



## TECHNICAL DATA SHEET



## ALTERNATOR E1E10M I

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



## E1E10M I

### COMMON DATA

Rated Power at 50Hz	kVA	7,0	
Rated Power at 60Hz	kVA	8,4	
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 <sup>3</sup> /min	3,5 at 50Hz	4,5 at 60Hz
R.F.I. Suppression		Standard EN55011	

### REGULATION DATA

AVR		HVR10E
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	0,6 at 20°C	
Rotor Winding Resistance	Ω	11,0 at 20°C	
THD at full load		<5,5%	
THD at no load		<4%	
Excitation at no Load	Adc	1,4	
Excitation at full Load	Adc	4,3	

### STANDARD

References	EN60034-1 ISO8528-3 EN55011
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## E1E10M I

### ELECTRICAL DATA

Frequency		50Hz - 3000rpm	60Hz - 3600rpm
Voltage Series Star	V	<b>115/230</b>	<b>110/220</b>
Rated Power in Class H (125°C/40°C)	kW	7,0	8,4
Rated Power in Class F (105°C/40°C)	kW	6,4	7,5

### EFFICIENCY IN CL. H

4/4	79,0%	80,5%
3/4	80,0%	81,0%

### 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
	in B3/B9	kg

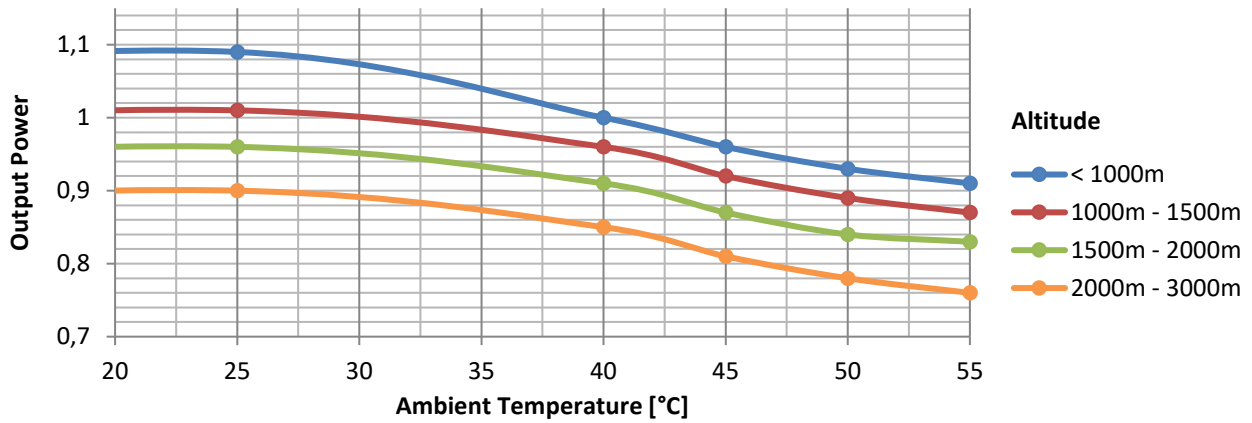


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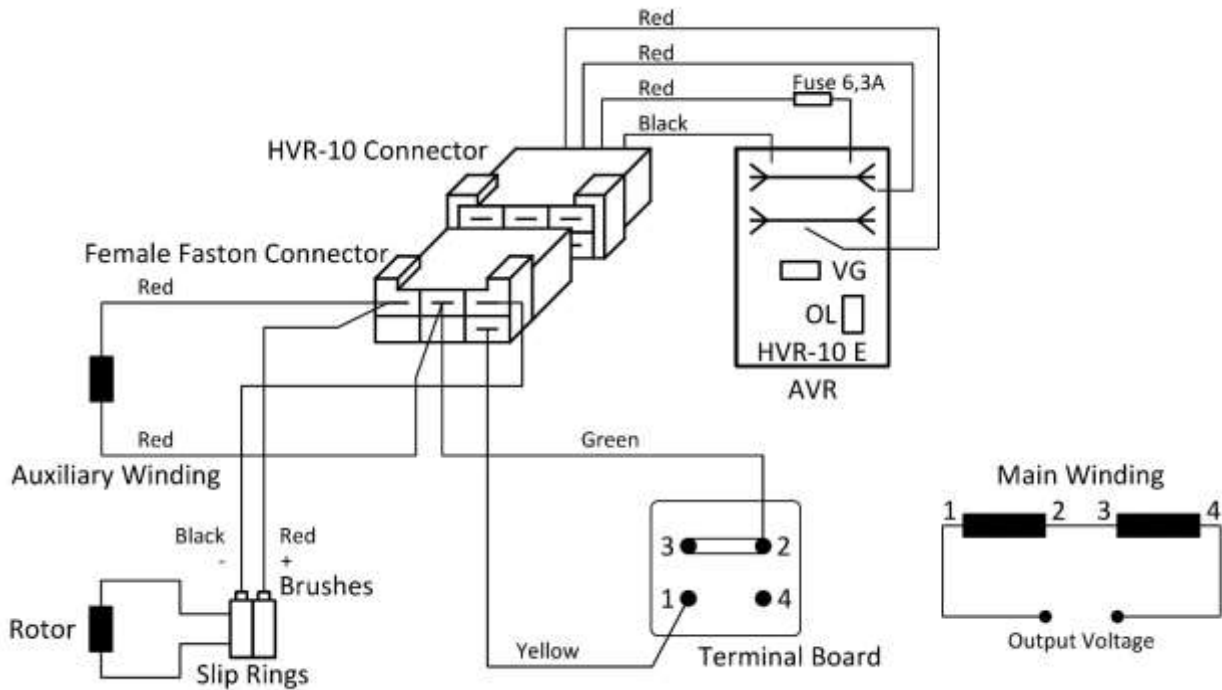
## MOMENT OF INERZIA

