

Alternatori 2 e 4 poli
per gruppi elettrogeni industriali

*2 and 4 pole alternators
for industrial gen-sets*



 **sincro**[®]



MORE CHOICE ON SINCRO INDUSTRIAL BRUSHLESS ALTERNATORS

SINCRO RANGE BECOMES WIDER.



SK series up to 2,600 kVA in 1,570 mm

2 NEW MODELS ON CATALOGUE

Sincro's offering for 4-pole industrial Brushless/AVR alternators becomes wider, thanks to the introduction of 2 new models in our catalogues:

- **SK225 MR** 85kVA/50Hz | 102kVA/60Hz
 - **SK225 MN** 100kVA/50Hz | 120kVA/60Hz
- available in SAE2, SAE3, IM B34 standard executions and other customized versions on request.

This range implementation is intended to give our customers an even greater choice when looking for industrial alternators, by fully covering their requests.

ONE OF THE MOST COMPLETE RANGES ON THE MARKET

Today, Sincro's offering of industrial Brushless/AVR alternators includes **over 180 models from 6,5 to 2,600 kVA** in 4 and 2 pole version, featured by **compactness**, proven **reliability** of performances, **durability**.

Starting from LV low-voltage IP23 standard models, we extend to marine, CSA/UL, air-to-air cooled IP55 executions up to MV medium-voltage executions .

One of the most complete ranges available within power generation industry.

PROUDLY MADE IN EUROPE

Also these new models are **Made in Europe** in Croatia in Sincro d.o.o. factory located in Rijeka, our productive plant specialized in the manufacturing of the biggest Sincro 4-pole industrial alternators (SK225-250, SK315-355, SK400-450, SK500).

We have **Made in Italy** production on our SK160, FB, HB, IB series, completely manufactured in our plant in Cereda di Cornedo, Vicenza.

COMPACTNESS IS A MUST

One key feature of our alternators is **COMPACTNESS**, for shorter-dimensioned gen-sets saving space, production materials, storage, transportation costs and so money.

In particular, SK160 models are very appreciated for their super-compactness by supplying up to 40kVA/50Hz in 51 cm length!



SK BRUSHLESS ALTERNATORS, SIMPLY SMART

Alternatori sincroni in bassa tensione AC | IP23

Synchronous low voltage AC alternators | IP23

Le potenze indicate si riferiscono alle seguenti condizioni di impiego:

- > altitudine non superiore a 1000 mt s.l.m
- > p.f. 0,8
- > carico equilibrato non distorcente

Given powers refer to the following conditions:

- > altitude below 1000 m a.s.l.
- > p.f. 0,8
- > symmetrical non deforming load

A RICHIESTA | ON REQUEST

- AVR digitale su tutti i modelli
Digital AVR on all models
- Alternatori per applicazioni MARINE
Alternators for MARINE applications
- Versioni MEDIUM VOLTAGE e TEAAC
MEDIUM VOLTAGE and TEAAC versions
- Esecuzioni CSA/UL
CSA/UL executions
- **SK225 NEW RELEASE 2018 AVAILABLE**

