

TECHNICAL DATA SHEET



ALTERNATOR ALUMEN-X MD

Single-Phase brushless synchronous alternator with capacitor - 4 poles

ALUMEN-X MD

COMMON DATA

Rated Power at 50Hz	kVA	5	
Rated Power at 60Hz	kVA	6	
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	2250	
Overload		110% of rated power for one hour in a cycle of 6 hours	
Air Flow Requirement	m ³ /min	3,1 at 50Hz	3,6 at 60Hz
R.F.I. Suppression		Standard EN55011	

REGULATION DATA

Capacitor		Capacitor
Voltage Regulation		±5%
Sustained Short Circuit		> 300% of rated current

WINDING DATA

Stator Winding		Single layer with auxiliary winding
Rotor Winding		without damping cage
Number of Leads of Stator		2
Stator Winding Resistance	Ω	0,73 at 20°C
Rotor Winding Resistance	Ω	0,83 at 20°C
THD at full load		<20%
THD at no load		<25%

STANDARD

References	EN60034-1 ISO8528-3 EN55011
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ON REQUEST

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

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

ALUMEN-X MD

ELECTRICAL DATA

Frequency		50Hz - 1500rpm		60Hz - 1800rpm	
Voltage Series Star	V		230		120/240
Rated Power in Class H (125°C/40°C)	kW		5,0		6,0
Rated Power in Class F (105°C/40°C)	kW		4,6		5,5
Rated Power Standby (150°C/40°C)	kW		6,0		7,0
Rated Power Standby (163°C/27°C)	kW		6,3		7,5

EFFICIENCY IN CL. H

4/4		82,7%		82,5%
3/4		83,4%		82,8%

MECHANICAL DATA

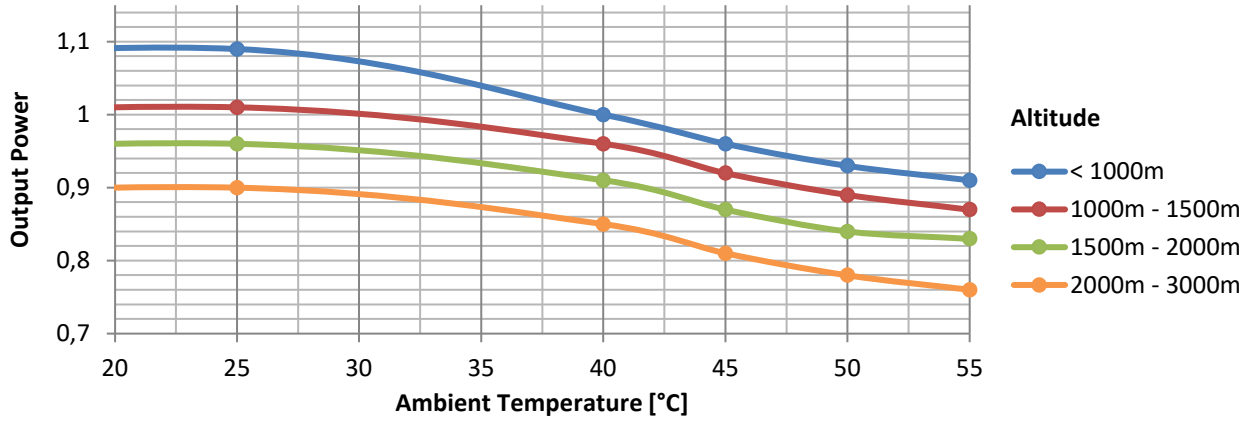
Bearing non drive end		6305-2Z-C3
Weight of generator in B2	kg	41,5

MOMENT OF INERZIA

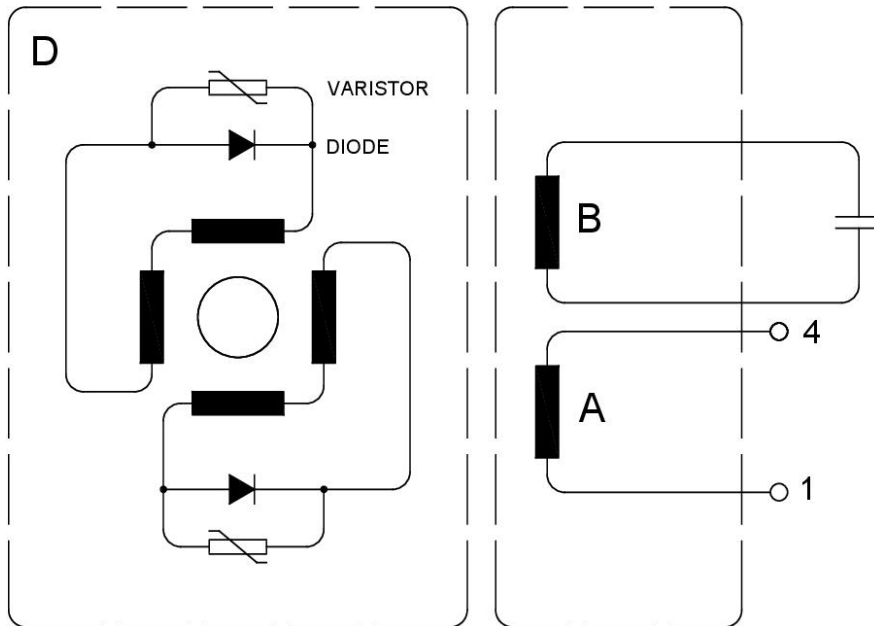
SAE	kg·m ²	0,0532
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ALUMEN-X MD

