



ALTERNATOR E1E13S C

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

Technical Data Sheet

E1E13S C

COMMON DATA

Rated Power at 50Hz	kVA	13	
Rated Power at 60Hz	kVA	15.6	
Rated Power Factor		1	
Nominal Temperature	°C	40	
Control System		self excited	
Execution		with brushes	
Regulation Type		avr	
Insulation Class		H	
Protection		IP21	
Maximum Overspeed	rpm	4500	
Overload		110% of rated power for one hour in a cycle of 6 hours	
Air Flow Requirement	m ³ /min	9.4 at 50Hz	12.2 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		0.31 at 20°C	
Rotor Winding Resistance		10.6 at 20°C	
THD at full load		<4%	
THD at no load		<4%	
Excitation at no load	A _{DC}	2	
Excitation at full load	A _{DC}	5.9	

STANDARD

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

E1E13S C

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	13		15.6	
Rated Power in Class F (105°C/40°C)	kW	12		14.2	

EFFICIENCY IN CL. H

4/4	82.0%	82.4%
3/4	82.5%	82.9%
2/4	80.5%	81.0%
1/4	79.2%	81.0%

MECHANICAL DATA

Bearing non drive end		6305-2Z-C3
Bearing drive end (B3/B14 form)		6208-2Z-C3
Weight of generator	in B2	\
	in B3/B14	65.2
	in B3/B9	62.3

