.0	7.2	IE3	89.1	89.3	88.2	85
SMX 160 LB6	11	965	22.9	0.77	108.9	2.7	9.1	IE3	90.3	90.5	88.5	153
SMX 180 LB6	15	978	31.3	0.76	147.7	3.1	9.1	IE3	91.2	91.2	90.0	180
SMX 200 LA6	18.5	980	37.4	0.80	180.3	3.7	8.6	IE3	91.7	91.8	89.9	240
SMX 200 LB6	22	975	43.1	0.80	215.5	3.1	7.3	IE3	92.2	92.3	90.4	240
SMX 225 M6	30	985	57.9	0.80	291.4	3.7	7.7	IE3	92.9	93.2	92.9	360
SMX 250 M6	37	980	68.2	0.84	360.5	3.2	7.9	IE3	93.3	93.4	91.5	490
SMX 280 S6	45	987	88.8	0.78	436.3	2.8	6.0	IE3	93.7	93.8	91.9	610
SMX 280 M6	55	987	108.1	0.78	533.2	2.8	6.6	IE3	94.1	94.2	92.3	650
8 pole												
SM 63 D8	0.07	650	0.45	0.62	1.03	2.2	1.6	***	28.0	27.0	19.0	5.0
SM 71 A8	0.08	660	0.60	0.53	1.16	2.0	2.0	***	42.9	38.6	30.7	6.5
SMX 71 B8	0.12	680	0.70	0.54	1.7	2.2	2.2	IE2	39.80	40.2	38.0	7
SMX 80 A8	0.18	690	0.86	0.60	2.5	2.2	2.4	IE2	45.90	46.3	44.1	10
SMX 80 B8	0.25	675	1.10	0.61	3.5	2.2	2.4	IE2	50.60	51.0	48.8	11
SMX 90 SA8	0.37	690	1.52	0.59	5.1	2.3	3.2	IE2	56.10	56.5	54.3	11.5
SMX 90 LA8	0.55	690	2.30	0.56	7.6	2.3	3.1	IE2	61.70	62.1	59.9	15.0
SMX 100 LA8	0.75	700	2.60	0.56	10.2	2.3	3.3	IE3	75.00	75.2	73.2	23.0
SMX 100 LB8	1.1	700	3.80	0.54	15.0	2.4	4.4	IE3	77.70	77.9	75.9	23.0
SMX 112 MB8	1.5	720	4.80	0.57	19.9	2.2	5.0	IE3	79.70	79.9	77.9	32
SMX 132 SB8	2.2	710	5.55	0.70	29.6	2.3	5.2	IE3	81.90	82.1	80.1	55
SMX 132 MB8	3	710	7.40	0.70	40.4	2.3	5.2	IE3	83.50	83.7	81.7	58
SMX 160 MA8	4	725	9.60	0.71	52.7	2.5	6.7	IE3	84.80	84.9	83.0	123
SMX 160 MB8	5.5	725	13.40	0.69	72.4	2.5	6.7	IE3	86.20	86.3	84.4	123
SMX 160 LA8	7.5	725	18.30	0.68	98.8	2.5	6.7	IE3	87.30	87.4	85.5	141
SMX 180 LB8	11	730	26.10	0.69	143.9	2.4	5.7	IE3	88.60	88.7	86.8	200
SMX 200 LA8	15	735	34.70	0.70	194.9	2.1	6.5	IE3	89.60	89.7	87.8	240
SMX 225 S8	18.5	740	44.00	0.67	238.7	2.4	7.5	IE3	90.10	90.1	88.3	370
SMX 225 M8	22	735	49.40	0.70	285.8	2.1	7.0	IE3	90.60	90.6	89.0	380
SMX 250 M8	30	740	64.17	0.74	387.1	2.1	6.8	IE3	91.30	91.3	89.5	605
SMX 280 S8	37	745	75.64	0.77	474.3	2.2	7.0	IE3	91.80	91.8	90.0	650
SMX 280 M8	45	745	90.42	0.78	576.8	2.2	7.2	IE3	92.20	92.2	90.4	690

\*\*\* La norma EN 60034-30-1 specifica le classi di efficienza IE per motori con potenza compresa tra 0.12 kW e 1000 kW. Per motori con potenza inferiore a 0,12 kW non è quindi possibile definire la classe di efficienza, inoltre questi motori sono fuori dallo scopo del regolamento EU 2019/1781. The EN 60034-30-1 standard specifies the IE efficiency classes for motors with power between 0.12 kW and 1000 kW. For motors with power lower than 0.12 kW it is therefore not possible to define the efficiency class, moreover these motors are outside the scope of the EU regulation 2019/1781.

1. I valori indicati si riferiscono al funzionamento del motore con alimentazione a 400V 50 Hz, temperatura esterna max 40 °C, altitudine fino a 1000 m s.l.m., servizio continuo (S1). - Motor characteristic values reported in the tables refer to continuous duty (S1), 50 Hz frequency, ambient temperature max. 40 °C, altitude up to 1000 m above sea level operating condition.  
2. I motori riportano in targa i dati relativi al funzionamento sia a 50 Hz che a 60 Hz con il medesimo valore di potenza ad esclusione dei motori contrassegnati con \*\*.

- The motors nameplates have the data relating to operation at both 50 Hz and 60 Hz with the same power value except for the motors marked with \*\*. 3. La MGM motori elettrici SpA si adopera per mantenere i dati forniti il più possibile aggiornati e corretti. Dal momento che i prodotti sono oggetto di continue modifiche e miglioramenti i dati indicati non possono tuttavia essere considerati impegnativi. I dati indicati inoltre si devono intendere come informazioni di carattere generale sul prodotto. Per specifiche applicazioni Vi raccomandiamo di contattare lo staff della MGM. - MGM keeps the data provided as up-to-date and correct as possible. Since the products are subject to changes and improvements, the data indicated cannot be considered binding. The data indicated must also be understood as being general in nature. For specific applications, please contact the MGM staff.

carattere generale sul prodotto. Per specifiche applicazioni Vi raccomandiamo di contattare lo staff della MGM. - MGM keeps the data provided as up-to-date and correct as possible. Since the products are subject to changes and improvements, the data indicated cannot be considered binding. The data indicated must also be understood as being general in nature. For specific applications, please contact the MGM staff.