

CEAR



MOTORI ELETTRICI A CORRENTE CONTINUA PER APPLICAZIONI INDUSTRIALI

DIRECT CURRENT ELECTRIC MOTORS FOR INDUSTRIAL APPLICATIONS

SERIE MGL NON COMPENSATI

GRANDEZZE 80 - 100 (2 POLI)
GRANDEZZA 112 - 160 (4 POLI)

POTENZE DA 1,6 A 73 KW (a 1500 rpm)
COPPIE DA 10 A 460 Nm

MGL SERIES UNCOMPENSATED

SIZE 80 - 100 (2 POLES)
SIZE 112 - 160 (4 POLES)

POWER FROM 1.6 TO 73 KW (at 1500 rpm)
TORQUE FROM 10 TO 460 Nm





MOTORI ELETTRICI A CORRENTE CONTINUA

DIRECT CURRENT ELECTRIC MOTORS

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MOTORI ELETTRICI A CORRENTE CONTINUA DIRECT CURRENT ELECTRIC MOTORS

PRODUZIONE CEAR

Tutte la macchine costruite dalla ditta CEAR sono conformi alle norme CEI EN 60034-1 classificazione 2-3 fascicolo n°11111 (data di pubblicazione 2011), per le macchine elettriche rotanti ed alle raccomandazioni internazionali IEC.

Il collaudo viene eseguito su ogni macchina, secondo quanto stabilito dalle suddette norme, onde accertarne il corretto funzionamento.

Sono inoltre considerate esecuzioni rispondenti a particolari esigenze delle ditte committenti nel rispetto di eventuali normative estere e della buona regola d'arte.

CEAR PRODUCTION

All motors made by company CEAR are in accordance with the norms CEI EN 60034-1 classification 2-3 fasc. n°11111 (publication date 2011), for the electrical rotating machines and with the IEC international recommendations.

Every motor is tested as established from the above mentioned norms in order to verify the correct operation.

We are at complete disposal for eventual execution of motors answering to particular needs of our customers ever in the respect of eventual foreign norms and executed to art rule.



ISOLAMENTO

I motori della serie MGL e MGLC sono costruiti utilizzando materiali con isolamento in classe H.
La sovratemperatura ammessa per la classe H dalle norme CEI EN 60034-1 classificazione 2-3 fascicolo n°11111 (data pubblicazione 2011), è pari a $\Delta T = 125^\circ\text{C}$.

I motori indicati sul catalogo sono previsti per sovratemperature, relative alla classe F, pari a $\Delta T = 105^\circ\text{C}$.

I motori vengono perciò utilizzati per una sovratemperatura inferiore mediamente del 20% offrendo così un più elevato grado di affidabilità.

INSULATION

Motors of series MGL and MGLC are constructed using material with insulation class H.
The overtemperature admitted for the class from the norms CEI EN 60034-1 classification 2-3 fasc. n°11111 (publication date 2001), is like $\Delta T = 125^\circ\text{C}$.

Motors indicated on the catalogue are provided for overtemperature of class F, like to $\Delta T = 105^\circ\text{C}$.

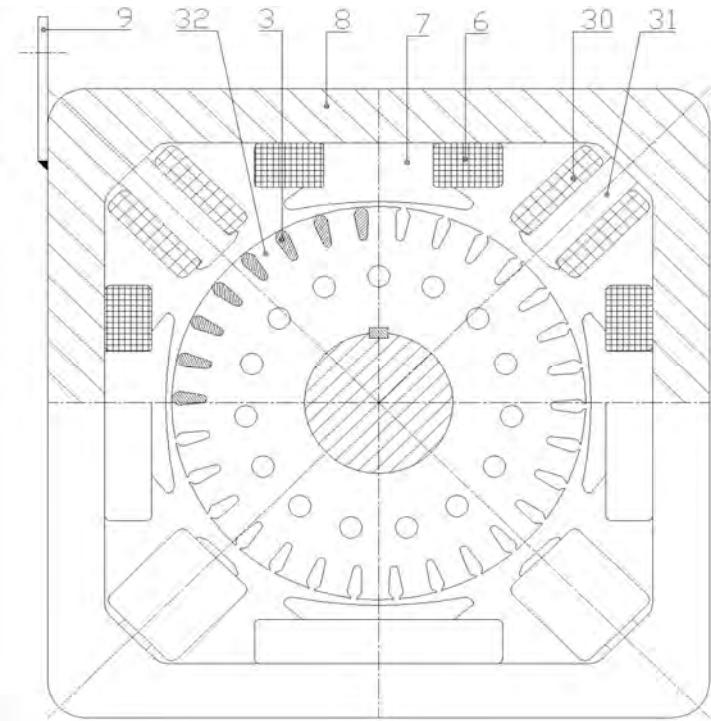
Motors are therefore used for a lower overtemperature of 20% on average, offering an higher reliability level.



Motori Serie MGL
Motoren Serie MGL
Motor Series MGL

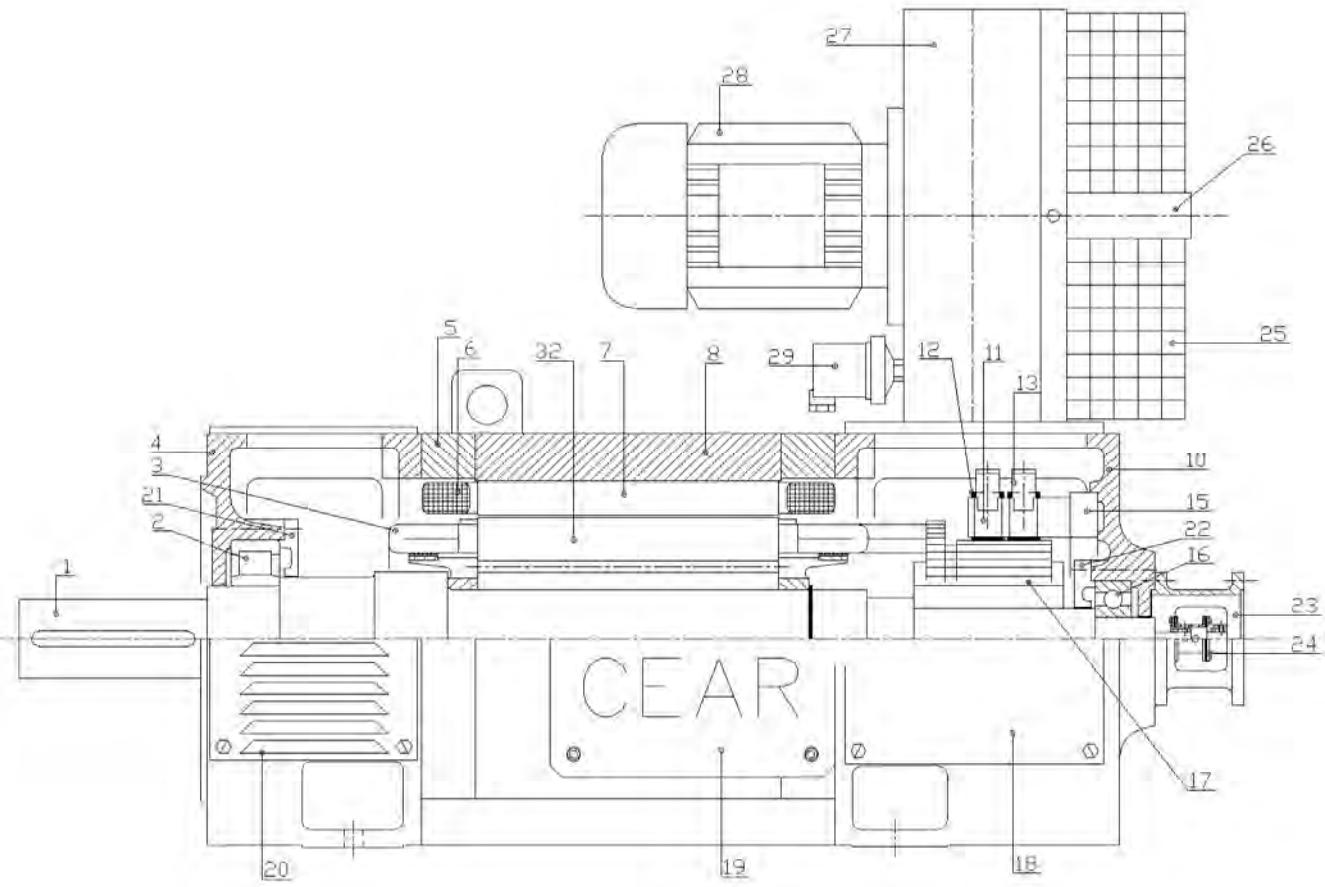
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RAPPRESENTAZIONE GRAFICA
MOTORE SERIE MGL

DRAWINGS
MOTOR SERIAL MGL





Motori Serie MGL
Motoren Serie MGL
Motor Series MGL

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LISTA COMPONENTI

MOTORE SERIE MGL

PARTS LISTS

MOTOR SERIAL MGL

- | | | |
|----|--|------------------------------------|
| 1 | Sporgenza d'albero | Shaft end |
| 2 | Cuscinetto lato accoppiamento | Bearing coupling side |
| 3 | Avvolgimento del rotore | Engine winding up |
| 4 | Scudo lato accoppiamento | Coupling shield side |
| 5 | Viti di fissaggio scudi - statore | Fixing screws shield-box |
| 6 | Bobina poli principali | Coil mains poles |
| 7 | Nucleo poli principali | Nucleous mains poles |
| 8 | Statore Lamellare | Blades package stator |
| 9 | Golfari di sollevamento | Lifting ring |
| 10 | Scudo lato opposto | Opposite shield side |
| 11 | Cassetto portaspazzole e spazzole | Drawer brushes-holder |
| 12 | Spazzole | Brushes |
| 13 | Molle spingi spazzole | Spring |
| 15 | Anello portaspazzole | Brushes-holder ring |
| 16 | Cuscinetto lato opposto | Bearing opposite side |
| 17 | Collettore | Collector |
| 18 | Portello ispezione lato opposto | Opposite side inspection door |
| 19 | Scatola Morsettiera | Terminal board |
| 20 | Portello lato accoppiamento | Coupling side door |
| 21 | Coperchietto interno lato accopp. | Coupling side interior small-cover |
| 22 | Coperchietto interno lato opposto | Opposite side interior small-cover |
| 23 | Lanterna attacco D.T. | Lantern for Tachogenerator |
| 24 | Giunto elastico di adattamento D.T. | Elastic Joint for tachogenerator |
| 25 | Filtro Ventilatore | Ventilator filter |
| 26 | Staffe di sostegno filtro | Support filter stirrups |
| 27 | Voluta ventialtore | Ventilator carter |
| 28 | Motore ventilatore | Ventilator engine |
| 29 | Relè anemostatico | Air flow control relay |
| 30 | Bobina poli ausiliari | Auxiliarys poles bobbin |
| 31 | Nucleo poli ausiliari | Nucleus auxiliarys poles |
| 32 | Pacco rotore | Rotor package |



Forme costruttive
Construction Forms

18.05.2007
Sheet N° 10

Macchine ad asse orizzontale
Machines with horizontal shaft

Tables N° 04

Figura Sketch	CEI EN 60034-7 Cod. II	Cod. I	UNEL 05513	
	IM 1001	IM B3	B3	Fissata mediante piedi; piedi disposti verso il basso Mounted by feet, feet down
	IM 3001	IM B5	B5	Fissata sul lato della flangia con fori passanti, rivolto verso il lato comando Mounted by on D-end side of flange
	IM 2001	IM B35	B3/B5	Fissata mediante piedi disposti verso il basso; fissaggio ulteriore sul lato della flangia con fori passanti rivolto verso il lato comando Mounted by feet, feet down, with additional mounting on D-end side of flange
	IM 3601	IM B14	B14	Fissata sul lato della flangia con fori filettati, rivolto verso il lato comando Mounted by on D-end side of flange with tapped holes
	IM 2101	IM B34	B3/B14	Fissata mediante piedi, piedi disposti verso il basso. Fissaggio ulteriore sul lato della flangia con fori filettati rivolto verso il lato comando. Mounted by feet, feet down, with additional mounting on D-end side of flange with tapped holes
	IM 1051	IM B6	B6	Fissata mediante piedi; piedi a sinistra (visti dal lato comando) Mounted by feet, feet left (viewed from D-end)
	IM 1061	IM B7	B7	Fissata mediante piedi; piedi a destra (visti dal lato comando) Mounted by feet, feet right (viewed from D-end)
	IM 1070	IM B8	B8	Fissata mediante piedi; piedi disposti verso l'alto Mounted by feet, feet up



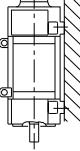
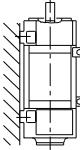
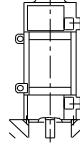
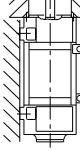
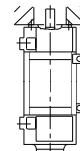
Figura Sketch	CEI EN 60034-7		UNEL 05513	
	Cod. II	Cod. I		
	IM 1011	IM V5	V5	Fissata mediante piedi; lato comando in basso Mounted by feet, D-end down
	IM 1031	IM V6	V6	Fissata mediante piedi; lato comando in alto Mounted by feet, D-end up
	IM 3031	IM V3	V3	Fissata sul lato della flangia con fori passanti rivolto verso il lato comando, lato comando in alto Mounted on D-end side of flange, D-end up
	IM 3011	IM V1	V1	Fissata sul lato della flangia con fori passanti, rivolto verso il lato comando, lato comando in basso Mounted on D-end side of flange, D-end down
	IM 2031	IM V36	V3/V6	Fissata mediante piedi; fissaggio ulteriore sulla flangia con fori passanti dal lato comando; lato comando in alto Mounted by feet, feet down, with additional mounting on D-end side of flange, D-end up
	IM 2011	IM V15	V1/V5	Fissata mediante piedi; fissaggio ulteriore sulla flangia con fori passanti dal lato comando; lato comando in basso Mounted by feet, feet down, with additional mounting on D-end side of flange, D-end down
	IM 3611	IM V18	V18	Fissata sul lato della flangia con fori filettati, dal lato comando, lato comando in basso Mounted by on D-end side of flange with tapped holes, D-end down
	IM 3631	IM V19	V19	Fissata sul lato della flangia con fori filettati, dal lato comando, lato comando in alto Mounted by on D-end side of flange with tapped holes, D-end up



