

# SPZ

MOTORI ELETTRICI  
VENTILATORI



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# SP2

BY SPZ

## SERIES THREE-PHASE ASYNCHRONOUS MOTORS (Type 56 - Type 132)

**CARCASSA IN ALLUMINIO**  
**ALUMINUM HOUSING**  
**CARCASSE EN ALUMINIUM**

هيكل من الألمنيوم

I motori asincroni trifase serie SP2, con carcassa in alluminio, di recentissima progettazione, sono realizzati con materiali di qualità selezionata e conformi alle norme CEI. I motori SP2 offrono prestazioni elevate, un funzionamento sicuro e affidabile e un aspetto gradevole. La manutenzione è minima, il rumore e le vibrazioni sono ridotti al minimo, l'ingombro è limitato e la costruzione è semplice. I motori di questa serie possono essere impiegati per la trasmissione generale.

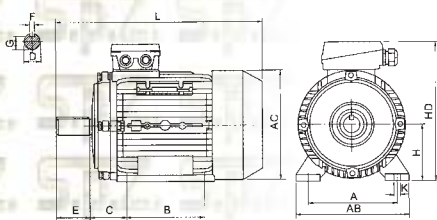
SP2 series aluminum housing three-phase asynchronous motors, with latest design in entirety, are made of selected quality and conform to the IEC standard. SP2 motors have good performance, safety and reliable operation, nice appearance, and can be maintained very conveniently, while with low noises, little vibration and at the same time light weight and simple construction. These series motors can be used for general drive.

Les moteurs asynchrones triphasés série SP2, avec carcasse en aluminium, de conception très récente, sont réalisés avec des matériaux de qualité sélectionnée et sont conformes aux normes CEI. Les moteurs SP2 offrent des prestations de haut niveau, un fonctionnement sûr et fiable et une esthétique agréable. Leur entretien est facile, le bruit et les vibrations réduits au strict minimum, l'encombrement limité et la construction simple. Les moteurs de cette série peuvent être utilisés pour la transmission générale.

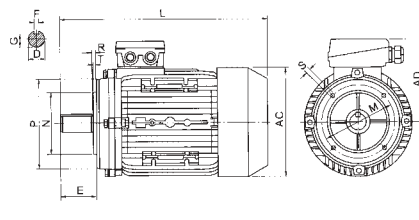
إن محركات السلسلة SP2 اللاآتزامنية وثلاثية الأوتار ذات هيكل من الألمنيوم ذي تصميم حديث جداً مصنوعة من معادن عالية الجودة و مطابقة للمواصفات العالمية CEI إن محركات SP2 توفر أداء عالي الجودة واشتغالا مؤكدا دون خلل مع جمالية مقبولة، أما صيانتها فهي بسيطة وقد وقع تخفيف الضجيج والإرتجاجات إلى أقصى حد مع حجم محدود وصنع مبهنظ.  
إن محركات هذه السلسلة يمكن استخدامها في مجالات عدة.



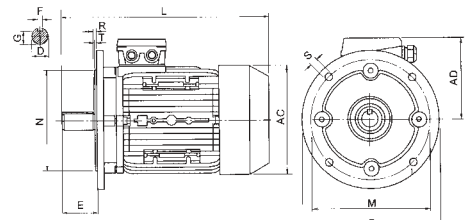
• Dimensioni di ingombro e installazione • Overall & Installation Dimensions • Dimensions hors tout et installation • قياسات الأحجام



IMB 3



IMB 14



IMB 5

• DATITECNICI • TECHNICAL DATA • DONNEES TECHNIQUES • معلومات فنية

Type	Power (kW)	Voltage (V)	Current (A)	Speed (r/min)	Eff (%)	Power factor	Tstart/Tn (Time)	Tmax/Tn (Time)	Ist/In (Time)
SP2 56A-2	0.09	220/380	0.57/0.33	2800	62	0.68	2.3	2.4	6
SP2 56B-2	0.12	220/380	0.67/0.38	2800	67	0.71	2.3	2.4	6
SP2 63A-2	0.18	220/380	0.91/0.53	2800	69	0.75	2.2	2.4	6
SP2 63B-2	0.25	220/380	1.17/1.68	2800	72	0.78	2.2	2.4	6
SP2 71A-2	0.37	220/380	1.65/0.95	2800	73.5	0.80	2.2	2.4	6
SP2 71B-2	0.55	220/380	2.33/1.35	2800	75.5	0.82	2.2	2.4	6
SP2 80A-2	0.75	220/380	3.03/1.75	2800	76.5	0.85	2.2	2.4	6
SP2 80B-2	1.10	220/380	4.42/2.55	2800	77	0.85	2.2	2.4	6
SP2 90S-2	1.50	220/380	6.01/3.84	2800	77	0.85	2.2	2.4	6
SP2 90L-2	2.20	220/380	8.61/4.98	2800	78	0.86	2.2	2.4	6
SP2 100L-2	3.00	220/380	11.1/6.4	2870	82	0.87	2.2	2.3	7
SP2 112M-2	4.00	380/660	8.2/4.7	2890	85.5	0.87	2.2	2.3	7
SP2 132SA-2	5.50	380/660	11/6.3	2900	85.5	0.88	2.0	2.2	7
SP2 132SB-2	7.50	380/660	15/8.6	2900	86.2	0.88	2.0	2.2	7
SP2 56A-4	0.06	220/380	0.49/0.28	1400	56	0.58	2.3	2.4	6
SP2 56B-4	0.09	220/380	0.67/0.39	1400	58	0.61	2.3	2.4	6
SP2 63A-4	0.12	220/380	0.84/0.48	1400	60	0.63	2.2	2.4	6
SP2 63B-4	0.18	220/380	1.12/0.65	1400	64	0.66	2.2	2.4	6
SP2 71A-4	0.25	220/380	1.44/0.83	1400	67	0.68	2.2	2.4	6
SP2 71B-4	0.37	220/380	1.94/1.12	1400	69.5	0.72	2.2	2.4	6
SP2 80A-4	0.55	220/380	2.69/1.56	1400	73.5	0.73	2.2	2.4	6
SP2 80B-4	0.75	220/380	3.48/2.01	1400	75.5	0.75	2.2	2.4	6
SP2 90S-4	1.10	220/380	4.74/2.75	1400	78	0.78	2.2	2.4	6
SP2 90L-4	1.50	220/380	6.31/3.65	1400	79	0.79	2.2	2.4	6
SP2 100LA-4	2.20	220/380	8.6/5.0	1430	81	0.82	2.2	2.3	7
SP2 100LB-4	3.00	220/380	11.7/6.8	1430	82.5	0.81	2.2	2.3	7
SP2 112M-4	4.00	380/660	8.8/5.1	1440	84.5	0.82	2.2	2.3	7
SP2 132S-4	5.50	380/660	12/6.9	1440	85.5	0.84	2.2	2.2	7
SP2 132M-4	7.50	380/660	15/8.6	1440	87	0.85	2.2	2.2	7
SP2 90S-6	0.75	220/380	4.0/2.3	910	72.5	0.70	2.2	2.2	5.5
SP2 90L-6	1.10	220/380	5.5/3.2	910	73.5	0.72	2.2	2.2	5.5
SP2 100L-6	1.50	220/380	6.9/4.0	940	77.5	0.74	2.2	2.2	6
SP2 112M-6	2.20	220/380	9.7/5.6	940	80.5	0.74	2.2	2.2	6
SP2 132S-6	3.00	220/380	12.4/7.2	960	83	0.76	2.0	2.0	6.5
SP2 132MA-6	4.00	380/660	9.4/5.4	960	84	0.77	2.0	2.0	6.5
SP2 132MB-6	5.50	380/660	13/7.5	960	85.3	0.78	2.0	2.0	6.5
SP2 132S-8	2.20	220/380	10/5.8	710	85.5	0.71	2.0	2.0	5.5
SP2 132M-8	3.00	220/380	13.3/7.7	710	82	0.72	2.0	2.0	5.5

