

SLS18 MC - 1PH - 60Hz

Dedicated Single-Phase brushless synchronous alternator
with AVR - 4 poles

COMMON DATA

Rated Power at 60Hz	kVA	15
Rated Power Factor		1 - 0.8
Nominal Temperature	°C	40
Control System		self-excited
Execution		brushless
Regulation Type		AVR
Insulation Class		H
Protection		IP23
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	5.7 at 60Hz
R.F.I. Suppression		Standard EN55011

REGULATION DATA

AVR		HVR11
Sensing		single-phase
Voltage Regulation		±1%
Sustained Short Circuit		> 200% of rated current

WINDING DATA

Stator Winding		Double layer with auxiliary winding
Rotor Winding		with damping cage
Number of Leads of Stator		4
Stator Winding Resistance	Ω	0.105 at 20°C
Rotor Winding Resistance	Ω	2.22 at 20°C
Exciter Stator Resistance	Ω	15 at 20°C
Exciter Rotor Resistance	Ω	0.72 at 20°C
THD at full load		<5.5%
THD at no load		<3.5%
Excitation at no load	A _{dc}	0.83
Excitation at full load	A _{dc}	1.85



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

Frequency		60Hz - 1800rpm		
		1 Phase Dedicated – Parallel/Series		
Voltage	V	110/220	115/230	120/240
Rated Power in Class H (125°C/40°C)	kVA	14.0	15.0	15.0
Rated Power in Class F (105°C/40°C)	kVA	13.0	14.0	14.0
Rated Power Standby (150°C/40°C)	kVA	14.7	16.0	16.0
Rated Power Standby (163°C/27°C)	kVA	15.2	16.5	16.5

EFFICIENCY IN CL. H

	@1 P.F.
4/4	85.8%
3/4	84.1%
2/4	80.0%
1/4	69.0%

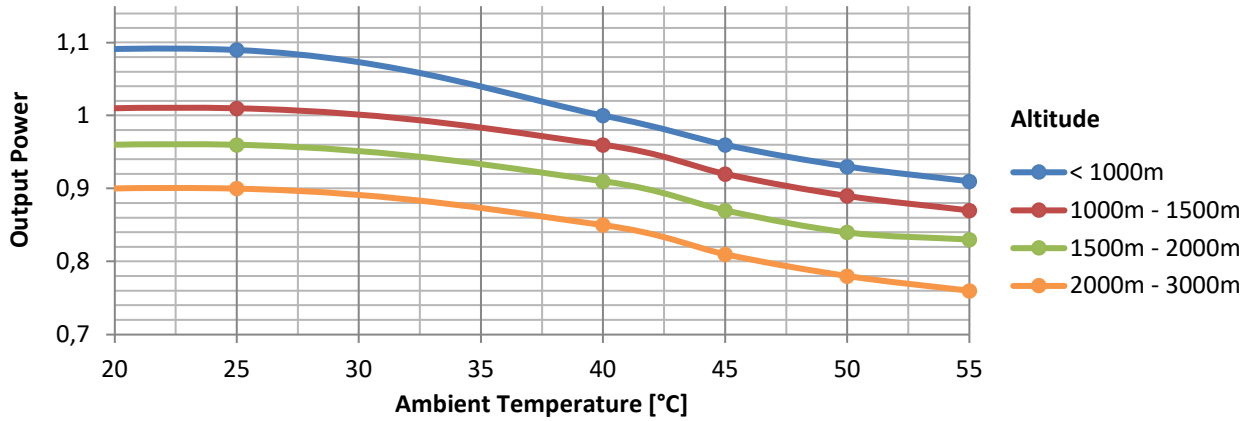
MECHANICAL DATA

Bearing non drive end	6306-2RS-C3		
Bearing drive end (B3/B14 form)	/		
Weight of generator	in B2	kg	96
	in B3/B14	kg	/
	in B3/B9	kg	/

