

EM0101021T01A

HIGH EFFICIENCY

EFFI

SERIE 1EM-1

SERIE 1EM-1

REIHE 1EM-1

1EM-1 SERIES

SERIE 1EM-1

CHIUSI, VENTILATI ESTERNAMENTE - PROTEZIONE "IP55"
ROTORE A GABBIA - COSTRUZIONE IN GHISA

FERMES, VENTILES EXTERIEUREMENT - PROTECTION "IP55"
ROTOR A CAGE D'ECUREUIL - CARCASSE FONTE

GESCHLOSSEN, AUßEN BELÜFTET - IP55 SCHUTZ
KÄFIGROTOR - GEHÄUSE AUS GÜßEISEN

TOTALLY ENCLOSED - EXTERNALLY FAN COOLED - "IP55" PROTECTION
SQUIRREL CAGE ROTOR - CAST-IRON CONSTRUCTION

CERRADOS, VENTILADOS EXTERNAMENTE - PROTECCIÓN "IP55"
ROTOR JAULA - CARCASA DE HIERRO FUNDIDO

dal 1910

FIMET

MOTORI ASINCRONI TRIFASI

MOTEURS ASYNCHRONES TRIPHASES

DREHSTROMMOTOREN

THREE-PHASE INDUCTION MOTORS

MOTORES ASÍNCRONOS TRIFÁSICOS



dal 1910

FIMET





Tipo Type Typ Type Tipo	400Volt 50Hz										Massa Masse Gewicht Weight Peso Kg	J Rotore Rotor Läufer Rotor Rotor Kg ^{m²}	Classe di rendimento Classe de rendement Wirkungs- klasse Efficiency class Clase de rendimiento
	Potenza Puissance Leistung Output Potencia kW	giri/min tours/min U/min rpm rpm	η%		cosφ	In A	Mn Nm	Ia/In Id/In Ia/In Is/In Ia/In	Ma/Mn Md/Mn Ma/Mn Ms/Mn Ma/Mn	Mmax/Mn Mmax/Mn Mk/Mn Mmax/Mn Mmax/Mn			
			100%	75%									
2 POLI - POLES - POLIG - POLES - POLOS													
1EM-1 80A2	1.1	2840	82.9	82.4	0.84	2.2	3.7	8	3	3.2	17.5	0.0009	82.9
1EM-1 90S2	1.5	2840	84.5	83.9	0.84	3	5	8	3	3.2	21	0.0012	84.5
1EM-1 90L2	2.2	2840	85.9	85.6	0.85	4.3	7.4	8	3	3.2	25	0.0014	85.9
1EM-1 100L2	3	2860	87.0	86.7	0.87	5.7	9.9	8	2.8	3.2	33	0.0029	87.0
1EM-1 112MR2	4	2880	87.3	87.6	0.88	7.4	13.2	8	2.5	3.2	41	0.0055	87.6
1EM-1 132S2	5.5	2900	88.9	88.6	0.88	10.2	18.1	8	2.2	3.2	63	0.0109	88.9
1EM-1 132SA2	7.5	2900	89.9	89.5	0.88	13.7	24.7	8	2.2	3.2	70	0.0126	89.9
1EM-1 160MC2	11	2930	91.0	90.5	0.89	19.6	35.8	8	1.9	3	110	0.0377	91.0
1EM-1 160M2	15	2930	91.5	91.3	0.89	26.6	48.8	8	1.9	3	120	0.0499	91.5
1EM-1 160L2	18.5	2930	92.3	91.8	0.90	32.3	60.3	8	1.9	3	135	0.055	92.3
1EM-1 180M2	22	2940	92.6	92.0	0.90	38.2	71.4	8.2	1.9	3	165	0.075	92.6
1EM-1 200LC2	30	2950	93.4	92.6	0.90	51.7	97.1	7.6	1.9	3	218	0.124	93.4
1EM-1 200L2	37	2950	93.7	93.1	0.90	63.5	119.7	7.6	1.9	3	230	0.139	93.7
1EM-1 225M2	45	2960	94.2	93.3	0.90	76.9	144.7	7.6	1.9	2.5	280	0.233	94.2
1EM-1 250M2	55	2965	94.5	93.5	0.90	93.6	176.8	8.2	1.8	2.5	365	0.312	94.5
1EM-1 280S2	75	2970	94.9	94.2	0.90	127	241.1	7.6	1.7	2.5	495	0.579	94.9
1EM-1 280M2	90	2970	95.2	94.6	0.91	150	289.3	7.6	1.7	2.5	565	0.675	95.2
4 POLI - POLES - POLIG - POLES - POLOS													
1EM-1 90S4	1.1	1390	84.0	83.8	0.77	2.3	7.5	7	2.7	3	23	0.0023	84.0
1EM-1 90L4	1.5	1390	85.2	85.0	0.79	3.1	10.2	7	2.7	3	25	0.0027	85.2
1EM-1 100L4	2.2	1410	86.7	86.4	0.81	4.5	14.8	7	2.5	2.8	33	0.0054	86.7
1EM-1 100LA4	3	1410	87.6	87.4	0.82	6	20.1	7	2.5	2.8	35	0.0067	87.6
1EM-1 112M4	4	1435	88.5	88.3	0.82	7.9	26.5	7	2.2	2.8	41	0.0095	88.5
1EM-1 132S4	5.5	1440	89.6	89.2	0.83	10.8	36.4	7	2.2	2.8	65	0.0214	89.6
1EM-1 132M4	7.5	1440	90.4	90.1	0.84	14.6	49.7	7	2.2	2.8	76	0.0296	90.4
1EM-1 160M4	11	1460	91.2	91.0	0.84	20.5	71.5	7.5	2.1	2.8	118	0.0747	91.2
1EM-1 160L4	15	1460	92.1	91.8	0.85	27.3	98.1	7.5	2.1	2.8	132	0.0918	92.1
1EM-1 180M4	18.5	1470	92.5	92.2	0.86	33.2	120.1	7.5	2.1	2.8	164	0.139	92.5
1EM-1 180L4	22	1470	92.9	92.6	0.86	39.3	142.9	7.5	2.1	2.5	182	0.158	92.9
1EM-1 200L4	30	1470	93.6	93.2	0.86	53.2	161	7.5	2.1	2.5	245	0.262	93.6
1EM-1 225S4	37	1475	93.9	93.6	0.87	64.7	199	7.5	1.8	2.5	258	0.406	93.9
1EM-1 225M4	45	1475	94.2	93.9	0.87	78.4	290.3	7.5	1.8	2.3	290	0.469	94.2
1EM-1 250M4	55	1480	94.4	94.2	0.87	95.6	354.9	7.5	1.8	2.3	388	0.66	94.4
1EM-1 280S4	75	1480	94.9	94.5	0.87	129.7	483.9	7.5	1.8	2.3	510	1.12	94.9
1EM-1 280M4	90	1480	95.2	94.8	0.87	155.2	578.7	7.5	1.8	2.3	606	1.46	95.2

