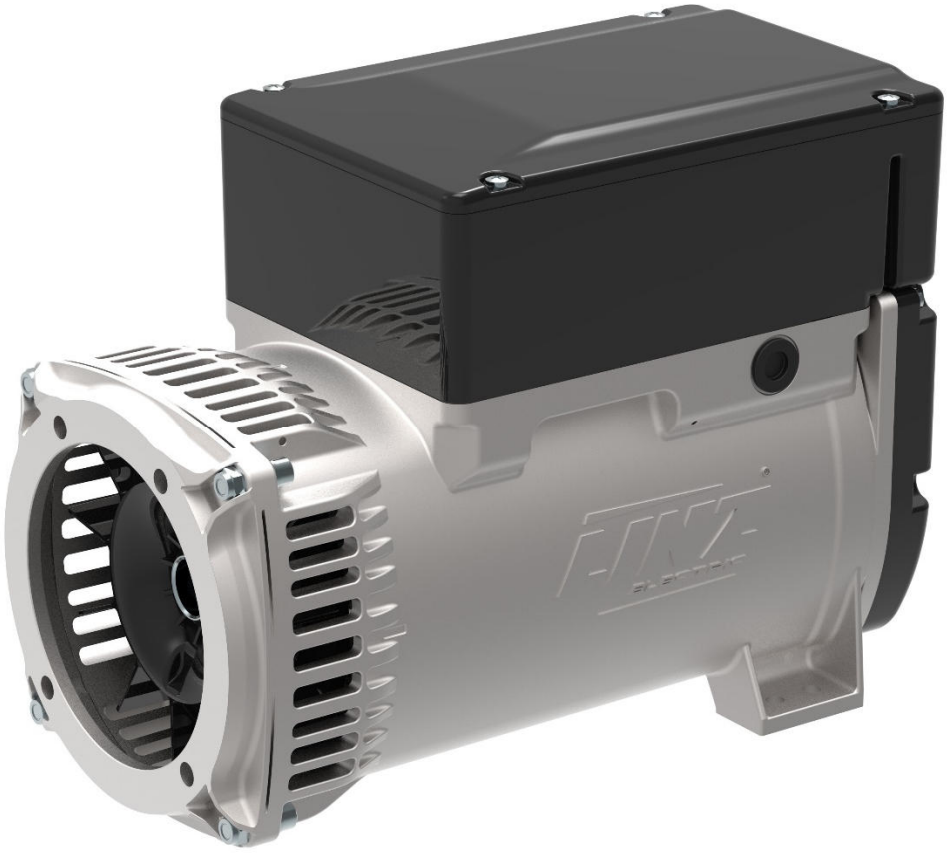
TECHNICAL DATA SHEET



ALTERNATOR E1S10M I KE

Three-Phase synchronous alternator with brushes, AVR and compound - 2 poles

E1S10M I KE

COMMON DATA

Rated Power at 50Hz	kVA	7,0	
Rated Power at 60Hz	kVA	8,5	
Rated Power Factor		0,8	
Nominal Temperature	°C	40	
Control System		self-excited	
Execution		with brushes	
Regulation Type		AVR and compound	
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	3,6 at 50Hz	4,5 at 60Hz
R.F.I. Suppression		Standard EN55011	

REGULATION DATA

AVR and compound	HVR10 and compound
Voltage Regulation	±1%
Sustained Short Circuit	> 300% of rated current

WINDING DATA

Stator Winding		Single layer with auxiliary winding
Rotor Winding		with damping cage
Number of Leads of Stator		6
Stator Winding Resistance	Ω	0,92 at 20°C
Rotor Winding Resistance	Ω	22,7 at 20°C
THD at full load		<4% (L-L)
THD at no load		<3% (L-L)
Excitation at no Load	Adc	1,4
Excitation at full Load	Adc	5,1

STANDARD

References	EN60034-1 ISO8528-3 EN55011

ON REQUEST

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

E1S10M I KE

ELECTRICAL DATA

Frequency		50Hz - 3000rpm	60Hz - 3600rpm
Voltage Series Star	V	**400/230**	**480/277**
Rated Power in Class H (125°C/40°C)	kVA	7,0	8,5
	kW	5,6	6,8
Rated Power in Class F (105°C/40°C)	kVA	6,4	7,8
	kW	5,12	6,24