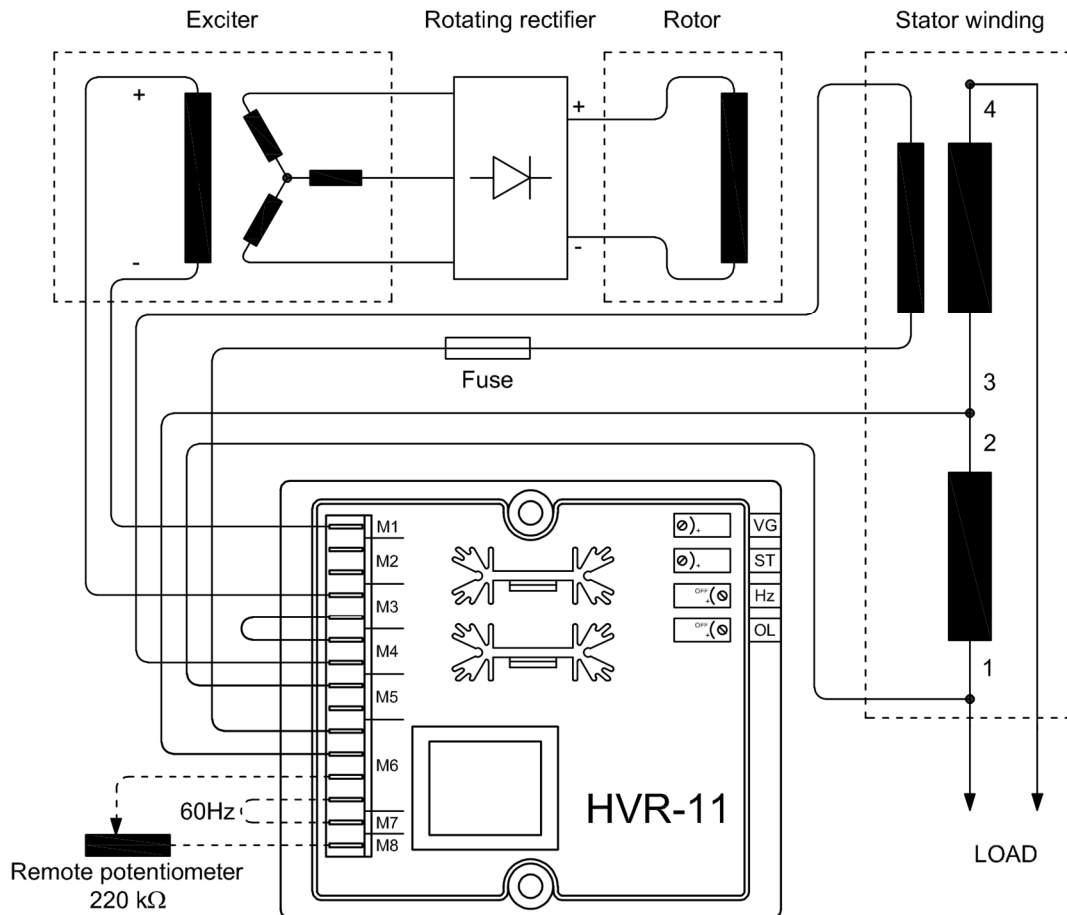
MOMENT OF INERZIA

SAE 6½	kg·m ²	0.158
SAE 7½	kg·m ²	0.161
SAE 8	kg·m ²	0.170
SAE 10	kg·m ²	0.187
SAE 11½	kg·m ²	0.206