Frame Size	Mounting Dimensions(mm)																				Overall Dimensions(mm)					
											IMB14					IMB5										
	A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	M	N	P	R	S	T	AB	AC	AD	HD	L
56	90	71	36	9	20	3	7.2	56	5.8	65	50	80	0	M5	2.5	98	80	120	0	7	3.0	110	120	110	155	195
63	100	80	40	11	23	4	8.5	63	7	75	60	90	0	M5	2.5	115	95	140	0	10	3.0	130	130	115	165	230
71	112	90	45	14	30	5	11	71	7	85	70	105	0	M6	2.5	130	110	160	0	10	3.5	145	145	125	185	255
80	125	100	50	19	40	6	15.5	80	10	100	80	120	0	M6	3.0	165	130	200	0	12	3.5	160	165	135	215	295
90S	140	100	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	180	185	145	235	335
90L	140	125	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	180	185	145	235	360
100L	160	140	63	28	60	8	24	100	12	130	110	160	0	M8	3.5	215	180	250	0	15	4.0	205	215	170	255	380
112M	190	140	70	28	60	8	24	112	12	130	110	160	0	M8	3.5	215	180	250	0	15	4.0	245	240	180	285	400
132S	216	140	89	38	80	10	33	132	12	165	130	200	0	M10	4.0	265	230	300	0	15	4.0	280	275	195	325	475
132M	216	178	89	38	80	10	33	132	12	165	130	200	0	M10	4.0	265	230	300	0	15	4.0	280	275	195	325	515

### CARCASSA IN ALLUMINIO ALUMINUM HOUSING CARCASSE EN ALUMINIUM

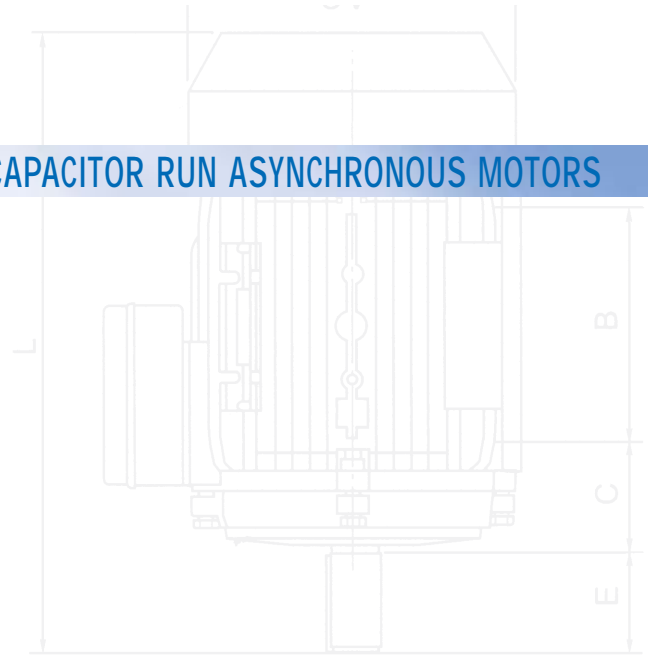
ميكمل من الألمنيوم

I motori asincroni monofase serie SP2, con condensatore di marcia e carcassa in alluminio, di recentissima progettazione, sono realizzati con materiali di qualità selezionata e conformi alle norme CEI. I motori SP2 offrono prestazioni elevate, un funzionamento sicuro e affidabile e un aspetto gradevole. La manutenzione è minima, il rumore e le vibrazioni sono ridotti al minimo, l'ingombro è limitato e la costruzione è semplice. I motori di questa serie possono essere impiegati negli elettrodomestici, pompe, ventilatori e registratori grafici, ecc.

SP2 series aluminum housing single-phase capacitor-run asynchronous motors, with latest design in entirety, are made of selected quality materials and conform to the IEC standard. SP2 motors have good performance, safety and reliable operation, nice appearance and, can be maintained very conveniently, while with low noises, little vibration and at the same time of light weight and simple construction. These series motors can be used for home electric appliances, pumps, fans and recording meters, etc.

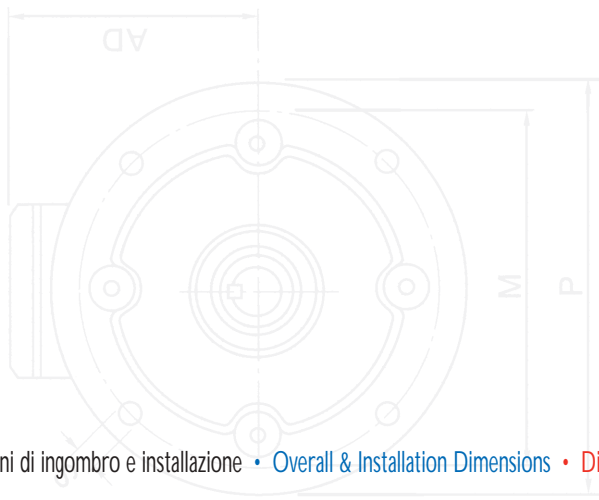
Les moteurs asynchrones monophasés série SP2, avec condensateur et carcasse en aluminium, de conception très récente, sont réalisés avec des matériaux de qualité sélectionnée et sont conformes aux normes CEI. Les moteurs SP2 offrent des prestations de haut niveau, un fonctionnement sûr et fiable et une esthétique agréable. Leur entretien est facile, le bruit et les vibrations réduits au strict minimum, l'encombrement limité et la construction simple. Les moteurs de cette série peuvent être utilisés pour les électrodomestiques, les pompes, les ventilateurs et les enregistreurs graphiques, etc.

إن محركات السلسلة SP2 اللاتزامنية وأحادية الأوتار ذات هيكل و مكثف من الألمنيوم ذي تصميم حديث جداً؛ مصنوعة من معادن عالية الجودة و مطابقة للمواصفات العالمية CEI إن محركات SP2 توفر أداء عالي الجودة و استهلاكاً مؤكداً دون خلل مع جمالية مقبولة، أما صيغتها فهي بسيطة و قد وقع تخفيف الضجيج و الإرتجاجات إلى أقصى حد مع حجم محدود و صنع ميسر. إن محركات هذه السلسلة يمكن استخدامها في اللآلات الكهرومنازلية و المضخات و المراوح ، و الآلات تسجيل الرسوم ، إلخ .

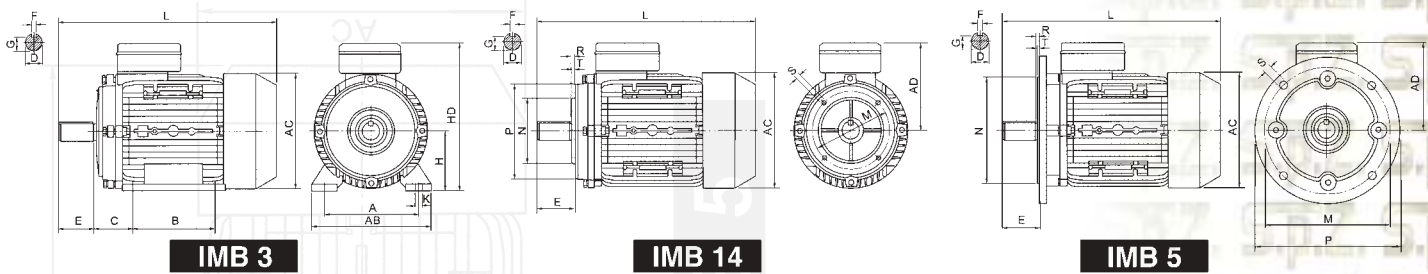


• DATITECNICI • TECHNICAL DATA • DONNEESTECHNIQUES • معلومات فنية

Type	Power (kW)	Voltage (V)	Current (A)	Speed (r/min)	Eff (%)	Power factor	Tstart/Tn (Time)	Tmax/Tn (Time)	Starting A. (A)
SP2 63A-2	0.18	220	1.48	2800	60	0.92	0.4	1.7	5
SP2 63B-2	0.25	220	1.96	2800	63	0.92	0.4	1.7	7
SP2 63A-4	0.12	220	1.10	1400	55	0.90	0.4	1.7	3.5
SP2 63B-4	0.18	220	1.62	1400	56	0.90	0.4	1.7	5



• Dimensioni di ingombro e installazione • Overall & Installation Dimensions • Dimensions hors tout et installation • قياسات الأحجام



Frame Size	Mounting Dimensions (mm)																				Overall Dimensions (mm)					
											IMB14					IMB5										
	A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	M	N	P	R	S	T	AB	AC	AD	HD	L
63	100	80	40	11	23	4	8.5	63	7	75	60	90	0	M5	2.5	115	95	140	0	10	3.0	130	130	115	185	230

### CARCASSA IN ALLUMINIO ALUMINUM HOUSING CARCASSE EN ALUMINIUM

ميكل من الألمنيوم

I motori asincroni monofase serie SP2, con doppio condensatore e carcassa in alluminio, di recentissima progettazione, sono realizzati con materiali di qualità selezionata e conformi alle norme CEI. I motori SP2 offrono prestazioni elevate, un funzionamento sicuro e affidabile e un aspetto gradevole. La manutenzione è semplice, il rumore e le vibrazioni sono ridotti al minimo, l'ingombro è limitato e la costruzione semplice.

