



ALTERNATOR E1E10M I

single-phase synchronous alternator with brushes and avr - 2 poles

Technical Data Sheet

E1E10M I

COMMON DATA

Rated Power at 50Hz	kVA	7	
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 Overspeed	rpm	4500	
Overload		110% of rated power for one hour in a cycle of 6 hours	
Air Flow Requirement	m ³ /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		0.6 at 20°C
Rotor Winding Resistance		11 at 20°C
THD at full load		<5,5%
THD at no load		<4%
Excitation at no load	A _{DC}	1.4
Excitation at full load	A _{DC}	4.3

STANDARD

References	EN60034-1 ISO8528-3 EN55011
------------	-----------------------------

E1E10M I

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		7		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	34
	in B3/B9	kg	33.3

E1E10M I

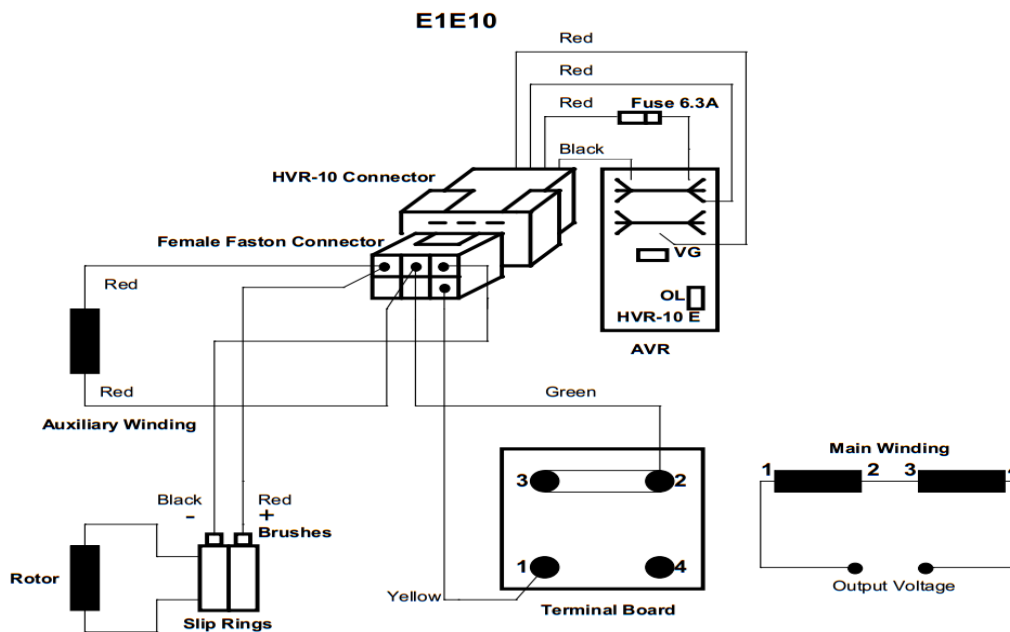
MOMENT OF INERZIA

B3/B9	kg·m ²	0.019
B3/B14	kg·m ²	0.019

POWER VARIATION ACCORDING TO TEMPERATURE AND ALTITUDE

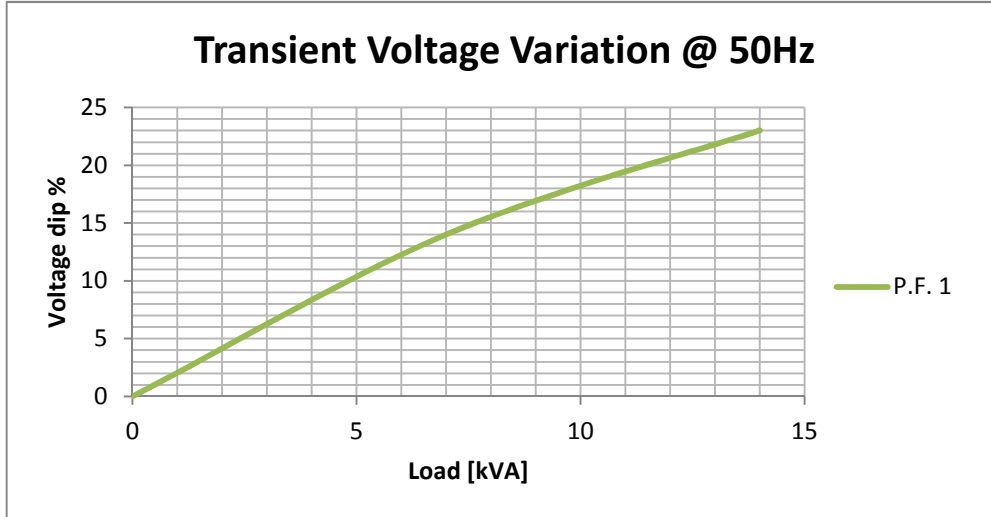
Altitude	Ambient temperature				
	25°C	40°C	45°C	50°C	55°C
< 1000m	1.09	1	0.96	0.93	0.91
1000m - 1500m	1.01	0.96	0.92	0.89	0.87
1500m - 2000m	0.96	0.91	0.87	0.84	0.83
2000m - 3000m	0.9	0.85	0.81	0.78	0.76

WIRING DIAGRAM



E1E10M I

TRANSIENT VOLTAGE VARIATION 50Hz



TRANSIENT VOLTAGE VARIATION 60Hz