E1E13S C

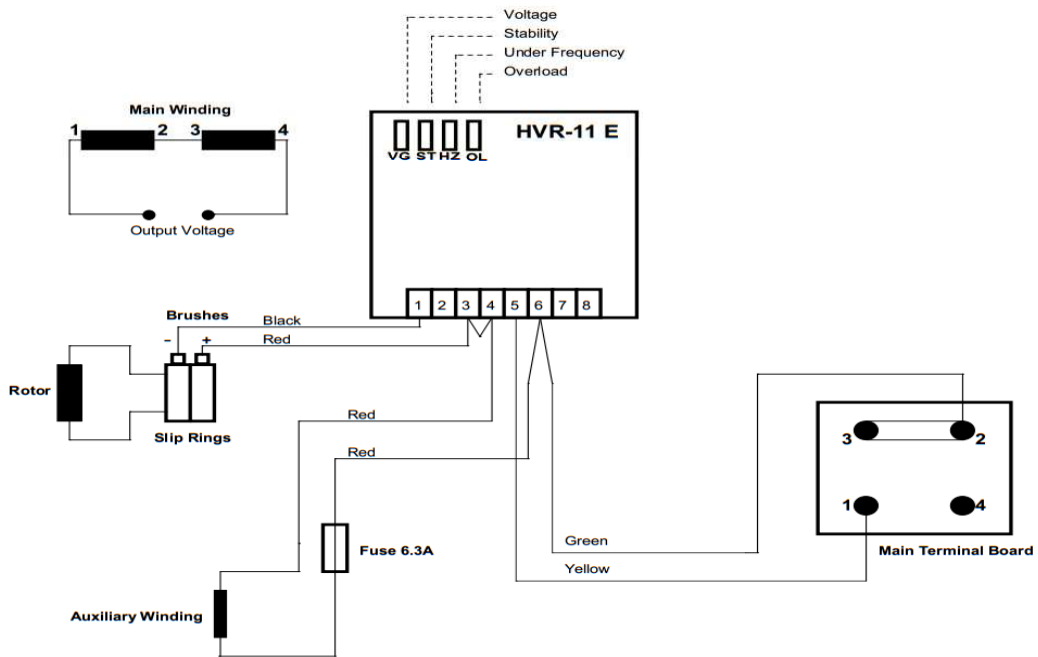
MOMENT OF INERZIA

B3/B9	kg·m ²		0.061
B3/B14	kg·m ²		0.061

POWER VARIATION ACCORDING TO TEMPERATURE AND ALTITUDE

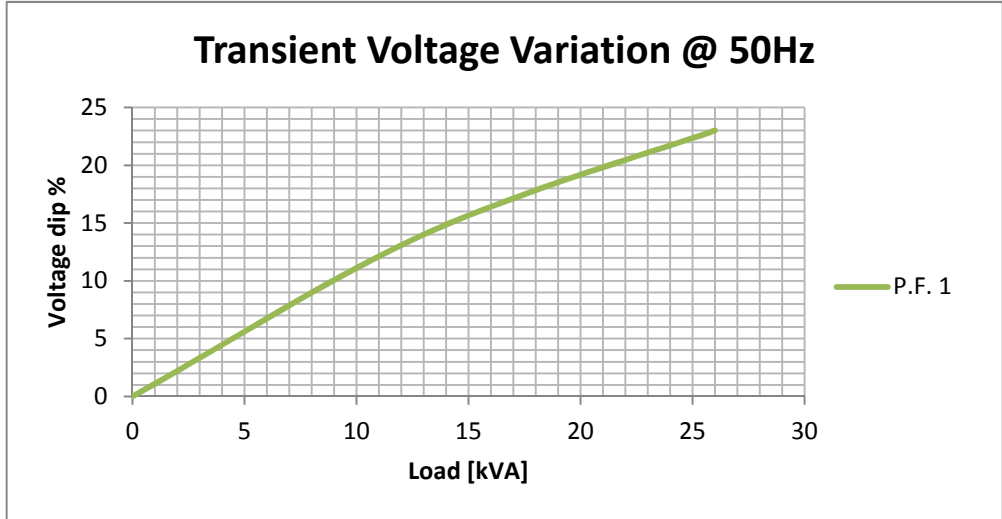
Altitude	Ambient temperature				
	25°C	40°C	45°C	50°C	55°C
< 1000m	1.09	1	0.96	0.93	0.91
1000m - 1500m	1.01	0.96	0.92	0.89	0.87
1500m - 2000m	0.96	0.91	0.87	0.84	0.83
2000m - 3000m	0.9	0.85	0.81	0.78	0.76

