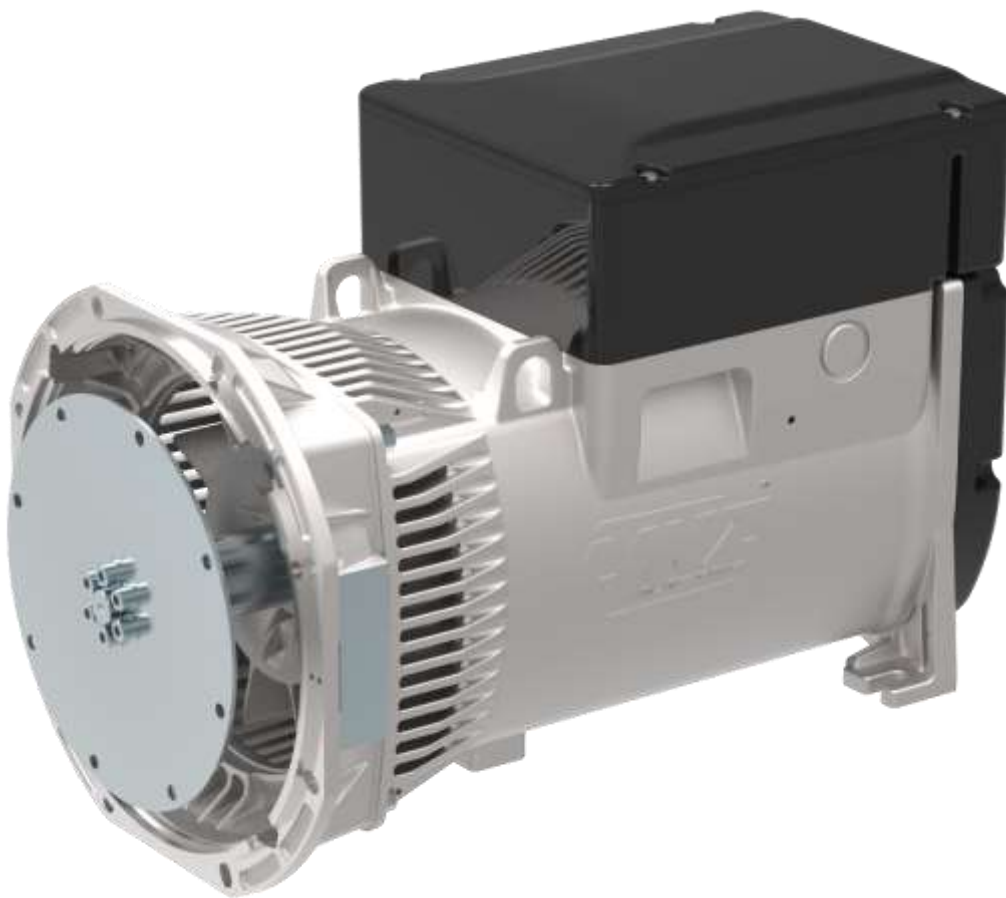


TECHNICAL DATA SHEET



ALTERNATOR E1E13M E

Single-Phase synchronous alternator with brushes and AVR - 2 poles

E1E13M E

COMMON DATA

Rated Power at 50Hz	kVA	18,0	
Rated Power at 60Hz	kVA	21,6	
Rated Power Factor		1	
Nominal Temperature	°C	40	
Control System		self-excited	
Execution		with brushes	
Regulation Type		AVR	
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	9,0 at 50Hz	10,8 at 60Hz
R.F.I. Suppression		Standard EN55011	

REGULATION DATA

AVR		HVR11E
Sensing		single-phase
Voltage Regulation		±1%

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	14,0 at 20°C	
THD at full load		<4%	
THD at no load		<4%	
Excitation at no Load	Adc	2,1	
Excitation at full Load	Adc	5,4	

STANDARD

References	EN60034-1 ISO8528-3 EN55011
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E1E13M E

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	18,0	21,6
Rated Power in Class F (105°C/40°C)	kW	16,5	19,7

