ALTERNATOR E1C13S B/4

Single-phase brushless synchronous alternator with capacitor - 4 poles

Technical Data Sheet

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COMMON DATA

Rated Power at 50Hz	kVA	7	
Rated Power at 60Hz	kVA	8.5	
Rated Power Factor		1	
Nominal Temperature	°C	40	
Control System		Self excited	
Execution		brushless	
Regulation Type		capacitor	
Insulation Class		H	
Protection		IP23	
Maximum Overspeed	rpm	2250	
Overload		110% of rated power for one hour in a cycle of 6 hours	
Air Flow Requirement	m^3/min	5.3 at 50Hz	6.4 at 60Hz
Telephone Interference		< 2%	
R.F.I. Suppression		Standard EN55011	

REGULATION DATA

capacitor	Aluminium technology
Sensing	Single phase
Voltage Regulation	± 5%
Sustained Short Circuit	>250% of rated current

WINDING DATA

Stator Winding		Single layer with auxiliary winding
Rotor Winding		with damping cage
Number of Leads of Stator Winding		4
Stator Winding Resistance	(50Hz)	0.57Ω at 20°C
Rotor Winding Resistance		1.75Ω at 20°C
Auxiliary Stator Resistance	(50Hz)	2.2Ω at 20°C
THD at full load		< 7%
THD at no load		< 7%

STANDARD

References	EN60034-1, ISO8538, EN55011

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ELECTRICAL DATA

Frequency		50Hz - 1500rpm			60Hz - 1800rpm		
Voltage Series Delta	V		**115/230**			**110/220**	
Rated Power in Class H (125°C/40°C)	kW		7			8.5	
Rated Power in Class F (105°C/40°C)	kW		6.2			7.5	
Rated Power Standby (150°C/40°C)	kW		7.7			9.3	
Rated Power Standby (163°C/27°C)	kW		8			9.6	

EFFICIENCY IN CL. H

4/4		78.0%			79.0%	
3/4		79.0%			80.0%	
2/4		74.3%			75.1%	
1/4		66.2%			68.0%	

MECHANICAL DATA

Bearing non drive end			6305-2Z-C3
Bearing drive end (B3/B14 form)			6208-2Z-C3
Weight of generator	in B2	kg	57.6
	in B3/B14	kg	53.5
	in B3/B9	kg	50.6

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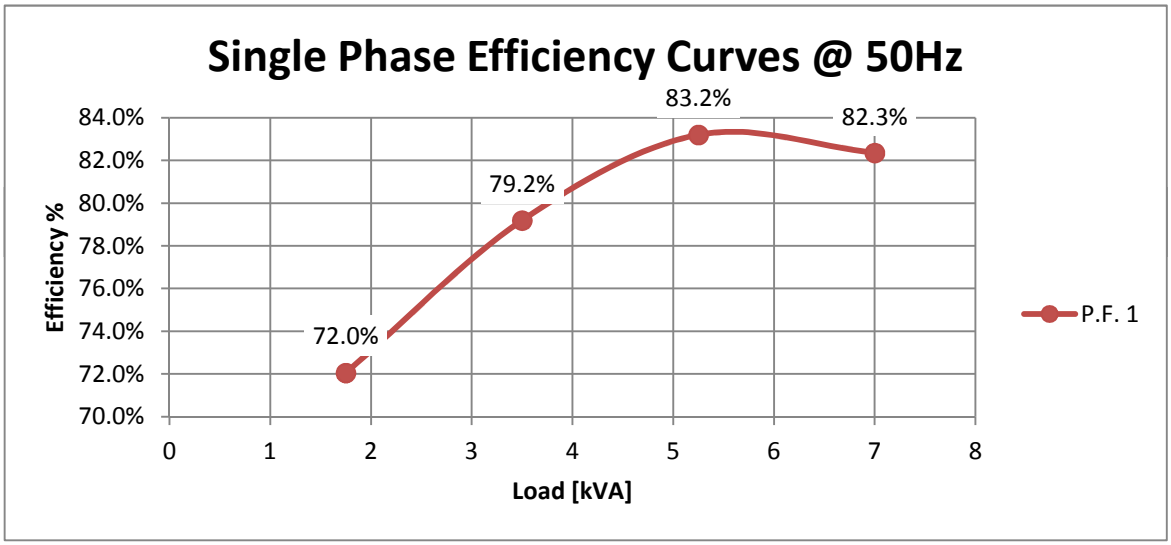
MOMENT OF INERZIA

