TECHNICAL DATA SHEET

PSA4-24/380

9 phases low voltage battery charger alternators

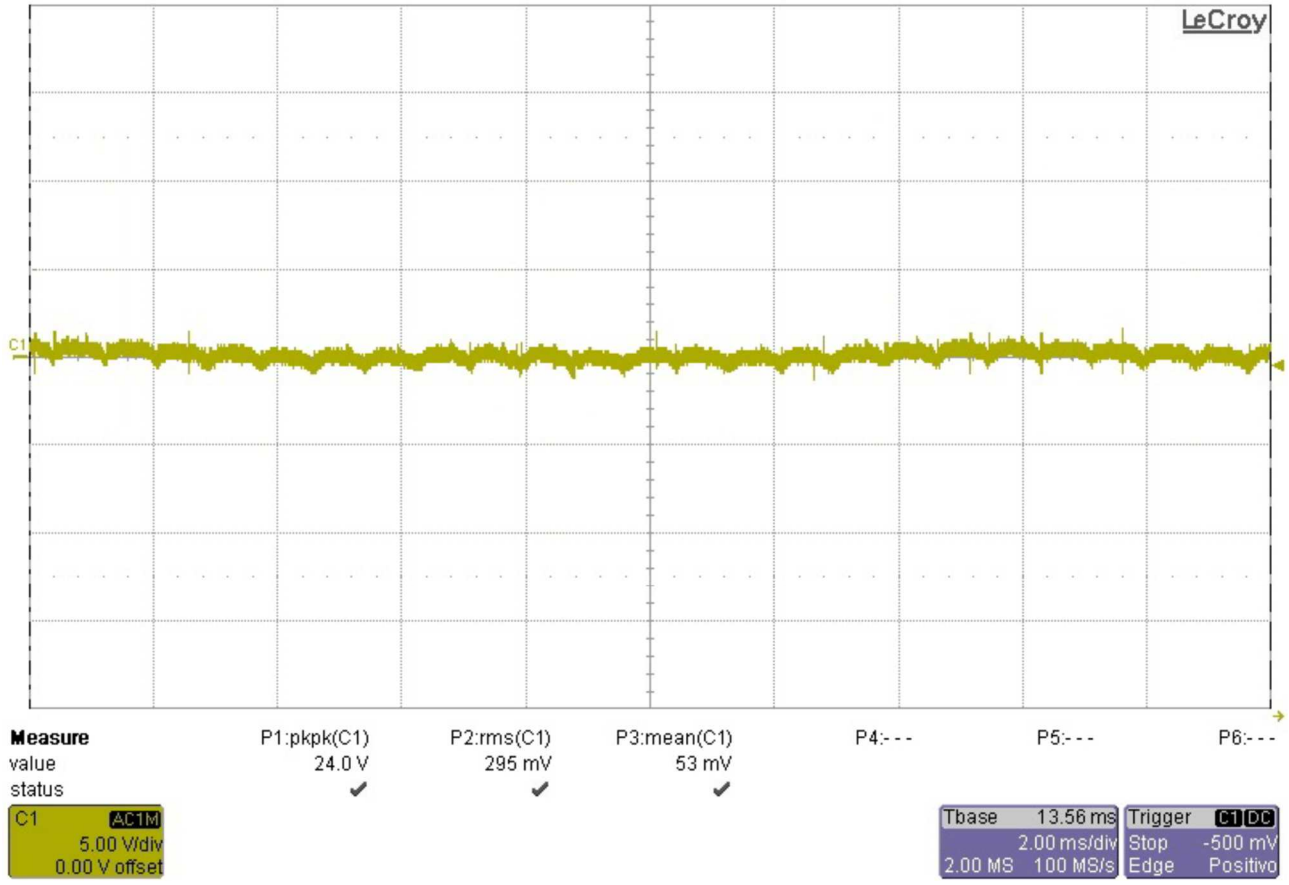
PSA4-24/380

TYPICAL FEATURES

- Very low output ripple: < 1% without battery (see picture 1)
- Output voltage: $24V_{DC}$
- Max. power output: 11kW @ 1500RPM (see picture 2)
- Max. rectified current: $380A_{DC}$
- From 1300 to 2100 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 380A with forced air flow (with fan)
- Protection of stator winding and rectifier with thermal trips
- Special socket to guarantee simple, safe and durable connections.
- IP23
- SAE Coupling
- Weight: 152kg

