

TECHNICAL DATA SHEET



ESA2-48/125

9 phases low voltage battery charger alternators

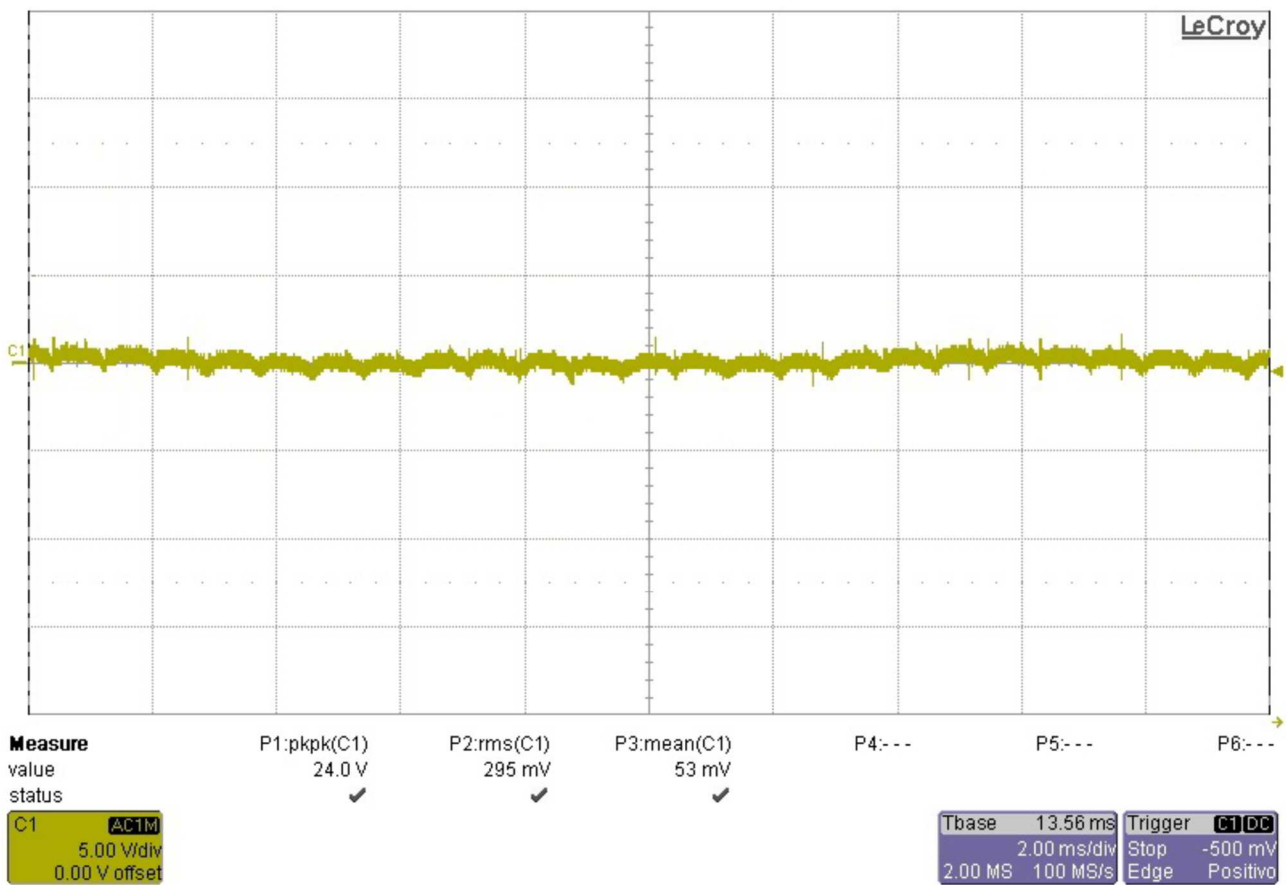
TYPICAL FEATURES

- Very low output ripple: < 1% without battery (see picture 1)
- Output voltage: 45Vdc ÷ 60Vdc
- Max. power output: 7kW @ 3000RPM (see picture 2)
- Max. rectified current: 125A_{dc}
- From 2700 to 3600 RPM
- AVR output voltage that allows:
 - ± 0,5% of voltage accuracy
 - Over-excitation protection
 - Under-speed protection
- Brushless alternator with auxiliary winding
- Nine Phases AC source
- Oversized and reliable internal DC power rectifier: up to 150A with natural air flow (without fan)
- Protection of stator winding and rectifier with thermal trips
- Special socket to guarantee simple, safe and durable connections.
- IP23
- B9 & SAE Coupling
- Weight: 77kg

