

TECHNICAL DATA SHEET



ALTERNATOR E1C11M C

Single-Phase brushless synchronous alternator with capacitor - 2 poles

E1C11M C

COMMON DATA

Rated Power at 50Hz	kVA	12,0	
Rated Power at 60Hz	kVA	15,0	
Rated Power Factor		1	
Nominal Temperature	°C	40	
Control System		self-excited	
Execution		brushless	
Regulation Type		capacitor	
Insulation Class		H	
Protection		IP21	
Maximum Over speed	rpm	4500	
Overload		110% of rated power for one hour in a cycle of 6 hours	
Air Flow Requirement	m ³ /min	4,8 at 50Hz	5,8 at 60Hz
R.F.I. Suppression		Standard EN55011	

REGULATION DATA

Capacitor		Capacitor	
Capacitor	μF	35+35	
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	0,235 at 20°C	
Rotor Winding Resistance	Ω	6,2 at 20°C	
THD at full load		<5%	
THD at no load		<5%	

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

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ELECTRICAL DATA

Frequency		50Hz - 3000rpm	60Hz - 3600rpm
Voltage Series Star	V	115/230	110/220
Rated Power in Class H (125°C/40°C)	kW	12,0	15,0
Rated Power in Class F (105°C/40°C)	kW	11,0	13,0

EFFICIENCY IN CL. H

4/4	80,0%	80,5%
3/4	81,0%	81,5%

MECHANICAL DATA

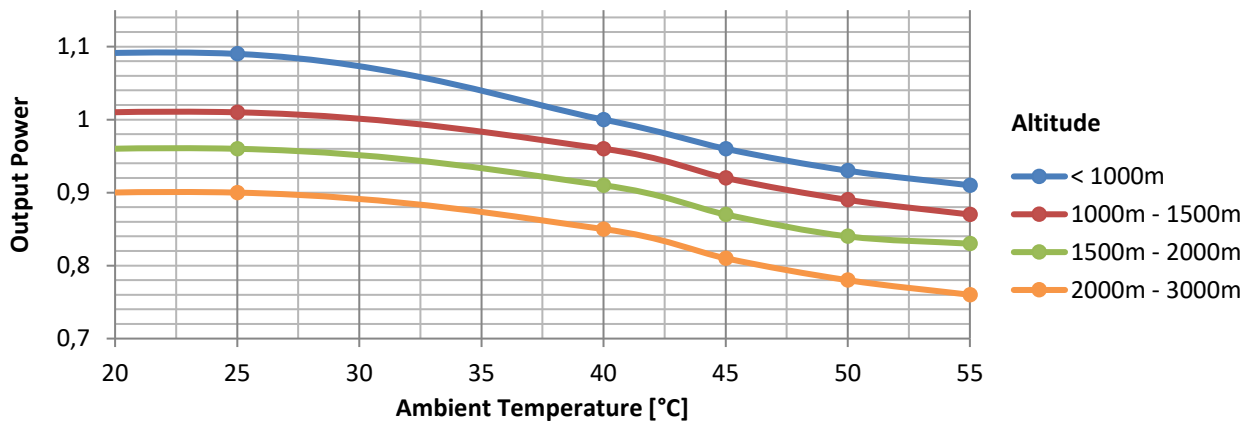
Bearing non drive end		6205-2Z-C3	
Bearing drive end (B3/B14 form)		6207-2Z-C3	
Weight of generator	in B2	kg	\
	in B3/B14	kg	53,2
	in B3/B9	kg	52,2