EFFICIENCY IN CL. H

4/4	82,5%	82,5%
3/4	83,0%	83,0%

REACTANCES AND TIME CONSTANTS

Pcc		0,72
Xd	- dir. axis synchronous	222%
X'd	- dir. axis transient	15,0%
X''d	- dir. axis subtransient	4,7%
X_q	- quad. axis reactance	128%
T'_{do}	- O.C. field time constant	500ms
T'_d	- Transient time constant	33ms
T''_d	- Sub-transient time constant	6,0ms

MECHANICAL DATA

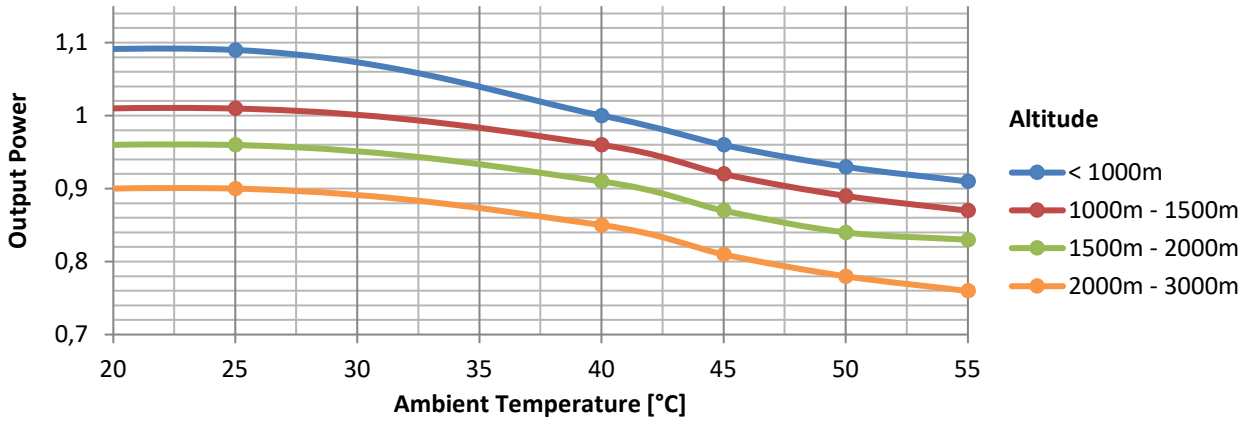
Bearing non drive end			6204-2Z-C3
Bearing drive end (B3/B14 form)			6305-2Z-C3
Weight of generator	in B2	kg	\
	in B3/B14	kg	37,6
	in B3/B9	kg	36,9

