

Alternatori 4 poli
per gruppi elettrogeni industriali

*4 pole alternators
for industrial gen-sets*

SK 400 / 450

800 to 1800 kVA / 50 Hz



 **sincro®**

Alternatori sincroni in bassa tensione AC | IP23

Synchronous low voltage AC alternators | IP23



TRIFASE - THREE PHASE

SENZA SPAZZOLE / AVR
BRUSHLESS / AVR

dati elettrici

electric data

Classe d'isolamento - <i>Insulation class</i>	H	Precisione regolazione di tensione - <i>Voltage regulation accuracy**</i>	± 0,25%
Terminali - <i>Leads</i>	6	Compatibilità elettromagnetica - <i>Electromagnetic compatibility</i>	EN 61000-6-2 - EN 61000-6-4
Passo d'avvolgimento - <i>Winding pitch</i>	2 / 3	Corrente di corto circuito - <i>Short circuit current</i>	> 300 % I _n for 10s
Sistema di eccitazione - <i>Excitation system</i>	Brushless + PMG*	Distorsione armonica - <i>Total harmonic content***</i>	< 2%
Tipo di regolatore di tensione - <i>Voltage regulator type</i>	AVR DBL 1 DIGITAL	Protezione basse velocità - <i>Underspeed protection</i>	Vers. Standard - Standard vers.

* PERMANENT MAGNET GENERATOR

** Con carico da 0 a 100%, variazione di velocità da -2% a +5%, cos φ 0,8, carico lineare ed equilibrato - With load from 0 to 100%, speed variation from -2% to +5%, power factor 0,8 linear and balanced load

*** Tra fase e fase, a pieno carico nominale lineare ed equilibrato - Line to line, at full linear and balanced rated load

informazioni tecniche

technical information

- > **Norme di riferimento:**
EN 60034-1, IEC 60034-1, ISO8528-3
- > **Grado di protezione:**
Lo standard è IP23
- > **Cuscinetti:**
I cuscinetti sono dimensionati per un utilizzo pesante
- > **Comportamento transitorio:**
La caduta di tensione transitoria per un'applicazione del carico nominale a cos φ 0,8 è inferiore al 18%
- > **Tropicalizzazione**
Standard
- > **Standards:**
EN 60034-1, IEC 60034-1, ISO8528-3
- > **Protection degree:**
Standard is IP23
- > **Bearings:**
Bearings are dimensioned for heavy duty
- > **Transient features:**
Transient voltage drop for rated step load at 0,8 power factor is less than 18%
- > **Tropicalization**
Standard

potenze e rendimenti

powers and efficiencies

	powers						efficiencies		
	S1 40/105 °C cl. F			S1 40/125 °C cl. H			Stand by 27/163 °C		
50 Hz • 1500 rpm	3 ph	3 ph	3 ph	3 ph	3 ph	3 ph	3 ph	3 ph	3 ph
tensione - <i>voltage</i> Y	380	400	415	380	400	415	380	400	415
tensione - <i>voltage</i> Δ	220	230	240	220	230	240	220	230	240
model	kVA			kVA			kVA		
SK 400 SD	737	737	737	800	800	800	858	858	858
SK 400 SE	829	829	829	900	900	900	966	966	966
SK 400 SF	921	921	921	1000	1000	1000	1073	1073	1073
SK 400 SG	1013	1013	1013	1100	1100	1100	1180	1180	1180
SK 450 ME	1197	1197	1197	1300	1300	1300	1395	1395	1395
SK 450 MF	1382	1382	1382	1500	1500	1500	1610	1610	1610
SK 450 MG	1474	1474	1474	1600	1600	1600	1717	1717	1717
SK 450 LE	1658	1658	1658	1800	1800	1800	1932	1932	1932
60 Hz • 1800 rpm	3 ph	3 ph	3 ph	3 ph	3 ph	3 ph	3 ph	3 ph	3 ph
tensione - <i>voltage</i> Y	416	440	480	416	440	480	416	440	480
tensione - <i>voltage</i> Δ	240	254	277	240	254	277	240	254	277
model	kVA			kVA			kVA		
SK 400 SD	827	854	879	902	932	960	984	1017	1047
SK 400 SE	930	961	989	1015	1049	1080	1107	1144	1178
SK 400 SF	1033	1067	1099	1128	1165	1200	1230	1271	1309
SK 400 SG	1136	1174	1209	1241	1282	1320	1353	1398	1439
SK 450 ME	1343	1388	1429	1466	1515	1560	1599	1652	1701
SK 450 MF	1550	1601	1649	1692	1748	1800	1845	1906	1963
SK 450 MG	1653	1708	1753	1805	1864	1920	1968	2033	2094
SK 450 LE	1860	1921	1979	2031	2097	2160	2214	2287	2356

condizioni d'impiego

operating conditions

Le potenze indicate sono riferite alle seguenti condizioni d'impiego:

- > temperatura ambiente 40 °C
- > altitudine non superiore a 1000 m. s.l.m.
- > cos φ 0,8
- > carico equilibrato non distorcente
- > le potenze in stand-by sono riferite a 27 °C di temperatura ambiente e si riferiscono ad alimentazione continua del carico per ogni possibile interruzione di rete; in tali servizi non sono ammessi sovraccarichi.

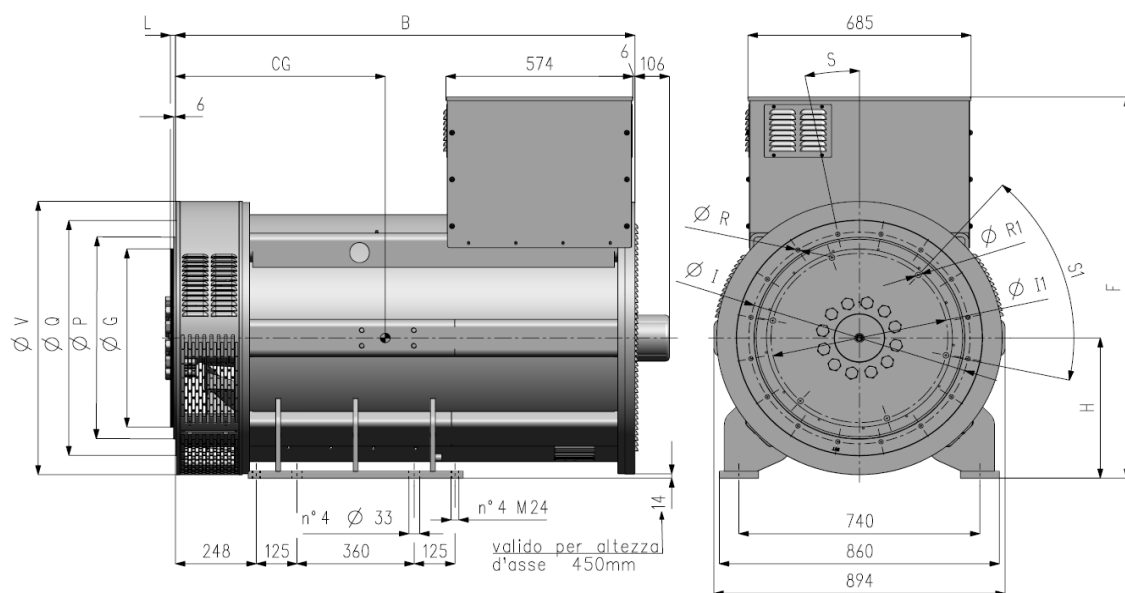
The ratings given are referred to the following conditions:

- > ambient temperature 40 °C
- > altitude below 1000 m. a.s.l.
- > power factor 0,8
- > symmetrical non distorting load
- > stand-by ratings are based on ambient temperature max 27 °C, for continuous supply of loads for any utility power failure; no overloads are allowed.