EFFICIENCY IN CL. H

4/4	83,0%	83,6%
3/4	83,5%	84,0%
2/4	81,2%	81,8%
1/4	80,2%	81,8%

MECHANICAL DATA

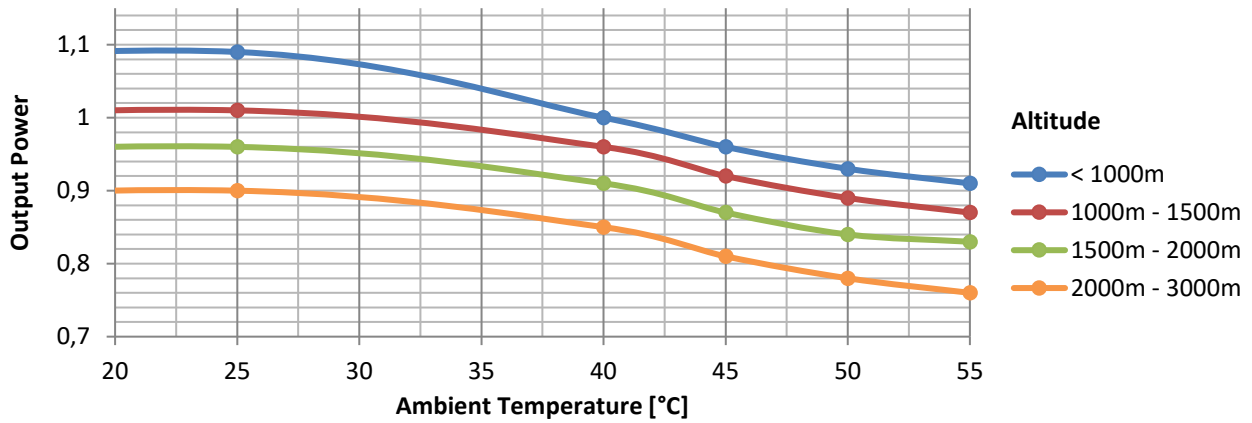
Bearing non drive end		6305-2Z-C3	
Bearing drive end (B3/B14 form)		6208-2Z-C3	
Weight of generator	in B2	kg	\
	in B3/B14	kg	91,6
	in B3/B9	kg	88,7