I motori di questa serie possono essere impiegati per compressori d'aria, pompe, ventilatori, apparecchiature e strumentazioni mediche e altre macchine di piccole dimensioni.

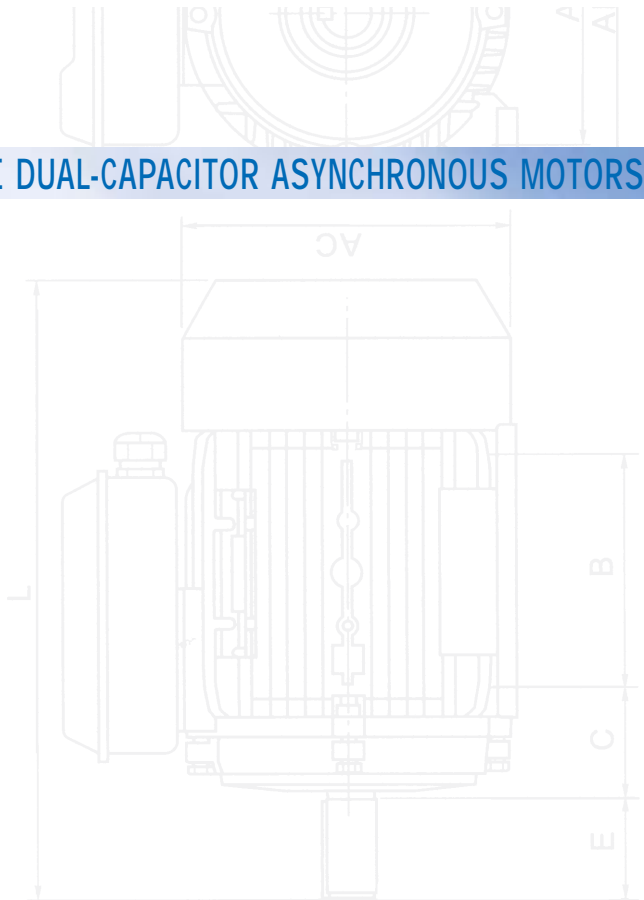
SP2 series aluminum housing single-phase dual-capacitor asynchronous motors, with latest design in entirety, are made of selected quality materials and conform to the IEC standard. SP2 motors have good performance, safety and reliable operation, nice appearance and, can be maintained very conveniently, while with low noises, little vibration and at the same time of light weight and simple construction. These series motors, can be used for air-compressors, pumps, fans, medical apparatus and instruments, and many other small machines.

Les moteurs asynchrones monophasés série SP2 avec double condensateur et carcasse en aluminium, de conception très récente, sont réalisés avec des matériaux de qualité sélectionnée et sont conformes aux normes CEI. Les moteurs SP2 offrent des prestations de haut niveau, un fonctionnement sûr et fiable et une esthétique agréable. Leur entretien est facile, le bruit et les vibrations réduits au strict minimum, l'encombrement limité et la construction simple.

Les moteurs de cette série peuvent être utilisés pour les compresseurs d'air, les pompes, les ventilateurs, les équipements et les instrumentations médicales ainsi que pour d'autres appareils de petites dimensions.

إن محركات السلسلة SP2 اللاآرآمنية وأحادية الأآوار ذات هيكل ومكثفان من الألمنيوم ذي تصميم حديث جداً مصنوعة من معادن عالية الجودة ومطابقة للمواصفات المعيارية CEI إن محركات SP2 توفر أداء عالي الجودة واشتغالاً مؤكداً دون آخل مع جمالية مقبولة، أما صيانتها فهي بسيطة وقد وقع تخفيف الضجيج والإرتجاجات إلى أقصى حد مع حجم محدود وصنع مبسط.

إن محركات هذه السلسلة يمكن استخدامها في ضاغطات الهواء، والمضخات، والمراوح، والتجهيزات الطبية وكذلك بالتنسبة إلى الآت أخرى ذات أحجام صغيرة.



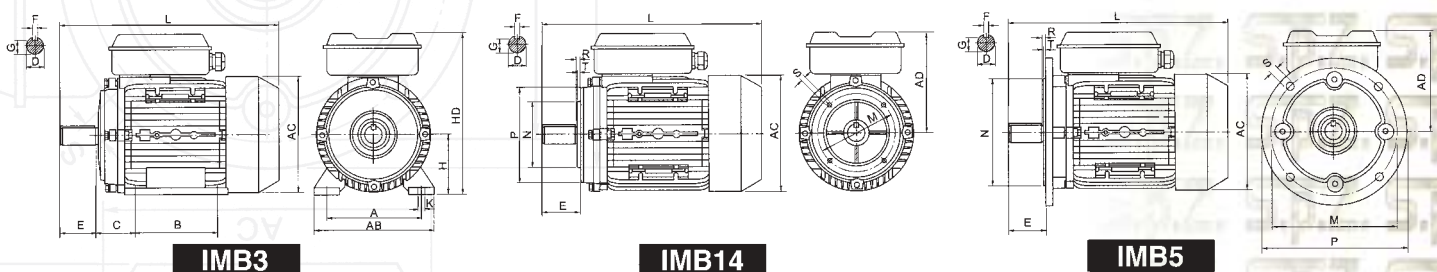
IMB3



• DATI TECNICI • TECHNICAL DATA • DONNEES TECHNIQUES • معلومات فنية

Type	Power (kW)	Voltage (V)	Current (A)	Speed (r/min)	Eff (%)	Power factor	Tstart/Tn (Time)	Tmax/Tn (Time)	Starting A. (A)
SP2 71A-2	0.37	220	2.73	2800	67	0.92	2.3	1.8	16
SP2 71B-2	0.55	220	3.88	2800	70	0.92	2.5	1.8	21
SP2 80A-2	0.75	220	5.15	2800	72	0.92	2.5	1.8	30
SP2 80B-2	1.10	220	7.02	2800	75	0.95	2.5	1.8	40
SP2 90S-2	1.50	220	9.44	2800	76	0.95	2.5	1.8	55
SP2 90LB-2	2.20	220	13.67	2800	77	0.95	2.5	1.8	80
SP2 100L-2	3.00	220	18.2	2800	79	0.95	2.5	1.8	110
SP2 71A-4	0.25	220	1.99	1400	62	0.92	2.5	1.8	12
SP2 71B-4	0.37	220	2.81	1400	65	0.92	2.5	1.8	16
SP2 80A-4	0.55	220	4.0	1400	68	0.92	2.5	1.8	21
SP2 80B-4	0.75	220	5.22	1400	71	0.92	2.5	1.8	30
SP2 90S-4	1.10	220	7.2	1400	73	0.95	2.5	1.8	40
SP2 90L-4	1.50	220	9.57	1400	75	0.95	2.5	1.8	55
SP2 100LA-4	2.20	220	13.9	1400	76	0.95	2.5	1.8	80
SP2 100LB-4	3.00	220	18.6	1400	77	0.95	2.5	1.8	110

• Dimensioni di ingombro e installazione • Overall & Installation Dimensions • Dimensions hors tout et installation • قياسات الأحجام



Frame Size	Mounting Dimensions(mm)																				Overall Dimensions(mm)					
											IMB14					IMB5										
	A	B	C	D	E	F	G	H	K	L	M	N	P	R	S	T	M	N	P	R	S	T	AB	AC	AD	HD
71	112	90	45	14	30	5	11	71	7	85	70	105	0	M6	2.5	130	110	160	0	10	3.5	145	145	125	210	255
80	125	100	50	19	40	6	15.5	80	10	100	80	120	0	M6	3.0	165	130	200	0	12	3.5	160	165	135	240	295
90S	140	100	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	180	185	145	270	335
90L	140	125	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	180	185	145	270	360
100L	160	140	63	28	60	8	24	100	12	-	-	-	-	-	-	215	180	250	0	15	4.0	205	215	170	280	380



