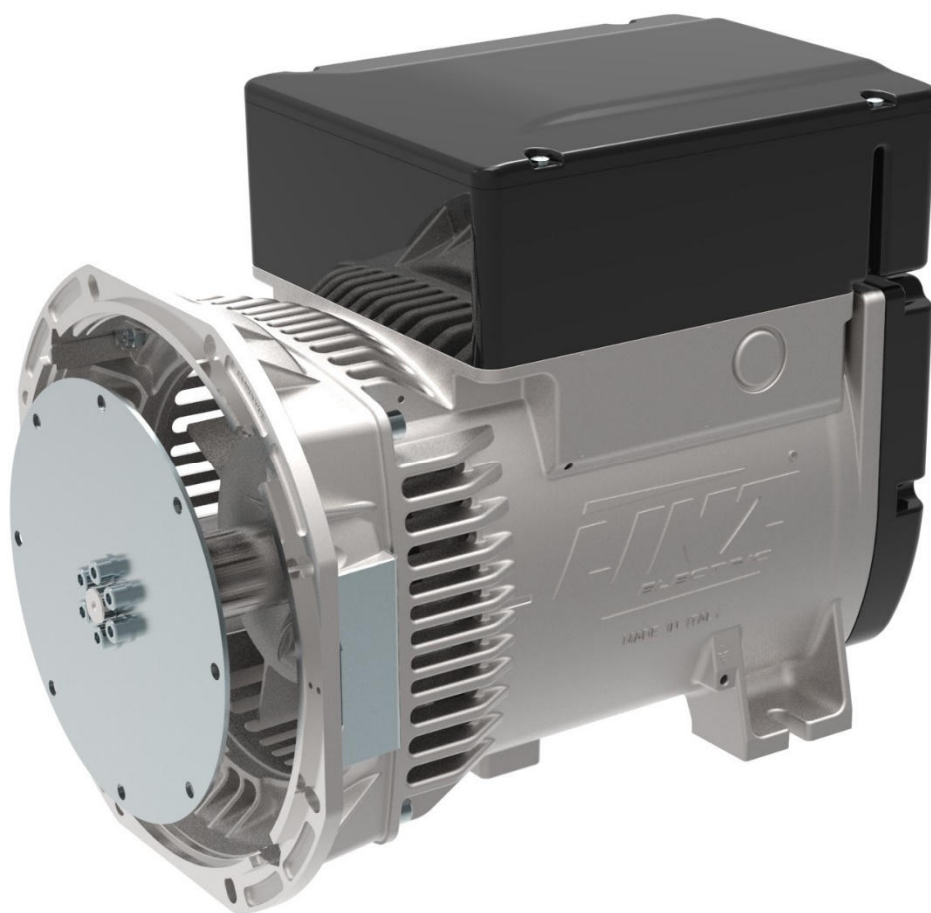


TECHNICAL DATA SHEET



ALTERNATOR E1C13S A/4

Single-Phase brushless synchronous alternator with capacitor - 4 poles

E1C13S A/4

COMMON DATA

Rated Power at 50Hz	kVA	5,5
Rated Power at 60Hz	kVA	7,0
Rated Power Factor		1,0
Nominal Temperature	°C	40
Control System		self-excited
Execution		brushless
Regulation Type		Capacitor
Insulation Class		H
Protection		IP21
Maximum Over speed	rpm	2250
Overload		110% of rated power for one hour in a cycle of 6 hours
Air Flow Requirement	m ³ /min	3,1 at 50Hz 3,6 at 60Hz
R.F.I. Suppression		Standard EN55011

REGULATION DATA

Capacitor	Capacitor with Aluminum Technology
Voltage Regulation	±5%
Sustained Short Circuit	> 250% of rated current

WINDING DATA

Stator Winding	Single layer with auxiliary winding
Rotor Winding	with damping cage
Number of Leads of Stator	4
Stator Winding Resistance	Ω 0,73 at 20°C
Rotor Winding Resistance	Ω 0,83 at 20°C
THD at full load	<5,5%
THD at no load	<5,0%

STANDARD

References	EN60034-1 ISO8528-3 EN55011
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ON REQUEST

