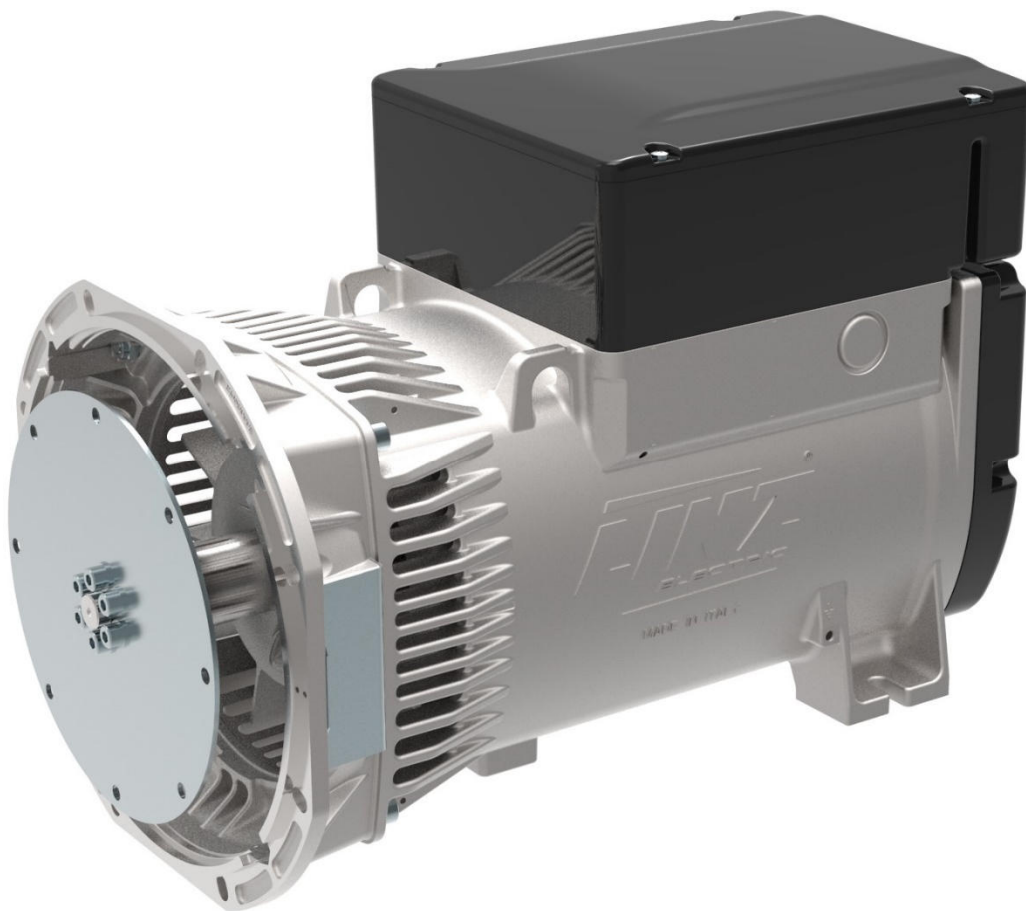


TECHNICAL DATA SHEET



ALTERNATOR E1C13M D/2

Single-Phase brushless synchronous alternator with capacitor - 2 poles

E1C13M D/2

COMMON DATA

Rated Power at 50Hz	kVA	15,0	
Rated Power at 60Hz	kVA	18,0	
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	9,2 at 50Hz	11,2 at 60Hz
R.F.I. Suppression		Standard EN55011	

REGULATION DATA

Capacitor		Capacitor with Aluminum Technology	
Capacitor	μF	50+50	
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	0,18 at 20°C	
Rotor Winding Resistance	Ω	5,87 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

E1C13M D/2

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	15,0	18,0
Rated Power in Class F (105°C/40°C)	kW	14,0	17,0