## THE COLOR SERIES OF SPZ BRAND

PLS CHOOSE YOUR FAVOURITE

(Type 56 - Type 132)



0401



0402



0403



0404



0405



0406



0407



0408



0409



0410



0411



0412



0413



0414



0415



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0417



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0434



0435



0436

**CARCASSA IN GHISA**  
**CAST IRON HOUSING**  
**CARCASSE EN FONTE**

هيكل من الفند

I motori della serie **SP2** vengono forniti con cuscinetti a sfera fino alla grandezza 280 e del tipo a rulli sulle grandezze 315 - 355. Tutti i motori di questa gamma sono equipaggiati di serie con **TERMISTORI** salvamotore (con temperature di intervento a 130°C), avvolgimento **tropicalizzato**, ingrassatori anteriori e posteriori. La protezione "**IP55**" viene garantita per mezzo di paraoli (cortechi) che impediscono l'entrata di acqua e/o olio nell'avvolgimento, e per mezzo di guarnizioni a tenuta stagna nel copribasetta. L'isolamento dell'avvolgimento è in classe **F** mentre l'isolamento dei cavi in basetta è in classe **H**.  
Il voltaggio viene espresso in eurotensione e la frequenza è a **50/60 Hz**.  
L'alto livello della qualità costruttiva, la classe di efficienza **EFF2**, la precisione nei dettagli, "**il basso consumo energetico**" e la potenza in esubero rispetto ai valori di targa fanno della serie "**SP2**" un prodotto dall'ottimo funzionamento garantito.  
Il nostro ufficio tecnico è a Vostra completa disposizione per qualsiasi ulteriore chiarimento.

The motors series **SP2** are delivered with ball bearings up to size 280 and with roller bearings for size 315-355. All motors of this range are standard equipped with **THERMISTORS** for motor protection (with operating temperatures at 130°C), **tropicalized** winding, front and back grease nipples. "**IP55**" protection degree is guaranteed by means oil seals (corteco seals) preventing water and/or oil from penetrating the winding and by means of hermetic seals for the board cover. The winding insulation is class **F** whereas the cable insulation is class **H**.  
The voltage is expressed in eurovoltage and the frequency is **50/60Hz**.  
High quality level of construction, efficiency class **EFF2**, precision in details, "low power use" and power exceeding the nameplate values make the series "**SP2**" a product with guaranteed optimal performance.  
Our technical department is at your complete disposal for further explanations you need.















Les moteurs de la série **SP2** sont fournis équipés de roulements à billes jusqu'à la grandeur de 280 et de roulements à rouleaux sur les grandeurs 315 - 355. Tous les moteurs de cette gamme sont équipés de série de discontacteurs **TERMISTORI** (avec une température d'intervention de 130°C), d'enroulement **tropicalisé**, de graisseurs avants et arrières. La protection "**IP55**" est assurée grâce à des déflecteurs d'huile empêchant l'entrée d'eau et/ou d'huile dans l'enroulement, et grâce à des joints d'étanchéité situés dans la plaque à bornes. L'isolation de l'enroulement est de classe **F** alors que l'isolation des câbles sur la plaquette de raccordement est de classe **H**.  
La tension est exprimée en eurotension et la fréquence est à **50/60Hz**.  
La qualité de fabrication élevée, la classe d'efficacité **EFF2**, la précision des détails, "la consommation d'énergie réduite" et la puissance en excédent par rapport aux valeurs de plaque font de la série "**SP2**" un produit au fonctionnement excellent garanti.  
Notre service technique demeure à votre entière disposition pour tout renseignement complémentaire.

محركات المسلسلة SP2 جهزت بمدارج كريات يصل قطرها إلى 280 ومدارج لفوفية بقطر 315-355. جميع محركات هذه المسلسلة مجهزة بفاصل-واصل من نوع **TERMISTORI** (مع درجة حرارة تدخل تساوي 130° مئوية) و بلمفانف قادرة على تحمل مناخ المنطقة الحارة، وبمضاحم لمامية و خلفية.  
وقد تأمين الحماية "**IP55**" بواسطة محارف زيت تمنع دخول الماء و/ أو الزيت إلى اللقائف، ويفضل وصلات المسلكة الموضوعية على صفيحة المرابط، أصبح العزل الكهربائي للقفان من صنف **F**، أما عزل الأسلاك على رقيقة التوصيل فهو من صنف **H**.  
وحدة قياس الجهد هي: الجهد الأروبي أما التردد فهو **50/60 Hz**.  
صناعة ذات جودة عالية، مردودية من صنف **EFF2**، دقة التفاصيل، استهلاك محدود في الطاقة، و قوة زفدة بالنسبة إلى القيمة المبيته على الصليحة، كلها خاصية من خاصيات الصنف "**SP2**"، منتج ذو اشتغال مضمون.  
لمزيد من الإرشادات، مصلحتنا التقنيتية على نمتكم للإستماع إلى استفساراتكم.

### Posizioni di Montaggio - Mounting Arrangements

The Commonly used mounting arrangements and the corresponding frame numbers are shown in table 1

Table 1

Frame No. Tipo	Base - Basic			Varianti - Variations								
	B3	B5	B35	Based on B5		Based on B3					Based on B35	
				V1	V3	V5	V6	B6	B7	B8	V15	V36
H63~160												
H63~160	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
H180~225	✓	✓	✓	✓	-	-	-	-	-	-	-	-
H250~355	✓	-	✓	✓	-	-	-	-	-	-	-	-

### Cuscinetti - Bearings

Table 2

Tipo Frame No.	Lato guida - Driving end		Lato opposto - Non-driving end	
	2P	4, 6, 8P	2P	4, 6, 8P
	SP2	SP2	SP2	
63	6201KZ <sub>2</sub>		6201KZ <sub>2</sub>	
71	6202KZ <sub>2</sub>		6202KZ <sub>2</sub>	
80	6204KZ <sub>2</sub>		6204KZ <sub>2</sub>	
90	6205KZ <sub>2</sub>		6205KZ <sub>2</sub>	
100	6206KZ <sub>2</sub>		6206KZ <sub>2</sub>	
112	6206KZ <sub>2</sub>	6206KZ <sub>2</sub>	6206KZ <sub>2</sub>	
132	6208KZ <sub>2</sub>	6208KZ <sub>2</sub>	6208KZ <sub>2</sub>	
160	6209KZ <sub>2</sub>	6308	6209KZ <sub>2</sub>	
180	6211-ZV <sub>2</sub>	6311-ZV <sub>2</sub>	6211-ZV <sub>2</sub>	
200	6212-ZV <sub>2</sub>	6312-ZV <sub>2</sub>	6212-ZV <sub>2</sub>	
225	6312-ZV <sub>2</sub>	6313-ZV <sub>2</sub>	6312-ZV <sub>2</sub>	
250	6313-ZV <sub>2</sub>	6314-ZV <sub>2</sub>	6313-ZV <sub>2</sub>	
280	6314-ZV <sub>2</sub>	6317-ZV <sub>2</sub>	6314-ZV <sub>2</sub>	
315	6317-ZV <sub>2</sub> ball	NU319-ZV <sub>2</sub> roll	6317-ZV <sub>2</sub> ball	6319-ZV <sub>2</sub> ball
355	6319-ZV <sub>2</sub> ball	NU322-ZV <sub>2</sub> roll	6319-ZV <sub>2</sub> ball	6322-ZV <sub>2</sub> ball

### Scatola morsettiera - Terminal Boxes

Table 3A

Tipo Frame No.	Diametro filettatura pressacavo mm Dia. of the pipe thread mm	Diametro foro pressacavo mm Dia. of out let hole mm
	SP2	SP2
H63~90	M24 x 1.5-6g	1 x 11
H100	M24 x 1.5-6g	1 x 11
H112~132	M30 x 2-6g	2 x 15
H160~180	M36 x 2-6g	2 x 18
H200~225	M48 x 2-6g	2 x 36
H250~280	M64 x 2-6g	2 x 51
H315	M64 x 2-6g	2 x 51
H355	M72 x 2-6g	2 x 52

## Scatola morsettiera - Terminal Boxes

Table 3B

Frame No.	Terminal bolt	Dia. of out jet hole
H80~112	M5	14, 20, 26
H132~180	M6	14, 20, 26, 31, 35
H200~225	M8	20, 26, 32, 37, 42
H250~280	M10	25, 31, 36, 45, 50
H315	M16	25, 31, 36, 45, 50

## Vibrazione - Vibration

At no load the virtual values of the vibration velocity (i.e. the limits of vibration severity) of motors should not exceed the values specified in table 4. Class R. is available on request.