E1E13M E

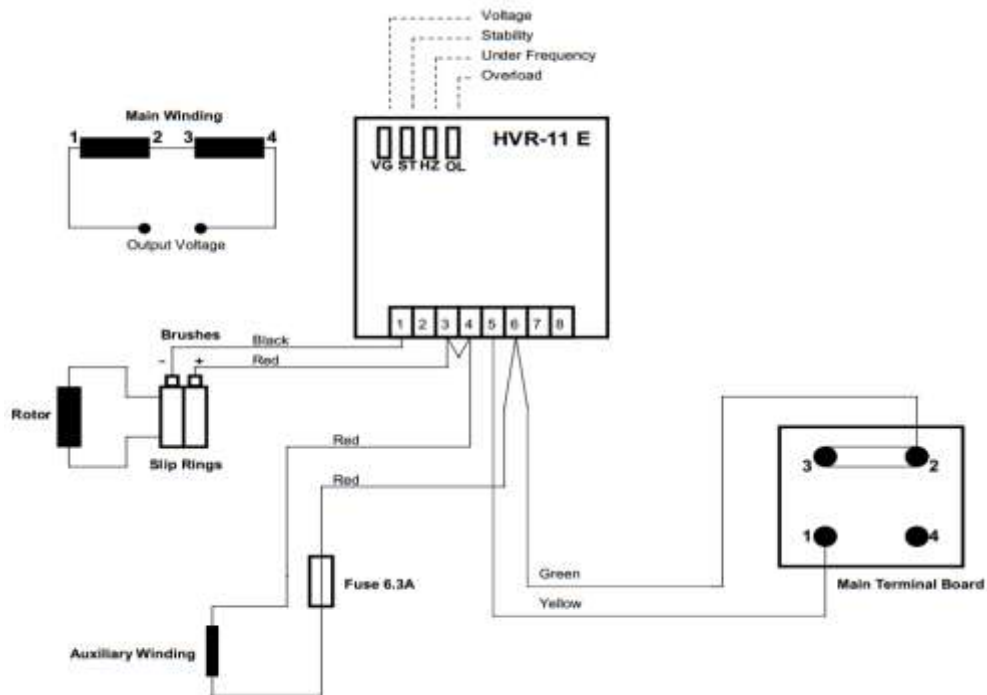
MOMENT OF INERZIA

B3/B9	kg·m ²	0,069
B3/B14	kg·m ²	0,069

DERATING CURVES



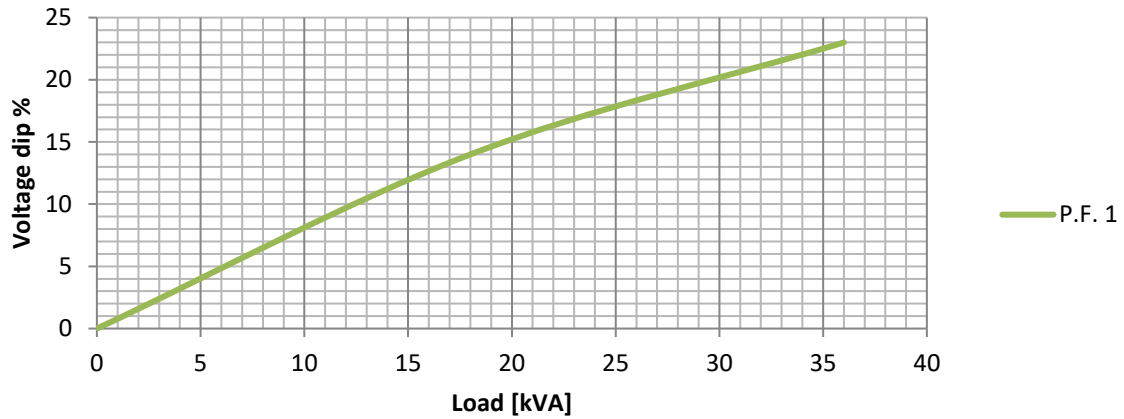
WIRING DIAGRAM



E1E13M E

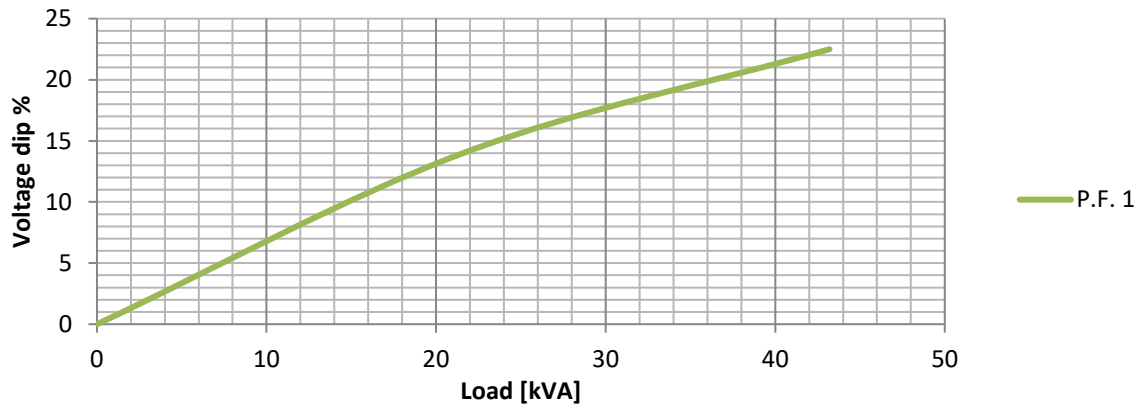
TRANSIENT VOLTAGE VARIATION 50Hz

Transient Voltage Variation @ 50Hz



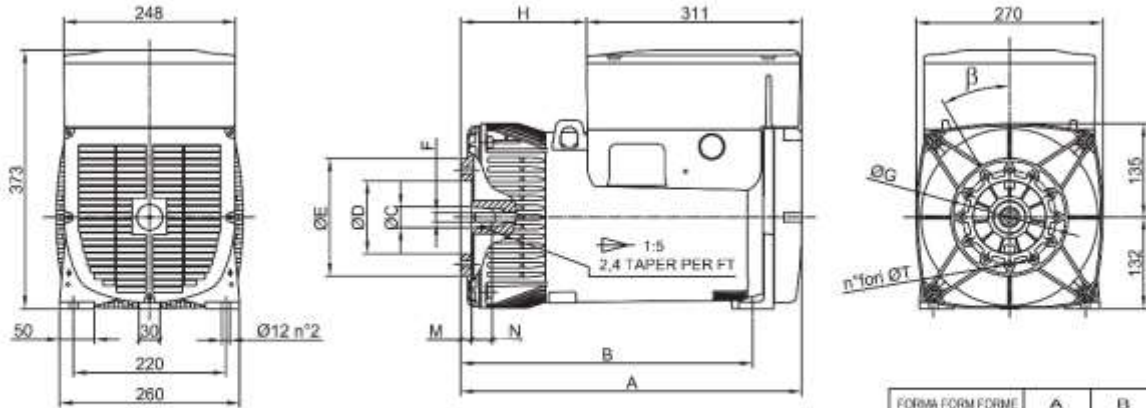
TRANSIENT VOLTAGE VARIATION 60Hz

Transient Voltage Variation @ 60Hz



E1E13M E

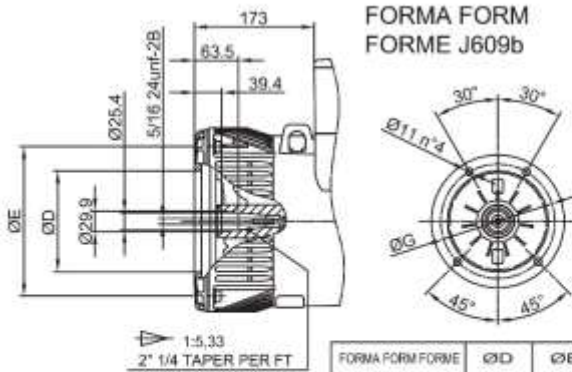
FORMA FORM FORME B3/B9



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°