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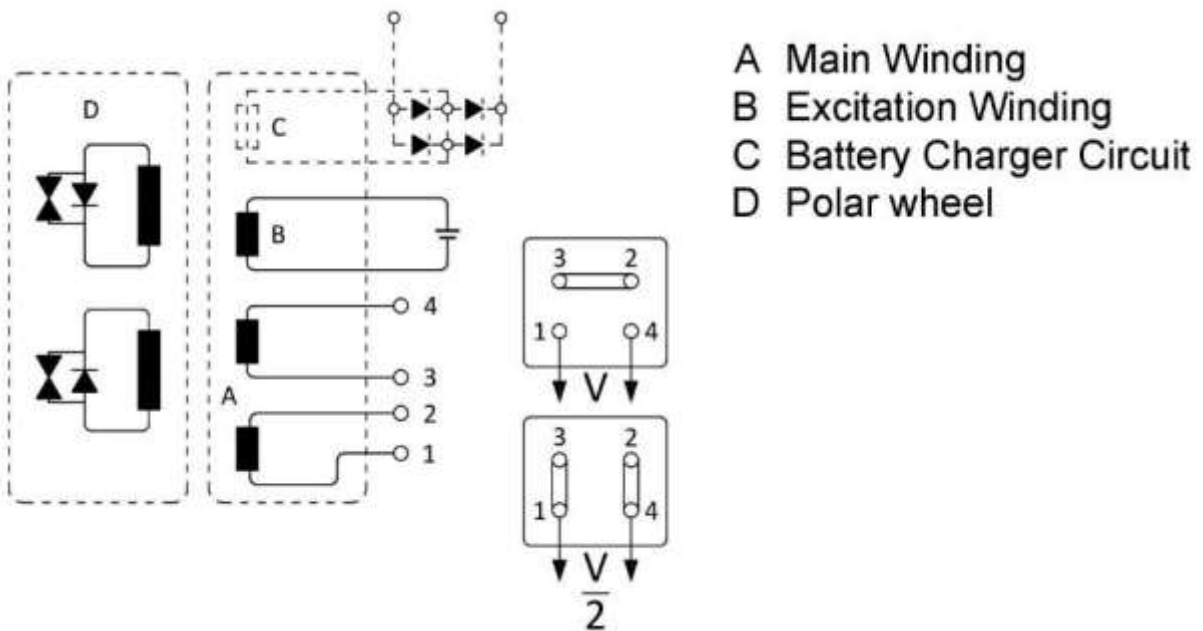
MOMENT OF INERZIA

