

TECHNICAL DATA SHEET



ALTERNATOR SPE10M F

Single-Phase synchronous alternator with brushes and AVR - 2 poles

SPE10M F

COMMON DATA

Rated Power at 50Hz	kVA	3,5	
Rated Power at 60Hz	kVA	4,2	
Rated Power Factor		1	
Nominal Temperature	°C	40	
Control System		self-excited	
Execution		with brushes	
Regulation Type		AVR	
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	3,7 at 50Hz	4,8 at 60Hz
R.F.I. Suppression		Standard EN55011	

REGULATION DATA

AVR		HVR10E
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		2	
Stator Winding Resistance	Ω	1,4 at 20°C	
Rotor Winding Resistance	Ω	8,5 at 20°C	
THD at full load		<5,5%	
THD at no load		<5%	
Excitation at no Load	Adc	1,4	
Excitation at full Load	Adc	4,6	

STANDARD

References		EN60034-1 ISO8528-3 EN55011
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ELECTRICAL DATA

Frequency		50Hz - 3000rpm	60Hz - 3600rpm
Voltage Series Star	V	230	220
Rated Power in Class H (125°C/40°C)	kW	3,5	4,2
Rated Power in Class F (105°C/40°C)	kW	3,2	3,8

EFFICIENCY IN CL. H

4/4	75,0%	75,3%
3/4	75,5%	75,8%

MECHANICAL DATA

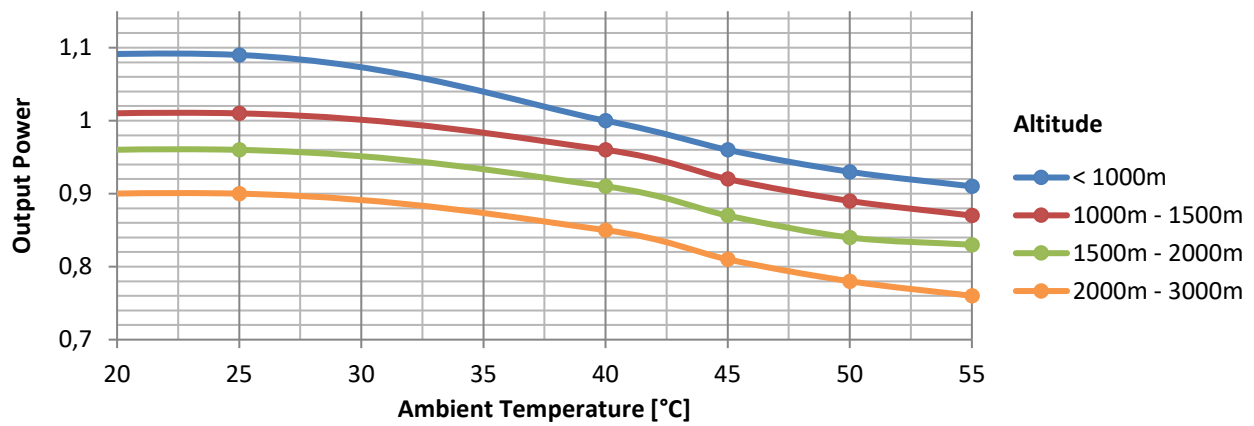
Bearing non drive end		6204-2Z-C3
Bearing drive end (B3/B14 form)		\
Weight of generator	in B2	\
	in B3/B14	\
	in B3/B9	20,1