B2	$kg \cdot m^2$	0.054
B3/B14	$kg \cdot m^2$	0.049

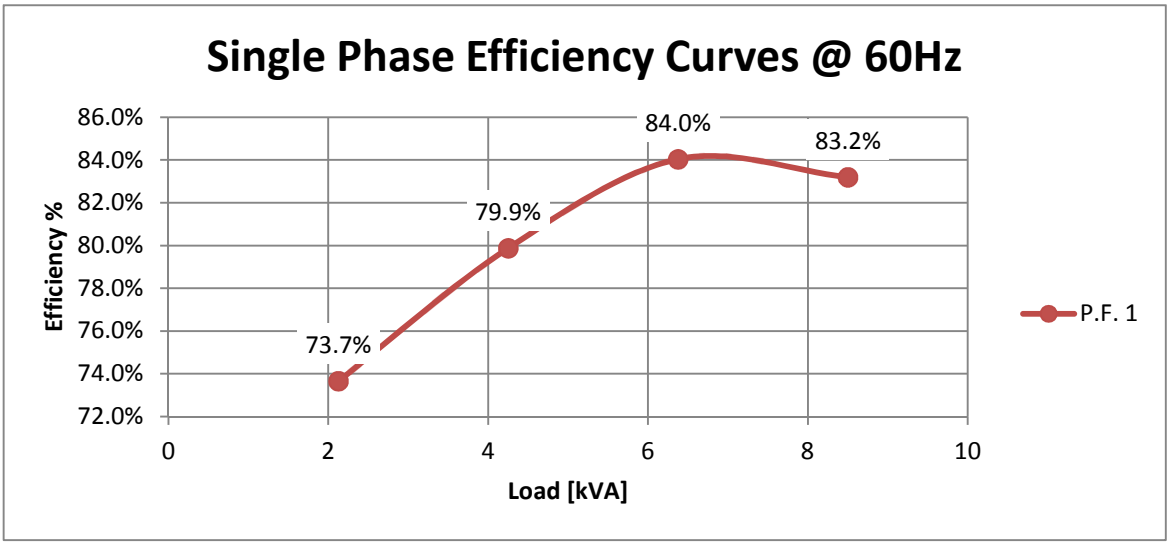
POWER VARIATION ACCORDING TO TEMPERATURE AND ALTITUDE

	Ambient temperature				
Altitude	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