Figura Sketch	CEI EN 60034-6 Semplificata Simplified	CEI EN 60034-6 Completo Complete	Descrizione Description	CEI EN 60034-5 Grado di Protezione Degrees of Protection
	IC 0 0	IC 0 A 0	Macchina raffreddata naturalmente Free convection	
	IC 0 1	IC 0 A 1	Macchina autoventilata Self-circulation	
	IC 1 1	IC 1 A 1	Macchina autoventilata con canale di aspirazione Self-circulation Inlet pipe duct circulated	
	IC 0 6	IC 0 A 6	Macchina raffreddata mediante dispositivo indipendente aspirante montato assialmente sulla macchina Circulation by machine-mounted axial Inlet independent component	
	IC 0 6	IC 0 A 6	Macchina raffreddata mediante dispositivo indipendente premente montato assialmente sulla macchina Circulation by machine-mounted axial Outlet independent component	IP 23
	IC 0 6	IC 0 A 6	Macchina raffreddata mediante dispositivo indipendente montato sulla macchina Circulation by machine-mounted independent component	
	IC 1 6	IC 1 A 6	Macchina raffreddata mediante dispositivo indipendente montato sulla macchina con canale di aspirazione Circulation by machine-mounted independent component, Inlet pipe duct circulated	
	IC 2 6	IC 2 A 6	Macchina raffreddata mediante dispositivo indipendente montato sulla macchina con canale di scarico Circulation by machine-mounted independent component, Outlet pipe duct circulated	



Metodi di Raffreddamento delle macchine elettriche rotanti
Rotating electrical machines, Methods of cooling

19.05.2007
Sheet N° 01

Tables N° 08

Figura Sketch	CEI EN 60034-6 Semplificata Simplified	CEI EN 60034-6 Completo Complete	Descrizione Description	CEI EN 60034-5 Grado di Protezione Degrees of Protection
	IC 1 7	IC 1 A 7	Macchina raffreddata mediante dispositivo separato e indipendente, mediante pressione della rete di distribuzione Circulation by separate and independent component, by coolant pressure system	IP 23
	IC 410	IC 4A1A0	Macchina chiusa raffreddata naturalmente Free-convection	
	IC 416	IC 4A1A6	Macchina chiusa raffreddata superficialmente, mediante dispositivo indipendente montato sulla macchina Frame surface cooled, circulation by machine-mounted independent component	
	IC 3 6	IC 3 A 6	Macchina raffreddata mediante dispositivo indipendente montato sulla macchina, canali di aspirazione e scarico Circulation by machine-mounted independent component, Inlet and Outlet pipe duct circulated	
	IC 3 7	IC 3 A 7	Macchina raffreddata mediante dispositivo separato e indipendente, canali di aspirazione e scarico Circulation by separate and independent component, Inlet and Outlet pipe duct circulated	IP 44
	IC 00 66	IC 6A6A0	Scambiatore di calore montato sulla macchina, circolazione mediante dispositivo indipendente. Machine-mouted heat exchanger, circulation by independent component	
	IC W37A86	IC 8A6W7	Scambiatore di calore montato sulla macchina, circolazione mediante dispositivo indipendente. Aria-Acqua Machine-mouted heat exchanger, circulation by independent component. Air-Water cooling	
	IC 06 66	IC 6A6A6	Scambiatore di calore montato sulla macchina, circolazione mediante dispositivo indipendente. Aria-Aria Machine-mouted heat exchanger, circulation by independent component. Air-Air cooling	



**TIPI DI SERVIZIO E
IDENTIFICAZIONE DEL SERVIZIO**
**DUTY TYPES AND
DECLARATION OF DUTY**

Tabella/Tables
Nº 9

Foglio/Sheet
Nº 1

----- Max
T: Temperature - - - Average
— Instantaneous

P: Carico load
Pv: Perdite elettriche Electrical losses

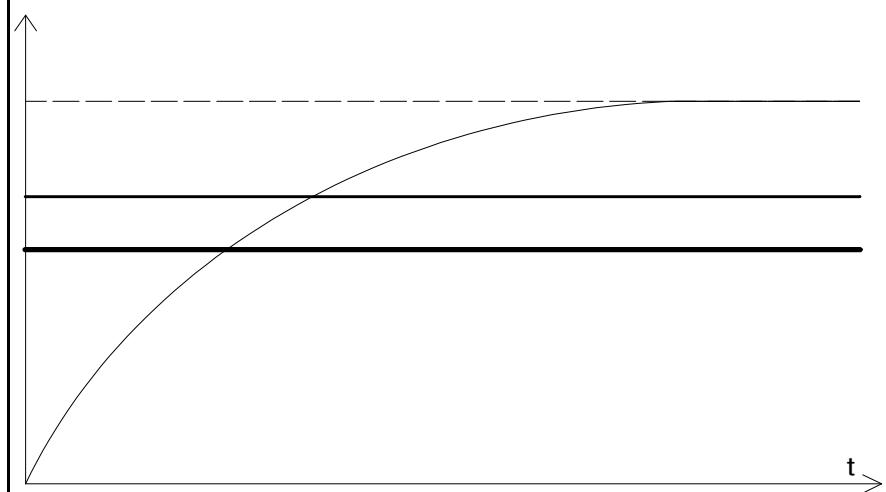
Servizio continuo S1

Funzionamento a carico costante di durata sufficiente a consentire alla macchina il raggiungimento dell'equilibrio termico.

L'abbreviazione appropriata è S1.

Continuous running duty S1

Operation at a constant load maintained for sufficient time to allow the machine to reach thermal equilibrium. The appropriate abbreviation is S1.



Servizio di durata limitata S2

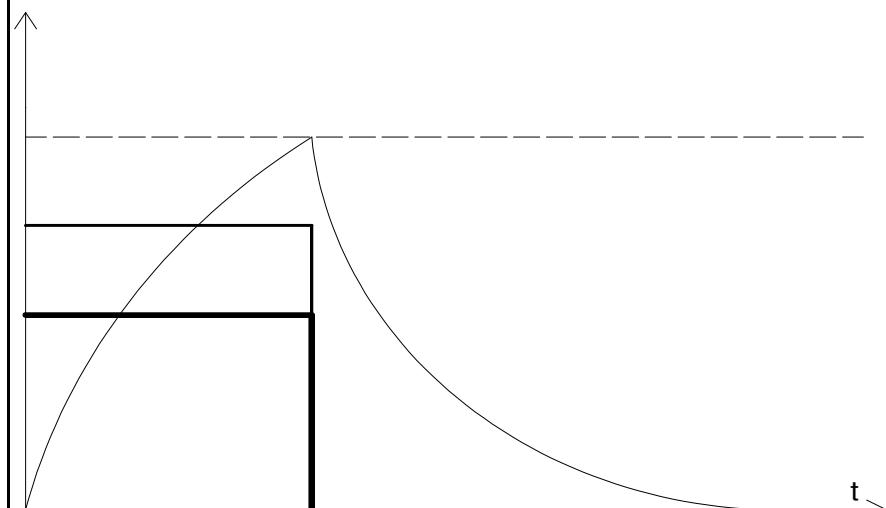
Funzionamento a carico costante per un periodo di tempo determinato, inferiore a quello richiesto per raggiungere l'equilibrio termico, seguito da un tempo di riposo di durata sufficiente a ristabilire l'uguaglianza fra la temperatura della macchina e quella del fluido di raffreddamento, con una tolleranza di 2 K.

L'abbreviazione appropriata è S2, seguita dall'indicazione della durata del servizio.

Short - time duty S2

Operation at constant load for a given time, less than that required to reach thermal equilibrium, followed by a time de-energized and at rest of sufficient duration to re-establish machine temperatures within 2 K of the coolant temperature.

The appropriate abbreviation is S2, followed by an indication of the duration of the duty.



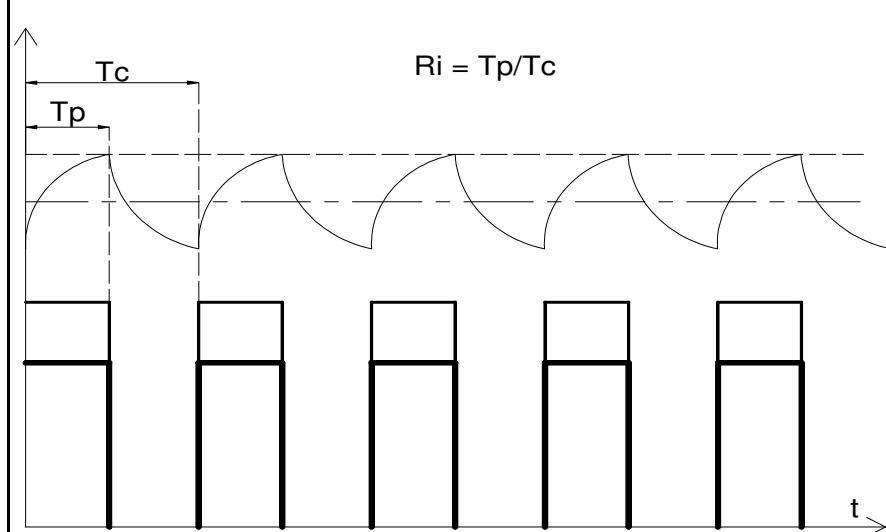
Servizio intermittente periodico S3⁽¹⁾

Sequenza di cicli di funzionamento identici, ciascuno comprendente un tempo di funzionamento a carico costante ed un tempo di riposo. In questo servizio il ciclo è tale che la corrente di avviamento non influenza la sovratestermperatura in maniera significativa. L'abbreviazione appropriata è S3, seguita dall'indicazione del rapporto di intermittenza Ri.

Intermittent periodic duty S3⁽¹⁾

A sequence of identical duty cycles, each including a time of operation at constant load and a time de-energized and at rest. In this duty, the cycle is such that the starting current does not significantly affect the temperature rise.

The appropriate abbreviation is S3, followed by the cyclic duration factor Ri.



(1) Il servizio periodico implica che l'equilibrio termico non è raggiunto durante il periodo a carico.

(1) Periodic duty implies that thermal equilibrium is not reached during the time on load.



**TIPI DI SERVIZIO E
IDENTIFICAZIONE DEL SERVIZIO**
**DUTY TYPES AND
DECLARATION OF DUTY**

Tabella/Tables
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Foglio/Sheet
Nº 2

----- Max

T: Temperature

— Average

— Instantaneous

P: Carico
load

Pv: Perdite elettriche
Electrical losses

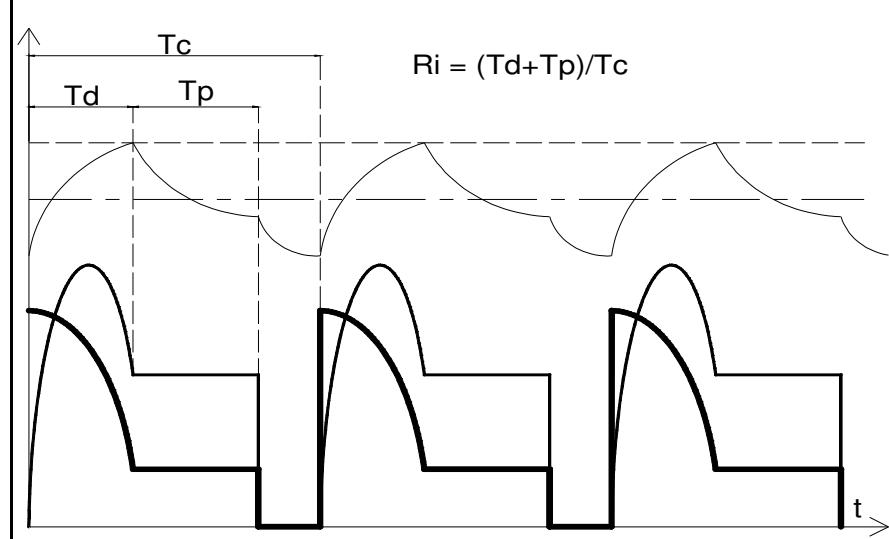
**Servizio intermittente periodico con
avviamento S4⁽¹⁾**

Sequenza di cicli di funzionamento identici, ciascuno comprendente un tempo non trascurabile di avviamento, un tempo di funzionamento a carico costante ed un tempo di riposo.

L'abbreviazione appropriata è S4, seguita dal rapporto di intermittenza Ri, dal momento d'inerzia del motore e dal momento d'inerzia del carico, questi ultimi due riferiti all'albero motore.

Intermittent periodic duty with starting S4⁽¹⁾

A sequence of identical duty cycles, each cycle including a significant starting time, a time of operation at constant load and a time de-energized and at rest. The appropriate abbreviation is S4, followed by the cyclic duration factor Ri, the moment of inertia of the motor and the moment of inertia of the load, both referred to the motor shaft.



