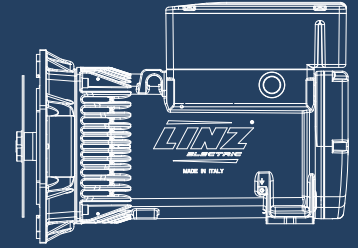


E1C13M D/2 - 60Hz

Single-Phase brushless synchronous alternator with capacitor - 2 poles



COMMON DATA		
Rated Power at 60Hz	kVA	18
Rated Power Factor		1
Nominal Temperature	°C	40
Control System		self-excited
Execution		Brushless
Regulation Type		Capacitor
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	11.2 at 60Hz
R.F.I. Suppression		Standard EN55011

REGULATION DATA		
Capacitor		Capacitor With Aluminum Technology
Capacitor	μF	40+40
Voltage Regulation		± 5%
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		4
Stator Winding Resistance	Ω	0.16 at 20°C
Rotor Winding Resistance	Ω	5.87 at 20°C
THD at full load		< 5%
THD at no load		< 5%



REFERENCES

EN60034-1 ISO8528-3 EN55011

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

CAN/CSA - C22.2 No. 100-14 (R2009) Motors and Generators, UL1004-1 2nd ed. Rotating Electrical Machines - General Requirements, UL1004-4 2nd ed. Electric Generators

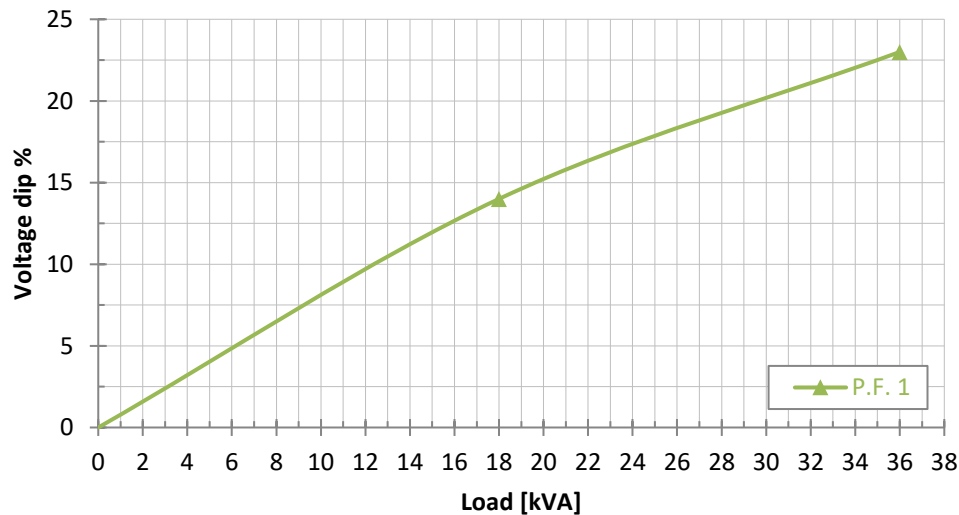
ELECTRICAL DATA @60Hz - 1 P.F.

Frequency		60Hz - 3600rpm
		1 Phase – Parallel/Series
Voltage	V	120/240
Rated Power in Class H (125°C/40°C)	kVA	18.0
	kW	18.0
Rated Power in Class F (105°C/40°C)	kVA	17.0
	kW	17.0
Rated Power Standby (150°C/40°C)	kVA	20.0
	kW	20.0
Rated Power in Class B (80°C/40°C)	kVA	15.0
	kW	15.0

EFFICIENCY IN CL. H OF RATED POWER @60Hz - 1 P.F.