EFFICIENCY 50Hz



EFFICIENCY 60Hz



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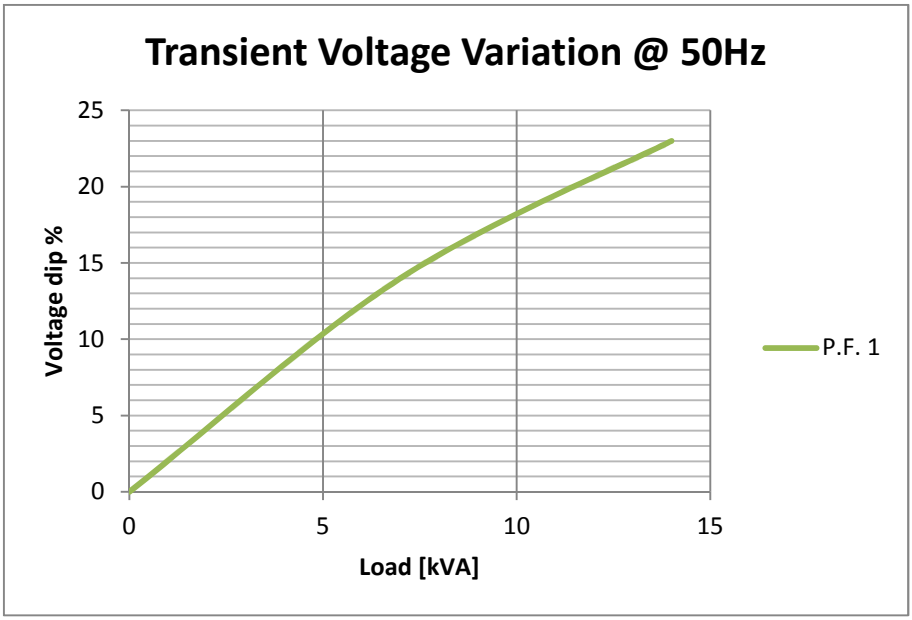
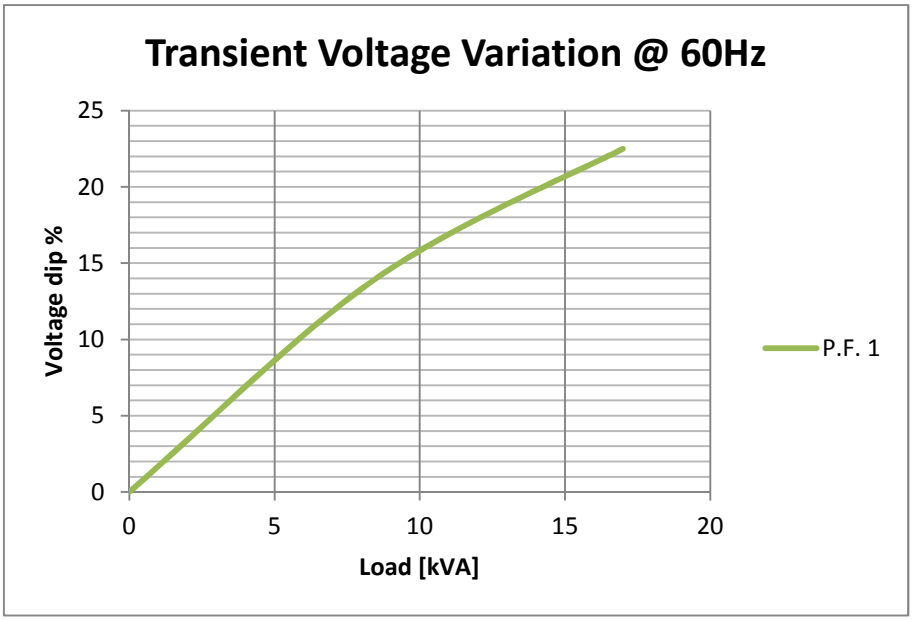
TRANSIENT VOLTAGE VARIATION 50Hz



TRANSIENT VOLTAGE VARIATION 60Hz



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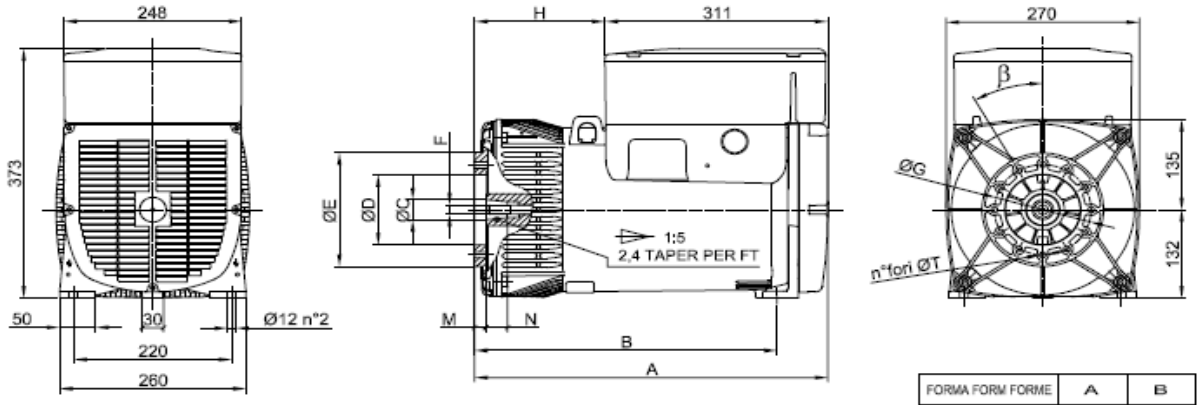
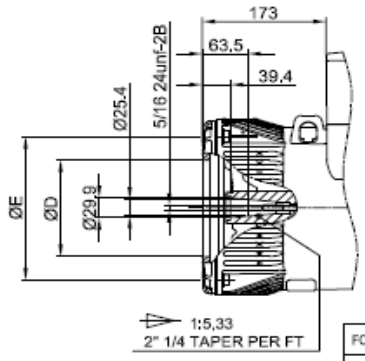
FORMA FORM FORME B3/B9