E1S10M I KE

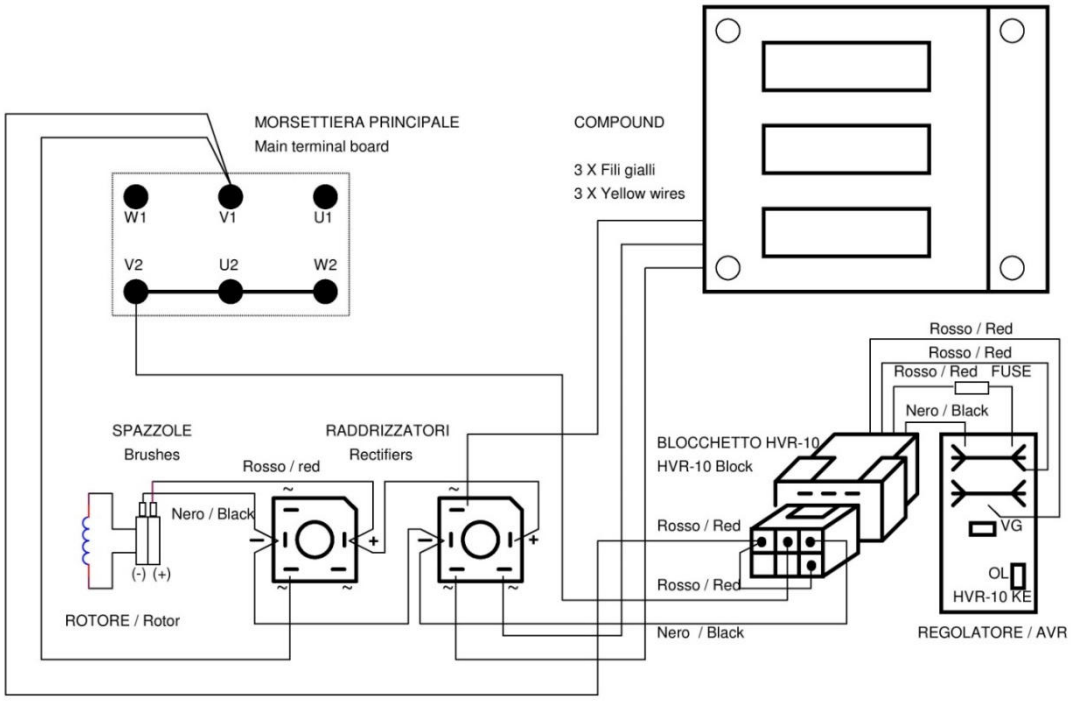
MOMENT OF INERZIA

B3/B9	kg·m^2	0,019
B3/B14	kg·m^2	0,019

DERATING CURVES

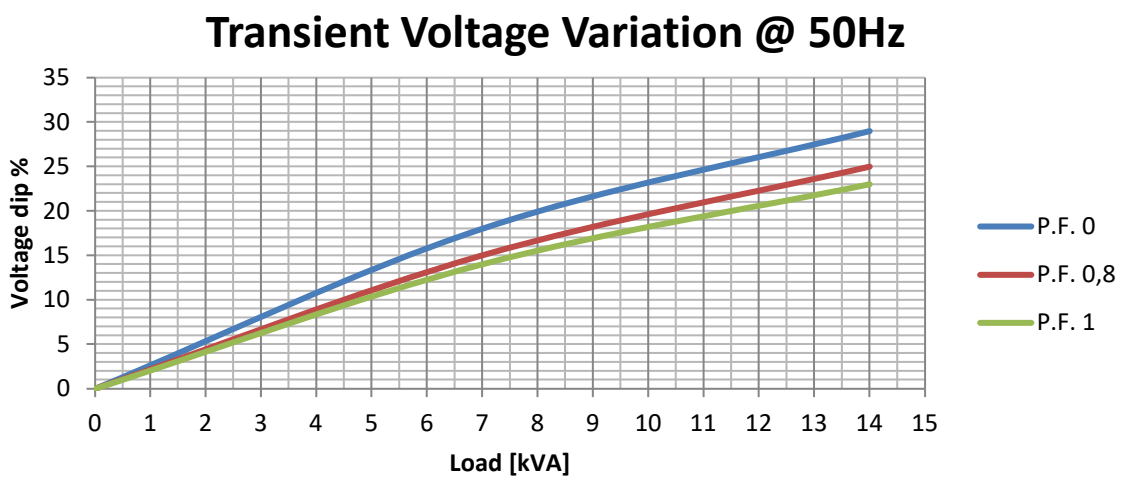


WIRING DIAGRAM

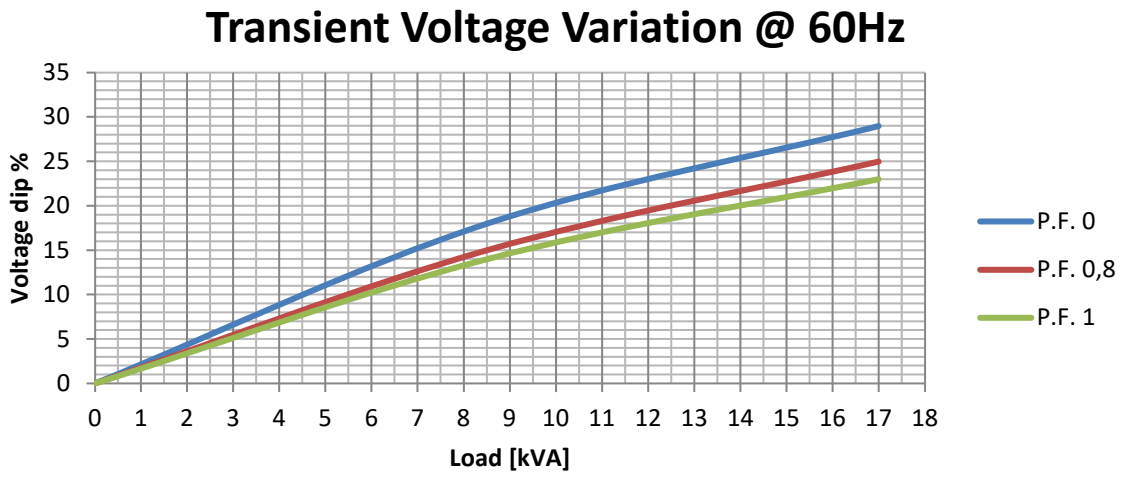


E1S10M I KE

TRANSIENT VOLTAGE VARIATION 50Hz

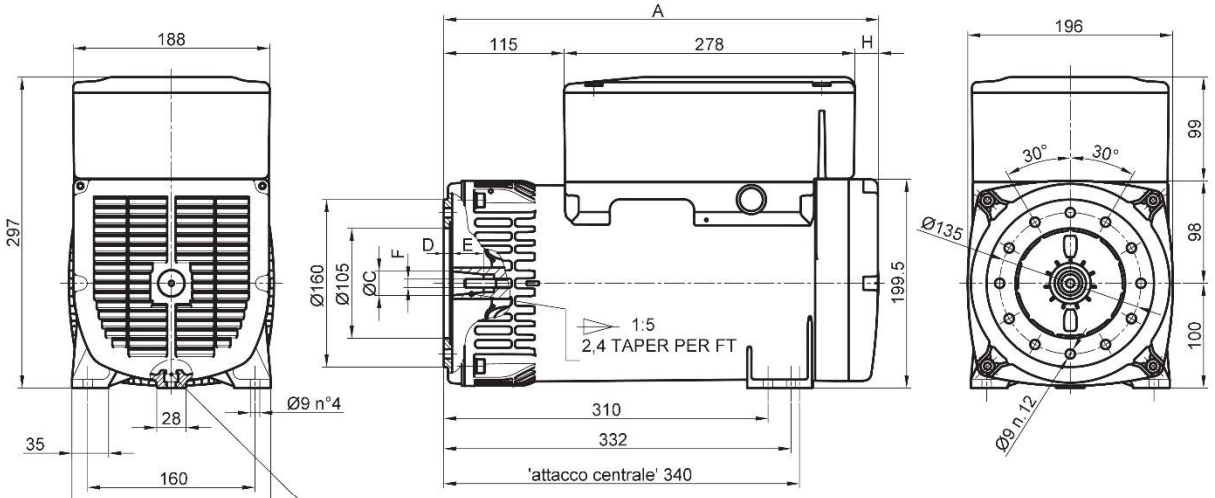


TRANSIENT VOLTAGE VARIATION 60Hz



E1S10M I KE

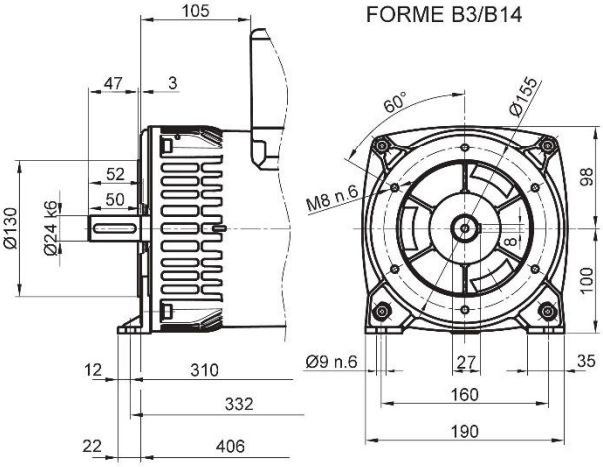