Table 4

Tipo Frame No.	≤132		>132~225		>225~355	
Velocità Synchronous speed r/min	600~1800	>1800~3600	600~1800	>1800~3600	600~1800	>1800~3600
Classe di vibrazione Vibration Class	Effective Value of Vibration speed mm/s					
N	1.8		2.8		3.5	
R	0.71	1.12	1.12	1.80	1.80	2.80
S	0.45	0.71	0.71	1.12	1.12	1.80



## SERIES THREE-PHASE MULTISPEED INDUCTION MOTORS (Motori trifase 2 velocità type 80-280)

Table 5

Tipo Frame No.	Power (KW) / Potenza				
	4P / 2P	6P / 4P	8P / 4P	8P / 6P	12P / 6P
80M1	0.45/0.55	—	—	—	—
80M2	0.55/0.75				
90S	0.85/1.1	0.65/0.85	0.45/0.75	0.35/0.45	
90L	1.3/1.8	0.85/1.1		0.45/0.65	
100L1	2.0/2.4	1.3/1.8	0.85/1.5	0.75/1.1	
100L2	2.4/3.0	1.5/2.2			
112M	3.3/4.0	2.2/2.8	1.5/2.4	1.3/1.8	
132S	4.5/5.5	3/4	2.2/3.3	1.8/2.4	
132M	6.5/8.0	4/5.5	3/4.5	2.6/3.7	
160M	9/11	6.5/8	5/7.5	4.5/6	
160L	11/14	9/11	7/11	6/8	3.7/7
180M	15/18.5	11/14	—	7.5/10	—
180L	18.5/22	13/16	11/17	9/12	5.5/10
200L1	26/30	18.5/22	14/22	12/17	7.5/13
200L2			17/26	15/20	9/15
225S	32/37	22/28	—	—	—
225M	37/45	26/32	24/34		12/20
250M	45/52	32/42	30/42		15/24
280S	60/72	42/55	40/55		20/30
280M	72/82	55/67	47/67		24/37



## SERIES THREE-PHASE ASYNCHRONOUS MOTORS (Type 160 - Type 355)

### Dati tecnici - Technical data

Table 6

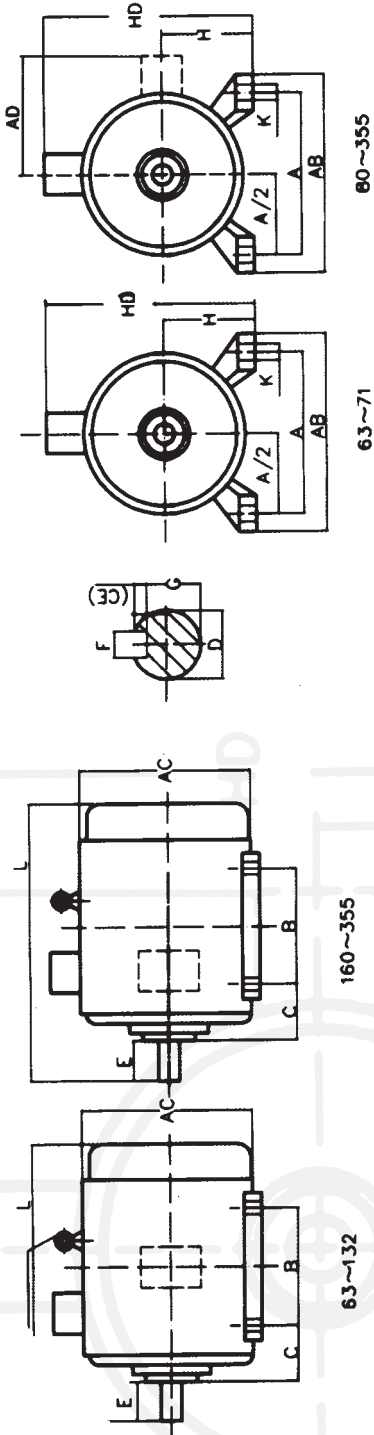
Type	Rated output KW	At full load				Locked current Rated current	Locked torque Rated torque	Max torque Rated torque	Net weight Kg	Noise level db (A)	
		Speed r/min	Current A	Eff %	Power factor cos φ					no load	load
<b>2 Poli Synchronous Speed 3000r / min 50Hz</b>											
160M1	11	2930	21.3	88.4	0.89	7.5	2.2	2.3	117	86	88
160M2	15		28.7	89.4					125		
160L	18.5		34.6	90.4					147		
180M	22	2940	40.8	91.0	0.90	7.5	2.2	2.3	180	89	91
200L1	30		55.3	91.6					240		
200L2	37	2950	67.6	92.4	0.90	7.5	2.2	2.3	255	92	94
225M	45		82.0	92.7					309		
250M	55		99.9	93.0					403		
280S	75	2970	135.6	93.4	0.91	7.5	2.2	2.3	544	93	95
280M	90		159.6	94.2					620		
315S	110	2980	194.6	94.4	0.91	7.1	1.8	2.2	980	96	98
315M	132		232.1	95.0					1080		
315L1	160		278.2	95.0					1160		
315L2	200		347.0	95.2					1190		
355M	250		431.5	95.7					1760		
355L	315		541.5	96.1					1850		
<b>4 Poli Synchronous Speed 1500r / min 50Hz</b>											
160M	11	1460	22.5	88.4	0.84	7	2.2	2.3	123	75	80
160L	15		30.0	89.4					144		
180M	18.5		35.9	91.0					182		
180L	22	1470	42.6	91.3	0.86	7	2.2	2.3	190	76	80
200L	30		57.4	92.4					270		
225S	37	1480	69.6	92.9	0.87	7	2.2	2.3	284	81	85
225M	45		84.3	93.3					320		
250M	55		103.0	93.3					427		
280S	75	1490	139.1	94.2	0.88	7	2.1	2.2	562	86	89
280M	90		166.2	94.6					667		
315S	110	1490	200.0	95.0	0.88	7	2.1	2.2	1000	93	96
315M	132		239.7	95.1					1100		
315L1	160		286.7	95.3					1160		
315L2	200		358.0	95.4					1270		
355M	250		440.7	95.8					1700		
355L	315		554.6	95.9					1850		

Type	Rated output KW	At full load				Locked current Rated current	Locked torque Rated torque	Max torque Rated torque	Net weight Kg	Noise level db (A)	
		Speed r/min	Current A	Eff %	Power factor cos φ					no load	load
<b>6 Poli Synchronous Speed 1000r / min 50Hz</b>											
160M	7.5	970	17.1	86.3	0.77	6.50	2.00	2.10	119	73	80
160L	11		24.4	87.8					147		
180L	15		31.5	89.2					195		
200L1	18.5	980	38.4	90.3	0.81	6.50	2.10	2.10	220	76	82
200L2	22		44.5	90.4					250		
225M	30	990	59.1	91.8	0.84	6.50	2.00	2.00	292	80	85
250M	37		70.8	92.3					408		
280S	45		85.7	92.8					536		
280M	55	990	104.3	93.2	0.86	6.50	2.00	2.00	595	85	90
315S	75		141.3	93.8					990		
315M	90		168.8	94.2					1080		
315L1	110		206.1	94.3					1150		
315L2	132		243.9	94.5					1210		
355M1	160		290.8	95.0					1600		
355M2	200	363.1	95.1	1700							
355L	250	452.9	95.3	1800							
<b>8 Poli Synchronous Speed 750r / min 50Hz</b>											
160M1	4	720	10.2	81.2	0.73	6.00	1.90	2.00	118	68	76
160M2	5.5		13.6	83.3					119		
160L	7.5		17.7	85.9					145		
180L	11	730	25.1	87.8	0.76	6.00	1.90	2.00	184	70	78
200L	15		34.0	88.3					266		
225S	18.5	740	40.9	90.4	0.78	6.00	1.90	2.00	292	73	80
225M	22		47.1	91.0					405		
250M	30		63.2	91.3					520		
280S	37	740	77.5	91.8	0.79	6.00	1.80	2.00	592	76	83
280M	45		93.7	92.4					592		
315S	55		110.6	93.3					1000		
315M	75		150.8	93.3					1100		
315L1	90		177.3	94.1					1160		
315L2	110		216.0	94.4					1230		
355M1	132	259.7	94.2	1600							
355M2	160	313.8	94.5	1700							
355L	200	386.3	94.8	1800							