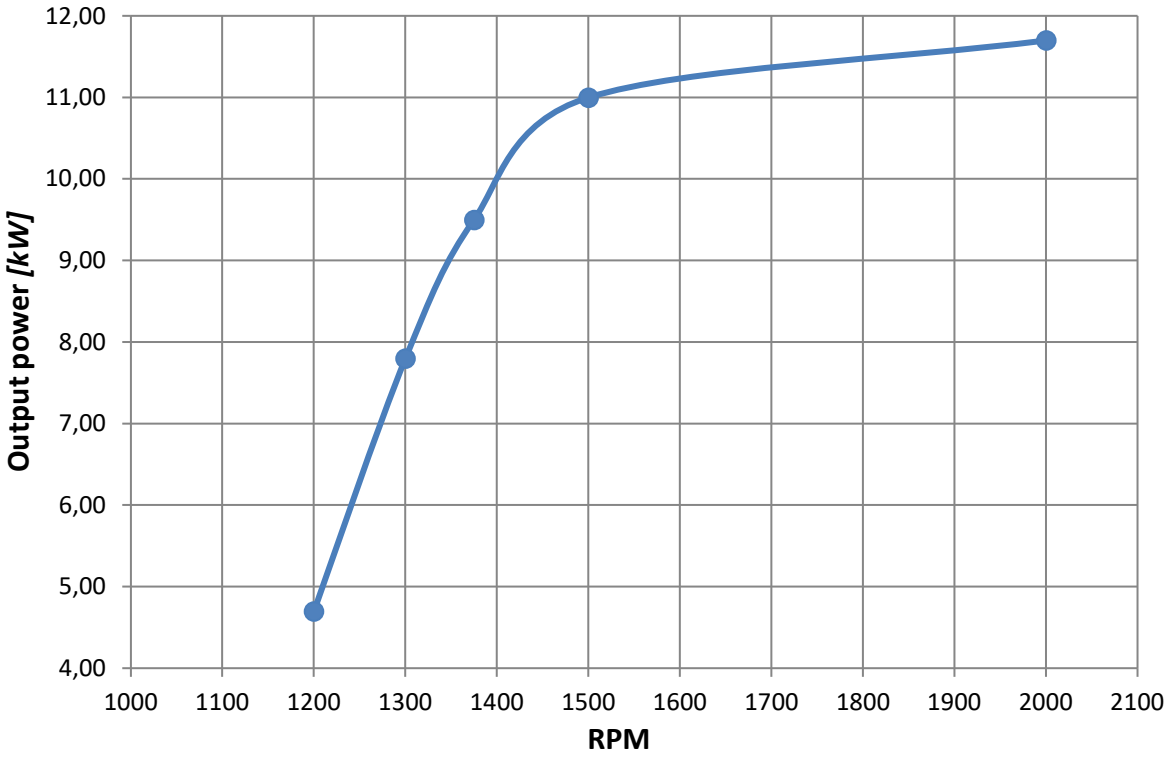
PSA4-24/380

TYPICAL TECHNICAL DATA	
DC Output (Vdc)	23 ÷ 30
Power Outlet @ 1500RPM & 28Vdc	11kW
DC Output Current @ 1500RPM	Up to 380A
Typical Efficiency	> 82,5%
RPM	From 1300 to 2100 RPM
Output Ripple	≤ 1% Without Battery (see picture 1)
Output Accuracy	± 0,5%