DERATING CURVES



WIRING DIAGRAM

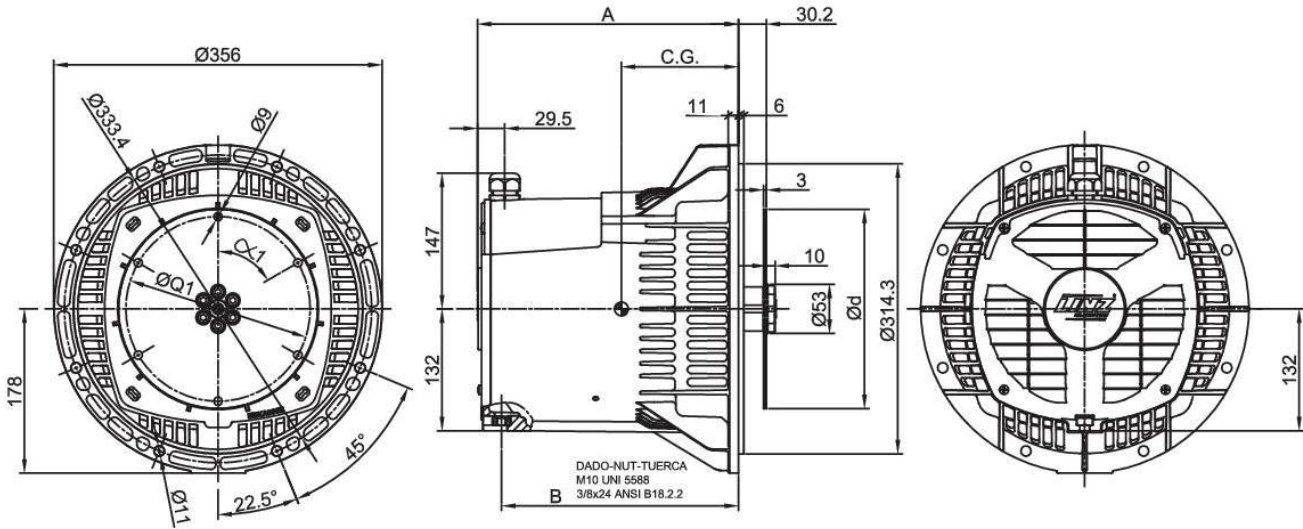


WIRING DIAGRAMS

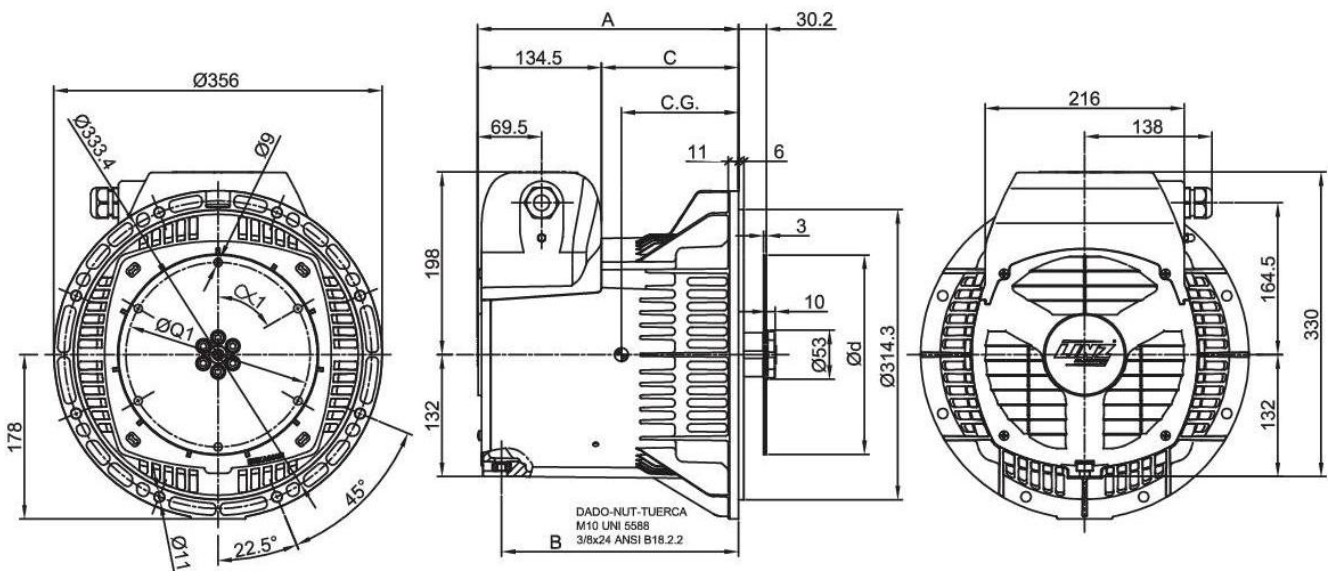
- A** Main Winding
- B** Excitation Winding
- D** Main Rotor

ALUMEN-X MD

FORMA FORM SAE



FORMA FORM SAE - OPTIONAL



TIPO - TYPE	A	B	C	C.G.
ALUMEN 'S'	248	222	113,5	126
ALUMEN 'M'	283	257	148,5	145
ALUMEN 'L'	334	308	199,5	171.5

SAE N.	GIUNTI A DISCO - COUPLING DISCS JUNTAS A DISCOS			
	d	Q1	n. fori holes No.	$\alpha 1$
6 1/2	215.9	200	6	60°
7 1/2	241.3	222.25	8	45°