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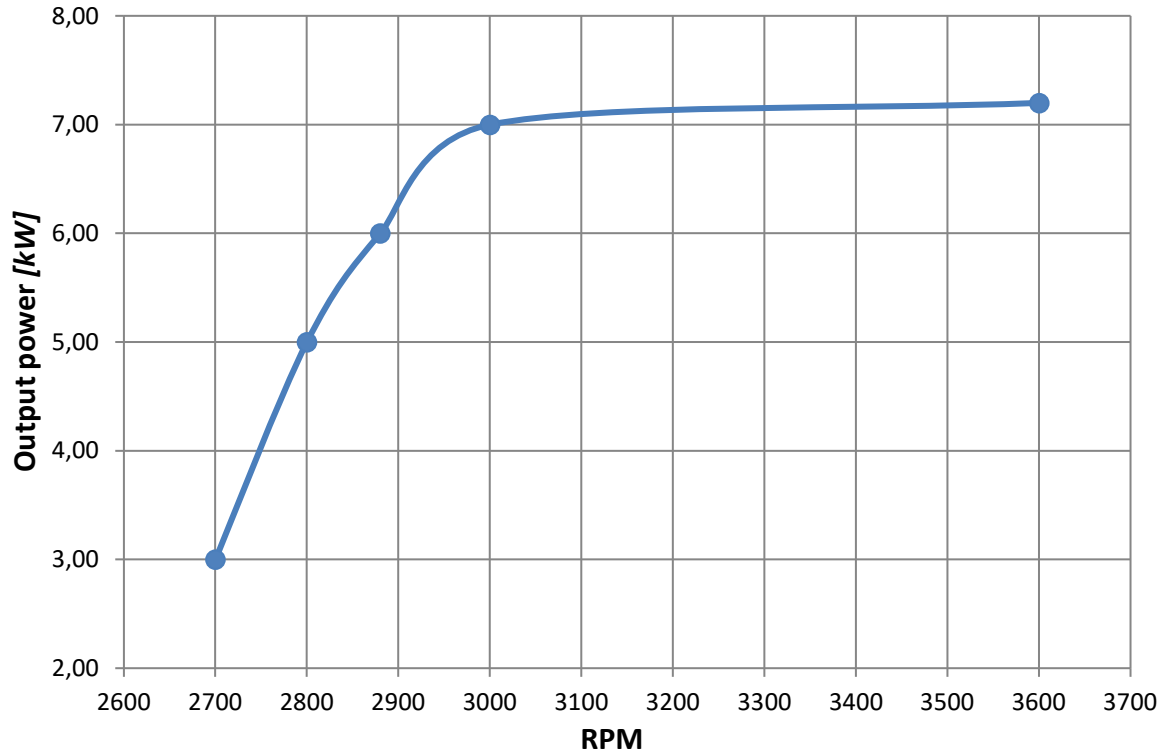
TYPICAL TECHNICAL DATA

DC Output (Vdc)	45 ÷ 60
Power Outlet @ 3000RPM & 56Vdc	7kW
DC Output Current @ 3000RPM	Up to 125A _{dc}
Typical Efficiency	> 78%
RPM	From 2700 to 3600 RPM
Output Ripple	< 1% Without Battery (see picture 1)
Output Accuracy	± 0,5%



Picture 1: AC ripple waveform @ 56Vdc and full load. The RMS value of the ripple is 295mV that is 0.54% of the nominal output voltage.