**4
POLES**
1500/1800 RPM

THREE PHASE BRUSHLESS/AVR

model	S1 40°C • H class		η		leads ⁽¹⁾	AVR	AVR power supply
	kVA 400V 50Hz	kVA 480V 60Hz	p.f. 0,8 50HZ	p.f. 0,8 60HZ			
FB4 SA	6,5	7,8	83	83,2	6	analogic	from auxiliary winding
FB4 SB	8	9,6	83,5	83,4	6	analogic	
FB4 MA	10	12	83,8	83,8	6	analogic	
FB4 MB	12	14,4	84,5	84,7	6	analogic	
HB4 SA	15	18	84	84,8	12	analogic	
HB4 SB	17,5	21	84,4	85,2	12	analogic	
HB4 CA	22	26,4	84,8	85,6	12	analogic	
IB4 SA	25	30	84,7	88	12	analogic	
IB4 SB	30	36	87,6	88,2	12	analogic	
IB4 MA	36	43	87,8	88,2	12	analogic	
IB4 MB	45	54	87,5	88,2	12	analogic	
IB4 LA	50	60	90,7	91,2	12	analogic	
SK 225 SM	65	78	89,4	90	6	analogic	from auxiliary winding PMG on request
SK 225 MS	80	96	90,1	90,7	6	analogic	
SK 225 MR <i>new</i>	85	102	90,5	91,2	6	analogic	
SK 225 MM	93	112	90,9	91,5	6	analogic	
SK 225 MN <i>new</i>	100	120	91,3	91,9	6	analogic	
SK 225 ML	110	132	91,3	91,9	6	analogic	
SK 225 LS	125	150	91,7	92,3	6	analogic	
SK 225 LM	140	168	91,7	92,4	6	analogic	
SK 250 SL	160	192	91,4	91,5	6	analogic	
SK 250 MS	180	216	91,8	91,9	6	analogic	
SK 250 MM	200	240	92,1	92,3	6	analogic	
SK 250 ML	230	275	92,4	92,6	6	analogic	
SK 250 LS	250	300	92,6	92,7	6	analogic	
SK 250 LM	275	330	92,7	92,8	6	analogic	
SK 250 LL	300	360	92,9	93	6	analogic	from PMG
SK 315 SS	350	420	92,9	93,7	6	digital	
SK 315 SM	400	480	93,4	94	6	digital	
SK 315 SL	450	540	93,8	94,4	6	digital	
SK 355 MS	500	600	94,2	94,7	6	digital	
SK 355 MM	570	684	94,3	94,8	6	digital	
SK 355 LS	600	720	94,5	95	6	digital	
SK 355 LM	650	780	94,6	95,1	6	digital	
SK 355 WL	720	860	94,8	95,2	6	digital	
SK 400 SD	800	960	94,7	95,3	6	digital	
SK 400 SE	900	1080	94,9	95,5	6	digital	
SK 400 SF	1000	1200	95,1	95,6	6	digital	
SK 400 SG	1100	1320	95,2	95,7	6	digital	
SK 450 ME	1300	1560	95,6	96,1	6	digital	
SK 450 MF	1500	1800	95,8	96,3	6	digital	
SK 450 MG	1600	1920	95,9	96,4	6	digital	
SK 450 LE	1800	2160	96,1	96,6	6	digital	
SK 500 MA	1875	2250	95,5	96,1	4	digital	
SK 500 MB	2000	2400	96	96,6	4	digital	
SK 500 MC	2300	2760	96,2	96,7	4	digital	
SK 500 MD	2600	3120	96,4	96,9	4	digital	



THREE PHASE BRUSHLESS/AVR

**2
POLES**
3000/3600 RPM

model	S1 40°C • H class		η		leads ⁽¹⁾	AVR	AVR power supply
	kVA 400V 50Hz	kVA 480V 60Hz	p.f. 0,8 50HZ	p.f. 0,8 60HZ			
FB2 SA	12,5	15	84,8	84,5	6	analogic	from auxiliary winding
FB2 SB	14	16,8	85,4	84,9	6	analogic	
FB2 MA	16,5	19,8	86,6	86,1	6	analogic	
FB2 MB	19	22,8	87,1	86,6	6	analogic	
IB2 SA	28	34	84,2	84,1	6	analogic	
IB2 SB	33	40	85,3	85,4	6	analogic	
IB2 MA	44	55	88,1	88,1	6	analogic	
IB2 MB	55	67	89,5	89,8	6	analogic	
IB2 LA	66	80	90,4	90,9	6	analogic	



Alternatori sincroni in bassa tensione AC | IP23 | SUPERCOMPATTI

Synchronous low voltage AC alternators | IP23 | SUPERCOMPACT

THREE PHASE

BRUSHLESS/AVR

model	S1 40°C • H class		η		leads ⁽¹⁾	AVR	AVR power supply
	kVA 400V 50Hz	kVA 480V 60Hz	p.f. 0,8 50HZ	p.f. 0,8 60HZ			
SK 160 SA	8,5	11	78,1	79,3	12	analogic	from auxiliary winding
SK 160 CA	11	14	80,3	81,8	12	analogic	
SK 160 CB	14	17,5	83,3	84,3	12	analogic	
SK 160 MA	17,5	22	84,5	85,5	12	analogic	
SK 160 MB	20	25	86	87,2	12	analogic	
SK 160 LA	25	30	87,4	88	12	analogic	
SK 160 LB	30	36	87,6	88,2	12	analogic	
SK 160 WA	36	43	87,8	88,4	12	analogic	
SK 160 WB	40	49	87,9	88,6	12	analogic	