**Servizio intermittente periodico con frenatura
elettrica S5⁽¹⁾**

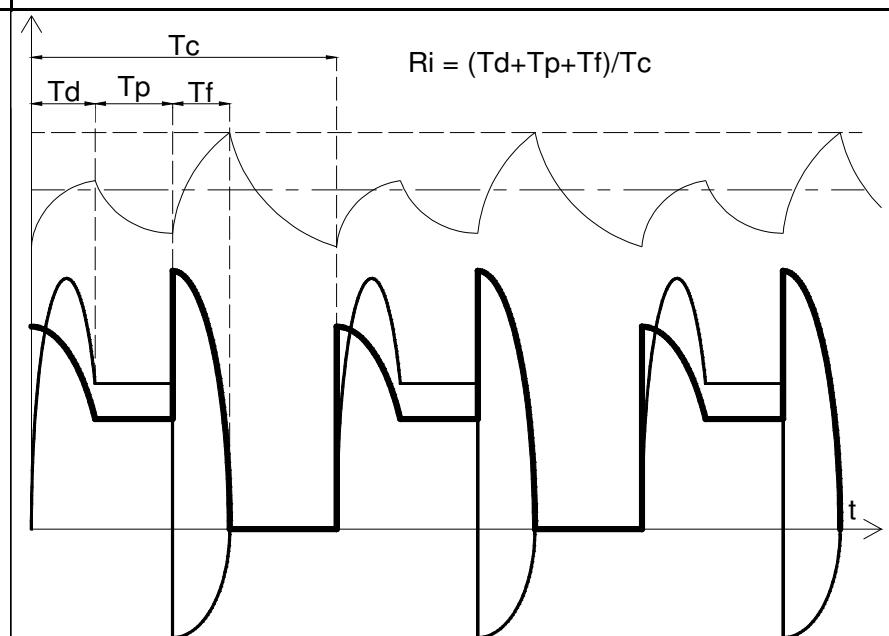
Sequenza di cicli di funzionamento identici, ciascuno comprendente un tempo di avviamento, un tempo di funzionamento a carico costante, un tempo di frenatura elettrica rapida ed un tempo di riposo.

L'abbreviazione appropriata è S5, seguita dal rapporto di intermittenza Ri, dal momento d'inerzia del motore e dal momento d'inerzia del carico, questi ultimi due riferiti all'albero motore.

**Intermittent periodic duty with electric
braking S5⁽¹⁾**

A sequence of identical duty cycles, each cycle consisting of a starting time, a time of operation at constant load, a time of electric braking and a time de-energized and at rest.

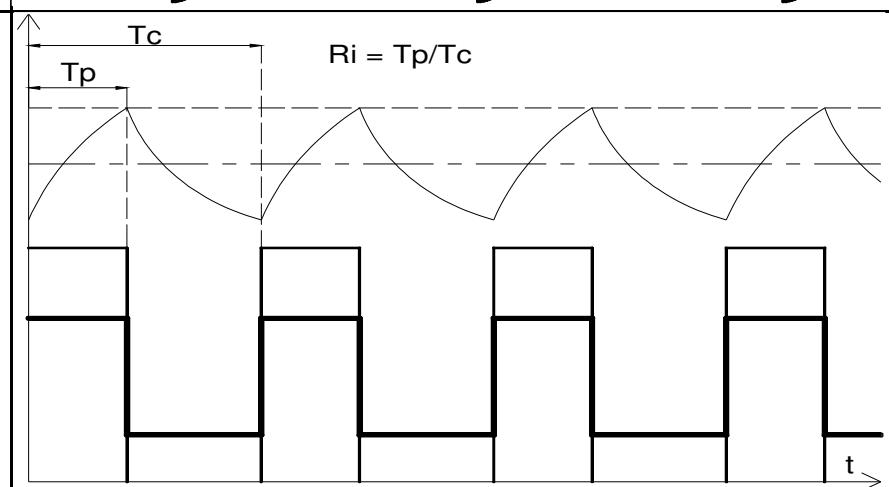
The appropriate abbreviation is S5, followed by the cyclic duration factor Ri, the moment of inertia of the motor and the moment of inertia of the load, both referred to the motor shaft.



Servizio ininterrotto periodico S6⁽¹⁾

Sequenza di cicli di funzionamento identici, ciascuno comprendente un tempo di funzionamento a carico costante ed un tempo di funzionamento a vuoto. Non esiste alcun tempo di riposo.

L'abbreviazione appropriata è S6, seguita dal rapporto d'intermittenza Ri.



(1) Il servizio periodico implica che l'equilibrio termico non è raggiunto durante il periodo a carico.

(1) Periodic duty implies that thermal equilibrium is not reached during the time on load.



**TIPI DI SERVIZIO E
IDENTIFICAZIONE DEL SERVIZIO**
**DUTY TYPES AND
DECLARATION OF DUTY**

Tabella/Tables
Nº 9

Foglio/Sheet
Nº 3

----- Max

T: Temperature

— Average

— Instantaneous

P: Carico
load

Pv: Perdite elettriche
Electrical losses

n: Velocità
speed

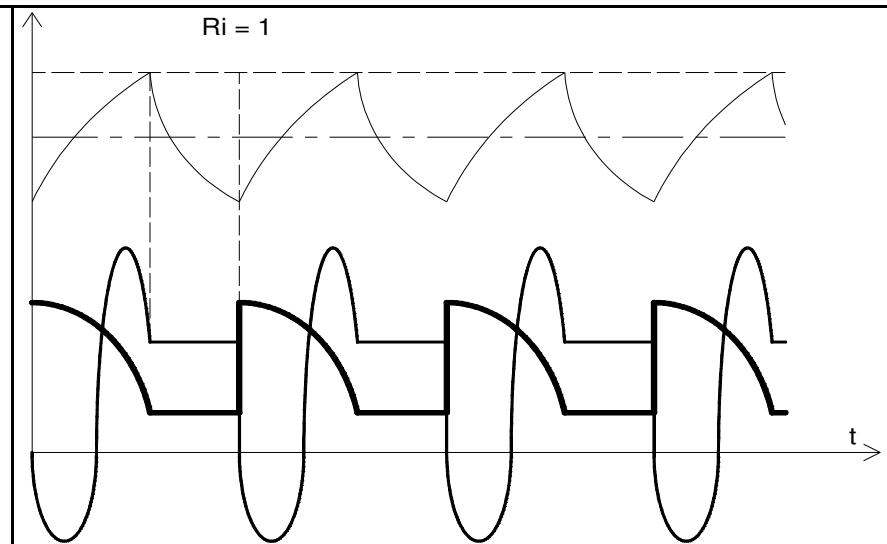
**Servizio ininterrotto periodico con
frenatura elettrica S7⁽¹⁾**

Sequenza di cicli di funzionamento identici, ciascuno comprendente un tempo di avviamento, un tempo di funzionamento a carico costante ed un tempo di frenatura elettrica. Non esiste alcun periodo di riposo. L'abbreviazione appropriata è S7, seguita dal momento d'inerzia del motore e dal momento d'inerzia del carico, entrambi riferiti all'albero motore.

**Continuous-operation periodic duty with
electric braking S7⁽¹⁾**

A sequence of identical duty cycles, each cycle consisting of a starting time, a time of operation at constant load and a time of electric braking. There is no time de-energized and at rest.

The appropriate abbreviation is S7, followed by the moment of inertia of the motor and the moment of inertia of the load, both referred to the motor shaft.



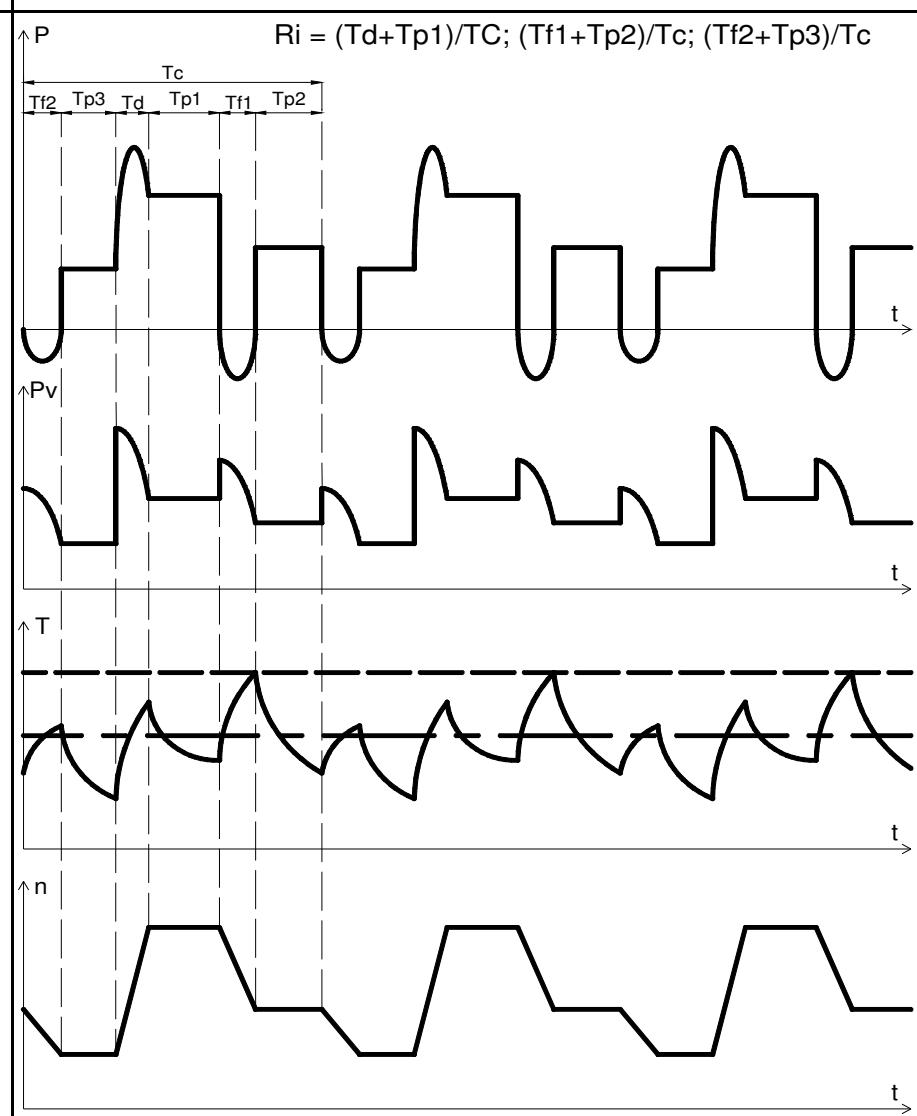
**Servizio ininterrotto periodico con variazioni
correlate di carico e velocità S8⁽¹⁾**

Sequenza di cicli di funzionamento identici, ciascuno comprendente un tempo di funzionamento a carico costante corrispondente ad una prestabilità velocità di rotazione, seguito da uno o più tempi di funzionamento con altri carichi costanti corrispondenti a diverse velocità di rotazione (realizzato per esempio mediante cambio del numero di poli nel caso dei motori a induzione). Non esiste alcun tempo di riposo.

L'abbreviazione appropriata è S8, seguita dal momento d'inerzia del motore e dal momento d'inerzia del carico, entrambi riferiti all'albero del motore, insieme al carico, alla velocità e al rapporto di intermittenza Ri, per ogni regime caratterizzato da una determinata velocità.

**Continuous-operation periodic duty with
related load/speed changes S8⁽¹⁾**

A sequence of identical duty cycles, each cycle consisting of a time of operation at constant load corresponding to a predetermined speed of rotation, followed by one or more times of operation at other constant loads corresponding to different speed of rotation (carried out, for example, by means of a change in the number of poles in the case of induction motors). There is no time de-energized and at rest. The appropriate abbreviation is S8, followed by the moment of inertia of the motor and the moment of inertia of the load, both referred to the motor shaft, together with the load, speed and cyclic duration factor Ri for each speed condition.



(1) Il servizio periodico implica che l'equilibrio termico non è raggiunto durante il periodo a carico.

(1) Periodic duty implies that thermal equilibrium is not reached during the time on load.



TIPI DI SERVIZIO E IDENTIFICAZIONE DEL SERVIZIO

DUTY TYPES AND DECLARATION OF DUTY

Tabella/Tables
Nº 9

Foglio/Sheet
Nº 4

----- Max

T: Temperature

- - - Average

— Instantaneous

P: Carico
load

Pv: Perdite elettriche
Electrical losses

n: Velocità
speed

Servizio con variazioni non periodiche di carico e velocità S9

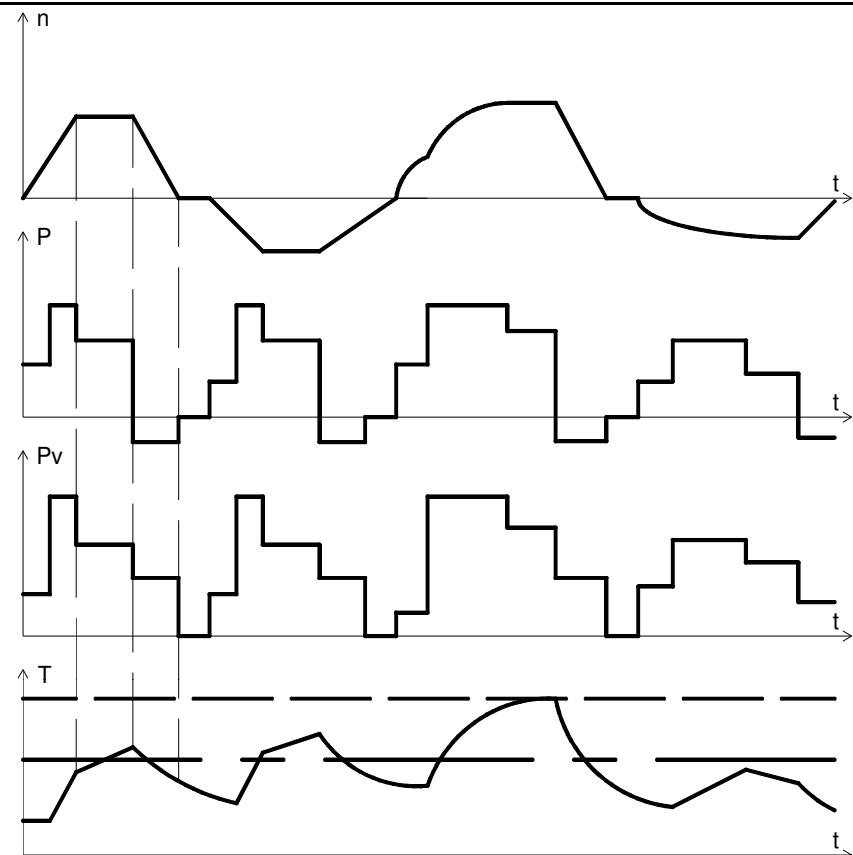
Servizio in cui generalmente il carico e la velocità variano in modo non periodico nel campo di funzionamento ammissibile. Questo servizio comprende sovraccarichi frequentemente applicati che possono essere largamente superiori ai valori di pieno carico.