EFFICIENCY IN CL. H

4/4	80,5%	81,5%
3/4	81,5%	82,0%

MECHANICAL DATA

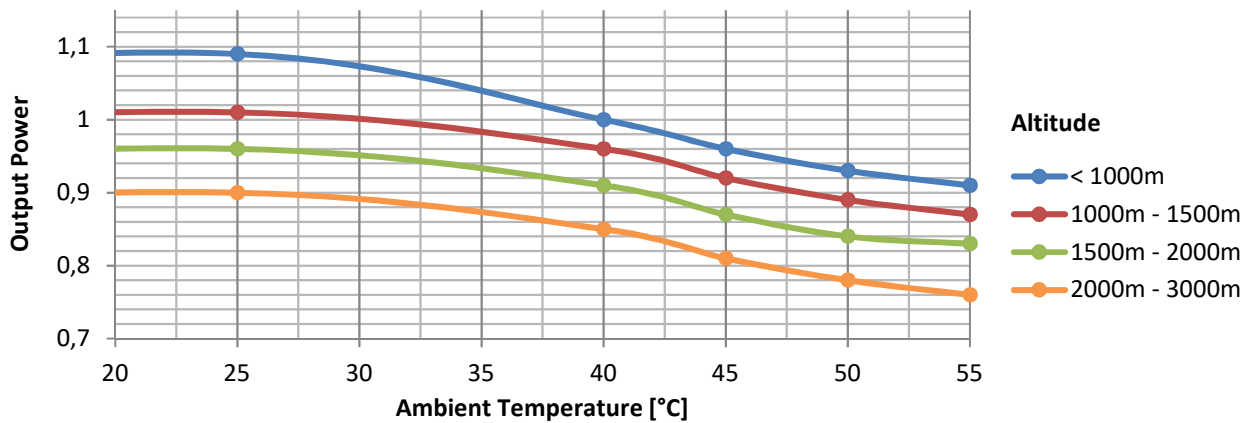
Bearing non drive end			6305-2Z-C3
Bearing drive end (B3/B14 form)			6208-2Z-C3
Weight of generator	in B2	kg	\
	in B3/B14	kg	80,3
	in B3/B9	kg	77,4

E1C13M D/2

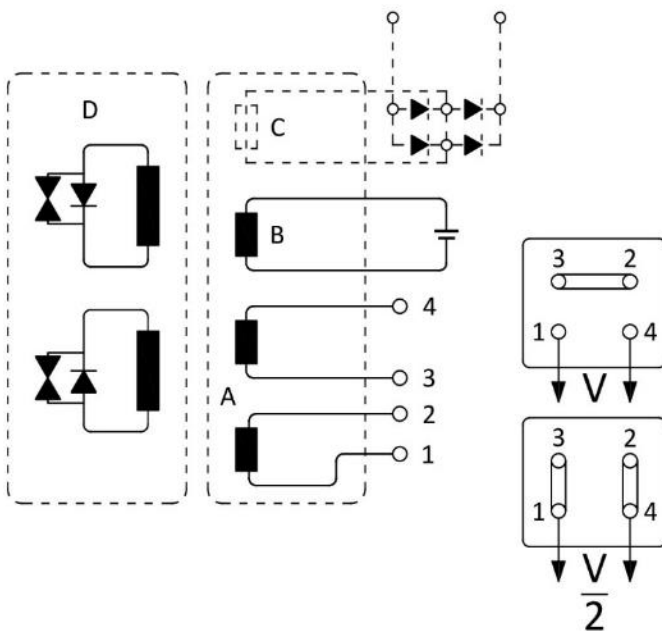
MOMENT OF INERZIA

B3/B9	kg·m ²	0,065
B3/B14	kg·m ²	0,065

DERATING CURVES



WIRING DIAGRAM

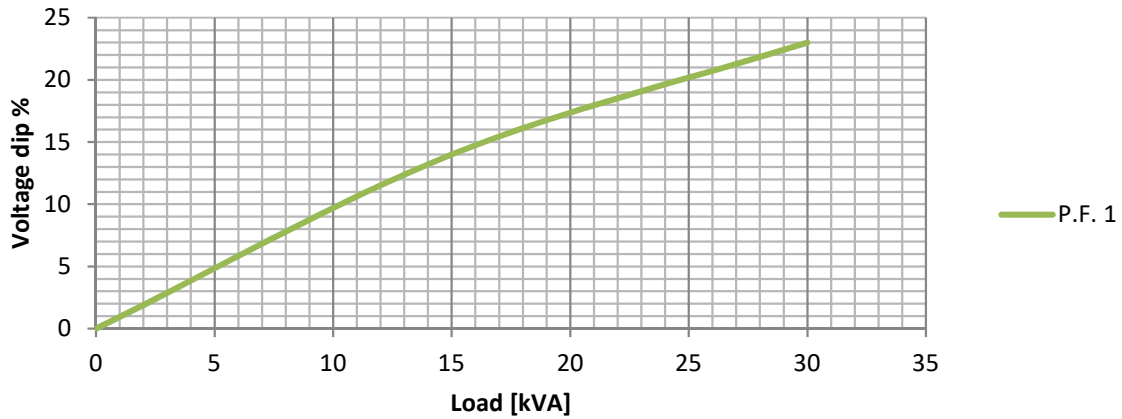


- A Main Winding
- B Excitation Winding
- C Battery Charger Circuit
- D Polar wheel