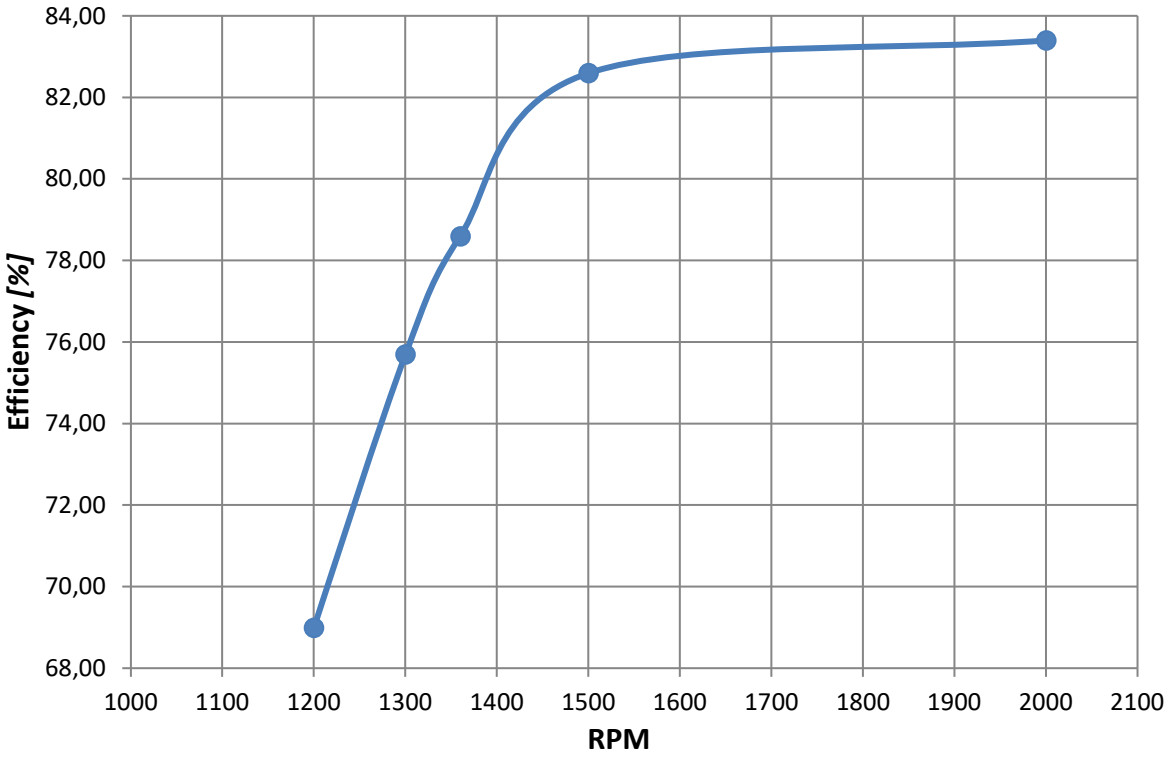
Picture 1: AC ripple waveform @ 28V_{DC} and full load. The RMS value of the ripple is 295mV that is 1% of the nominal output voltage.