4/4	(100%)	81.5%
3/4	(75%)	82.0%

TRANSIENT VOLTAGE VARIATION @60Hz



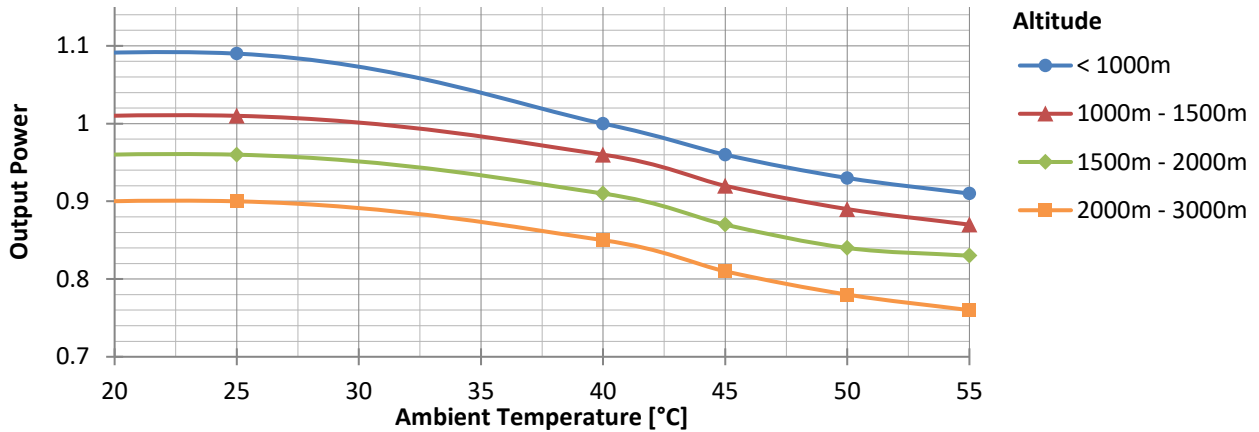
MECHANICAL DATA

Bearing non drive end	6305-2Z-C3		
Bearing drive end (B3/B14 form)	6208-2Z-C3		
Weight of generator	in B2	lbs/kg	/
	in B3/B14	lbs/kg	177/80.3
	in B3/B9	lbs/kg	170.6/52.2

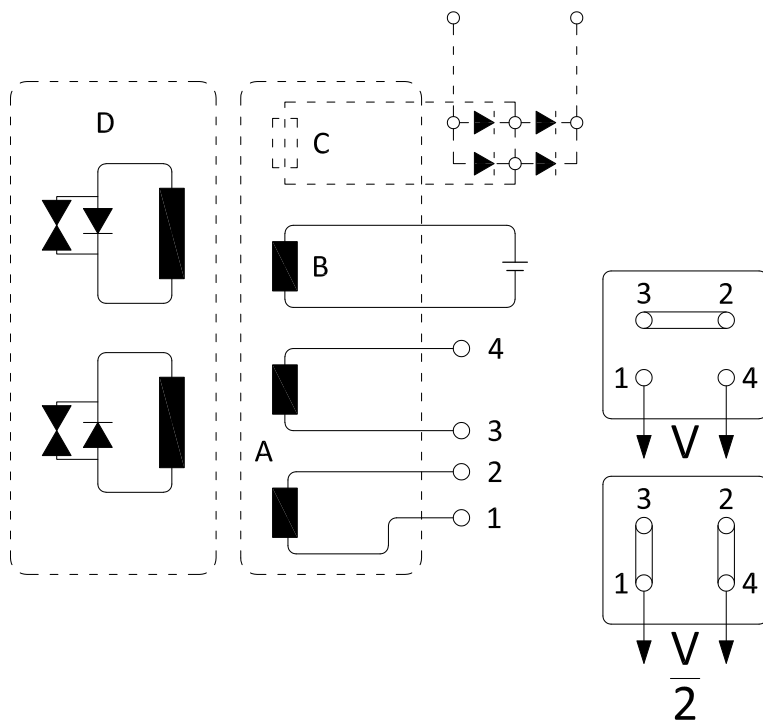
MOMENT OF INERZIA

B3/B9	kg·m ²	0.065
B3/B14	kg·m ²	0.065

DERATING CURVES



WIRING DIAGRAM

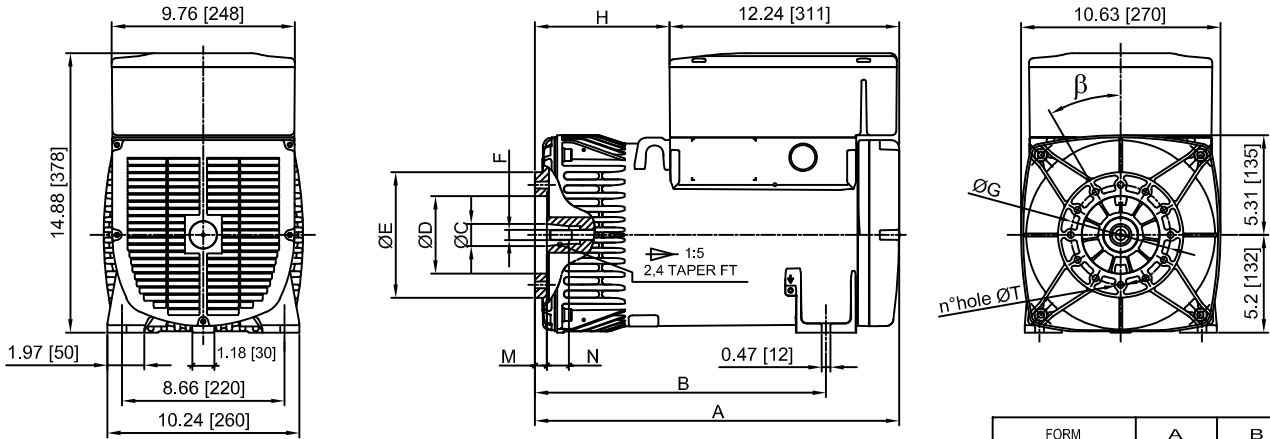


- A Main Winding
- B Excitation Winding
- C Battery Charger Circuit
- D Polar wheel

OVERALL DIMENSIONS

Dimensions in inches and [millimeters]