UL 1446, Systems of Insulating Materials - General CSA-C22.2 No. 0, Appendix B, General Requirements - Canadian Electrical Code, Part I

CAN/CSA - C22.2 No. 100-14 (R2009) Motors and Generators, UL1004-1 2nd ed. Rotating Electrical Machines - General Requirements, UL1004-4 2nd ed. Electric Generators

E1C13S A/4

ELECTRICAL DATA

Frequency		50Hz - 1500rpm	60Hz - 1800rpm
Voltage Series Star	V	115/230	110/220
Rated Power in Class H (125°C/40°C)	kW	5,5	7,0
Rated Power in Class F (105°C/40°C)	kW	5,0	6,5
Rated Power Standby (150°C/40°C)	kW	5,8	7,5
Rated Power Standby (163°C/27°C)	kW	6,0	7,8

EFFICIENCY IN CL. H

4/4	77,0%	78,0%
3/4	78,0%	78,5%
2/4	73,0%	74,0%
1/4	71,5%	72,0%

MECHANICAL DATA

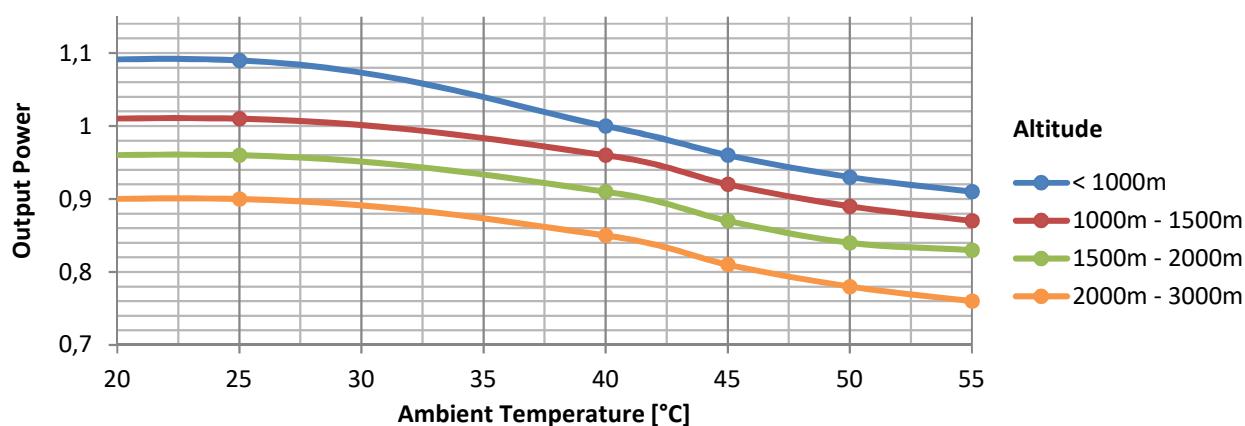
Bearing non drive end			6305-2Z-C3
Bearing drive end (B3/B14 form)			6208-2Z-C3
Weight of generator	in B2	kg	51,1
	in B3/B14	kg	47,0
	in B3/B9	kg	44,0