In = corrente nominale
In = courant nominal
In = Nennstrom
In = rated current
In = corriente nominal

Mn = coppia nominale
Mn = couple nominal
Mn = Nennmoment
Mn = rated torque
Mn = par nominal

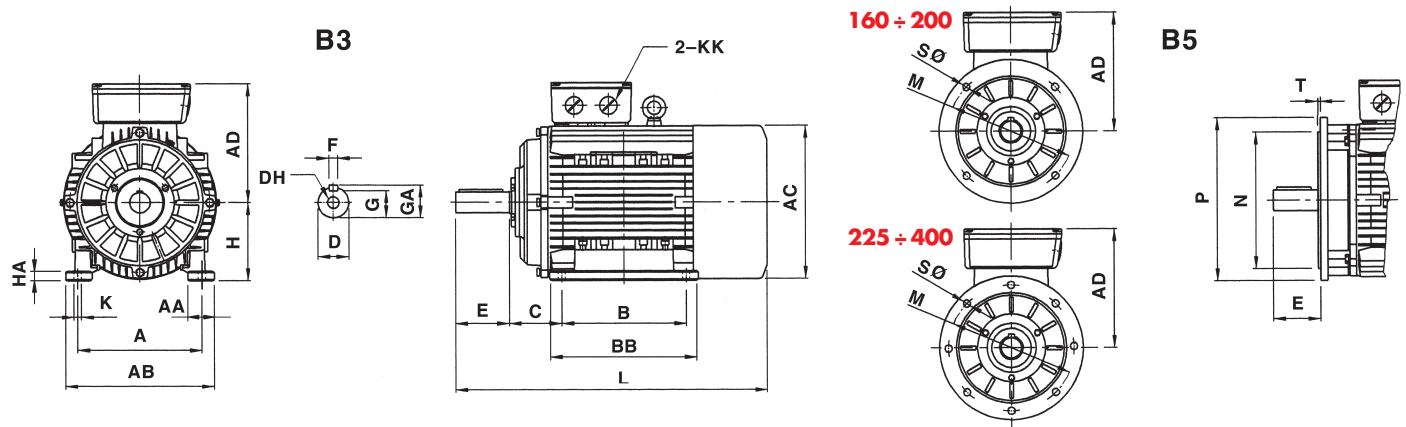
Ia = corrente d' avviamento
Id = courant de démarrage
Ia = Anzugsstrom
Ia = starting current
Ia = corriente de arranque