B3/B9	kg·m <sup>2</sup>	0,019
B3/B14	kg·m <sup>2</sup>	0,019

## DERATING CURVES



## WIRING DIAGRAM

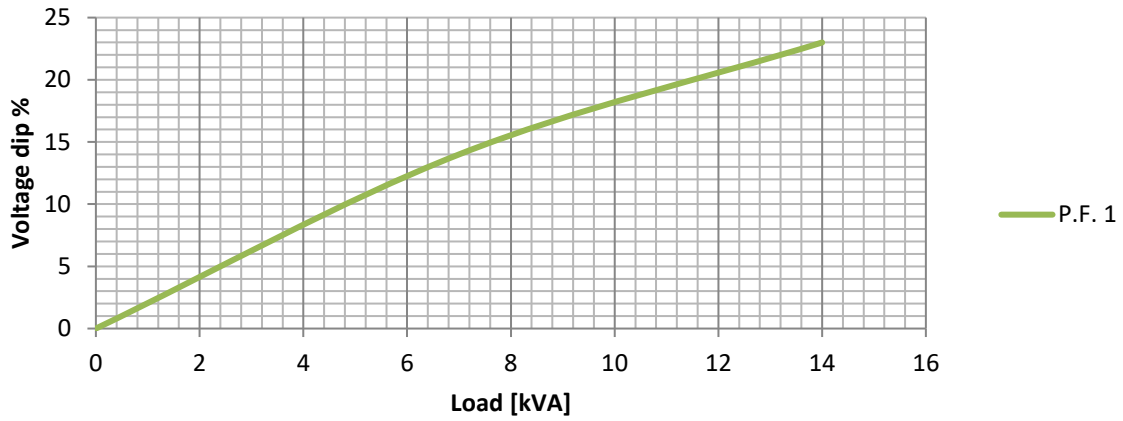




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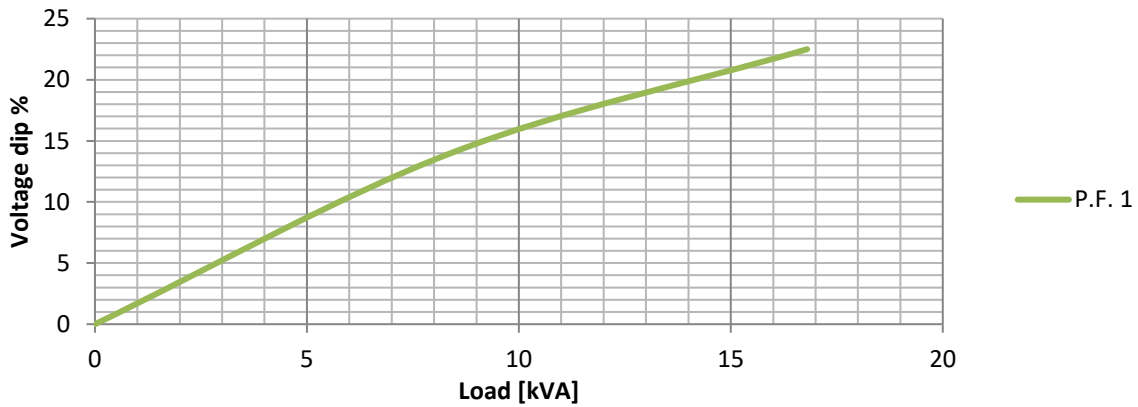
## TRANSIENT VOLTAGE VARIATION 50Hz

### Transient