DERATING CURVES

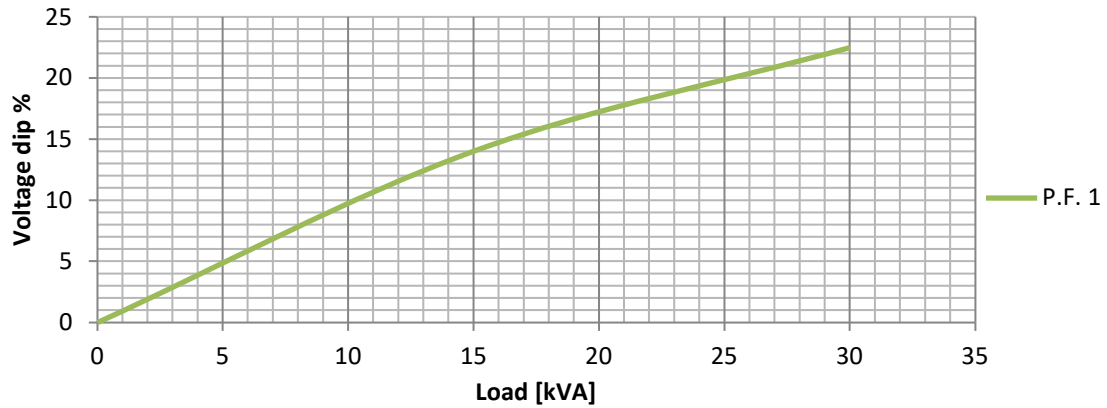


WIRING DIAGRAM



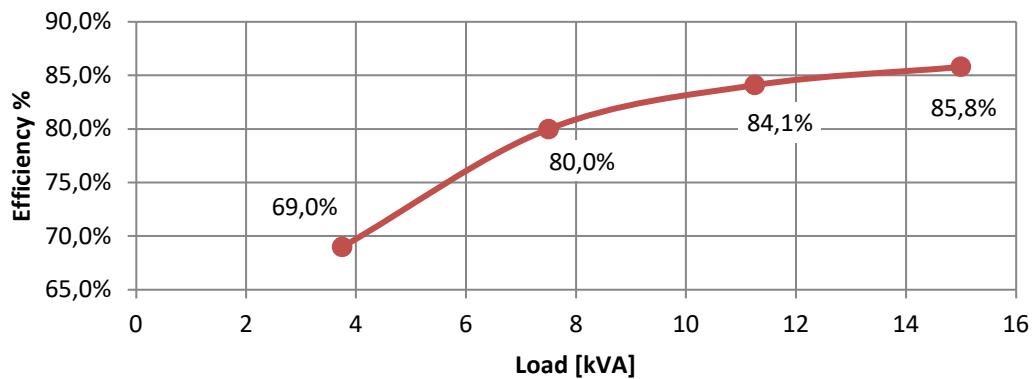
TRANSIENT VOLTAGE VARIATION 60Hz

Transient Voltage Variation @ 60Hz



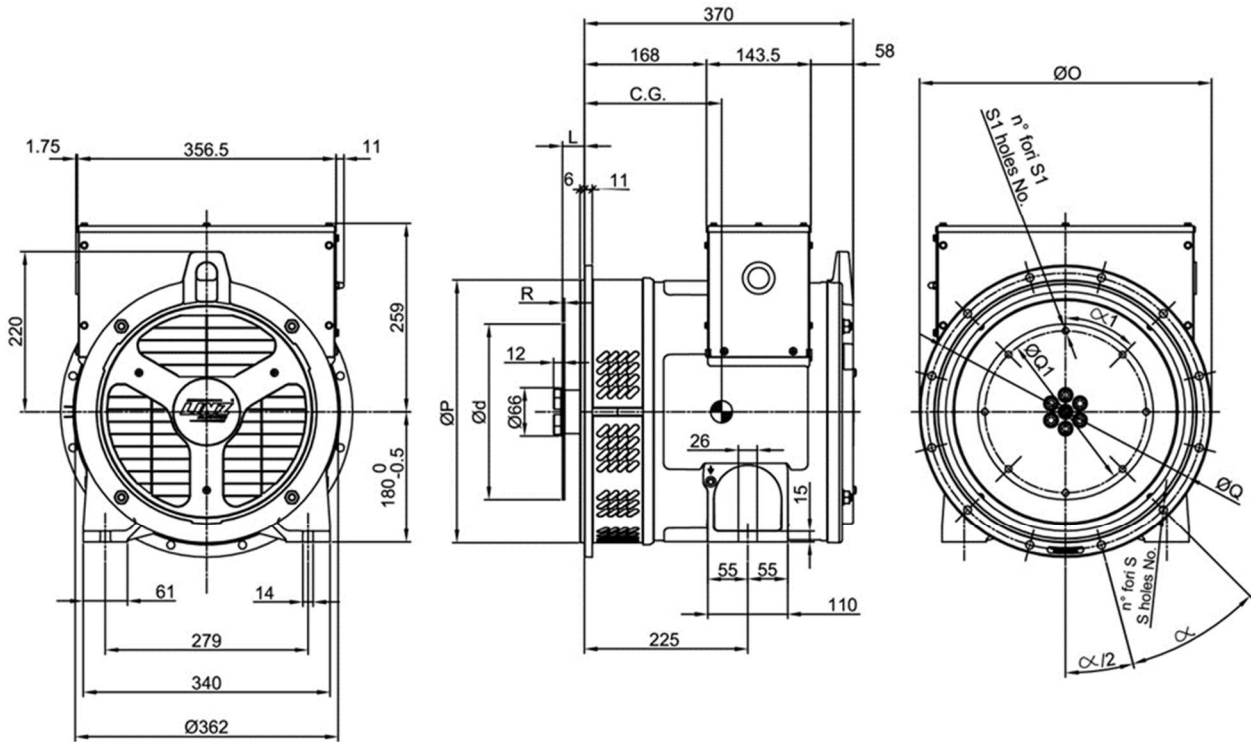
EFFICIENCY 60Hz @PF1

Efficiency Curves @ 60Hz - 120/240V



OVERALL DIMENSIONS

FORMA - FORM SAE



TIPO - TYPE	C.G.
SLS/SLT18 MC MD35	190
SLS/SLT18 MD MD35	192

SAE N.	FLANGIE - FLANGES - BRIDAS					
	$\varnothing O$	$\varnothing P$	$\varnothing Q$	n. fori holes No.	S	α
5	356	314.3	333.4	8	11	45°
4	402	362	381	12		30°
3	451	409.6	428.6	12		30°

SAE N.	GIUNTI A DISCO - COUPLING DISCS - JUNTAS A DISCOS						
	L	$\varnothing d$	$\varnothing Q1$	n. fori holes No.	S1	$\alpha 1$	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°	