L'abbreviazione appropriata è S9. Per questo tipo di servizio si prende come valore di riferimento per il concetto di sovraccarico un carico costante adeguatamente scelto e basato sul tipo di servizio S1.

Duty with non-periodic load and speed variations S9

A duty in which generally load and speed vary non-periodically within the permissible operating range. This duty includes frequently applied overloads that may greatly exceed the reference load.

The appropriate abbreviation is S9. For this duty type, a constant load appropriately selected and based on duty type S1 is taken as the reference value for the overload concept.



Servizio con carichi distinti costanti S10

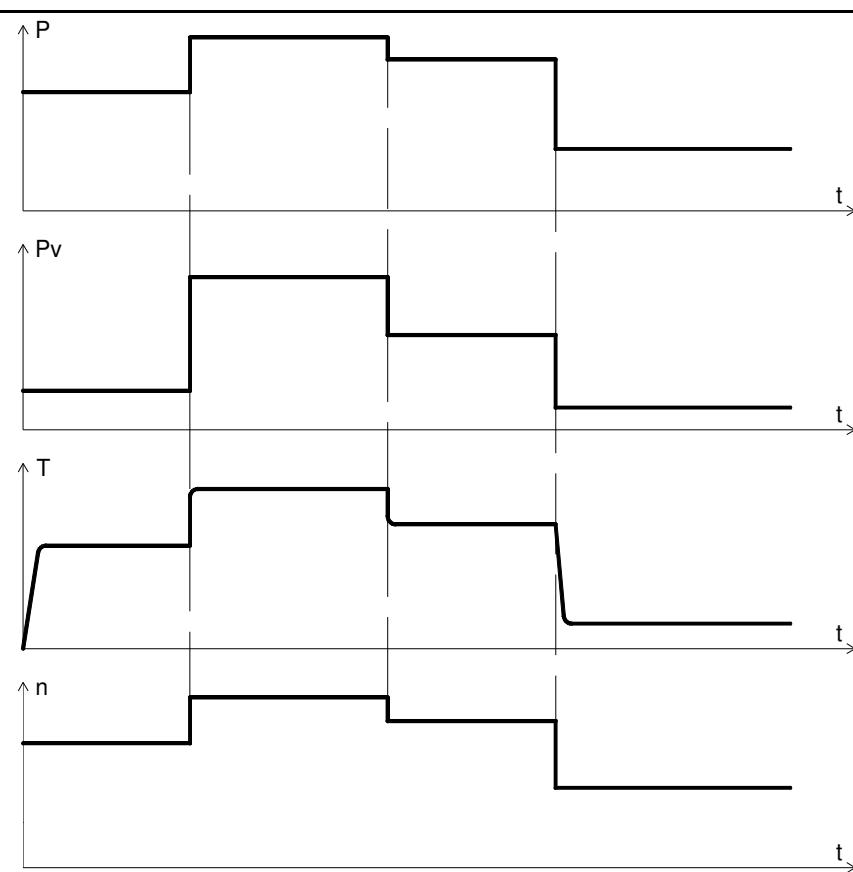
Servizio che consiste in un numero specifico di valori distinti di carico (o carico equivalente), mantenendo ogni valore per un tempo sufficiente per consentire alla macchina di raggiungere l'equilibrio termico. Il carico minimo durante un ciclo di servizio può avere valore zero (a vuoto o in stato di riposo).

L'abbreviazione appropriata è S10. Per questo tipo di servizio, deve essere assunto come valore di riferimento per i carichi distinti un carico costante adeguatamente scelto e basato sul servizio S1.

Duty with discrete constant loads and speeds S10

A duty consisting of a specific number of discrete values of load (or equivalent loading) and if applicable, speed, each load/speed combination being maintained for sufficient time to allow the machine to reach thermal equilibrium. The minimum load within a duty cycle may have the value zero (no-load or de-energized and at rest).

The appropriate abbreviation is S10. For this duty type a constant load appropriately selected and based on duty type S1 shall be taken as the reference value for the discrete loads.





Motori Serie MGL
Motoren Serie MGL
Motor Series MGL

Tabella / Tisch / Tables
Nº 14 C

Foglio / Seite / Sheet
Nº 1

TIPO TYP TYPE			Momento inerzia Trageistsmoment Moment of inerzia		Eccitazione Erregung Excitation		Dati di Ventilazione Angaben über die Belüftung Ventilation Data		
	PESO GEWICHT WEIGHT	Velocità Drehzahl Speed Max	PD2	J	Costante di tempo Feldzeitconstant Time Constant	Potenza Erregerleistung Power	Potenza Leistung Out Put	Pressione Druck Pressure	Portata Forderstrom Air Flow
	Kg	giri/1' u/min r.p.m.	Kgm ²	Kgm ²	ms	W	50Hz kW	mm H ₂ O	m ³ /1'
80	S 40	5000	0.028	0.007	95	230	0.12	45	4
	M 46		0.034	0.0085	120	260			
	L 53		0.044	0.011	145	290			
100	S 64	5000	0.076	0.019	140	350	0.25	70	6
	M 72		0.092	0.023	165	380			
	L 82		0.112	0.028	180	430			
112	S 82	5000	0.156	0.039	130	500	0.25	70	6
	M 92		0.188	0.047	140	550			
	L 110		0.228	0.057	150	600			
132	S 139	5000	0.380	0.095	160	650	0.55	80	10
	M 155		0.452	0.113	175	750			
	L 175		0.546	0.137	190	850			
	P 195		0.620	0.155	209	950			
160	K 220	4500	0.80	0.20	210	920	1.1	100	18
	S 238		0.92	0.23	230	1000			
	M 264		1.12	0.28	260	1100			
	L 302		1.36	0.34	290	1200			
	P 320		1.48	0.37	310	1300			

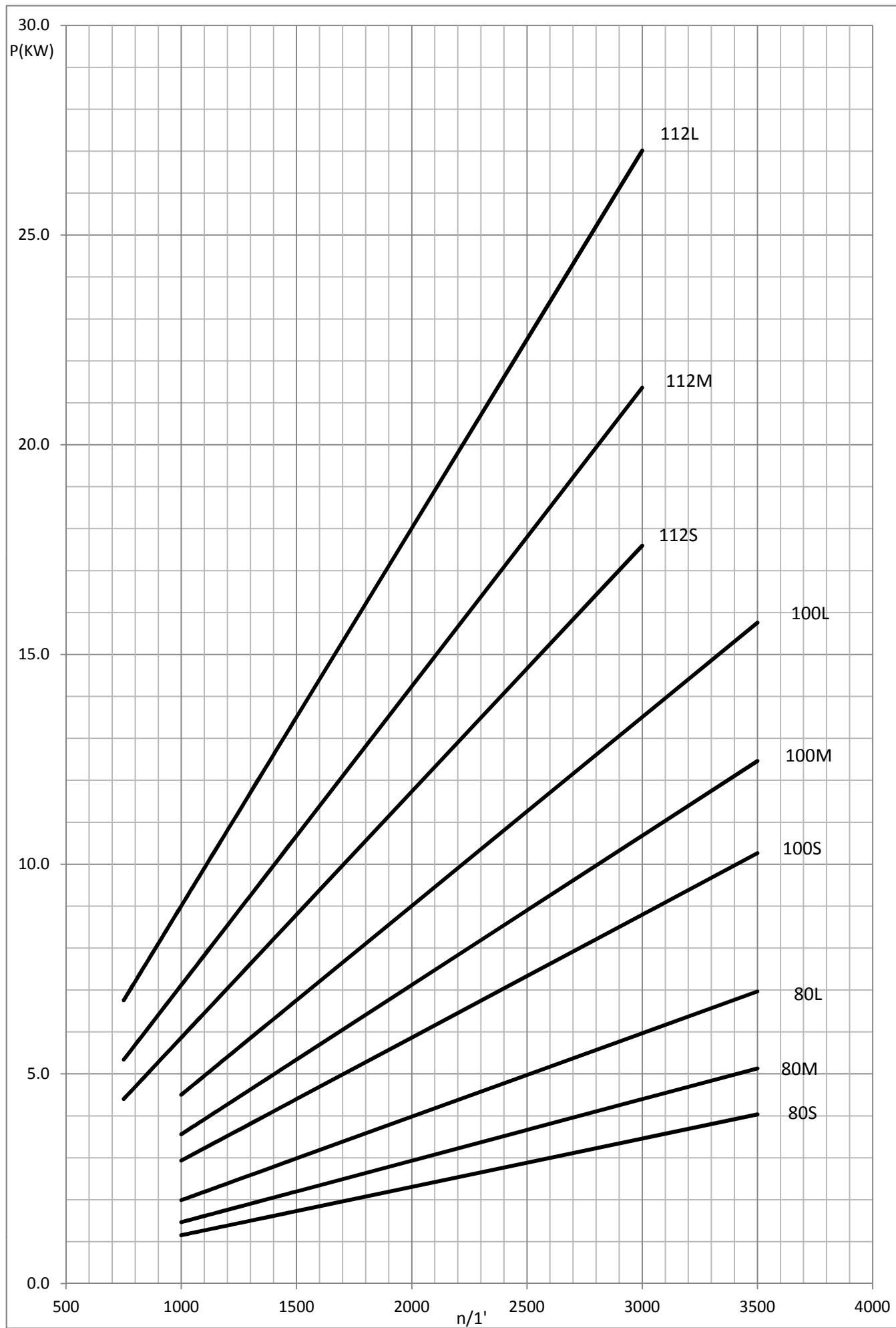
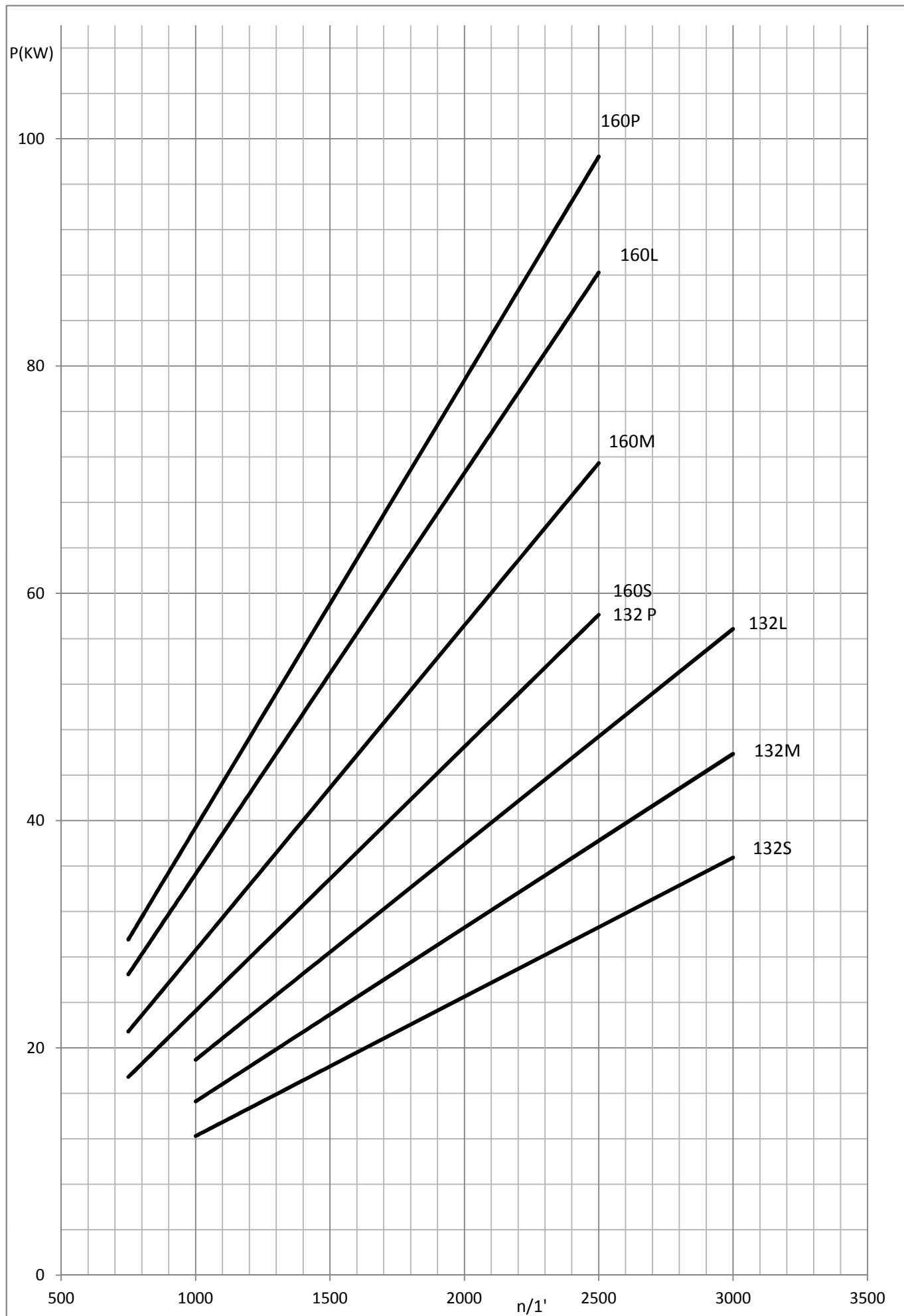