WIRING DIAGRAM

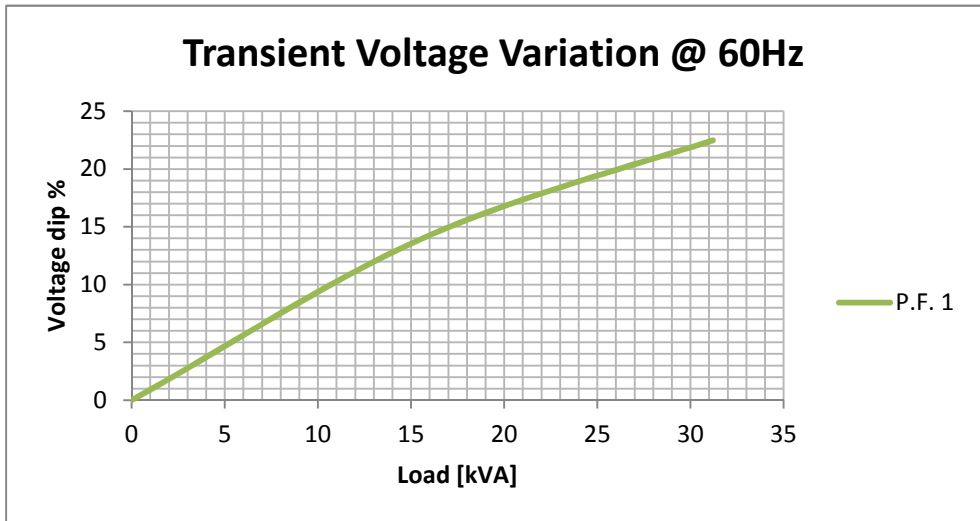


E1E13S C

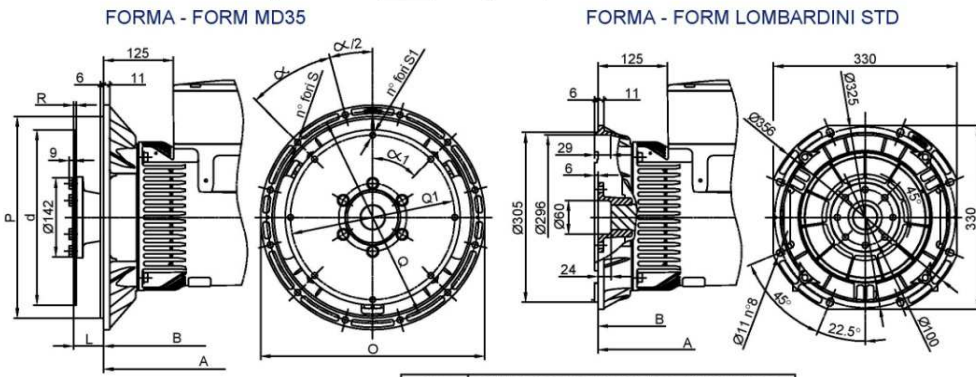
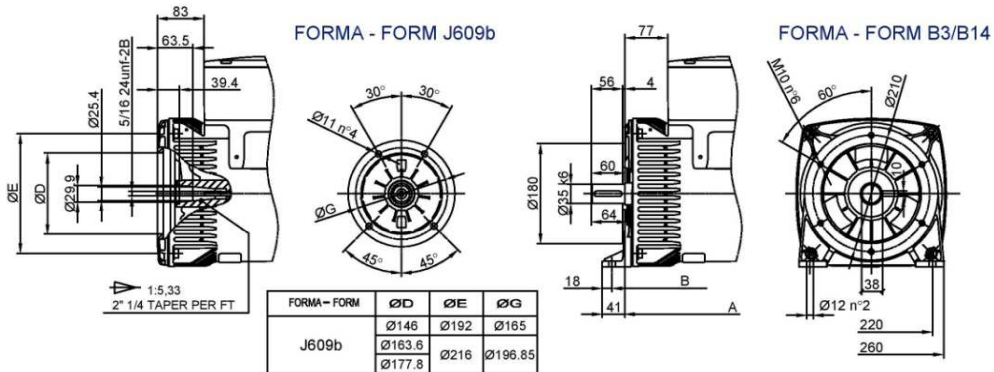
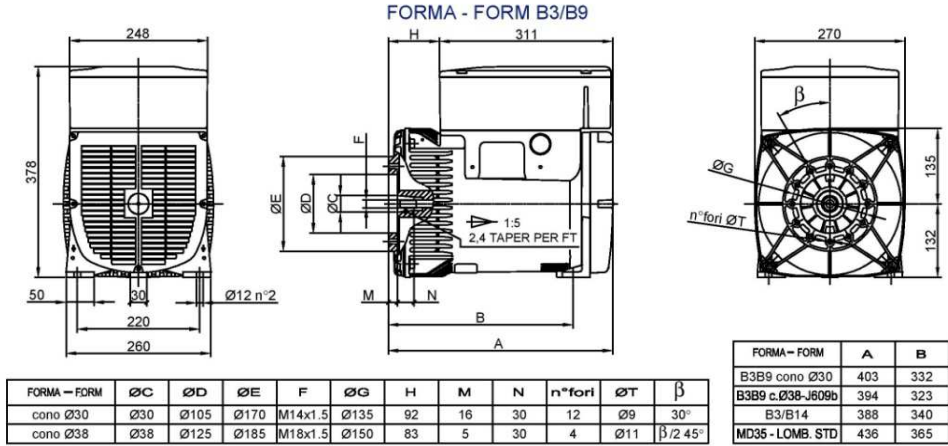
TRANSIENT VOLTAGE VARIATION 50Hz



TRANSIENT VOLTAGE VARIATION 60Hz



E1E13S C



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