B3/B9	kg·m ²	0,027
B3/B14	kg·m ²	0,027

DERATING CURVES



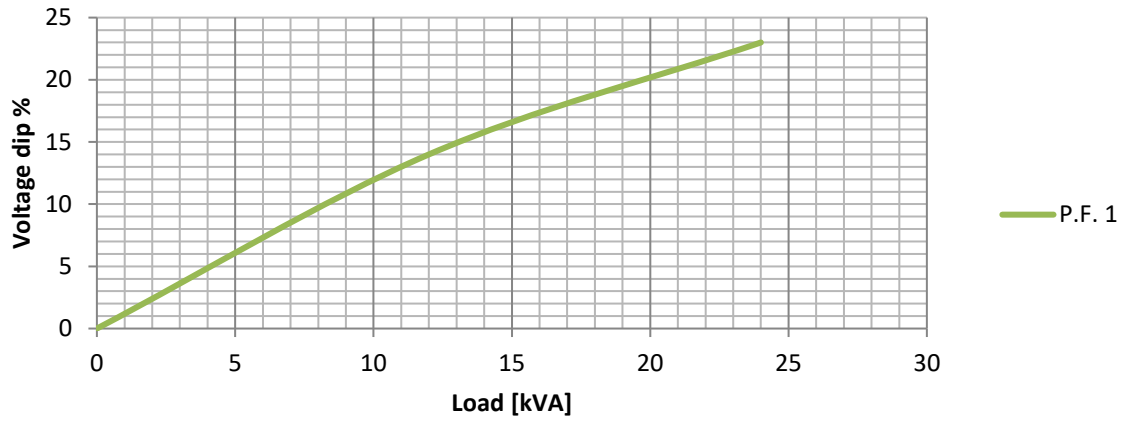
WIRING DIAGRAM



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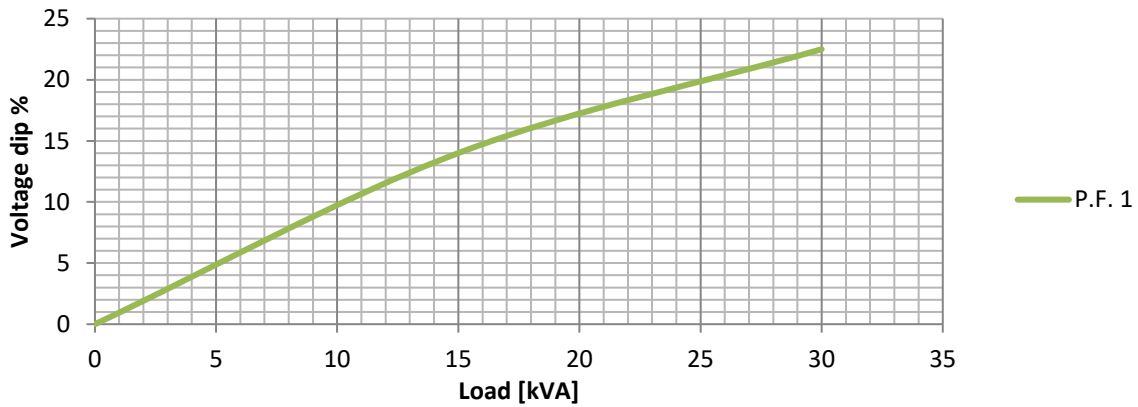
TRANSIENT VOLTAGE VARIATION 50Hz