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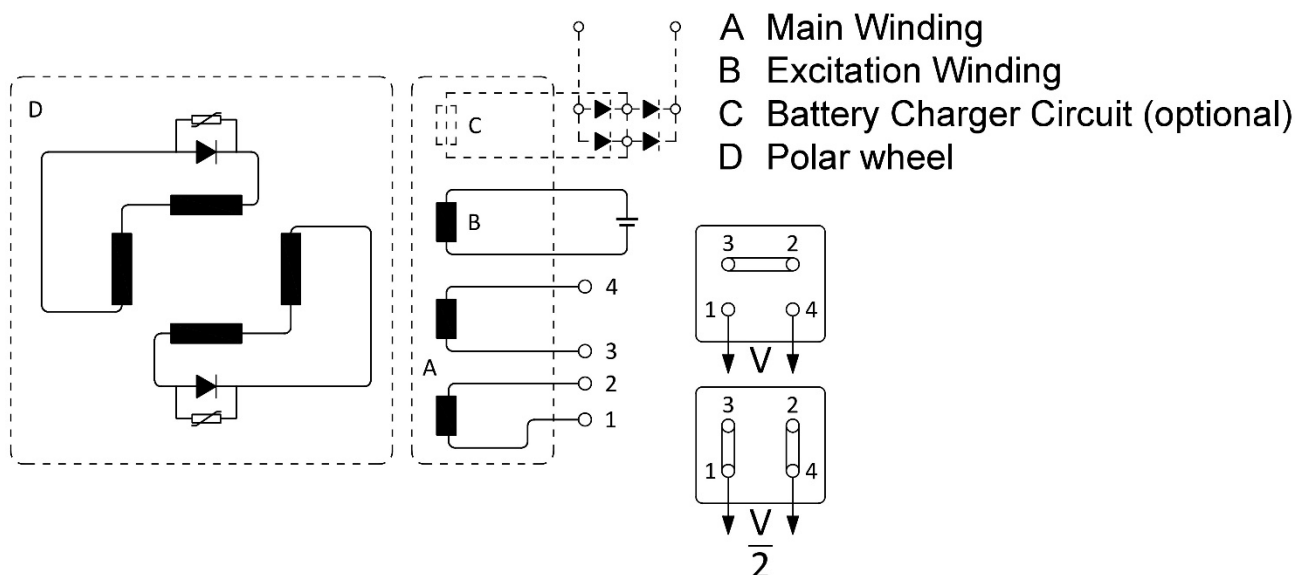
MOMENT OF INERZIA