TYPICAL OUTPUT POWER



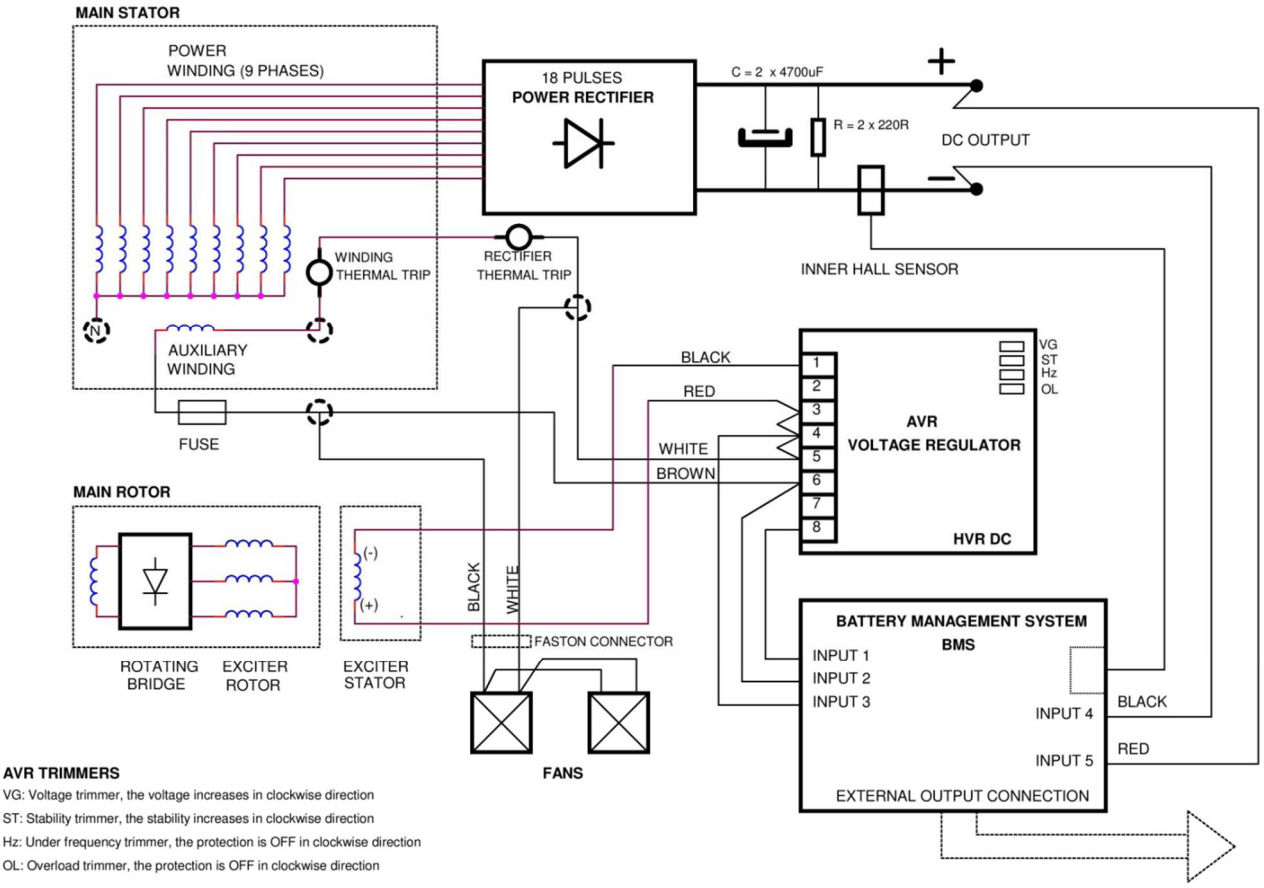
Picture 2: output power with different RPM.