Ma = coppia d'avviamento
Md = couple de démarrage
Ma = Anzugsmoment
Ms = starting torque
Ma = par de arranque

Mmax = coppia massima
Mmax = couple maximum
Mk = Kippmoment
Mmax = maximum torque
Mmax = par máximo

J = momento d' inerzia = 1/4 PD²
J = moment d' inertie = 1/4 MD²
J = Trägheitsmoment = 1/4 GD²
J = inertia moment = 1/4 WD²
J = momento de inercia = 1/4 PD²

DIMENSIONI 1EM-1/DIMENSIONS 1EM-1/ABMESSUNGEN 1EM-1/1EM-1 DIMENSIONS/1EM-1 DIMENSIONES



	A	AA	AB	AC	AD	B	BB	C	D	DH	E	F
1EM-1 160M-MC	254	66	320	330	255	210	260	108	42	M16X36	110	12
1EM-1 160L	254	69	320	330	255	254	305	108	42	M16X36	110	12
1EM-1 180M	279	70	355	380	280	241	311	121	48	M16X36	110	14
1EM-1 180L	279	70	355	380	280	279	348	121	48	M16X36	110	14
1EM-1 200L-LC	318	70	395	420	305	305	368	133	55	M20X42	110	16
1EM-1 225S(4-8P)	356	75	435	470	335	286	310	149	60	M20X42	140	18
1EM-1 225M(2P)	356	75	435	470	335	311	393	149	55	M20X42	110	16
1EM-1 225M(4-8P)	356	75	435	470	335	311	393	149	60	M20X42	140	18
1EM-1 250M(2P)	406	81	490	510	370	349	450	168	60	M20X42	140	18
1EM-1 250M(4-8P)	406	81	490	510	370	349	450	168	65	M20X42	140	18
1EM-1 280S(2P)	457	85	550	580	410	368	488	190	65	M20X42	140	18
1EM-1 280S(4-8P)	457	85	550	580	410	368	488	190	75	M20X42	140	20
1EM-1 280M(2P)	457	85	550	580	410	419	540	190	65	M20X42	140	18
1EM-1 280M(4-8P)	457	85	550	580	410	419	540	190	75	M20X42	140	20
	G	GA	H	HA	K	KK	L	M	N	P	S	T
1EM-1 160M-MC	37	45	160	22	15	2 x Pg 29	615	300	250	350	19	5
1EM-1 160L	37	45	160	22	15	2 x Pg 29	670	300	250	350	19	5
1EM-1 180M	42,5	51,5	180	23	15	2 x Pg 29	700	300	250	350	19	5
1EM-1 180L	42,5	51,5	180	23	15	2 x Pg 29	740	300	250	350	19	5
1EM-1 200L-LC	49	59	200	25	19	2 x Pg 29	770	350	300	400	19	5
1EM-1 225S(4-8P)	53	64	225	30	19	2 x Pg 42	815	400	350	450	19	5
1EM-1 225M(2P)	49	59	225	30	19	2 x Pg 42	820	400	350	450	19	5
1EM-1 225M(4-8P)	53	64	225	30	19	2 x Pg 42	845	400	350	450	19	5
1EM-1 250M(2P)	53	64	250	31	24	2 x Pg 42	910	500	450	550	19	5
1EM-1 250M(4-8P)	58	69	250	31	24	2 x Pg 42	910	500	450	550	19	5
1EM-1 280S(2P)	58	69	280	38	24	2 x Pg 48	985	500	450	550	19	5
1EM-1 280S(4-8P)	67,5	79,5	280	38	24	2 x Pg 48	985	500	450	550	19	5
1EM-1 280M(2P)	58	69	280	38	24	2 x Pg 48	1035	500	450	550	19	5
1EM-1 280M(4-8P)	67,5	79,5	280	38	24	2 x Pg 48	1035	500	450	550	19	5

TOLLERANZE:	TOLERANCES:	TOLERANZEN:	TOLERANCES:	TOLERANCIAS:
Quota H = +0 -0,5mm (160-250) +0 -1mm (280)	Cote H = +0 -0,5mm (160-250) +0 -1mm (280)	Mass H = +0 -0,5mm (160-250) +0 -1mm (280)	Dimension H = +0 -0,5mm (160-250) +0 -1mm (280)	Cotas H = +0 -0,5mm (160-250) +0 -1mm (280)
Quota N = h6	Cote N = h6	Mass N = h6	Dimension N = h6	Cotas N = h6
Quota D = <= 48 = k6 > 48 = m6	Cote D = <= 48 = k6 > 48 = m6	Mass D = <= 48 = k6 > 48 = m6	Dimension D = <= 48 = k6 > 48 = m6	Cotas D = <= 48 = k6 > 48 = m6
Le dimensioni non sono impegnative.	Les dimensions ne sont pas impératives.	Die Abmessungen sind nicht verbindlich.	The dimensions are not binding.	Las dimensiones son orientativas.