10 poli a richiesta

Table 7

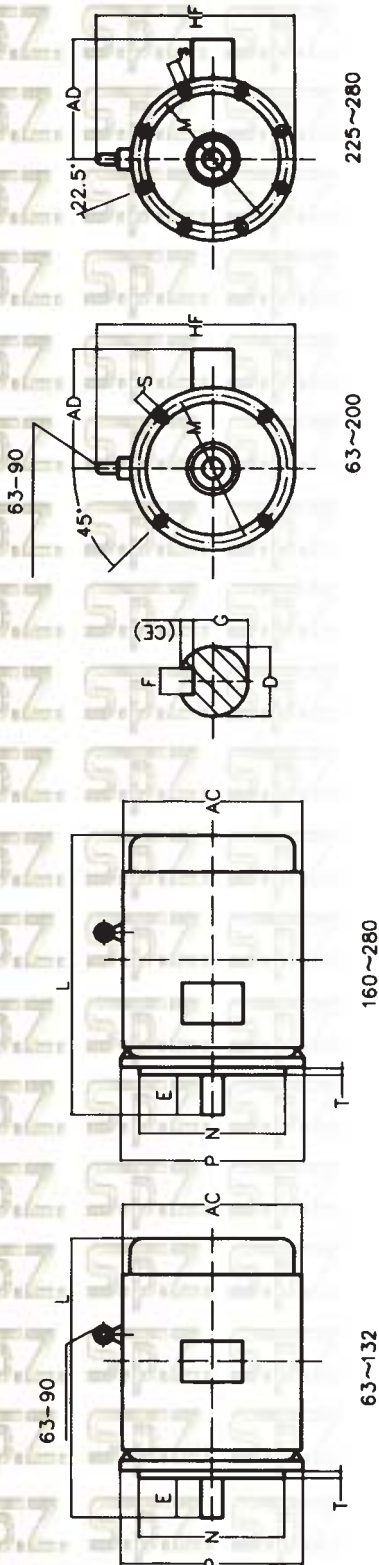
Dimensioni di montaggio B3  
Mounting Dimensions B3



Frame No.	Poles	Mounting Dimensions & Tolerance													Frame Dimensions				
		A	A/2	B	C	D	E	F	G <sup>(1)</sup>	H	K <sup>(2)</sup>	AB	AC	AD	HD	L			
160M		254	127	210	108	42	+0.018	12	37	160	0	320	330	255	420	615			
160L		279	139.5	241	121	48	+0.002	14	42.5	180	-0.5	355	380	280	455	670			
180L	2, 4, 6, 8	318	159	305	133	55	0	16	49	200		395	420	305	505	740			
200L	4, 8	356	178	349	149	60	±0.500	18	53	225		435	470	335	560	815			
225S	2	406	203	311	168	65	±0.430	16	53	250		490	510	370	615	845			
250M	4, 6, 8	457	228.5	368	190	75		20	58	280		550	580	410	680	985			
280S	4, 6, 8	508	254	419	216	80	±4.0	22	67.5	315		635	645	530	845	1035			
280M	2	508	254	419	216	80		20	67.5	315		635	645	530	845	1035			
315S	4, 6, 8, 10	560	280	457	236	85	+0.030	20	67.5	315		730	710	655	1010	1160			
315M	2	610	305	508	254	100	+0.011	25	86	355		730	710	655	1010	1270			
315L	4, 6, 8, 10	610	305	508	254	100		25	86	355		730	710	655	1010	1300			
355M	4, 6, 8, 10	610	305	508	254	100		25	86	355		730	710	655	1010	1500			
355L	2	610	305	508	254	100		25	86	355		730	710	655	1010	1530			

Table 8

Dimensioni di montaggio B5  
Mounting Dimensions B5



Frame No.	Poles	Mounting Dimensions & Tolerance											Frame Dimensions			
		D	E	F	G <sup>1)</sup>	M	N	P <sup>3)</sup>	R <sup>4)</sup>	S	T	Holes No.	AC	AD	HF	L
160M	2, 4, 6, 8	42	110 ±0.430	12	37	300	+0.016	350	0	±3.0	5	4	330	255	385	615
160L		48			42.5		-0.013									670
180M		55	16	49	350	±0.016	400	740								
180L		60	18	53	400	±0.018	450	770								
200L	4, 8	60	140 ±0.500	0	49	400	±0.016	±4.0	19	±0.320	8	470	335	535	815	
225S		55	110 ±0.430	16	49	400	±0.018									450
225M	2	60	140 ±0.500	18	53	400	±0.018	±4.0	19	±0.320	8	510	370	595	910	
250M	4, 6, 8	60		16	53	400	±0.018									450
250M	2	65	140 ±0.500	18	58	500	±0.020	±4.0	19	±0.320	8	580	410	650	985	
280S	4, 6, 8	75		20	67.5	500	±0.020									550
280M	4, 6, 8	65	140 ±0.500	18	58	500	±0.020	±4.0	19	±0.320	8	580	410	650	985	
280M	4, 6, 8	75		20	67.5	500	±0.020									550



## Dimensioni di montaggio V1

### Mounting Dimensions V1

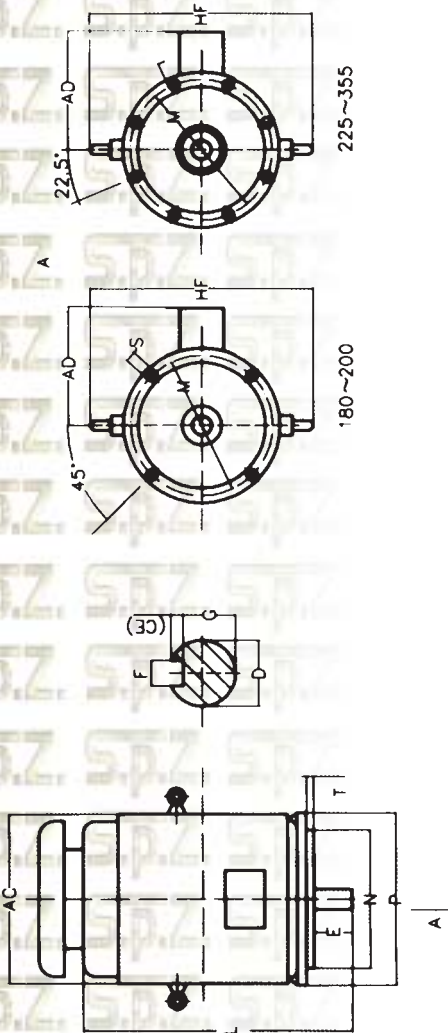


Table 10

Frame No.	Poles	Mounting Dimensions & Tolerance										Frame Dimensions								
		D	E	F	G <sup>1)</sup>	M	N	P <sup>3)</sup>	R <sup>4)</sup>	S	T	Holes No.	AC	AD	HF	L				
180M	2, 4, 6, 8	48	±0.018	110	±0.430	14	42.5	300	250	±0.015	350	±3.0	0	19	5	4	380	280	500	760
190L	2, 4, 6, 8	55	±0.022	110	±0.430	16	49	350	300	±0.016	400	±3.0	0	19	5	4	420	305	550	810
200L	4, 6, 8	60	±0.022	110	±0.430	16	53	400	350	±0.018	450	±3.0	0	19	5	4	470	335	610	910
225S	4, 6, 8	55	±0.022	110	±0.430	16	53	400	350	±0.018	450	±3.0	0	19	5	4	470	335	610	910
250M	4, 6, 8	60	±0.022	110	±0.430	16	53	400	350	±0.018	450	±3.0	0	19	5	4	470	335	610	910
250M	4, 6, 8	65	±0.022	110	±0.430	16	58	450	400	±0.018	500	±3.0	0	19	5	4	510	370	650	1015
280S	4, 6, 8	75	±0.022	140	±0.500	20	67.5	500	450	±0.020	550	±3.0	0	19	5	4	580	410	720	1110
280M	2	65	±0.022	140	±0.500	20	67.5	500	450	±0.020	550	±3.0	0	19	5	4	580	410	720	1110
280M	4, 6, 8	75	±0.022	140	±0.500	20	67.5	500	450	±0.020	550	±3.0	0	19	5	4	580	410	720	1110
315S	2	65	±0.030	170	±0.500	22	71	600	550	±0.022	660	±4.0	0	24	6	8	645	530	900	1280
315S	4, 6, 8, 10	80	±0.030	170	±0.500	22	71	600	550	±0.022	660	±4.0	0	24	6	8	645	530	900	1280
315M	2	65	±0.030	170	±0.500	22	71	600	550	±0.022	660	±4.0	0	24	6	8	645	530	900	1280
315M	4, 6, 8, 10	80	±0.030	170	±0.500	22	71	600	550	±0.022	660	±4.0	0	24	6	8	645	530	900	1280
315L	2	65	±0.030	170	±0.500	22	71	600	550	±0.022	660	±4.0	0	24	6	8	645	530	900	1280
315L	4, 6, 8, 10	80	±0.030	170	±0.500	22	71	600	550	±0.022	660	±4.0	0	24	6	8	645	530	900	1280
355	2	75	±0.035	170	±0.500	25	86	740	680	±0.025	800	±4.0	0	24	6	8	710	655	1010	1640
355	4, 6, 8, 10	100	±0.035	170	±0.500	25	86	740	680	±0.025	800	±4.0	0	24	6	8	710	655	1010	1640
355L	2	75	±0.035	170	±0.500	25	86	740	680	±0.025	800	±4.0	0	24	6	8	710	655	1010	1640
355L	4, 6, 8, 10	100	±0.035	170	±0.500	25	86	740	680	±0.025	800	±4.0	0	24	6	8	710	655	1010	1640