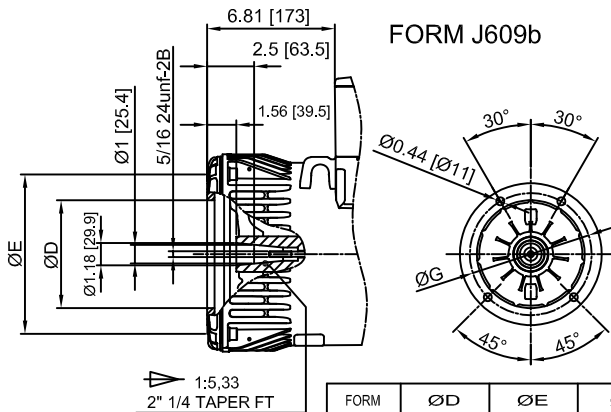
FORM B3/B9



FORM	ØC	ØD	ØE	F	ØG	H	M	N	n°holes	ØT	β
cone Ø1.18 [30]	1.18 [30]	4.13 [105]	6.69 [170]	M14x1.5	5.32 [135]	7.17 [182]	0.63 [16]	1.18 [30]	12	0.35 [9]	30°
cone Ø1.49 [38]	1.49 [38]	4.92 [125]	7.28 [185]	M18x1.5	5.91 [150]	6.81 [173]	0.2 [5]	1.18 [30]	4	0.43 [11]	β/2 45°

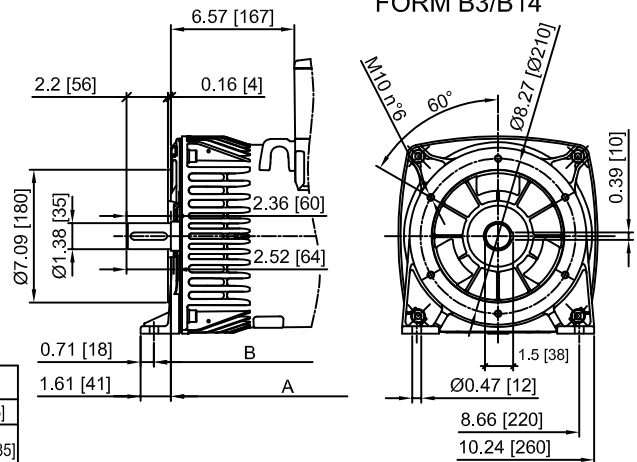
FORM	A	B
B3B9 c. Ø1.18 [30]	19.41 [493]	15.51 [394]
B3B9 c. Ø1.49 [38]-J609b	19.06 [484]	15.16 [385]
B3/B14	18.82 [478]	15.83 [402]
MD35 - LOMB. STD	20.71 [526]	16.81 [427]

FORM J609b

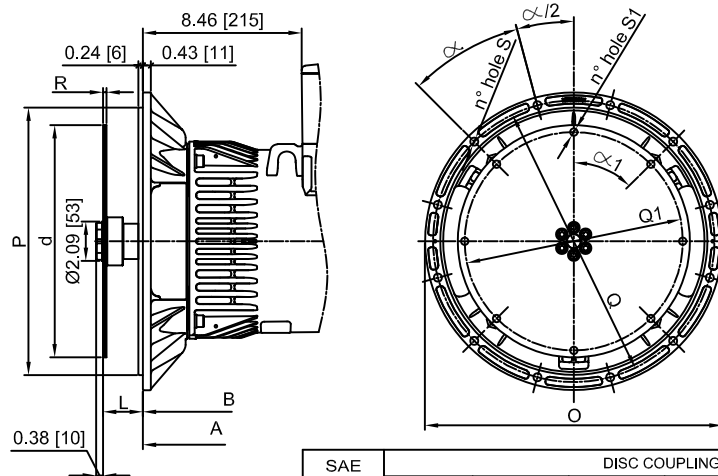


FORM	ØD	ØE	ØG
J609b	5.75 [146]	7.56 [192]	6.49 [165]
	6.44 [163.6]	8.5 [216]	7.75 [196.85]
	7 [177.8]		

FORM B3/B14



FORM MD35



SAE N.	BRIDE					
	ØO	ØP	ØQ	n. holes	S	α
5	14.02 [356]	12.37 [314.3]	13.13 [333.4]	8	11	45°
4	15.87 [403]	14.26 [362]	15 [381]	12		30
3	17.76 [451]	16.13 [409.6]	16.87 [428.6]	12		30

SAE N.	DISC COUPLING						
	L	Ød	ØQ1	n. holes	S1	α1	R
6 1/2	1.19 [30.2]	8.5 [215.9]	7.87 [200]	6	0.35 [9]	60°	0.12 [3]
7 1/2	1.19 [30.2]	9.5 [241.3]	8.75 [222.25]	8	0.35 [9]	45°	
8	2.44 [62]	10.38 [263.52]	9.63 [244.47]	6	0.41 [10.5]	60	0.18 [4.5]
10	2.12 [53.8]	12.38 [314.32]	11.63 [295.27]	8	0.41 [10.5]	45°	
11 1/2	1.56 [39.6]	13.88 [352.42]	13.13 [333.37]	8	0.41 [10.5]	45°	