SPECIFICHE GENERALI

I motori sono realizzati in accordo con i seguenti standard:

- IEC 34 e 72
- VDE 0530
- DIN 42673, 42677
- BS 4999,5000
- NF C 51
- AS 1359
- ISO 2373

I motori di serie sono in esecuzione:

- IP 55
- IC 0141
- Isolamento in classe F con sovratemperatura in classe B per la maggior parte dei motori.
- Equilibrati in classe N con mezza linguetta.

- **1EM-1:** Carcassa (con piedi fissi), scudi e scatola morsettiera in ghisa.
- 80 - 160: Cuscinetti stagni lubrificati a vita.
- 180 - 260: Con dispositivo di ingrassaggio.

CARACTERISTIQUES GENERALES

Les moteurs sont réalisés en conformité aux Norme Internationales:

- IEC 34, 72
- VDE 0530
- DIN 42673, 42677
- BS 4999,5000
- NF C 51
- AS 1359
- ISO 2373

Les moteurs standard sont caractérisés par:

- IP 55
- IC 0141
- Classe F d'isolement avec échauffement de classe B pour la majorité des moteurs.
- Equilibrage de class N avec demi-clavette.

- **1EM-1:** Carcasse (avec pattes fixes), flasques et boîte à bornes en fonte.
- 80 - 160: Roulement étanches, graissés à vie.
- 180 - 260: Avec grasseur à bille.

GENERAL SPEZIFIKATIONEN

Normentsprechen von den Motoren:

- IEC 34, 72
- VDE 0530
- DIN 42673, 42677
- BS 4999,5000
- NF C 51
- AS 1359
- ISO 2373

Die standard Motoren sind:

- IP 55
- IC 0141
- Isolationklasse F, maximale Motorübertemperatur nach Übertemperatur isolationklasse B.
- Vibration grade N mit einer Halbfeder.

- **1EM-1:** Gehäuse (mit festen Füßen), Lagerschilde und Klemmenkasten aus Gußeisen.
- 80 - 160: Lebensdauer geschmiert.
- 180 - 260: Mit Kugeleinfetter.

GENERAL CHARACTERISTICS

The motors are built to comply with current International Standards:

- IEC 34, 72
- VDE 0530
- DIN 42673, 42677
- BS 4999,5000
- NF C 51
- AS 1359
- ISO 2373

Standard motors are featured by:

- IP 55
- IC 0141
- Class F insulation, with overtemperature class B for most motor sizes.
- Class N, half key balanced.

- **1EM-1:** Cast iron frame (with fixed feet), end shields and terminal box.
- 80 - 160: Bearings, double shielded greased for life.
- 180 - 260: With grease facilities.

CARACTERÍSTICAS GENERALES

Los motores son fabricados de acuerdo con las siguientes normas internacionales:

- IEC 34 y 72
- VDE 0530
- DIN 42673, 42677
- BS 4999,5000
- NF C 51
- AS 1359
- ISO 2373

Características de los motores de serie:

- IP 55
- IC 0141
- Aislamiento de clase F, con sobretemperatura en clase B para la mayor parte de los motores.
- Equilibrados en clase N con media claveta.

- **1EM-1:** Carcasa (con patas fijas), escudos y caja de bornes de hierro fundido.
- 80 - 160: Rodamientos cerrados autolubricados de por vida.
- 180 - 260: Con lubricadores.

CUSCINETTI / ROULEMENTS / LAGER BEARINGS / RODAMIENTOS

TIPO TYPE TYPE TYPE TIPO	POLI POLES POLIG POLES POLOS	LATO COMANDO CÔTÉ ARBRE D.E. STEUERSEITE LADO ACCIONAMIENTO	LATO VENTOLA CÔTÉ VENTILATEUR N.D.E. LÜFTERRADSEITE LADO VENTILADOR
1EM-1 80	2 - 4	6204-ZZ C3	6204-ZZ C3
1EM-1 90	2 - 4	6205-ZZ C3	6205-ZZ C3
1EM-1 100	2 - 4	6206-ZZ C3	6206-ZZ C3
1EM-1 112	2 - 4	6206-ZZ C3	6206-ZZ C3
1EM-1 132	2 - 4	6208-ZZ C3	6208-ZZ C3
1EM-1 160	2 - 4	6309-ZZ C3*	6309-ZZ C3*
1EM-1 180	2 - 4	6311-C3	6311-C3
1EM-1 200	2 - 4	6312-C3	6212-C3
1EM-1 225	2 - 4	6313-C3	6213-C3
1EM-1 250	2 - 4	6314-C3	6314-C3
1EM-1 280	2	6314-C3	6314-C3
	4	6317-C3	6317-C3

* Preliminary