4 POLES
1500/1800 RPM

THREE PHASE

BRUSHLESS/AVR

model	S1 40°C • H class		η		leads ⁽¹⁾	AVR	AVR power supply
	kVA 400V 50Hz	kVA 480V 60Hz	p.f. 0,8 50HZ	p.f. 0,8 60HZ			
SK 160 CA2	15	18	82,5	82,5	6	analogic	from auxiliary winding
SK 160 MA2	20	25	83,7	83,6	6	analogic	
SK 160 LA2	28	34	84,2	84,1	6	analogic	
SK 160 LB2	33	40	85,3	85,4	6	analogic	
SK 160 WA2	44	55	88,1	88,1	6	analogic	

2 POLES
3000/3600 RPM

SINGLE PHASE

BRUSHLESS/AVR

model	S1 40°C • H class		η		leads ⁽¹⁾	AVR	AVR power supply
	kVA 230V 50Hz	kVA 240V 60Hz	p.f. 1 50HZ	p.f. 1 60HZ			
SK 160 SZ 1	7	9	82,6	83,6	4	analogic	from auxiliary winding
SK 160 SA 1	9	12	84	85	4	analogic	
SK 160 CA 1	12	14,5	86	86,8	4	analogic	
SK 160 CB 1	14	17,5	87,1	87,6	4	analogic	
SK 160 MA 1	18	22	88,8	89,5	4	analogic	
SK 160 LA 1	22	27	89,8	90,6	4	analogic	

4 POLES
1500/1800 RPM

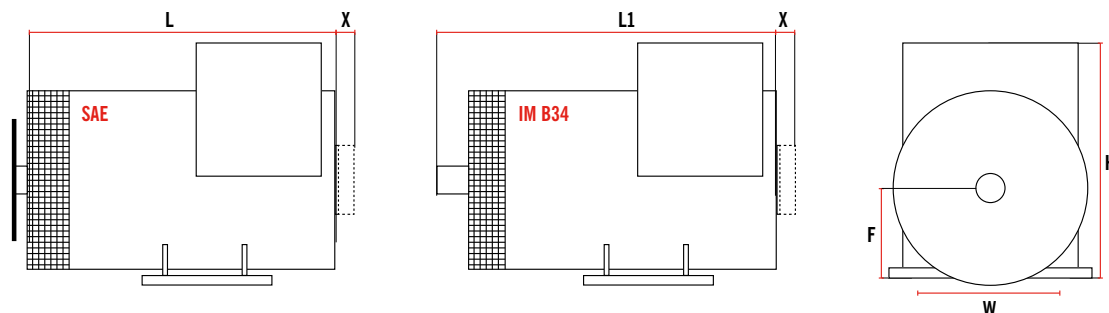


⁽¹⁾ altre configurazioni su richiesta • other configurations on request

ACCOPPIAMENTI STANDARD PER SAE - STANDARD COUPLINGS FOR SAE

	series	FB2 FB4			HB4			IB2 IB4		SK160			SK225				SK250			SK315 SK355			SK400 SK450			SK500	
	flange	5	4	3	5	4	3	4	3	5	4	3	4	3	2	1	3	2	1	1	1/2	0	1/2	0	00	00	
disk joint	6,5	•	•		•	•		•	•																		
	7,5	•	•		•	•		•	•																		
	8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	10		•	•		•	•		•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	11,5			•			•		•		•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	14															•					•	•	•	•	•	•	•
	18																					•	•	•	•	•	•
	21																								•	•	•