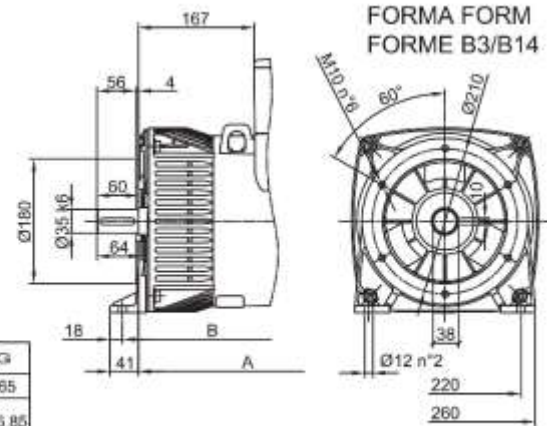
FORMA FORM FORME	A	B
B3B9 cono Ø30	493	422
B3B9 c.Ø38-J609b	484	413
B3B14	478	430
MD35 - LOMB. STD	526	455

FORMA FORM FORME J609b

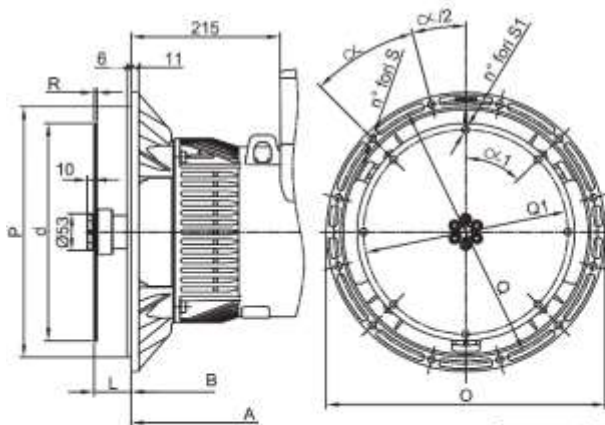


FORMA FORM FORME	ØD	ØE	ØG
J609b	Ø146	Ø192	Ø165
	Ø163.6	Ø216	Ø196.85
	Ø177.8		

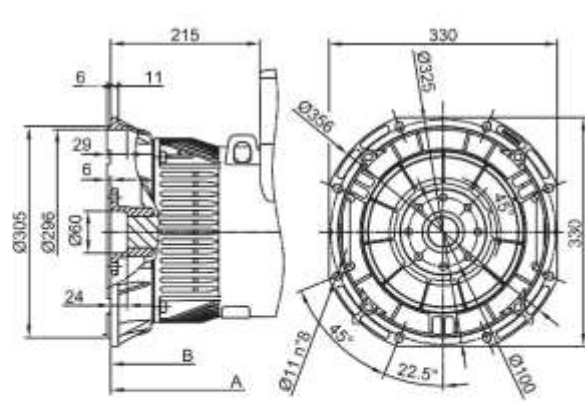
FORMA FORM FORME B3/B14



FORMA FORM FORME MD35



FORMA FORM FORME LOMBARDINI STD



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

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