TABELLA SELEZIONE MOTORI MGL 132 - 160

Foglio 2 di 2



								Potenza eccitazione Excitation power (w) 350	Tipo Size MGL 100 S					
Cost. tempo eccitaz. Field time constant (ms) 140								Massa del motore Mass of the motor (Kg) 64.0	Ventilazione Ventilation IC 06					
Massa del motore Mass of the motor (Kg) 64.0								Momento d'inerzia rotore Rotor inertia moment (Kgm2) 0.019						
Velocità nominale n/min a tensione nominale di armatura Rated speed (rev/min) at rated voltage								Potenza Power kW	Coppia vel.nomin. Torque at rated speed Nm	Rendimento Efficency %	Circuito di armatura circuit		Max giri Max. speed (°)	
Avv.	170	220	260	300	400	440	500	kW			Corrente Current Amp	Res. 115°C mOhm	Ind. mH	
45	3965	---	---	---	---	---	---	6.31	15.2	88.4	42.0	227	1.55	4700
46	3260	---	4305	---	---	---	---	6.28	18.4	88.0	42.0	274	2.25	4700
46	3260	4305	---	---	---	---	---	8.29	18.4	89.7	42.0	4700		
47	2745	---	3635	4350	---	---	---	6.20	21.6	86.8	42.0	345	3.14	4389
47	2745	3635	4350	---	---	---	---	8.22	21.6	89.0	42.0	4700		
47	2745	3635	4350	---	---	---	---	9.84	21.6	90.1	42.0	4700		
48	2340	---	3120	3745	---	---	---	6.07	24.8	85.0	42.0	439	4.12	3741
48	2340	3120	3745	4370	---	---	---	8.09	24.8	87.6	42.0	4700		
48	2340	3120	3745	4370	---	---	---	9.72	24.8	89.0	42.0	4700		
48	2340	3120	3745	4370	---	---	---	11.3	24.7	89.7	42.0	4700		
49	2025	---	2720	3275	---	---	---	5.92	27.9	82.9	42.0	534	5.27	3236
49	2025	2720	3275	3830	---	---	---	7.96	27.9	86.1	42.0	4700		
49	2025	2720	3275	3830	---	---	---	9.59	28.0	87.8	42.0	4700		
49	2025	2720	3275	3830	---	---	---	11.2	27.9	88.9	42.0	4700		
50	1775	---	2400	2900	---	---	---	5.30	28.5	81.0	38.5	676	6.50	2841
50	1775	2400	2900	3400	---	---	---	7.19	28.6	84.9	38.5	3842		
50	1775	2400	2900	3400	4655	---	---	8.66	28.5	86.5	38.5	4643		
50	1775	2400	2900	3400	4655	---	---	10.1	28.4	87.4	38.5	4700		
50	1775	2400	2900	3400	4655	---	---	13.9	28.5	90.3	38.5	4700		
51	1575	---	2145	2600	---	---	---	4.71	28.6	79.2	35.0	837	7.79	2523
51	1575	2145	2600	3055	4195	---	---	6.40	28.5	83.1	35.0	3433		
51	1575	2145	2600	3055	4195	---	---	7.76	28.5	85.3	35.0	4162		
51	1575	2145	2600	3055	4195	---	---	9.12	28.5	86.9	35.0	4700		
51	1575	2145	2600	3055	4195	4650	---	12.5	28.5	89.3	35.0	4700		
51	1575	2145	2600	3055	4195	4650	13.9	28.5	90.3	35.0	4700			

Nota (*) - VENTILAZIONE SOLO L.O. / FAN ONLY SIDE COMMUTATOR

Nota (°) - Regolazione di campo / Field weakening

								Potenza eccitazione Excitation power (w) 350				Tipo MGL 100 S Size Ventilazione Ventilation IC 06			
								Cost. tempo eccitaz.	(ms)	140					
								Field time constant	(ms)	140					
								Massa del motore	(Kg)	64.0					
								Mass of the motor	(Kg)	64.0					
								Momento d'inerzia rotore	(Kgm2)	0.019					
								Rotor inertia moment	(Kgm2)	0.019					
Avv.	Velocità nominale n/min a tensione nominale di armatura Rated speed (rev/min) at rated voltage								Potenza Power	Coppia vel.nomin. Torque at rated speed Nm	Rendimento Efficency	Circuito di armatura			Max giri Max. speed (°)
	170	220	260	300	400	440	500	kW				Corrente Current	Res. 115°C	Ind.	
52	1435	---	---	---	---	---	---	4.27	28.4	78.5	32.0	946	9.23	2296	
	1955	---	---	---	---	---	---	5.82	28.4	82.7	32.0			3131	
		2375	---	---	---	---	---	7.06	28.4	84.9	32.0			3798	
			2790	---	---	---	---	8.30	28.4	86.5	32.0			4466	
				3835	---	---	---	11.4	28.4	89.1	32.0			4700	
					4250	---	---	12.6	28.3	89.5	32.0			4700	
53	1290	---	---	---	---	---	---	3.77	27.9	76.5	29.0	1170	10.9	2065	
	1770	---	---	---	---	---	---	5.18	27.9	81.2	29.0			2835	
		2155	---	---	---	---	---	6.30	27.9	83.6	29.0			3452	
			2540	---	---	---	---	7.43	27.9	85.4	29.0			4068	
				3505	---	---	---	10.2	27.8	87.9	29.0			4700	
					3890	---	---	11.4	28.0	89.3	29.0			4700	
						4470	13.0	27.8	89.7	29.0	29.0			4700	
54	1185	---	---	---	---	---	---	3.54	28.5	75.7	27.5	1290	12.8	1894	
	1630	---	---	---	---	---	---	4.87	28.5	80.5	27.5			2609	
		1990	---	---	---	---	---	5.94	28.5	83.1	27.5			3181	
			2345	---	---	---	---	7.01	28.5	85.0	27.5			3753	
				3240	---	---	---	9.68	28.5	88.0	27.5			4700	
					3595	---	---	10.8	28.7	89.3	27.5			4700	
						4135	12.3	28.4	89.5	27.5	27.5			4700	
55	1080	---	---	---	---	---	---	3.21	28.4	74.0	25.5	1510	14.4	1728	
	1495	---	---	---	---	---	---	4.44	28.4	79.1	25.5			2396	
		1830	---	---	---	---	---	5.44	28.4	82.1	25.5			2930	
			2165	---	---	---	---	6.43	28.4	84.1	25.5			3464	
				3000	---	---	---	8.90	28.3	87.3	25.5			4700	
					3335	---	---	9.89	28.3	88.1	25.5			4700	
						3835	11.4	28.4	89.4	25.5	25.5			4700	
56	985	---	---	---	---	---	---	2.84	27.5	72.0	23.2	1800	16.5	1580	
	1380	---	---	---	---	---	---	3.97	27.5	77.8	23.2			2205	
		1690	---	---	---	---	---	4.87	27.5	80.7	23.2			2706	
			2005	---	---	---	---	5.77	27.5	82.9	23.2			3207	
				2785	---	---	---	8.02	27.5	86.4	23.2			4458	
					3100	---	---	8.92	27.5	87.4	23.2			4700	
						3570	10.3	27.6	88.8	23.2	23.2			4700	
57	915	---	---	---	---	---	---	2.74	28.6	71.3	22.6	1920	18.8	1468	
	1285	---	---	---	---	---	---	3.83	28.5	77.0	22.6			2056	
		1580	---	---	---	---	---	4.71	28.5	80.2	22.6			2528	
			1875	---	---	---	---	5.59	28.5	82.4	22.6			2999	
				2610	---	---	---	7.79	28.5	86.2	22.6			4177	
					2905	---	---	8.66	28.5	87.1	22.6			4648	
						3345	9.98	28.5	88.3	22.6	22.6			4700	
58	840	---	---	---	---	---	---	2.44	27.7	69.0	20.80	2250	20.7	1346	
	1190	---	---	---	---	---	---	3.45	27.7	75.4	20.80			1902	
		1465	---	---	---	---	---	4.26	27.8	78.8	20.80			2347	
			1745	---	---	---	---	5.07	27.7	81.3	20.80			2792	
				2440	---	---	---	7.09	27.7	85.2	20.80			3905	
					2720	---	---	7.90	27.7	86.3	20.80			4350	
						3135	9.11	27.7	87.6	20.80	20.80			4700	

Nota (*) - VENTILAZIONE SOLO L.O. / FAN ONLY SIDE COMMUTATOR

Nota (°) - Regolazione di campo / Field weakening

								Potenza eccitazione Excitation power Cost. tempo eccitaz. Field time constant Massa del motore Mass of the motor Momento d'inerzia rotore Rotor inertia moment	(w) (ms) (Kg) (Kgm2)	350 140 64.0 0.019	Tipo Size Ventilazione Ventilation	MGL 100 S	IC 06	
Avv.	Velocità nominale n/min a tensione nominale di armatura Rated speed (rev/min) at rated voltage							Potenza Power	Coppia vel.nomin. Torque at rated speed Nm	Rendimento Efficency %	Circuito di armatura		Max giri Max. speed (°)	
	170	220	260	300	400	440	500				Corrente Current Amp	Res. 115°C mOhm		
59	785	---	---	---	---	---	---	2.34	28.5	68.1	20.2	2400	23.4	1260
		1115	---	---	---	---	---	3.33	28.5	74.9	20.2			1786
			1380	---	---	---	---	4.11	28.4	78.3	20.2			2208
				1645	---	---	---	4.90	28.4	80.9	20.2			2630
					2300	---	---	6.86	28.5	84.9	20.2			3684
						2565	---	7.64	28.4	86.0	20.2			4105
							2960	8.82	28.5	87.3	20.2			4700
60	720	---	---	---	---	---	---	2.11	28.0	66.0	18.8	2790	25.7	1155
		1035	---	---	---	---	---	3.02	27.9	73.0	18.8			1656
			1285	---	---	---	---	3.75	27.9	76.7	18.8			2056
				1535	---	---	---	4.48	27.9	79.4	18.8			2457
					2160	---	---	6.30	27.9	83.8	18.8			3458
						2410	---	7.03	27.9	85.0	18.8			3858
							2785	8.13	27.9	86.5	18.8			4459
61	680	---	---	---	---	---	---	2.02	28.4	65.3	18.2	2950	28.6	1088
		980	---	---	---	---	---	2.90	28.3	72.4	18.2			1565
			1215	---	---	---	---	3.61	28.4	76.3	18.2			1947
				1455	---	---	---	4.32	28.4	79.1	18.2			2328
					2050	---	---	6.08	28.3	83.5	18.2			3282
						2290	---	6.79	28.3	84.8	18.2			3663
							2645	7.85	28.3	86.3	18.2			4235
62	635	---	---	---	---	---	---	1.90	28.6	63.9	17.5	3210	31.3	1017
		920	---	---	---	---	---	2.75	28.5	71.4	17.5			1472
			1145	---	---	---	---	3.43	28.6	75.4	17.5			1836
				1375	---	---	---	4.10	28.5	78.1	17.5			2200
					1945	---	---	5.81	28.5	83.0	17.5			3110
						2170	---	6.49	28.6	84.3	17.5			3474
							2515	7.51	28.5	85.8	17.5			4020
63		865	---	---	---	---	---	2.53	27.9	70.1	16.4	3610	34.1	1382
			1080	---	---	---	---	3.16	27.9	74.1	16.4			1730
				1300	---	---	---	3.80	27.9	77.2	16.4			2078
					1845	---	---	5.39	27.9	82.2	16.4			2949
						2060	---	6.03	28.0	83.6	16.4			3297
							2385	6.99	28.0	85.2	16.4			3819
64		765	---	---	---	---	---	2.26	28.2	67.6	15.2	4270	40.4	1225
			965	---	---	---	---	2.85	28.2	72.1	15.2			1546
				1165	---	---	---	3.44	28.2	75.4	15.2			1866
					1665	---	---	4.92	28.2	80.9	15.2			2667
						1865	---	5.51	28.2	82.4	15.2			2987
							2165	6.39	28.2	84.1	15.2			3468
65		680	---	---	---	---	---	1.99	27.9	64.6	14.0	5110	47.0	1085
			865	---	---	---	---	2.53	27.9	69.5	14.0			1382
				1050	---	---	---	3.08	28.0	73.3	14.0			1678
					1515	---	---	4.44	28.0	79.3	14.0			2420
						1700	---	4.98	28.0	80.8	14.0			2717
							1975	5.80	28.0	82.9	14.0			3162

Nota (*) - VENTILAZIONE SOLO L.O. / FAN ONLY SIDE COMMUTATOR

Nota (*) - Regolazione di campo / Field weakening

								Potenza eccitazione Excitation power (w) 350	Tipo Size MGL 100 S			
Cost. tempo eccitaz. Field time constant (ms) 140								Ventilazione Ventilation	IC 06			
Massa del motore Mass of the motor (Kg) 64.0								Momento d'inerzia rotore Rotor inertia moment (Kgm2) 0.019				
Avv. 170 220 260 300 400 440 500 kW								Coppia vel.nomin. Torque at rated speed Nm	Rendimento Efficency %	Circuito di armatura circuit	Armature	Max giri Max. speed (°)
66 625 800 970 1405 1575 1835 5.45								Corrente Current Amp	Res. 115°C mOhm	Ind. mH		
66 5510 54.7 1002 1278 1554 2245 2521 2935												
67 715 875 1280 1440 1680 4.94									6610 62.0			
67 1145 1404 2049 2308 2695												
68 665 815 1195 1345 1575 4.76									7020 70.4			
68 1063 1305 1912 2155 2519												
69 740 1100 1240 1455 4.27									8390 79.2			
69 1186 1758 1987 2330												
70 650 980 1110 1310 3.78									10200 93.4			
70 1041 1568 1778 2095												
71 855 975 1150 3.53									11800 114			
71 1366 1557 1843												
72 790 900 1065 3.20									13300 132			
72 1261 1439 1706												

Nota (*) - VENTILAZIONE SOLO L.O. / FAN ONLY SIDE COMMUTATOR

Nota (°) - Regolazione di campo / Field weakening

								Potenza eccitazione Excitation power (w) 350	Tipo Size MGL 100 S					
Cost. tempo eccitaz. Field time constant (ms) 140								Massa del motore Mass of the motor (Kg) 64.0	Ventilazione Ventilation IC 06					
Momento d'inerzia rotore Rotor inertia moment (Kgm2) 0.019														
Avv.								Velocità nominale n/min a tensione nominale di armatura Rated speed (rev/min) at rated voltage	Potenza Power	Coppia vel.nomin. Torque at rated speed Nm	Rendimento Efficency %	Circuito di armatura circuit	Armature Ind.	Max giri Max. speed (°)
73	170	220	260	300	400	440	500	kW		Amp	mOhm	mH		
73					725	---	2.19	28.8	67.6	8.1	14800	151	1161	
73					830	---	2.51	28.9	70.4	8.1			1328	
73					985	---	2.98	28.9	73.6	8.1			1578	
74					660	---	1.94	28.1	65.5	7.4	17400	169	1058	
74					760	---	2.22	27.9	68.2	7.4			1215	
74					905	---	2.66	28.1	71.9	7.4			1450	