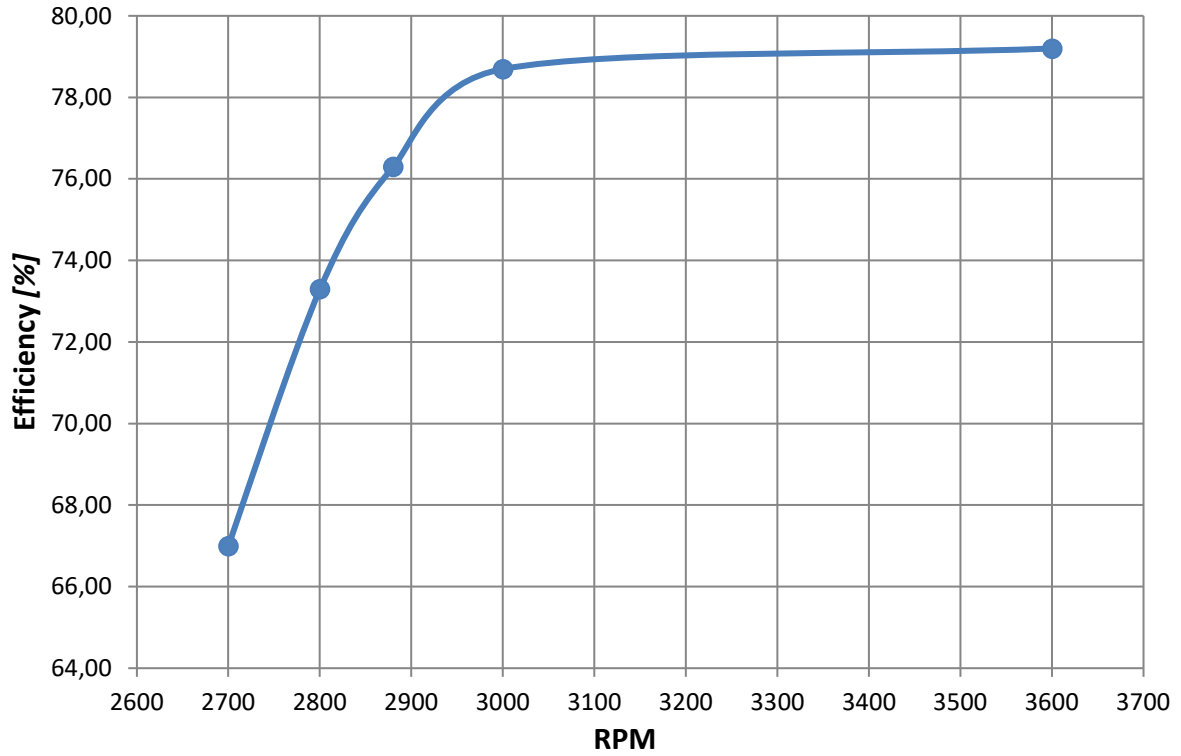
TYPICAL OUTPUT POWER



Picture 2: output power with different RPM.