#### Legenda note:

- 1) G = D-GE. Il limite di deviazione in GE è  $(+0.10)$  fino alla grandezza 80, per i rimanenti è  $(+0.20)$ .
- 2) Il limite di tolleranza della posizione del foro K dipende dall'asse della prolunga del braccio.
- 3) La dimensione P è il valore limite massimo.
- 4) R è la distanza tra la superficie di accoppiamento della flangia e la spalla della prolunga dell'albero.

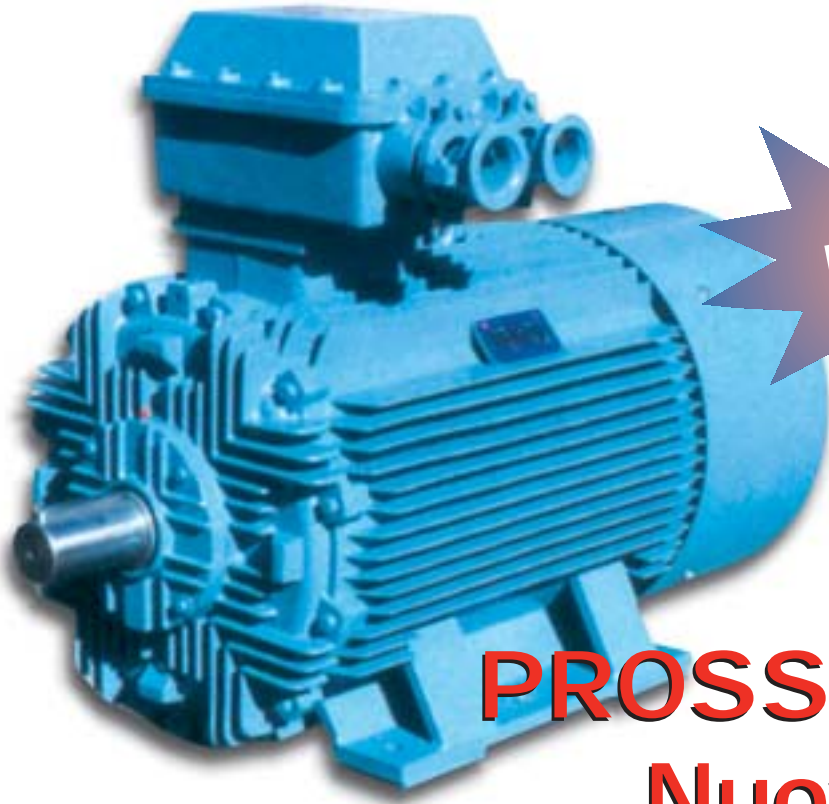
#### The note for:

- 1) G=D-GE. The limit of deviation in GE is  $(+0.10)$  for frame No.up to 80, the rest is  $(+0.20)$ .
- 2) The position tolerance for hole K is based on the axis of shaft extension.
- 3) Dimension P is the maximum limit value.
- 4) R is the distance from the matching surface of flange to the shoulder of shaft extension.

**S.p.b.2**  
BY SPZ

**MOTORI ANTIDEFAGRANTI Serie SP B2**  
Series three-phase explosion-proof induction motors

• Grandezza • Frame size • La taille de la trame • طول الوصلة	H80-355
• Potenza • Power • Puissance • القوة	0.55-315KW
• Giri/minuto • Synchronous speed • Vitesse synchrone • حركة تزامنية	3000 ; 1500 ; 1000 ; 750RPM
• Volt • Voltage • Voltage • الضغط الكهربائي	230 / 400V ; 400 / 690V
• Frequenza • Frequency • Fréquence • التذبذب	50Hz ; 60Hz
• Grado di protezione • Protection class • Classe de protection • درجة الوقاية	IP44 ; IP54 ; IP55
• Classe di protezione • Insulation class • Classe d'isolement • درجة العزل	F
• Temperatura ambiente • Ambient temperature • Température ambiante • درجة حرارة المحيط	-15~+40°C
• Altitudine dal livello del mare • Altitude above sea level • Altitude au dessus de niveau de la mer • الإرتفاع على مستوى سطح البحر	< 1000m

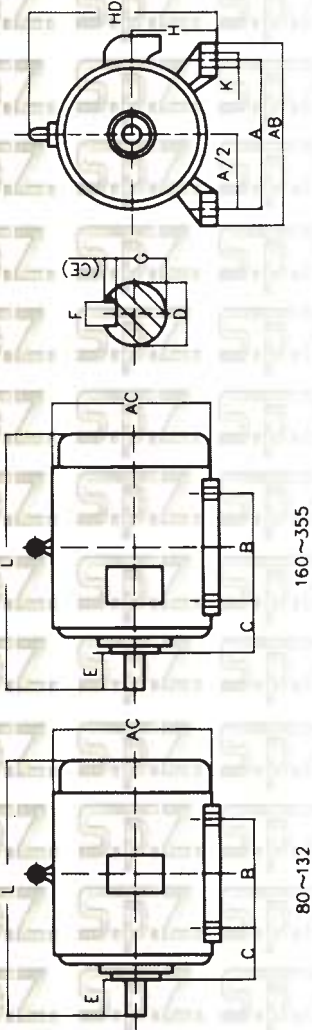


**PROSSIMAMENTE...**  
**Nuovi motori**  
**linea S.p.b.2 by S.p.Z.**

Table 11

### Dimensioni di montaggio B3

### Mounting Dimensions B3



Frame No.	Poles	Mounting Dimensions & Tolerance											Frame Dimensions							
		A	A/2	B	C	D	E	F	G <sup>(1)</sup>	H	K <sup>(2)</sup>	L	AB	AC	AD	HD	L			
80M	2, 4	125	62.5	100	50	19	±0.009	40	±0.310	6	0	15.5	0	80	10	165	175	150	175	290
90S		140	70	100	56	24	-0.004	50		8	0	20	-0.10	90		180	195	160	195	315
90L		125		125										100		205	215	180	245	340
100L	2, 4, 6	160	±0.50	140	63	28		60	±0.370	8	0	24		112		245	240	190	265	400
112M		190	95	140	70									112						
132S		216	108	140	89	38		80		10	0	33		132		280	275	210	315	475
132M		178		178																515
160M	2, 4, 6, 8	254	127	210	108	42	+0.018	110	±0.430	12	0	37	0	160	0	330	335	265	385	605
180M		279	139.5	211	121	48	+0.002	140	±0.500	14	0	42.5	-0.10	180	15	355	380	285	430	650
180L		279		279				140	±0.500	16	0	49		200		395	420	315	475	710
200L	4, 8	318	159	305	133	55		110	±0.430	16	0	53		225	19	435	475	345	530	820
225S	2	356	178	286	149	55		110	±0.430	16	0	49		250		490	515	385	575	845
225M	4, 6, 8	311		311		60		180		18	0	53								930
250M	2	406	203	349	168	65		140		20	0	58		280	24	550	580	410	640	1000
280S	4, 6, 8	368		368		75		140		20	0	67.5	0							1050
280M	2	457	228.5	419	190	65		140		18	0	58	0							
	4, 6, 8					75				20	0	67.5	-0.20							
315S	2			406		65			±0.500	18	0	58								
	4, 6, 8, 10					80		170		22	0	71		315	28					1240
315M	2	508	254	457	216	65		140		18	0	58								1270
	4, 6, 8, 10					80		170		18	0	58		315		744	645	576	865	1310
315L	2			508		65		140		18	0	58								1340
	4, 6, 8, 10					80		170		22	0	71		355						1310
355M	2			560		75		140		22	0	71								1340
	4, 6, 8, 10					100		140	±0.50	20	0	67.5								1540
355L	2	610	305	630	254	75		140	±0.50	20	0	67.5				740	750	680	1035	1570
	4, 6, 8, 10					100		170	±0.57	25	0	86								1540
						100		170	±0.57	25	0	86								1570