Nota (*) - VENTILAZIONE SOLO L.O. / FAN ONLY SIDE COMMUTATOR

Nota (°) - Regolazione di campo / Field weakening

								Potenza eccitazione Excitation power (w)	380	Tipo Size MGL 100 M				
								Cost. tempo eccitaz. Field time constant (ms)	165					
								Massa del motore Mass of the motor (Kg)	72	Ventilazione Ventilation				
								Momento d'inerzia rotore Rotor inertia moment (Kgm2)	0.023	IC 06				
Avv.	Velocità nominale n/min a tensione nominale di armatura Rated speed (rev/min) at rated voltage							Potenza Power kW	Coppia vel.nomin. Torque at rated speed Nm	Rendimento Efficency %	Circuito di armatura			Max giri Max. speed (°)
	170	220	260	300	400	440	500				Corrente Current Amp	Res. 115°C mOhm	Ind. mH	
45	3290	---	---	---	---	---	---	6.32 8.33	18.3 18.3	88.5 90.2	42 42	250	1.87	4700 4700
46	2705	---	---	---	---	---	---	6.28 8.30 9.92	22.2 22.2 22.2	88.0 89.8 90.8	42 42 42	302	2.73	4324 4700 4700
47	2270	---	---	---	---	---	---	6.18 8.21 9.83 11.5	26.0 26.0 26.0 26.1	86.6 88.9 90.0 91.3	42 42 42 42	379	3.80	3629 4700 4700 4700
48	1930	---	---	---	---	---	---	6.02 8.06 9.69 11.3	29.8 29.8 29.8 29.8	84.3 87.2 88.7 89.7	42 42 42 42	483	4.99	3084 4129 4700 4700
49	1665	---	---	---	---	---	---	5.86 7.90 9.54 11.2 15.3	33.6 33.6 33.6 33.7 33.7	82.1 85.5 87.4 88.9 91.1	42 42 42 42 42	586	6.39	2661 3589 4332 4700 4700
50	1455	---	---	---	---	---	---	5.22 7.10 8.60 10.1 13.8 15.3	34.3 34.2 34.3 34.3 34.1 34.2	79.8 83.8 85.9 87.4 89.6 90.3	38.5 38.5 38.5 38.5 38.5 38.5	742	7.88	2329 3164 3833 4501 4700 4700
51	1290	---	---	---	---	---	---	4.63 6.33 7.70 9.06 12.5 13.8 15.9	34.3 34.2 34.3 34.3 34.4 34.2 34.3	77.8 82.2 84.6 86.3 89.3 89.6 90.9	35 35 35 35 35 35 35	919	9.44	1820 2504 3051 3598 4700 4700 4700

Nota (*) - VENTILAZIONE SOLO L.O. / FAN ONLY SIDE COMMUTATOR

Nota (°) - Regolazione di campo / Field weakening

	Potenza eccitazione Excitation power Cost. tempo eccitaz. Field time constant Massa del motore Mass of the motor Momento d'inerzia rotore Rotor inertia moment	(w) (ms) (Kg) (Kgm2)	380 165 72 0.023	Tipo Size Ventilazione Ventilation	MGL 100 M IC 06
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Avv.	Velocità nominale n/min a tensione nominale di armatura Rated speed (rev/min) at rated voltage							Potenza Power	Coppia vel.nomin. Torque at rated speed Nm	Rendimento Efficency %	Circuito di armatura			Max giri Max. speed (°)
	170	220	260	300	400	440	500				Corrente Current Amp	Res. 115°C mOhm	Ind. mH	
52	1170	---	---	---	---	---	---	4.19	34.2	77.0	32	1040	11.2	1875
	1605	---	1955	---	---	---	---	5.75	34.2	81.7	32			2571
				2305	---	---	---	7.00	34.2	84.1	32			3128
					3175	---	---	8.25	34.2	85.9	32			3685
						3520	---	11.4	34.3	89.1	32			4700
							3520	12.6	34.2	89.5	32			4700
							4045	14.5	34.2	90.6	32			4700
53	1050	---	---	---	---	---	---	3.69	33.6	74.8	29	1280	13.2	1281
	1450	---	1775	---	---	---	---	5.10	33.6	79.9	29			2324
				2095	---	---	---	6.23	33.5	82.6	29			2838
					2900	---	---	7.36	33.5	84.6	29			3352
						3220	---	10.2	33.6	87.9	29			4638
							3220	11.3	33.5	88.6	29			4700
							3700	13.0	33.6	89.7	29			4700
54	960	---	---	---	---	---	---	3.46	34.4	74.0	27.5	1420	15.5	1539
	1335	---	1635	---	---	---	---	4.80	34.3	79.3	27.5			2136
				1930	---	---	---	5.87	34.3	82.1	27.5			2614
					2680	---	---	6.94	34.3	84.1	27.5			3091
						2975	---	9.62	34.3	87.5	27.5			4285
							2975	10.7	34.3	88.4	27.5			4700
							3425	12.3	34.3	89.5	27.5			4700
55	875	---	---	---	---	---	---	3.12	34.1	72.0	25.5	1660	17.4	1400
	1225	---	1500	---	---	---	---	4.37	34.1	77.9	25.5			1957
				1780	---	---	---	5.36	34.1	80.8	25.5			2403
					2475	---	---	6.36	34.1	83.1	25.5			2849
						2755	---	8.84	34.1	86.7	25.5			3963
							2755	9.84	34.1	87.7	25.5			4409
							3175	11.3	34.0	88.6	25.5			4700
56	795	---	---	---	---	---	---	2.76	33.2	70.0	23.2	1970	20.0	1275
	1125	---	1385	---	---	---	---	3.89	33.0	76.2	23.2			1798
				1645	---	---	---	4.80	33.1	79.6	23.2			2216
					2300	---	---	5.70	33.1	81.9	23.2			2634
						2560	---	7.96	33.0	85.8	23.2			3678
							2560	8.87	33.1	86.9	23.2			4096
							2950	10.2	33.0	87.9	23.2			4700
57	740	---	---	---	---	---	---	2.65	34.2	69.0	22.6	2100	22.8	1183
	1045	---	1290	---	---	---	---	3.76	34.4	75.6	22.6			1675
				1540	---	---	---	4.64	34.3	79.0	22.6			2068
					2155	---	---	5.52	34.2	81.4	22.6			2461
						2400	---	7.72	34.2	85.4	22.6			3444
							2765	8.61	34.3	86.6	22.6			3838
								9.93	34.3	87.9	22.6			4428
58	675	---	---	---	---	---	---	2.36	33.4	66.7	20.8	2480	25.1	1081
	965	---	1200	---	---	---	---	3.37	33.3	73.6	20.8			1545
				1430	---	---	---	4.18	33.3	77.3	20.8			1916
					2010	---	---	5.00	33.4	80.1	20.8			2288
						2240	---	7.02	33.4	84.4	20.8			3216
							2590	7.83	33.4	85.6	20.8			3588
								9.05	33.4	87.0	20.8			4145

Nota (*) - VENTILAZIONE SOLO L.O. / FAN ONLY SIDE COMMUTATOR

Nota (°) - Regolazione di campo / Field weakening

								Potenza eccitazione Excitation power (w)	380	Tipo Size MGL 100 M Ventilazione Ventilation IC 06				
								Cost. tempo eccitaz. Field time constant (ms)	165					
								Massa del motore Mass of the motor (Kg)	72					
								Momento d'inerzia rotore Rotor inertia moment (Kgm2)	0.023					
Avv.	Velocità nominale n/min a tensione nominale di armatura Rated speed (rev/min) at rated voltage							Potenza Power	Coppia vel.nomin. Torque at rated speed Nm	Rendimento Efficency %	Circuito di armatura circuit		Max giri Max. speed (°)	
	170	220	260	300	400	440	500	kW			Corrente Current Amp	Res. 115°C mOhm	Ind. mH	
59	630	---	---	---	---	---	---	2.26	34.3	65.8	20.2	2630	28.3	1009
		905	---	---	---	---	---	3.25	34.3	73.1	20.2			1449
		1125	---	---	---	---	---	4.03	34.2	76.7	20.2			1801
		1345	---	---	---	---	---	4.82	34.2	79.5	20.2			2153
		1895	---	---	---	---	---	6.79	34.2	84.0	20.2			3033
		2115	---	---	---	---	---	7.58	34.2	85.3	20.2			3385
		2445	---	---	---	---	8.76	34.2	86.7	20.2	3912			
60	835	---	---	---	---	---	---	2.94	33.6	71.1	18.8	3070	31.1	1338
		1045	---	---	---	---	---	3.67	33.5	75.1	18.8			1673
		1255	---	---	---	---	---	4.40	33.5	78.0	18.8			2007
		1775	---	---	---	---	---	6.23	33.5	82.8	18.8			2843
		1985	---	---	---	---	---	6.97	33.5	84.3	18.8			3177
		2300	---	---	---	---	8.07	33.5	85.9	18.8	3678			
		790	---	---	---	---	---	2.82	34.1	70.4	18.2			3240
61	990	---	---	---	---	---	---	3.53	34.0	74.6	18.2	3240	34.7	1264
		1190	---	---	---	---	---	4.24	34.0	77.7	18.2			1583
		1685	---	---	---	---	---	6.01	34.1	82.6	18.2			1901
		1885	---	---	---	---	---	6.72	34.0	83.9	18.2			2697
		2185	---	---	---	---	7.79	34.0	85.6	18.2	3015			
		740	---	---	---	---	---	2.67	34.5	69.4	17.5			3493
		930	---	---	---	---	---	3.35	34.4	73.6	17.5			1186
62	1120	---	---	---	---	---	---	4.03	34.4	76.8	17.5	3530	37.9	1490
		1595	---	---	---	---	---	5.74	34.4	82.0	17.5			1794
		1785	---	---	---	---	---	6.42	34.3	83.4	17.5			2554
		2070	---	---	---	---	7.44	34.3	85.0	17.5	2858			
		695	---	---	---	---	---	2.44	33.5	67.6	16.4			3314
		875	---	---	---	---	---	3.08	33.6	72.2	16.4			1111
		1055	---	---	---	---	---	3.72	33.7	75.6	16.4			1401
63	1510	---	---	---	---	---	---	5.32	33.6	81.1	16.4	3970	41.3	1692
		1695	---	---	---	---	---	5.96	33.6	82.6	16.4			2419
		1965	---	---	---	---	6.92	33.6	84.4	16.4	2709			
		615	---	---	---	---	---	2.17	33.7	64.9	15.2			3145
		780	---	---	---	---	---	2.77	33.9	70.1	15.2			980
		945	---	---	---	---	---	3.36	34.0	73.7	15.2			1248
		1365	---	---	---	---	---	4.84	33.9	79.6	15.2			1515
64	1530	---	---	---	---	---	---	5.43	33.9	81.2	15.2	4690	49.0	2184
		1785	---	---	---	---	6.32	33.8	83.2	15.2	2451			
		695	---	---	---	---	---	2.45	33.7	67.3	14			2852
		850	---	---	---	---	---	2.99	33.6	71.2	14			1110
		1235	---	---	---	---	---	4.36	33.7	77.9	14			1358
		1390	---	---	---	---	---	4.90	33.7	79.5	14			1977
		1620	---	---	---	---	5.72	33.7	81.7	14	2224			
		695	---	---	---	---	---	2.45	33.7	67.3	14	5610	56.9	2596

Nota (*) - VENTILAZIONE SOLO L.O. / FAN ONLY SIDE COMMUTATOR

Nota (°) - Regolazione di campo / Field weakening

								Potenza eccitazione Excitation power (w) 380	Tipo Size MGL 100 M			
Cost. tempo eccitaz. Field time constant (ms) 165								Ventilazione Ventilation	IC 06			
Massa del motore Mass of the motor (Kg) 72								Momento d'inerzia rotore Rotor inertia moment (Kgm2) 0.023				
Avv. 170 220 260 300 400 440 500 kW								Coppia vel.nomin. Torque at rated speed Nm	Rendimento Efficency %	Circuito di armatura circuit	Armature	Max giri Max. speed (°)
66 640 785 1145 1290 1505 2.29 2.81 4.09 4.61 5.38 34.2 34.2 34.1 34.1 34.1								Corrente Current Amp	Res. 115°C mOhm	Ind. mH		6050 66.3 1026 1257 1833 2063 2409
67 570 705 1045 1175 1380 2.01 2.49 3.68 4.16 4.87 33.7 33.7 33.6 33.8 33.7									7260 75.1			913 1129 1668 1884 2207
68 655 970 1100 1290 2.38 3.53 3.99 4.69 34.7 34.8 34.6 34.7 79.5									7700 85.3			1049 1555 1758 2062
69 590 890 1010 1190 2.09 3.14 3.56 4.20 33.8 33.7 33.7 33.7 77.8									9210 95.9			947 1425 1616 1903
70 790 900 1065 2.75 3.13 3.70 33.2 33.2 33.2 33.2 70.2 72.6 75.5 9.8 9.8 9.8									11300 113			1265 1441 1705
71 685 785 935 2.53 2.90 3.45 35.3 35.3 35.2 35.2 67.3 70.1 73.4 9.4 9.4 9.4									13000 139			1097 1256 1495
72 630 725 865 2.28 2.62 3.12 34.6 34.5 34.4 34.4 66.3 69.2 72.6 8.6 8.6 8.6									14600 160			1011 1160 1382