FORMA FORM FORME B3/B9

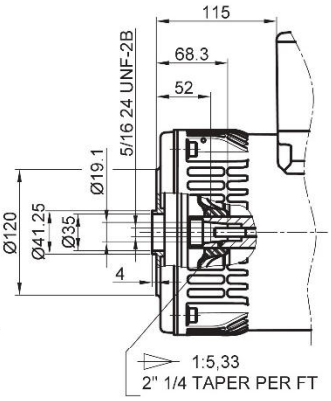


TIPO TYPE TYP	A	H
E1S10M - E1E10M	394	1
E1S10L - E1E10L	416	23

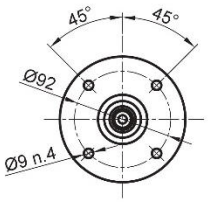
FORMA FORM FORME FORM FORMA	ØC	D	E	F
cono Ø23	Ø23	8	25	M8
cono Ø30	Ø30	16	30	M14x1.5

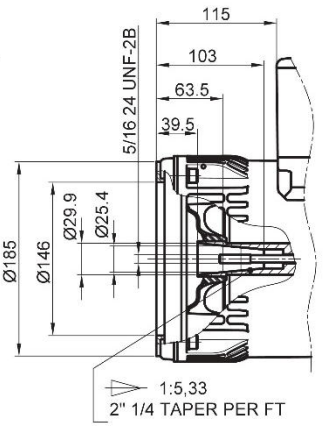
FORMA FORM
FORME B3/B14





FORMA FORM
FORME J609a





FORMA FORM
FORME J609b