E1C13M D/2

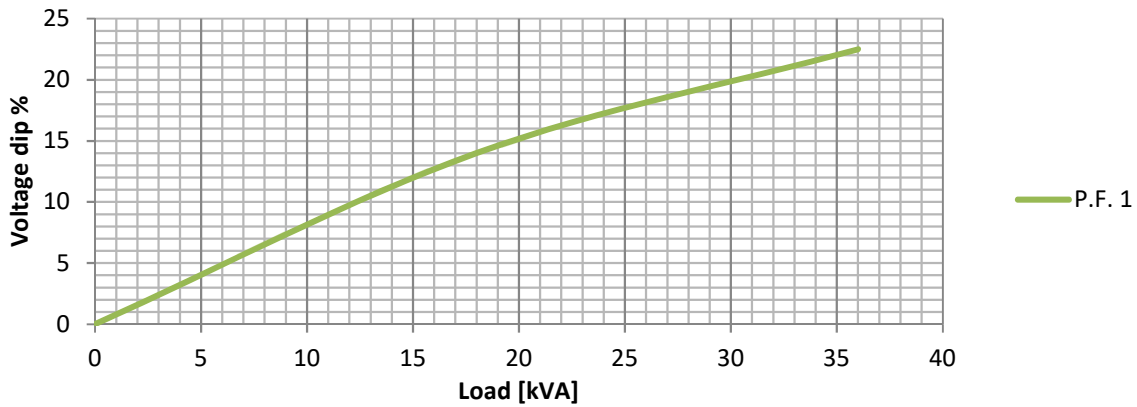
TRANSIENT VOLTAGE VARIATION 50Hz

Transient Voltage Variation @ 50Hz



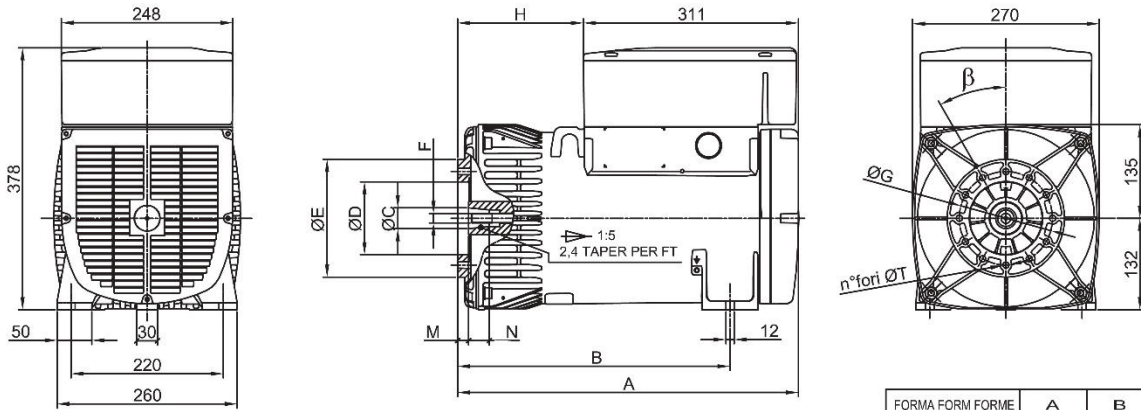
TRANSIENT VOLTAGE VARIATION 60Hz

Transient Voltage Variation @ 60Hz



E1C13M D/2

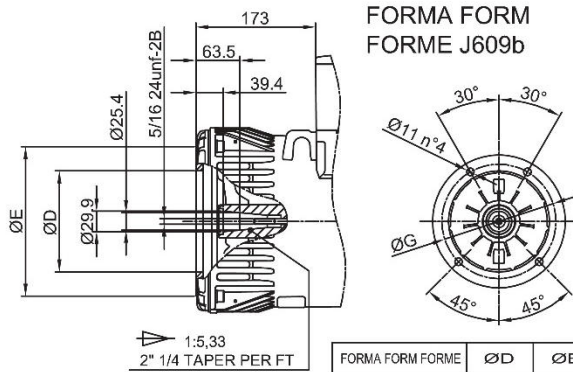
FORMA FORM FORME B3/B9



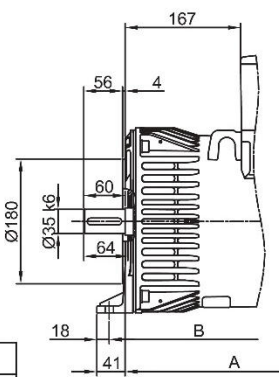
FORMA FORM FORME	ØC	ØD	ØE	F	ØG	H	M	N	n° fori	ØT	β
cono Ø30	Ø30	Ø105	Ø170	M14x1.5	Ø135	182	16	30	12	Ø9	30°
cono Ø38	Ø38	Ø125	Ø185	M18x1.5	Ø150	173	5	30	4	Ø11	β/2 45°

FORMA FORM FORME	A	B
B3B9 cono Ø30	493	394
B3B9 c. Ø38-J609b	484	385
B3/B14	478	402
MD35 - LOMB. STD	526	427

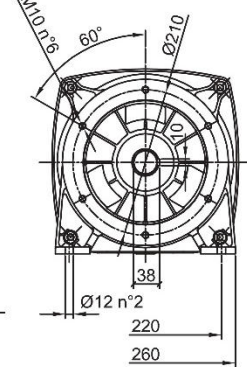