Nota (*) - VENTILAZIONE SOLO L.O. / FAN ONLY SIDE COMMUTATOR

Nota (°) - Regolazione di campo / Field weakening

								Potenza eccitazione Excitation power (w) 380		Tipo Size MGL 100 M			
								Cost. tempo eccitaz. Field time constant (ms) 165					
								Massa del motore Mass of the motor (Kg) 72		Ventilazione Ventilation			
								Momento d'inerzia rotore Rotor inertia moment (Kgm2) 0.023		IC 06			
Avv.	Velocità nominale n/min a tensione nominale di armatura Rated speed (rev/min) at rated voltage							Potenza Power	Coppia vel.nomin. Torque at rated speed Nm	Rendimento Efficency %	Circuito di armatura	Armature	Max giri Max. speed (°)
	170	220	260	300	400	440	500				kW	corrente Current Amp	
73					580	---	2.11	34.7	65.1	8.1	16200	183	929 1068 1277
74					610	---	2.14	33.5	65.7	7.4	19100	205	973 1170
Nota (*) - VENTILAZIONE SOLO L.O. / FAN ONLY SIDE COMMUTATOR								Nota (°) - Regolazione di campo / Field weakening					

								Potenza eccitazione Excitation power (w) 430				Tipo Size MGL 100 L							
								Cost. tempo eccitaz. Field time constant (ms)	180										
								Massa del motore Mass of the motor (Kg)	82										
								Momento d'inerzia rotore Rotor inertia moment (Kgm2)	0.028										
								Ventilazione Ventilation											
								IC 06											
								Velocità nominale n/min a tensione nominale di armatura Rated speed (rev/min) at rated voltage											
Avv.	170	220	260	300	400	440	500	Potenza Power	Coppia vel.nomin. Torque at rated speed Nm	Rendimento Efficency	Circuito di armatura circuit		Max giri Max. speed						
	Amp							Corrente Current Amp	Res. 115°C mOhm	Ind. mH	(°)								
45	2525	---	---	---	---	---	---	6.32	23.9	88.5	42	283	2.33	4043					
	3335	---	---	---	---	---	---	8.35	23.9	90.4	42			4700					
		3985	---	---	---	---	---	9.97	23.9	91.3	42			4700					
			4635	---	---	---	---	11.6	23.9	92.1	42			4700					
46	2075	---	---	---	---	---	---	6.26	28.8	87.7	42	341	3.39	3317					
	2750	---	---	---	---	---	---	8.30	28.8	89.8	42			4396					
		3290	---	---	---	---	---	9.93	28.8	90.9	42			4700					
			3830	---	---	---	---	11.6	28.9	92.1	42			4700					
47	1735	---	---	---	---	---	---	6.13	33.7	85.9	42	427	4.73	2776					
	2315	---	---	---	---	---	---	8.18	33.7	88.5	42			3701					
		2775	---	---	---	---	---	9.81	33.8	89.8	42			4442					
			3240	---	---	---	---	11.4	33.6	90.5	42			4700					
				4395	---	---	---	15.5	33.7	92.3	42			4700					
48	1470	---	---	---	---	---	---	5.95	38.7	83.3	42	543	6.21	2350					
	1975	---	---	---	---	---	---	8.00	38.7	86.6	42			3159					
		2380	---	---	---	---	---	9.64	38.7	88.3	42			3807					
			2785	---	---	---	---	11.3	38.7	89.7	42			4455					
				3795	---	---	---	15.4	38.8	91.7	42			4700					
					4200	---	---	17.0	38.7	92.0	42			4700					
											659								
49	1260	---	---	---	---	---	---	5.76	43.7	80.7	42	586	7.95	2019					
	1710	---	---	---	---	---	---	7.82	43.7	84.6	42			2738					
		2070	---	---	---	---	---	9.46	43.6	86.6	42			3314					
			2430	---	---	---	---	11.1	43.6	88.1	42			3890					
				3330	---	---	---	15.2	43.6	90.5	42			4700					
					3690	---	---	16.9	43.7	91.5	42			4700					
						4230	---	19.3	43.6	91.9	42			4700					
50	1100	---	---	---	---	---	---	5.12	44.4	78.2	38.5	835	9.8	1759					
	1505	---	---	---	---	---	---	7.00	44.4	82.6	38.5			2407					
		1830	---	---	---	---	---	8.51	44.4	85.0	38.5			2925					
			2150	---	---	---	---	10.0	44.4	86.6	38.5			3443					
				2960	---	---	---	13.8	44.5	89.6	38.5			4700					
					3285	---	---	15.3	44.5	90.3	38.5			4700					
						3770	---	17.5	44.3	90.9	38.5			4700					
51	970	---	---	---	---	---	---	4.51	44.4	75.8	35	1030	11.7	1552					
	1340	---	---	---	---	---	---	6.23	44.4	80.9	35			2141					
		1630	---	---	---	---	---	7.60	44.5	83.5	35			2612					
			1925	---	---	---	---	8.97	44.5	85.4	35			3083					
				2665	---	---	---	12.4	44.4	88.6	35			4261					
					2955	---	---	13.8	44.6	89.6	35			4700					
						3400	---	15.8	44.4	90.3	35			4700					

Nota (*) - VENTILAZIONE SOLO L.O. / FAN ONLY SIDE COMMUTATOR

Nota (°) - Regolazione di campo / Field weakening

								Potenza eccitazione Excitation power (w) 430				Tipo MGL 100 L Size Ventilazione Ventilation IC 06			
								Cost. tempo eccitaz. Field time constant (ms)	180						
								Massa del motore Mass of the motor (Kg)	82						
								Momento d'inerzia rotore Rotor inertia moment (Kgm2)	0.028						
Avv.	Velocità nominale n/min a tensione nominale di armatura Rated speed (rev/min) at rated voltage								Potenza Power	Coppia vel.nomin. Torque at rated speed Nm	Rendimento Efficency	Circuito di armatura circuit			Max giri Max. speed (°)
	170	220	260	300	400	440	500	kW				Corrente Current	Res. 115°C	Ind.	
52	880	---	---	---	---	---	---	4.08	44.3	75.0	32	1170	13.9	1408	
	1215	---	---	---	---	---	---	5.65	44.4	80.3	32			1948	
		1485	---	---	---	---	---	6.90	44.4	82.9	32			2380	
			1755	---	---	---	---	8.15	44.3	84.9	32			2811	
				2430	---	---	---	11.3	44.4	88.3	32			3891	
					2700	---	---	12.5	44.2	88.8	32			4323	
						3105	14.4	44.3	90.0	32				4700	
53	785	---	---	---	---	---	---	3.58	43.5	72.6	29	1440	16.4	1256	
	1095	---	---	---	---	---	---	5.00	43.6	78.4	29			1755	
		1345	---	---	---	---	---	6.13	43.5	81.3	29			2153	
			1595	---	---	---	---	7.27	43.5	83.6	29			2552	
				2220	---	---	---	10.1	43.4	87.1	29			3549	
					2465	---	---	11.2	43.4	87.8	29			3948	
						2840	12.9	43.4	89.0	29				4546	
54	720	---	---	---	---	---	---	3.34	44.3	71.4	27.5	1590	19.3	1148	
	1005	---	---	---	---	---	---	4.69	44.6	77.5	27.5			1611	
		1240	---	---	---	---	---	5.77	44.4	80.7	27.5			1981	
			1470	---	---	---	---	6.84	44.4	82.9	27.5			2351	
				2050	---	---	---	9.54	44.4	86.7	27.5			3277	
					2280	---	---	10.6	44.4	87.6	27.5			3647	
						2625	12.2	44.4	88.7	27.5				4202	
55	650	---	---	---	---	---	---	3.01	44.2	69.4	25.5	1870	21.7	1039	
	920	---	---	---	---	---	---	4.25	44.1	75.8	25.5			1471	
		1135	---	---	---	---	---	5.25	44.2	79.2	25.5			1817	
			1350	---	---	---	---	6.25	44.2	81.7	25.5			2162	
				1890	---	---	---	8.75	44.2	85.8	25.5			3026	
					2105	---	---	9.75	44.2	86.9	25.5			3372	
						2430	11.2	44.0	87.8	25.5				3890	
56	590	---	---	---	---	---	---	2.64	42.7	66.9	23.2	2220	24.8	942	
	840	---	---	---	---	---	---	3.78	43.0	74.1	23.2			1347	
		1045	---	---	---	---	---	4.69	42.9	77.8	23.2			1671	
			1245	---	---	---	---	5.60	43.0	80.5	23.2			1995	
				1755	---	---	---	7.87	42.8	84.8	23.2			2805	
					1955	---	---	8.78	42.9	86.0	23.2			3129	
						2260	10.1	42.7	87.1	23.2				3614	
57	545	---	---	---	---	---	---	2.53	44.3	65.9	22.6	2370	28.3	872	
	785	---	---	---	---	---	---	3.64	44.3	73.2	22.6			1253	
		975	---	---	---	---	---	4.53	44.4	77.1	22.6			1558	
			1165	---	---	---	---	5.41	44.3	79.8	22.6			1863	
				1640	---	---	---	7.63	44.4	84.4	22.6			2625	
					1830	---	---	8.51	44.4	85.6	22.6			2930	
						2115	9.84	44.4	87.1	22.6				3387	
58		720	---	900	---	---	---	3.26	43.2	71.2	20.8	2790	31.2	1151	
			900	---	---	---	---	4.07	43.2	75.3	20.8			1439	
				1080	---	---	---	4.89	43.2	78.4	20.8			1727	
					1530	---	---	6.92	43.2	83.2	20.8			2446	
						1710	---	7.74	43.2	84.6	20.8			2734	
							1980	8.96	43.2	86.2	20.8			3166	

Nota (*) - VENTILAZIONE SOLO L.O. / FAN ONLY SIDE COMMUTATOR

Nota (°) - Regolazione di campo / Field weakening

								Potenza eccitazione Excitation power (w) 430	Tipo Size MGL 100 L					
								Cost. tempo eccitaz. Field time constant (ms) 180						
								Massa del motore Mass of the motor (Kg) 82						
								Momento d'inerzia rotore Rotor inertia moment (Kgm2) 0.028						
								Ventilazione Ventilation IC 06						
Avv.	Velocità nominale n/min a tensione nominale di armatura Rated speed (rev/min) at rated voltage							Potenza Power	Coppia vel.nomin. Torque at rated speed Nm	Rendimento Efficency %	Circuito di armatura circuit		Max giri Max. speed (°)	
	170	220	260	300	400	440	500	kW			Corrente Current Amp	Res. 115°C mOhm	Ind. mH	
59	675	---	845	---	---	---	---	3.13	44.3	70.4	20.2	2960	35.2	1078
		---	---	1015	---	---	---	3.92	44.3	74.6	20.2			1351
		---	---	---	1440	---	---	4.71	44.3	77.7	20.2			1623
		---	---	---	---	1610	---	6.69	44.4	82.8	20.2			2305
		---	---	---	---	1865	---	7.48	44.4	84.2	20.2			2578
		---	---	---	---	---	8.67	44.4	85.8	20.2	2987			
60	620	---	780	---	---	---	---	2.81	43.3	67.9	18.8	3460	38.7	990
		---	---	945	---	---	---	3.55	43.5	72.6	18.8			1250
		---	---	---	1350	---	---	4.29	43.4	76.1	18.8			1509
		---	---	---	---	1510	---	6.13	43.4	81.5	18.8			257
		---	---	---	---	1755	---	6.87	43.4	83.1	18.8			2416
		---	---	---	---	---	7.97	43.4	84.8	18.8	2804			
61	585	---	740	---	---	---	---	2.70	44.1	67.4	18.2	3650	43.1	934
		---	---	895	---	---	---	3.41	44.0	72.1	18.2			1181
		---	---	---	1280	---	---	4.13	44.1	75.6	18.2			1428
		---	---	---	---	1430	---	5.91	44.1	81.2	18.2			2045
		---	---	---	---	1665	---	6.62	44.2	82.7	18.2			2292
		---	---	---	---	---	7.69	44.1	84.5	18.2	2662			
62	545	---	695	---	---	---	---	2.54	44.5	66.0	17.5	3970	47.1	874
		---	---	840	---	---	---	3.23	44.4	71.0	17.5			1110
		---	---	---	1210	---	---	3.92	44.6	74.7	17.5			1345
		---	---	---	---	1355	---	5.63	44.4	80.4	17.5			1934
		---	---	---	---	1575	---	6.32	44.5	82.1	17.5			2170
		---	---	---	---	---	7.34	44.5	83.9	17.5	2523			
63	510	---	650	---	---	---	---	2.32	43.4	64.3	16.4	4470	51.3	815
		---	---	790	---	---	---	2.97	43.6	69.7	16.4			1040
		---	---	---	1145	---	---	3.61	43.6	73.4	16.4			1265
		---	---	---	---	1285	---	5.21	43.5	79.4	16.4			1829
		---	---	---	---	1495	---	5.86	43.5	81.2	16.4			2054
		---	---	---	---	---	6.82	43.6	83.2	16.4	2392			
64	575	---	705	---	---	---	---	2.65	44.0	67.1	15.2	5270	61.0	921
		---	---	1030	---	---	---	3.24	43.9	71.1	15.2			1129
		---	---	---	1160	---	---	4.73	43.9	77.8	15.2			1647
		---	---	---	1355	---	---	5.33	43.9	79.7	15.2			1854
		---	---	---	---	---	6.22	43.8	81.8	15.2	2165			
		---	---	---	---	---	7.34	43.6	83.2	15.2	2165			
65	510	---	630	---	---	---	---	2.32	43.4	63.7	14	6310	70.8	813
		---	930	---	---	---	---	2.87	43.5	68.3	14			1005
		---	1050	---	---	---	---	4.24	43.5	75.7	14			1485
		---	1230	---	---	---	---	4.79	43.6	77.8	14			1677
		---	---	---	---	---	5.62	43.6	80.3	14	1965			