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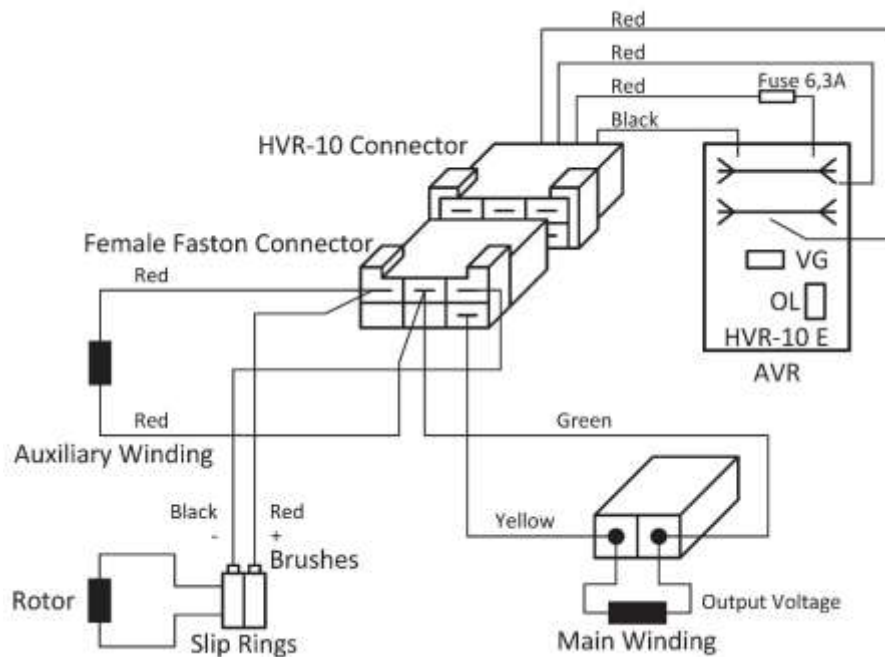
MOMENT OF INERZIA

B3/B9	kg·m ²	0,013
B3/B14	kg·m ²	\

DERATING CURVES



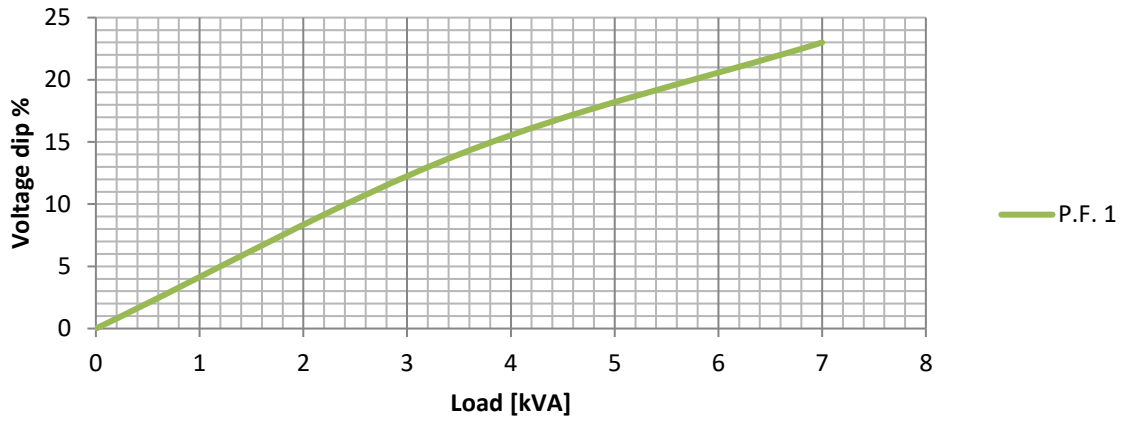
WIRING DIAGRAM



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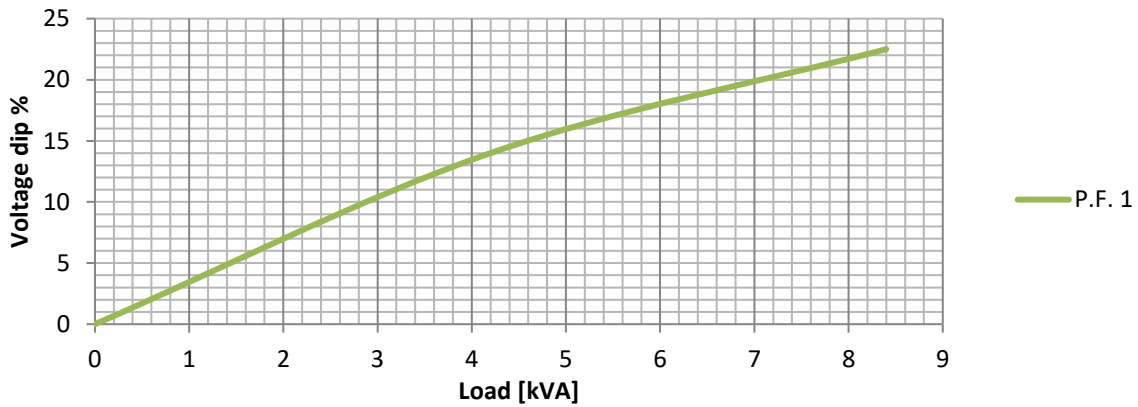
TRANSIENT VOLTAGE VARIATION 50Hz