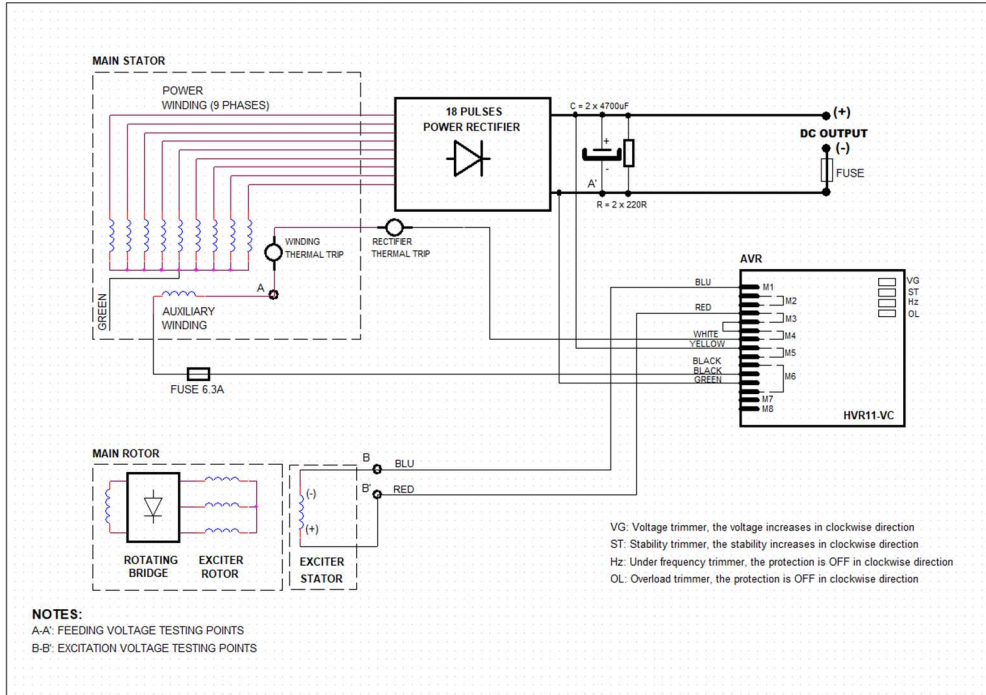
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TYPICAL EFFICIENCY

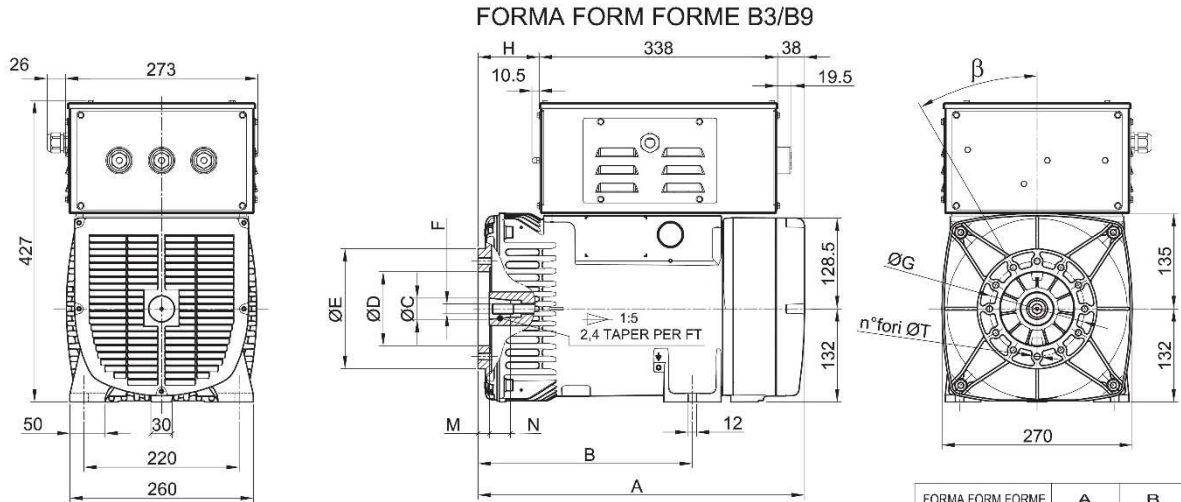


Picture 3: Efficiency with different RPM.