Nota (*) - VENTILAZIONE SOLO L.O. / FAN ONLY SIDE COMMUTATOR

Nota (°) - Regolazione di campo / Field weakening

								Potenza eccitazione Excitation power (w) 430	Tipo Size MGL 100 L			
Cost. tempo eccitaz. Field time constant (ms) 180								Ventilazione Ventilation	IC 06			
Massa del motore Mass of the motor (Kg) 82								Momento d'inerzia rotore Rotor inertia moment (Kgm2) 0.028				
Velocità nominale n/min a tensione nominale di armatura Rated speed (rev/min) at rated voltage								Potenza Power	Coppia vel.nomin. Torque at rated speed Nm	Rendimento Efficency %	Circuito di armatura circuit	
Avv.	170	220	260	300	400	440	500	KW			Corrente Current Amp	Res. 115°C mOhm
				580	---	---	860		44.3	67.9	13.2	mH
66					---	---	970	2.69	44.2	75.4	13.2	6800
					---	---	1140	3.98	44.3	77.5	13.2	82.4
					---	---		4.50	44.2	80.0	13.2	930
					---	---		5.28				1376
					---	---						1555
					---	---						1823
67				520	---	---	780	2.37	43.5	64.8	12.2	8160
					---	---	885	3.56	43.6	73.0	12.2	93.4
					---	---	1040	4.04	43.6	75.3	12.2	829
					---	---		4.76	43.7	78.0	12.2	1247
					---	---						1414
					---	---						1665
68				480	---	---	725	2.26	45.0	63.8	11.8	8660
					---	---	825	3.42	45.0	72.5	11.8	106
					---	---	970	3.88	44.9	74.7	11.8	768
					---	---		4.58	45.1	77.6	11.8	1161
					---	---						1318
					---	---						1554
69				660	---	---	755	3.03	43.8	70.1	10.8	10400
					---	---	895	3.45	43.6	72.6	10.8	119
					---	---		4.08	43.5	75.6	10.8	1059
					---	---						1207
					---	---						1429
70				585	---	---	670	2.63	42.9	67.1	9.8	12700
					---	---	795	3.01	42.9	69.8	9.8	141
					---	---		3.59	43.1	73.3	9.8	934
					---	---						1070
					---	---						1275
71				500	---	---	580	2.40	45.8	63.8	9.4	14700
					---	---	695	2.77	45.6	67.0	9.4	172
					---	---		3.32	45.6	70.6	9.4	802
					---	---						926
					---	---						1111
72				535	---	---	640	2.50	44.6	66.1	8.6	16400
					---	---		3.00	44.8	69.8	8.6	199
					---	---						854
					---	---						1026

Nota (*) - VENTILAZIONE SOLO L.O. / FAN ONLY SIDE COMMUTATOR

Nota (°) - Regolazione di campo / Field weakening

								Potenza eccitazione Excitation power (w) 430	Tipo Size MGL 100 L					
Cost. tempo eccitaz. Field time constant (ms) 180								Ventilazione Ventilation	IC 06					
Massa del motore Mass of the motor (Kg) 82								Momento d'inerzia rotore Rotor inertia moment (Kgm2) 0.028						
Velocità nominale n/min a tensione nominale di armatura Rated speed (rev/min) at rated voltage								Potenza Power	Coppia vel.nomin. Torque at rated speed Nm	Rendimento Efficency %	Circuito di armatura circuit			
Avv.	170	220	260	300	400	440	500	kW			Corrente Current Amp	Res. 115°C mOhm	Ind. mH	Max giri Max. speed (°)
73						490	- --- 590	2.31 2.78	45.0 45.0	64.8 68.6	8.1 8.1	18200	228	784 946
74						540	2.46	43.5	66.5	7.4	21400	255	862	

Nota (*) - VENTILAZIONE SOLO L.O. / FAN ONLY SIDE COMMUTATOR

Nota (°) - Regolazione di campo / Field weakening

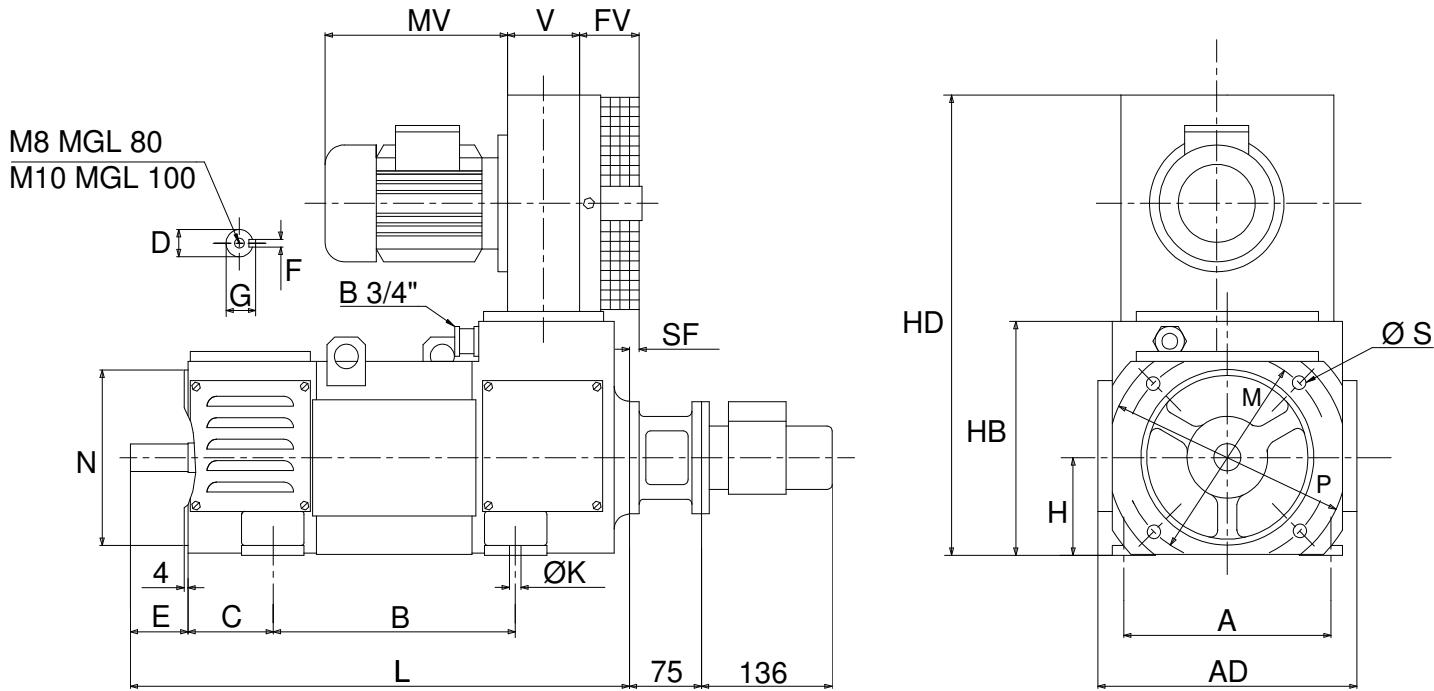


MOTORI C.C. SERIE MGL
GLEICHSTROMMOTOREN SERIE MGL
D.C. MOTORS SERIES MGL

Forma costr. IM B3/B5 e derivate - Mounting IM B3/B5 and derived
 Protezione IP23S - Protection IP23S
 Ventilazione IC06 - Cooling IC06

IN H 03

Foglio/Seite/Sheet
 D 09 93



MORSETTIERA INTERNA AL COPERTO LATO OPPOSTO

TERMINAL BOARD INTERNAL TO CAP COLLECTOR SIDE

TIPO	PIAZZAMENTO					ALBERO				FLANGIA				INGOMBRO				ELETTROVENT.				
	A	B	C	H	K	E	D	F	G	M	N	S	P	HD	HB	L	AD	FV	MV	V	SF	
80	S	160																405				
	M	170	185	82	80	9	50	24	8	27	165	130	11,5	200	385	196	430	215	60	150	100	24
	L	220																465				
100	S	192																460				
	M	216	217	89	100	12	60	28	8	31	215	180	14	250	465	240	485	260	65	185	92	12
	L	252																520				

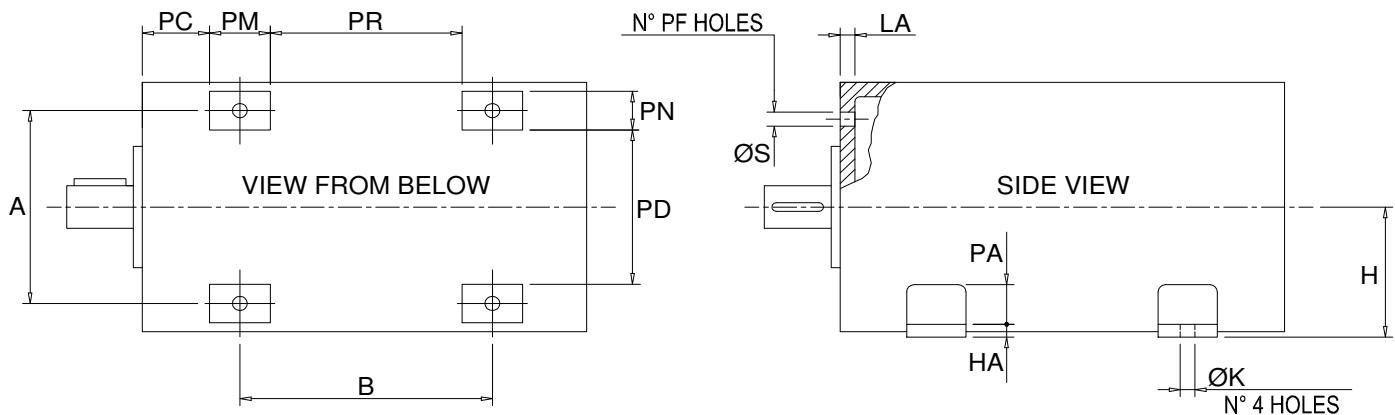


PIAZZAMENTO - QUOTE AUSILIARIE

PLACEMENT - AUXILIARY DIMENSION

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Tables N°



TIPO/TYPE	A	PD	PN	PC	PM	PR	B	K	S	PF	LA	PA	HA	H
80	S M L	170	123	36	57	55	100	160						
							125	185						
							160	220						
100	S M L	216	150	45	54	65	132	192						
							157	217						
							192	252						
112	S M L	190	146	31	48	52	228	288						
							258	318						
							298	358						
132	S M L P	216	172	38	62	55	275	330						
							315	370						
							365	420						
							415	470						
160	K S M L P	254	200	50	71	75	268	342						
							298	372						
							338	412						
							388	462						
							418	492						

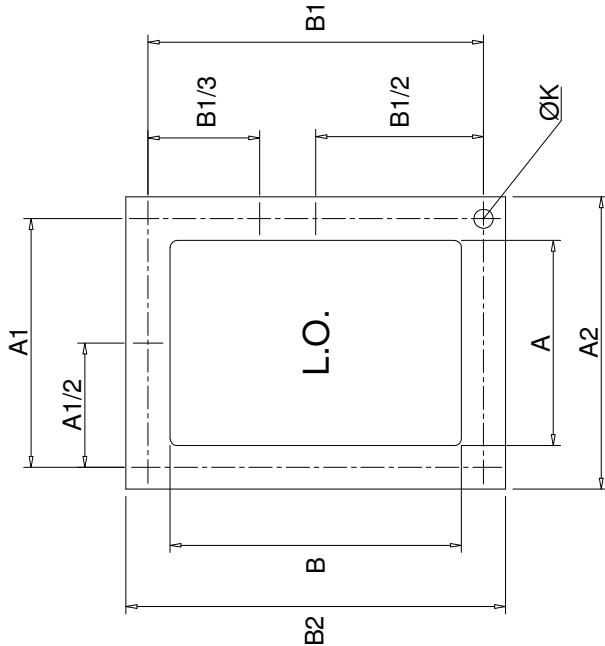


Tabella quote per bocchette di adattamento ventilazione separata

Dimensions table of adapted openings for separated ventilation

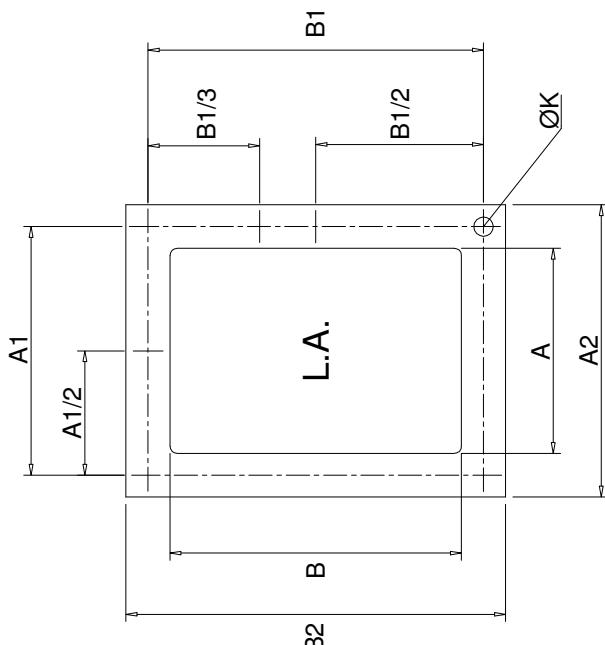
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Tables N° 40



A1/2 = B1/2 = N° 8 FORI
B1/3 = N° 10 FORI

A1/2 = B1/2 = N° 8 HOLES
B1/3 = N° 10 HOLES



A1/2 = B1/2 = N°8 HOLES
B1/3 = N°10 HOLES

TIPO	A	B	A1	B1	A2	B2	N°	K	FORI / HOLES				TIPO	
									ON TOP / SUPERIORI					
80	90	145	108	160	120	172	90	90	ON SIDE / LATERALI				80	
	90	90	108	90	120	105			ON TOP / SUPERIORI					
	90	170	113	178	125	190			ON SIDE / LATERALI					
	100	4	6	100	170	113	100	120	ON SIDE / LATERALI				100	
	90								ON TOP / SUPERIORI					
	70								ON SIDE / LATERALI					
	90								ON TOP / SUPERIORI					
	110								ON SIDE / LATERALI					
112	70	140	98	145	110	155	85	140	ON TOP / SUPERIORI				112	
132	90	180	118	185	130	197	105	180	ON SIDE / LATERALI				132	
160	110	210	135	220	155	240	4	7	ON TOP / SUPERIORI				160	