**Dimensioni di montaggio B5**  
**Mounting Dimensions B5**

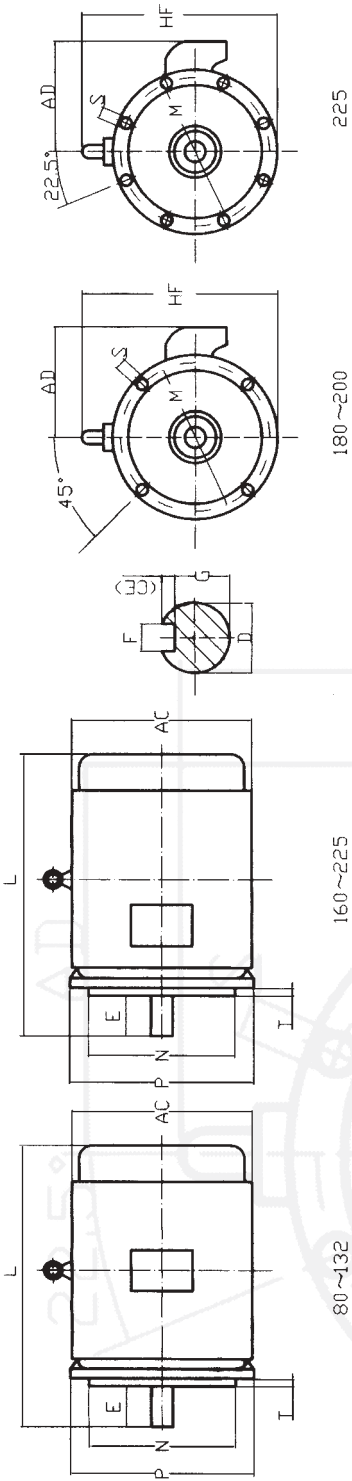


Table 12

Frame No.	Poles	Mounting Dimensions & Tolerance													Frame Dimensions			
		D	E	F	G <sup>1)</sup>	M	N	P <sup>3)</sup>	R <sup>4)</sup>	S	T	Holes No.	AC	AD	HF	L		
80M	2,4	19	40	6	15.5 <sup>0</sup> -0.030	165	130	200	±1.5	12	3.5	4	175	150	185	290		
90S	2,4,6	24	±0.310	8	20	250	±0.014 -0.011	±0.430	15	4	5		195	160	195	315		
90L		28	±0.370	10	24								300	±2.0	19	0	420	315
100L	2,4,6,8	38	±0.430	12	33	350	±0.016 -0.013	0	±3.0	19	5		215	180	245	380		
112M		42	±0.500	14	37 <sup>0</sup> -0.20							300	230	±2.0	350	0	475	210
132S	2,4,6,8	48	±0.500	16	42.5	400	±0.016 -0.013	0	±4.0	19	5	240	190	265	400			
132M		55	±0.500	18	49							400	250	±2.0	400	0	515	210
160M	2,4,6,8	55	±0.500	18	49	450	±0.016 -0.013	0	±4.0	19	5	275	210	315	475			
160L		60	±0.500	18	53							450	230	±2.0	450	0	515	210
180M	2,4,6,8	60	±0.500	18	53	450	±0.016 -0.013	0	±4.0	19	5	335	265	385	605			
180L		60	±0.500	18	53							450	230	±2.0	450	0	515	210
200L	4,8	60	±0.500	18	53	450	±0.016 -0.013	0	±4.0	19	5	380	285	430	670			
225S		60	±0.500	18	53							450	230	±2.0	450	0	515	210
225M	2	55	±0.430	16	49	450	±0.016 -0.013	0	±4.0	19	5	420	315	480	775			
225M		60	±0.500	18	53							450	230	±2.0	450	0	515	210
225M	4,6,8	55	±0.430	16	49	450	±0.016 -0.013	0	±4.0	19	5	475	345	535	815			
225M		60	±0.500	18	53							450	230	±2.0	450	0	515	210

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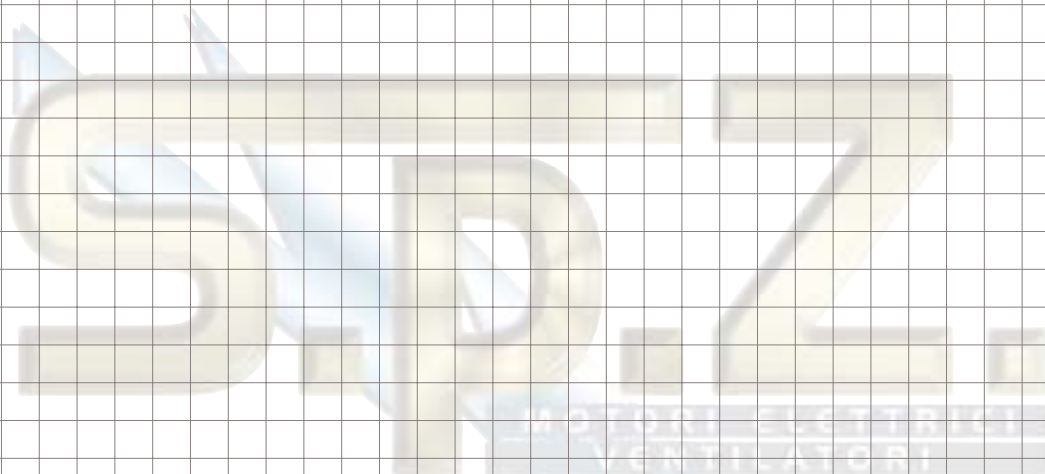
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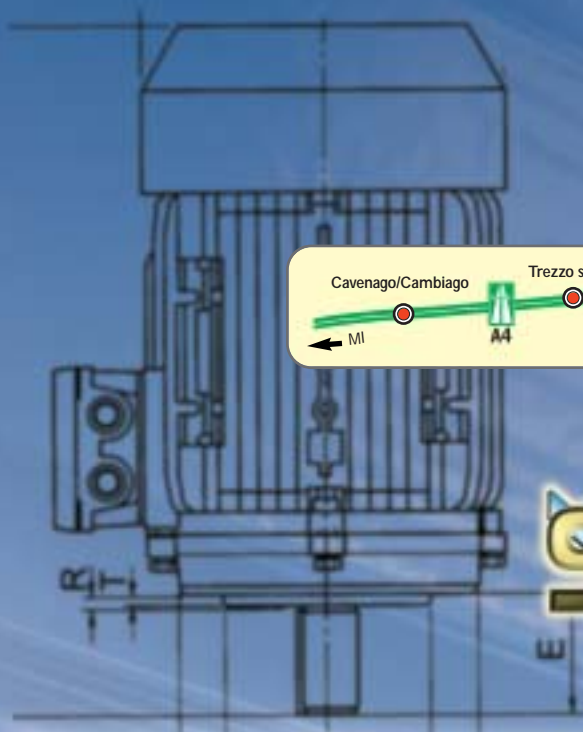
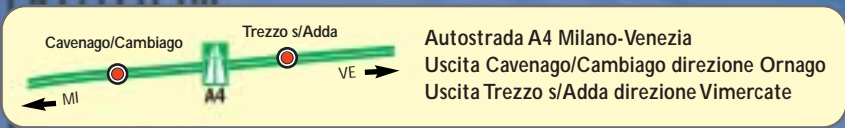
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