Voltage Variation @ 50Hz



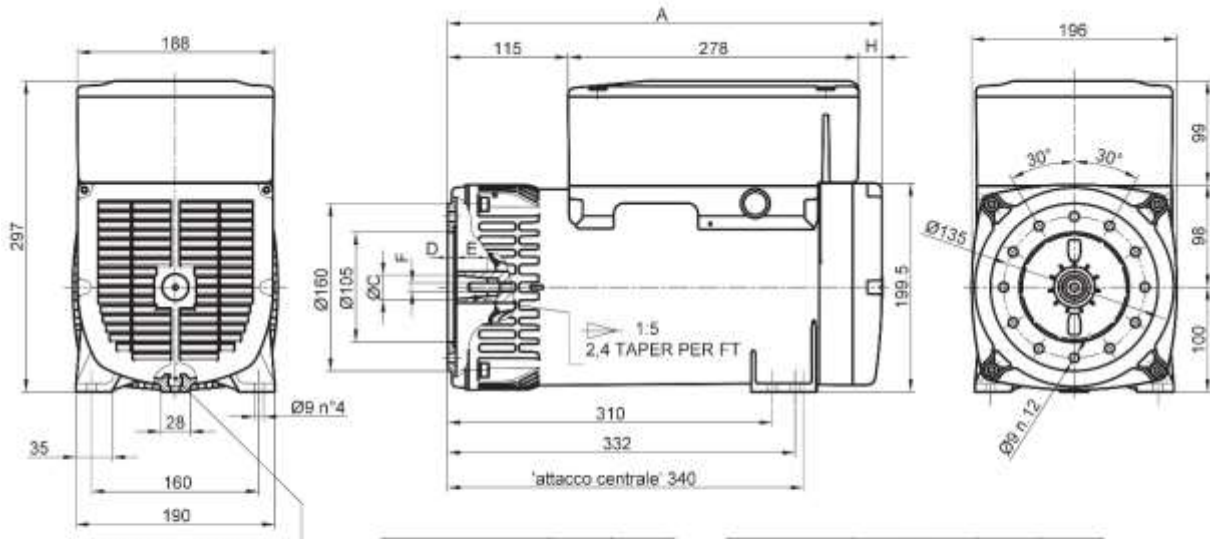
## TRANSIENT VOLTAGE VARIATION 60Hz

### Transient Voltage Variation @ 60Hz



# E1E10M I

## FORMA FORM FORME B3/B9



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

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