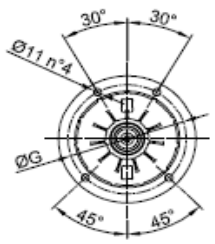


FORMA FORM FORME	ØC	ØD	ØE	F	ØG	H	M	N	n°fori	ØT	β
cono Ø30	Ø30	Ø105	Ø170	M14x1,5	Ø135	182	16	30	12	Ø9	30°
cono Ø38	Ø38	Ø125	Ø185	M18x1,5	Ø150	173	5	30	4	Ø11	β/2 45°

FORMA FORM FORME	A	B
B3B9 cono Ø30	493	422
B3B9 c.Ø38-J609b	484	413
B3/B14	478	430
MD35 - LOMB. STD	526	455

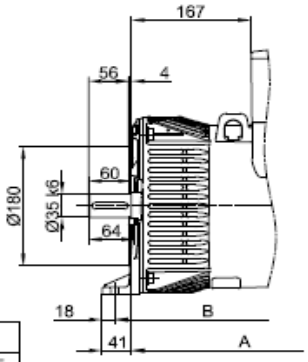
FORMA FORM FORME J609b

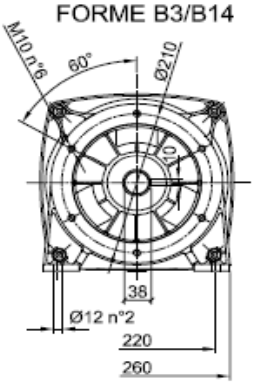




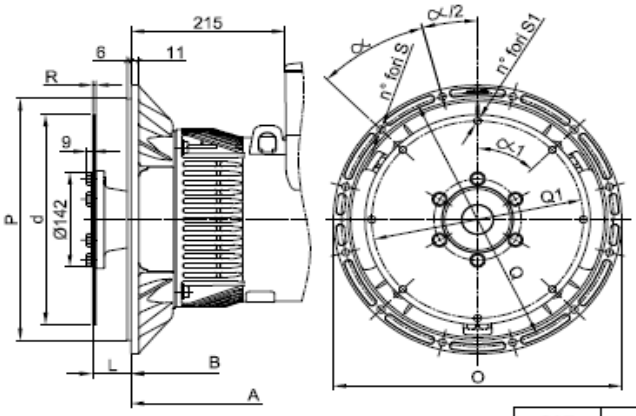
FORMA FORM FORME	ØD	ØE	ØG
J609b	Ø146	Ø192	Ø165
	Ø163.6	Ø216	Ø196.85
	Ø177.8		

FORMA FORM FORME B3/B14



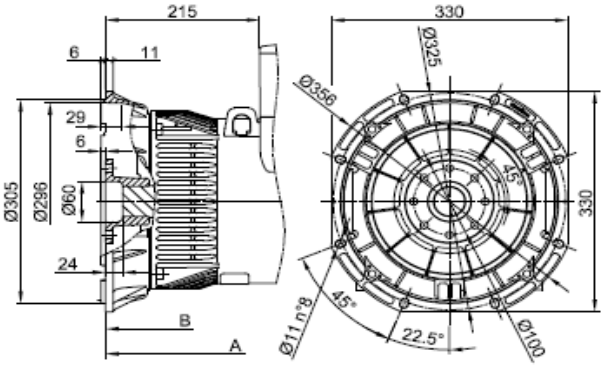


FORMA FORM FORME MD35



SAE N.	FLANGIE - BRIDE - FLANGE					
	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

FORMA FORM FORME LOMBARDINI STD



SAE N.	GIUNTI A DISCO - DISC COUPLING - ACC. DISQUE						
	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°	