FORMA FORM FORME J609b



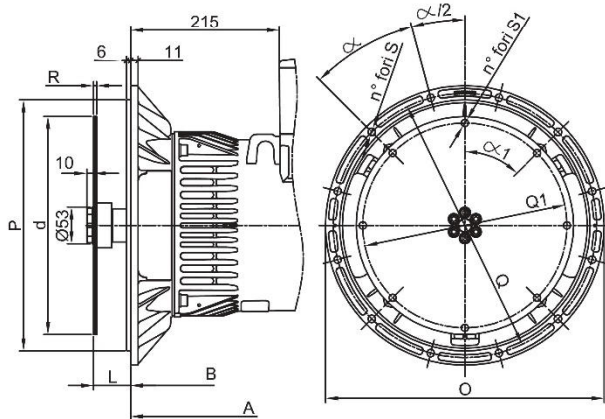
FORMA FORM FORME	ØD	ØE	ØG
J609b	Ø146	Ø192	Ø165
	Ø163.6	Ø216	Ø196.85
	Ø177.8		



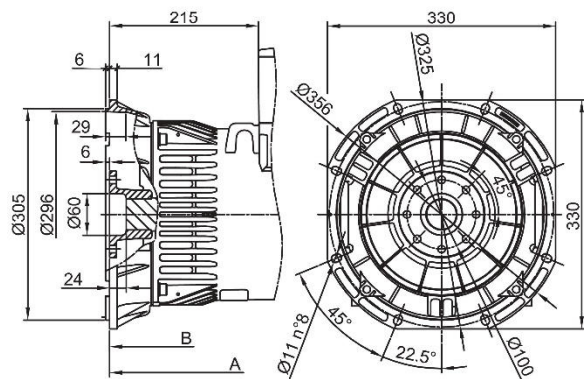
FORMA FORM FORME B3/B14



FORMA FORM FORME MD35



FORMA FORM FORME LOMBARDINI STD



SAE N.	FLANGIE - BRIDE - FLANGE					
	O	P	Q	n. fori	S	α
5	356	314.3	333.4	8	11	45°
4	403	362	381	12		30
3	451	409.6	428.6	12		30

SAE N.	GIUNTI A DISCO - DISC COUPLING - ACC. DISQUE						
	L	d	Q1	n. fori	S1	α1	R
6 1/2	30.2	215.9	200	6	9	60°	
7 1/2	30.2	241.3	222.25	8	9	45°	3
8	62	263.52	244.47	6	10.5	60	
10	53.8	314.32	295.27	8	10.5	45°	4.5
11 1/2	39.6	352.42	333.37	8	10.5	45°	