B3/B9	kg·m ²	0,044
B2	kg·m ²	0,042
B3/B14	kg·m ²	0,044

DERATING CURVES

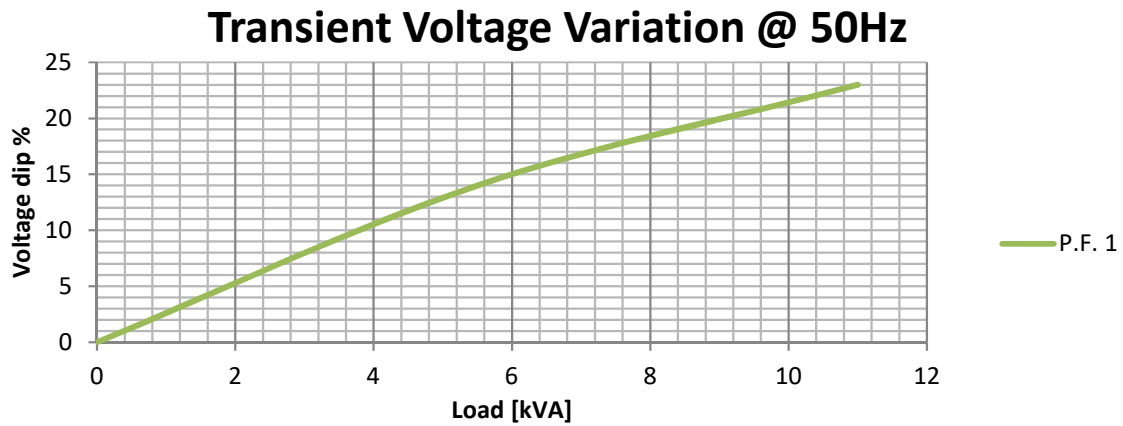


WIRING DIAGRAM

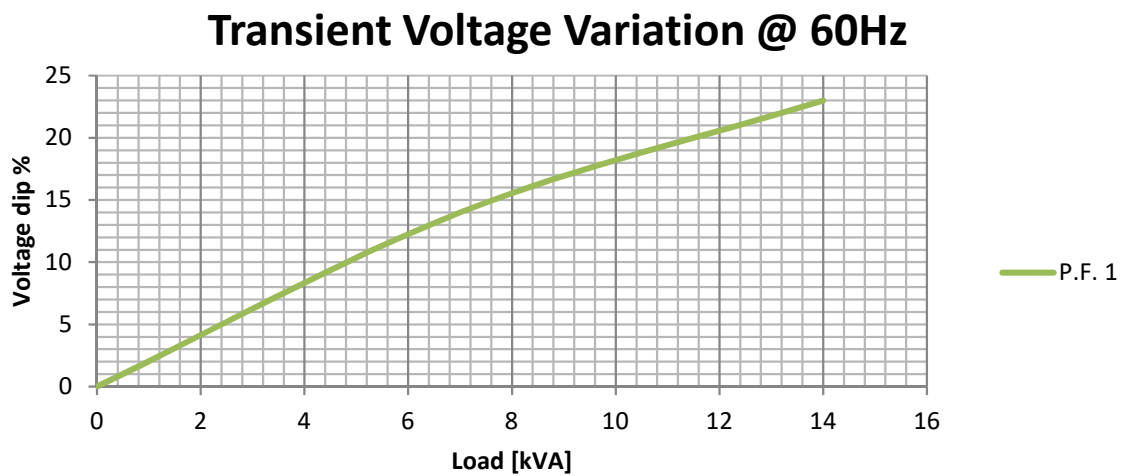


E1C13S A/4

TRANSIENT VOLTAGE VARIATION 50Hz



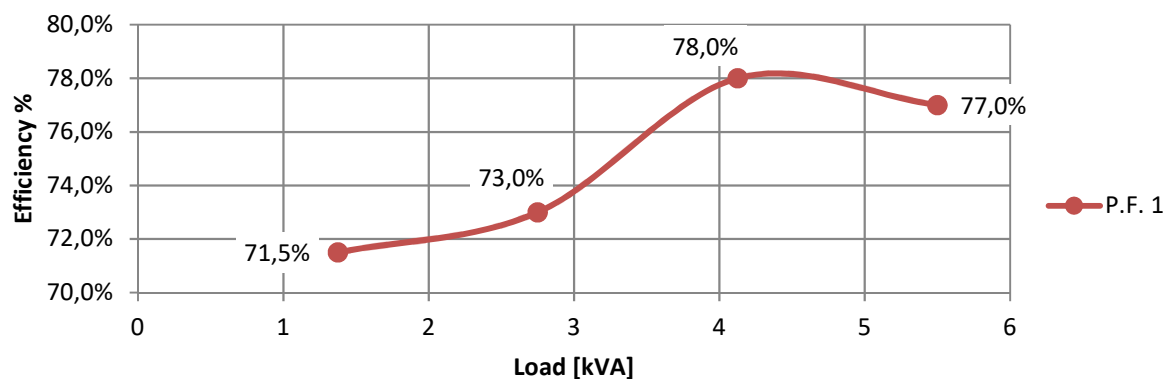
TRANSIENT VOLTAGE VARIATION 60Hz



E1C13S A/4

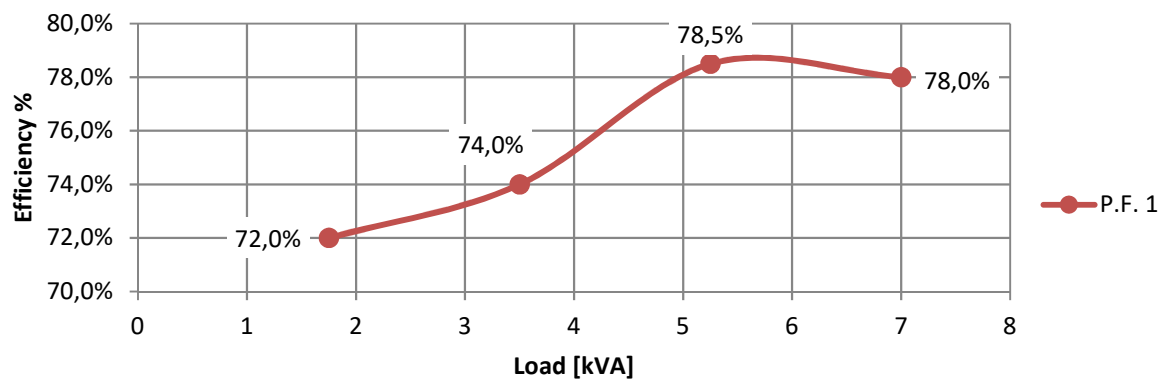
EFFICIENCY 50Hz

Efficiency Curves @ 50Hz



EFFICIENCY 60Hz

Efficiency Curves @ 60Hz



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