fattori correttivi

correction factors

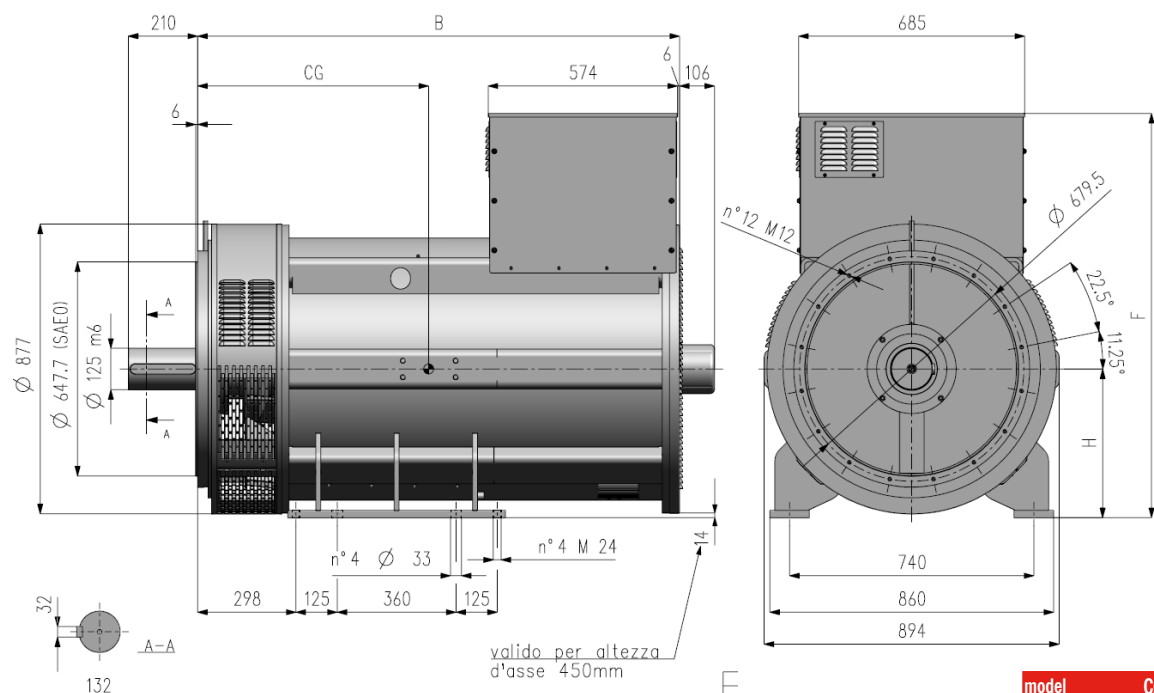
temp. amb.	25 °C	40 °C	45 °C	50 °C	55 °C
amb. temp	1,05	1,00	0,96	0,92	0,88
altitudine	1000m	1500m	2000m	2500m	3000m
altitude	1,00	0,96	0,93	0,90	0,86
cos φ	1,0	0,8	0,7	0,6	0,5
power factor	1,00	1,00	0,93	0,88	0,84



monosupporto SAE
single bearing SAE

giunto a dischi disk joint	flangia SAE-flange SAE			G	I1	L	R1	fori holes	S1
	0,5	0	00						
18	•	•	•	571,5	542,9	15,7	18	6	60°
21	•	•	•	673,1	641,4	0	18	12	30°
P	584,2	647,7	787,4						
Q	664	754	877						
I	619,1	679,5	851						
V	877	877	877						
S	15°	11,25°	11,25°						
R	14	14	14						
fori - holes	12	16	16						

model	Cg (mm)	B (mm)	H (mm)	F (mm)	mass (Kg)
SK 400 SD	493	1136	400	1173	1610
SK 400 SE	513	1136	400	1173	1700
SK 400 SF	523,5	1136	400	1173	1765
SK 400 SG	545,5	1136	400	1173	1900
SK 450 ME	593	1411	450	1223	2230
SK 450 MF	638	1411	450	1223	2490
SK 450 MG	668	1411	450	1223	2660
SK 450 LE	715	1511	450	1223	2940



bisupporto IM B34
double bearing IM B34

model	Cg (mm)	B (mm)	H (mm)	F (mm)	mass (Kg)
SK 400 SD	528	1186	400	1173	1670
SK 400 SE	551	1186	400	1173	1760
SK 400 SF	561	1186	400	1173	1825
SK 400 SG	583,5	1186	400	1173	1960
SK 450 ME	631	1461	450	1223	2300
SK 450 MF	676	1461	450	1223	2560
SK 450 MG	706	1461	450	1223	2730
SK 450 LE	754	1561	450	1223	3010

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Warranty conditions

Soga guarantees the own alternators for a period of 18 months starting from the invoice date or 12 months starting from the first start up, whichever occurs first. We confirm that warranty is directed only to Soga customers to which we respond. Soga does not grant warranty to those who have not directly purchased the product from the factory, in spite of the possession of it.

Within the above mentioned terms, Soga commits itself to supply free of charge those

spare parts that, according to its judgment or to the one of an authorized representative, appear with manufacturing or material defects or, always to its judgment, to directly or through an authorized center carry out the repairing without undertaking transport costs. We anyhow exclude forms of responsibility or obligation for other costs, damages and direct or indirect loss caused by total or partial usage or impossible usage of the products. The repairing or the

substitution will not extend or renew the warranty duration. Warranty will not be granted: whenever break-downs or problems may appear because of lack of experience, usage over the nominal performances, if the product had been modified or should return incomplete, disassembled or with modified nameplate data.