Transient Voltage Variation @ 50Hz



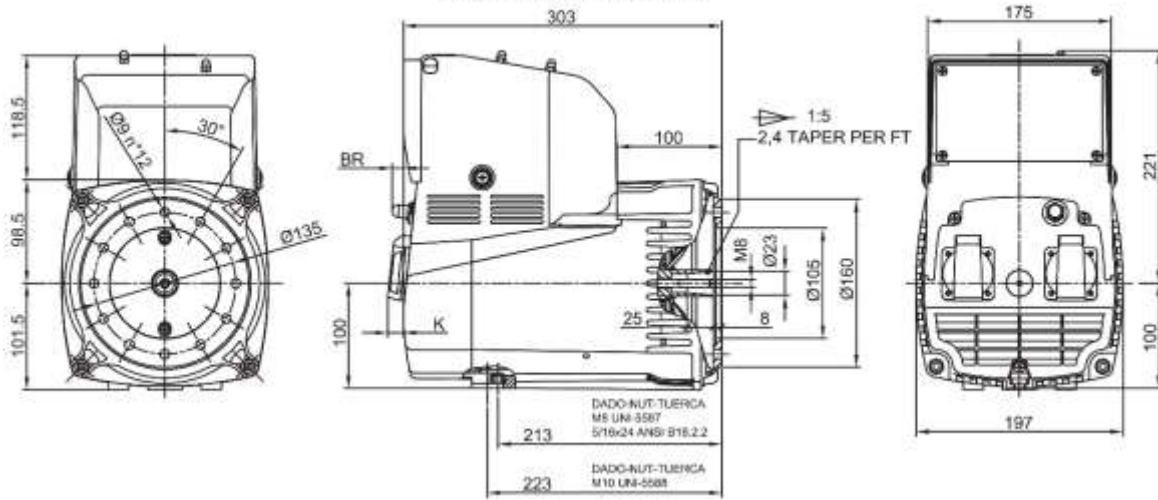
TRANSIENT VOLTAGE VARIATION 60Hz

Transient Voltage Variation @ 60Hz

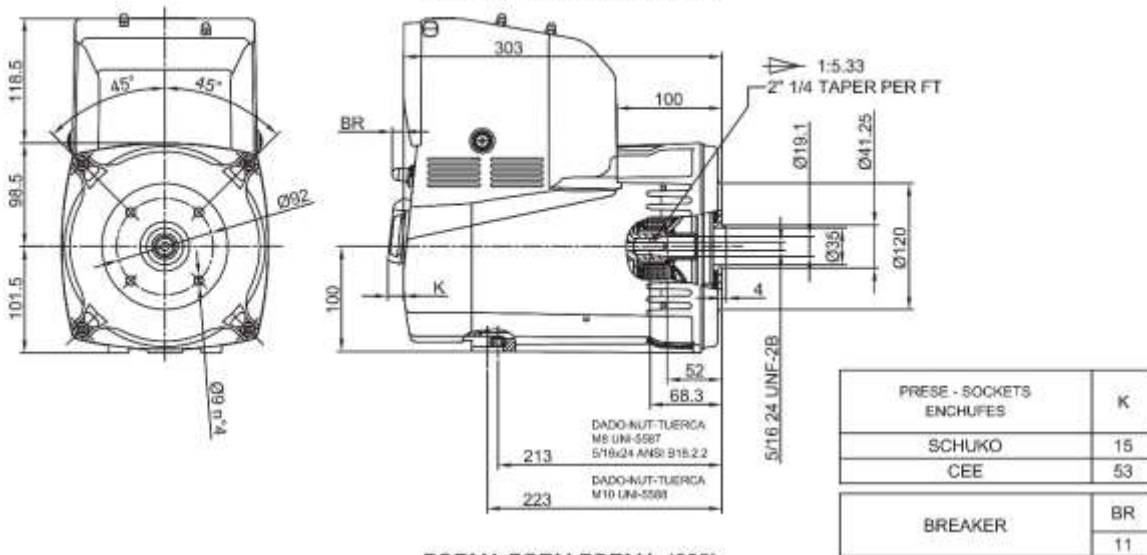


SPE10M F

FORMA FORM FORMA B9



FORMA FORM FORMA J609a



FORMA FORM FORMA J609b