ELECTRIC DIAGRAM

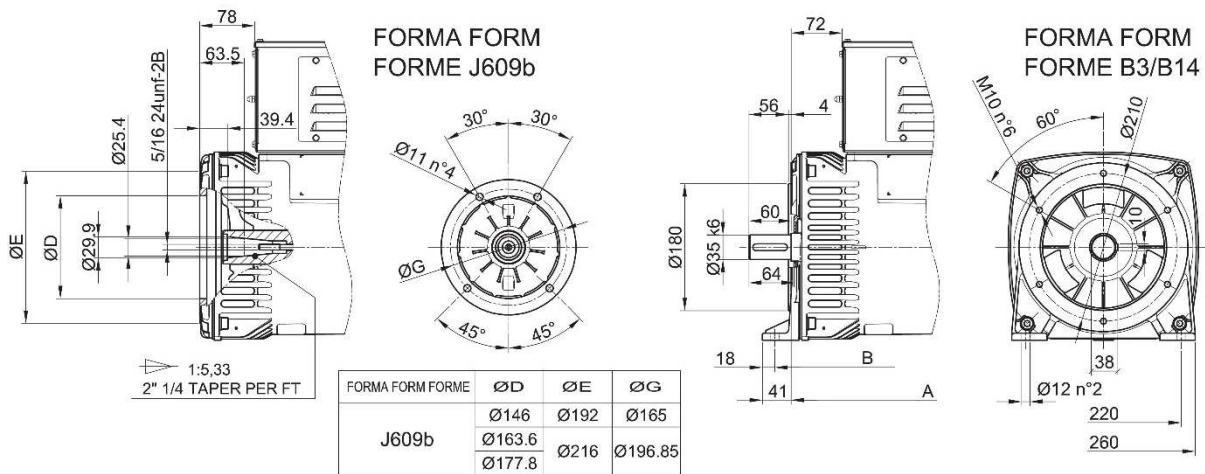


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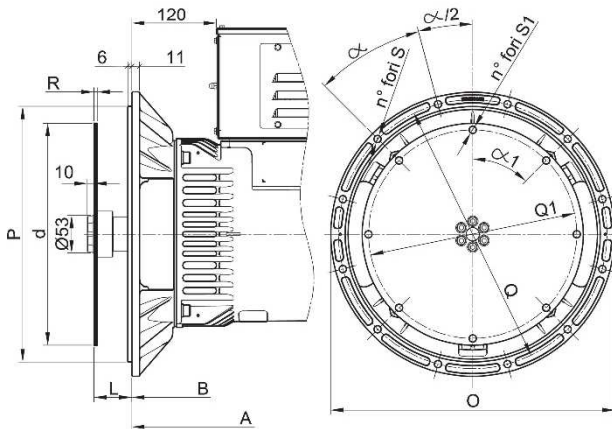
FORMA FORM FORME	ØC	ØD	ØE	F	ØG	H	M	N	n° fori	ØT	β
cono Ø30	Ø30	Ø105	Ø170	M14x1.5	Ø135	87	16	30	12	Ø9	30°
cono Ø38	Ø38	Ø125	Ø185	M18x1.5	Ø150	78	5	30	4	Ø11	β/2 45°

FORMA FORM FORME	A	B
B3B9 cono Ø30	463	304
B3B9 c.Ø38-J609b	454	295
B3/B14	448	312
MD35 - LOMB. STD	496	337



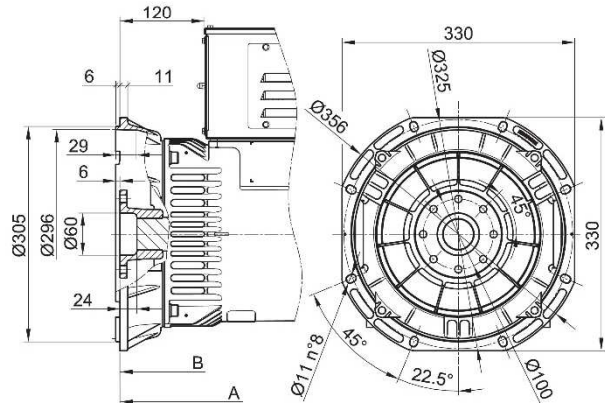
FORMA FORM FORME	ØD	ØE	ØG
J609b	Ø146	Ø192	Ø165
	Ø163.6	Ø216	Ø196.85
	Ø177.8		

FORMA FORM FORME MD35



SAE N.	FLANGIE - BRIDE - FLANGE					
	O	P	Q	n. fori	S	α
5	356	314.3	333.4	8		45°
4	403	362	381	12	11	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	α/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	
10	53.8	314.32	295.27	8	10.5	45°	4.5
11 1/2	39.6	352.42	333.37	8	10.5	45°	