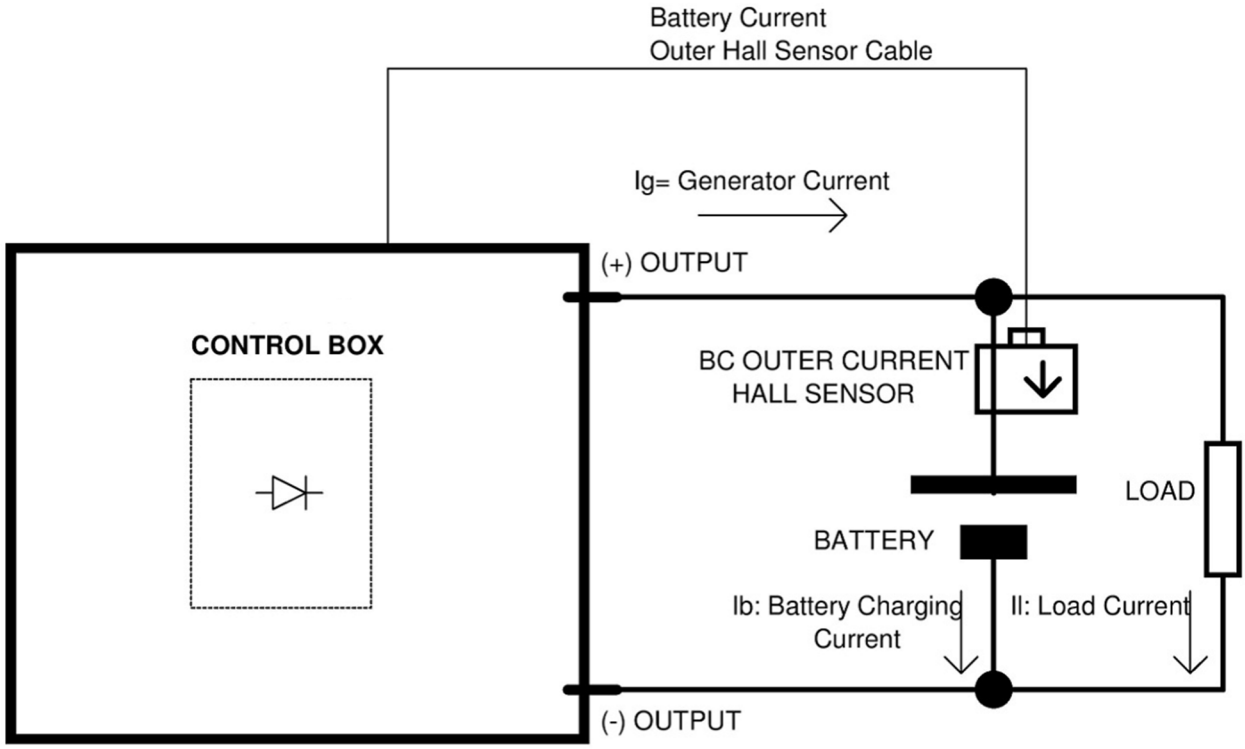
EFFICIENCY vs. RPM @ 28Vdc



Picture 3: Efficiency with different RPM.