Su richiesta esecuzioni speciali • Special executions available on request

PRINCIPALI DIMENSIONI D'INGOMBRO - MAIN OVERALL DIMENSIONS

4 POLES

model	F mm	L mm	L1 mm	W mm	H mm	mass SAE Kg
FB4 SA	132	450	503	220	330	52
FB4 SB	132	450	503	220	330	58
FB4 MA	132	510	563	220	330	69
FB4 MB	132	510	563	220	330	75
HB4 SA	160	505	563	254	366	87
HB4 SB	160	505	563	254	366	93
HB4 CA	160	545	603	254	366	112
IB4 SA	160	510	568	254	433	119
IB4 SB	160	510	568	254	433	129
IB4 MA	160	570	628	254	433	152
IB4 MB	160	570	628	254	433	164
IB4 LA	160	640	698	254	433	193
SK 225 SM	225	558	673	330	555	215
SK 225 MS	225	693	808	330	555	264
SK 225 MR	225	693	808	330	555	270
SK 225 MM	225	693	808	330	555	280
SK 225 MN	225	693	808	330	555	292
SK 225 ML	225	693	808	330	555	308
SK 225 LS	225	803	918	330	555	350
SK 225 LM	225	803	918	330	555	388
SK 250 SL	250	677	801	405	665	459
SK 250 MS	250	787	911	405	665	507
SK 250 MM	250	787	911	405	665	540
SK 250 ML	250	787	911	405	665	601
SK 250 LS	250	887	1011	405	665	647
SK 250 LM	250	887	1011	405	665	680
SK 250 LL	250	887	1011	405	665	725
SK 315 SS	315	899	1048	590	905	855
SK 315 SM	315	899	1048	590	905	910
SK 315 SL	315	899	1048	590	905	1005
SK 355 MS	355	994	1143	590	945	1090
SK 355 MM	355	994	1143	590	945	1180
SK 355 LS	355	1119	1268	590	945	1290
SK 355 LM	355	1119	1268	590	945	1420
SK 355 WL	355	1224	1373	590	945	1630

model	F mm	L mm	L1 mm	X mm	W mm	H mm	mass SAE Kg
SK 400 SD	400	1136	1396	106	740	1173	1610
SK 400 SE	400	1136	1396	106	740	1173	1700
SK 400 SF	400	1136	1396	106	740	1173	1765
SK 400 SG	400	1136	1396	106	740	1173	1900
SK 450 ME	450	1411	1671	106	740	1223	2230
SK 450 MF	450	1411	1671	106	740	1223	2490
SK 450 MG	450	1411	1671	106	740	1223	2660
SK 450 LE	450	1511	1771	106	740	1223	2940
SK 500 MA	500	1578	1897	155	850	1372	3420
SK 500 MB	500	1578	1897	155	850	1372	3605
SK 500 MC	500	1578	1897	155	850	1372	3885
SK 500 MD	500	1578	1897	155	850	1372	4230

2 POLES

model	F mm	L mm	L1 mm	W mm	H mm	mass SAE Kg
FB2 SA	132	450	503	220	330	76
FB2 SB	132	450	503	220	330	81
FB2 MA	132	510	563	220	330	90
FB2 MB	132	510	563	220	330	98
IB2 SA	160	510	568	254	433	107
IB2 SB	160	510	568	254	433	117
IB2 MA	160	570	628	254	433	139
IB2 MB	160	570	628	254	433	159
IB2 LA	160	640	698	254	433	184

4 POLES | SUPERCOMPACT

model	F mm	L mm	W mm	H mm	mass SAE Kg
SK 160 SA	160	258	295	335	62
SK 160 CA	160	303	295	335	73
SK 160 CB	160	303	295	335	80
SK 160 MA	160	348	295	335	89
SK 160 MB	160	348	295	335	99
SK 160 LA	160	415	295	335	103
SK 160 LB	160	415	295	335	118
SK 160 WA	160	516	254	376	125
SK 160 WB	160	516	254	376	136

2 POLES | SUPERCOMPACT

model	F mm	L mm	W mm	H mm	mass SAE Kg
SK 160 CA2	160	303	295	335	68
SK 160 MA2	160	348	295	335	81
SK 160 LA2	160	440	254	376	97
SK 160 LB2	160	440	254	376	107
SK 160 WA2	160	516	254	376	124

4 POLES | SUPERCOMPACT

model	F mm	L mm	W mm	H mm	mass SAE Kg
SK 160 SZ 1	160	258	295	335	60
SK 160 SA 1	160	258	295	335	63
SK 160 CA 1	160	303	295	335	79
SK 160 CB 1	160	303	295	335	86
SK 160 MA 1	160	348	295	335	104
SK 160 LA 1	160	415	295	335	117

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FOR ENERGY & AUTOMATION



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