Transient Voltage Variation @ 50Hz



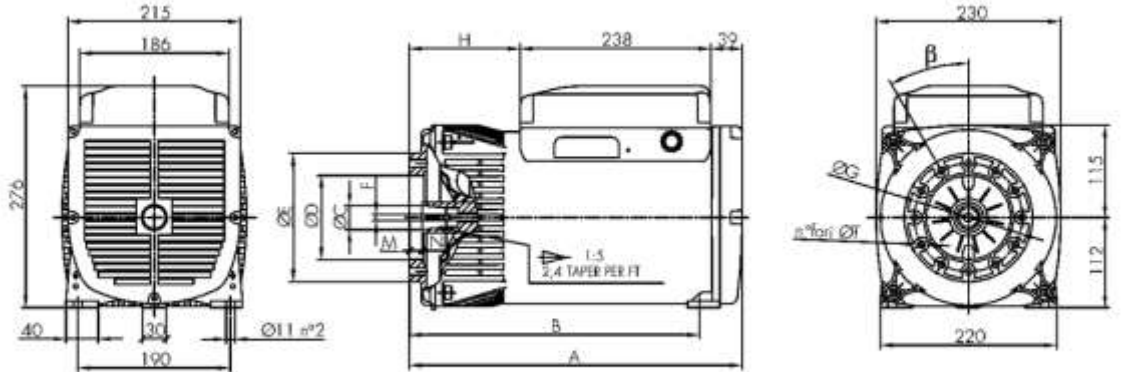
TRANSIENT VOLTAGE VARIATION 60Hz

Transient Voltage Variation @ 60Hz



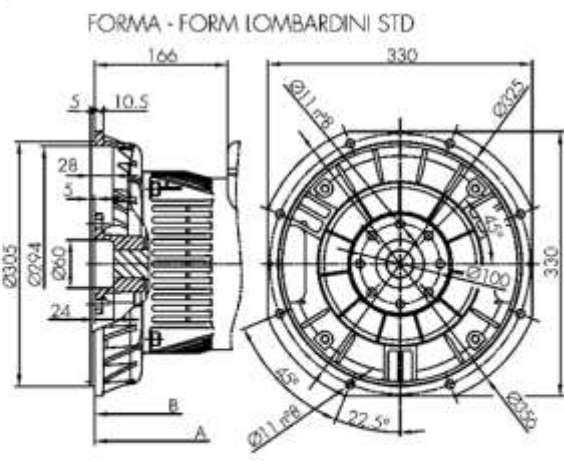
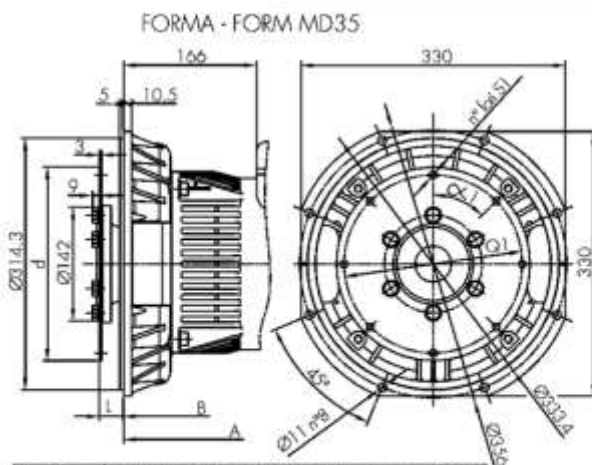
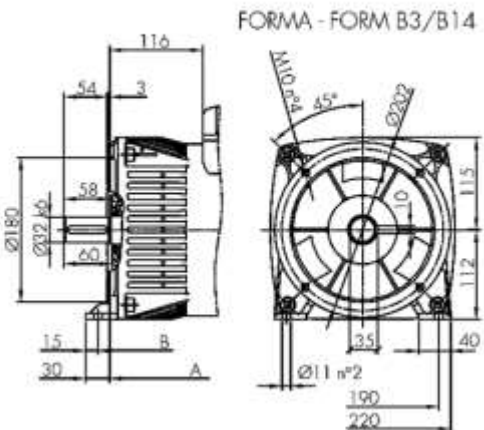
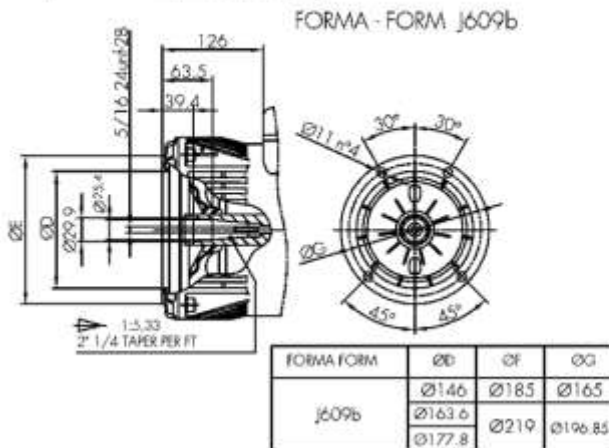
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FORMA - FORM B3/B9



FORMA FORM	A	B
B3/B9 cono Ø23 Ø30	415	362
B3/B9 cono Ø38	398.5	345.5
j609b	403	350
B3/B14	393	355
MD35/OMB STD	443	390

FORMA FORM	ØC	ØD	ØE	F	ØG	H	M	N	n° fori	ØT	β
cono Ø23	Ø23	Ø10.5	Ø160	M8	Ø135	138	8	25	12	Ø9	30°
cono Ø30	Ø30	Ø10.5	Ø160	M14X1.5	Ø135	138	16	30	12	Ø9	30°
cono Ø38	Ø38	Ø12.5	Ø185	M18X1.5	Ø150	121.5	5	30	4	Ø11	b/2 45°



SAE N.	GIUNTI A DISCO - COUPLING DISCS - JUNTA A DISCOS					
	l	d	Q1	n. fori	S1	α l
6 1/2	30.2	215.9	200	6	9	60°
7 1/2	30.2	241.3	222.25	8	9	45°