ELECTRIC DIAGRAM





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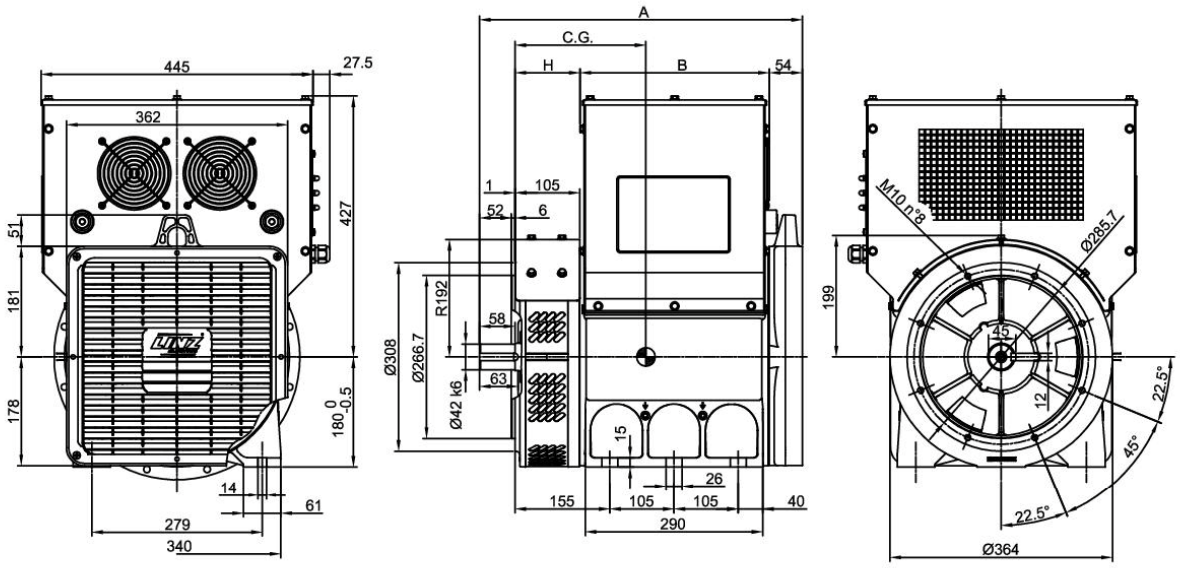
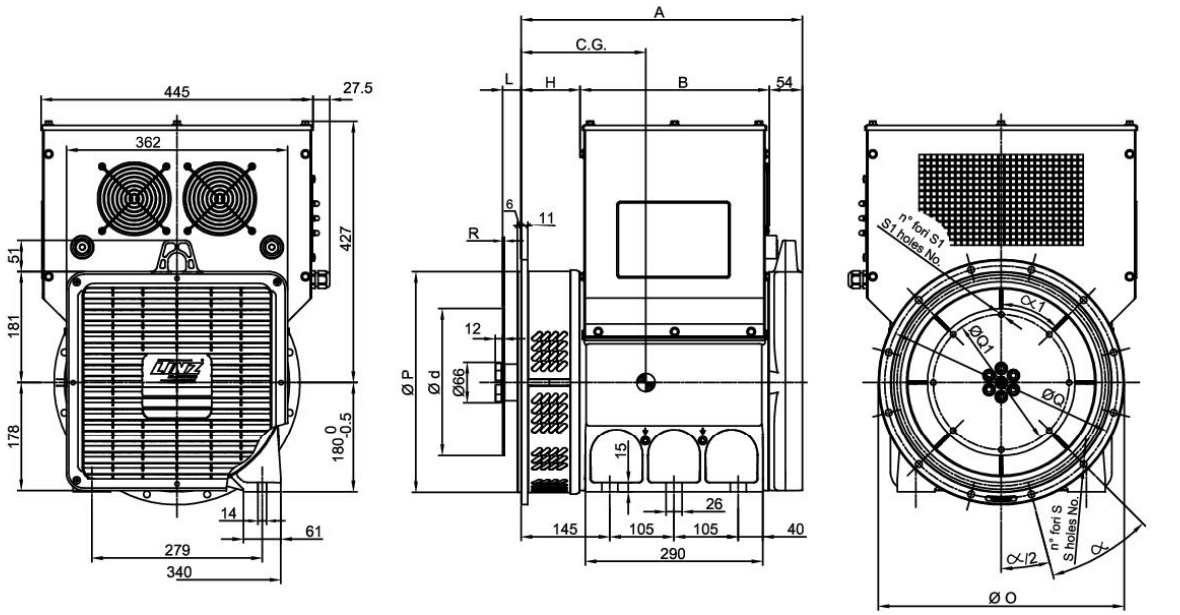
FORMA - FORM B3/B14



FORMA - FORM SAE



FORMA - FORM		A	B	H
B3/B14	PRO 18S	528	309	107
	PRO 18M	598	383	103
SAE	PRO 18S	460	309	97
	PRO 18M	530	383	93

TIPO - TYPE	C.G.
BC9-PRO18S A/4 B3/B14	226
BC9-PRO18S B/4 B3/B14	229
BC9-PRO18M C/4 B3/B14	255
BC9-PRO18M D/4 B3/B14	258

TIPO - TYPE	C.G.
BC9-PRO18S A/4 SAE	228
BC9-PRO18S B/4 SAE	231
BC9-PRO18M C/4 SAE	257
BC9-PRO18M D/4 SAE	260

SAE N.	FLANGIE - FLANGES - BRIDAS					
	Ø O	Ø P	Ø 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			
2	490	447,7	466,7			

SAE N.	GIUNTI A DISCO -COUPLING DISCS- JUNTAS A DISCOS						
	L	Ø d	Ø Q1	n. fori holes No.	S1	α1	R
6 1/2	30.2	215,9	200	6	9	60°	3
7 1/2		241,3	222,25	8		45°	
8	62	263,52	244,47	6	10,5	60°	4,5
10	53,8	314,32	295,27	8		45°	
11 1/2	39,6	352,42	333,37				