

TECHNICAL DATA SHEET



**PMC4-48/500**

*9 phases low voltage battery charger alternators*

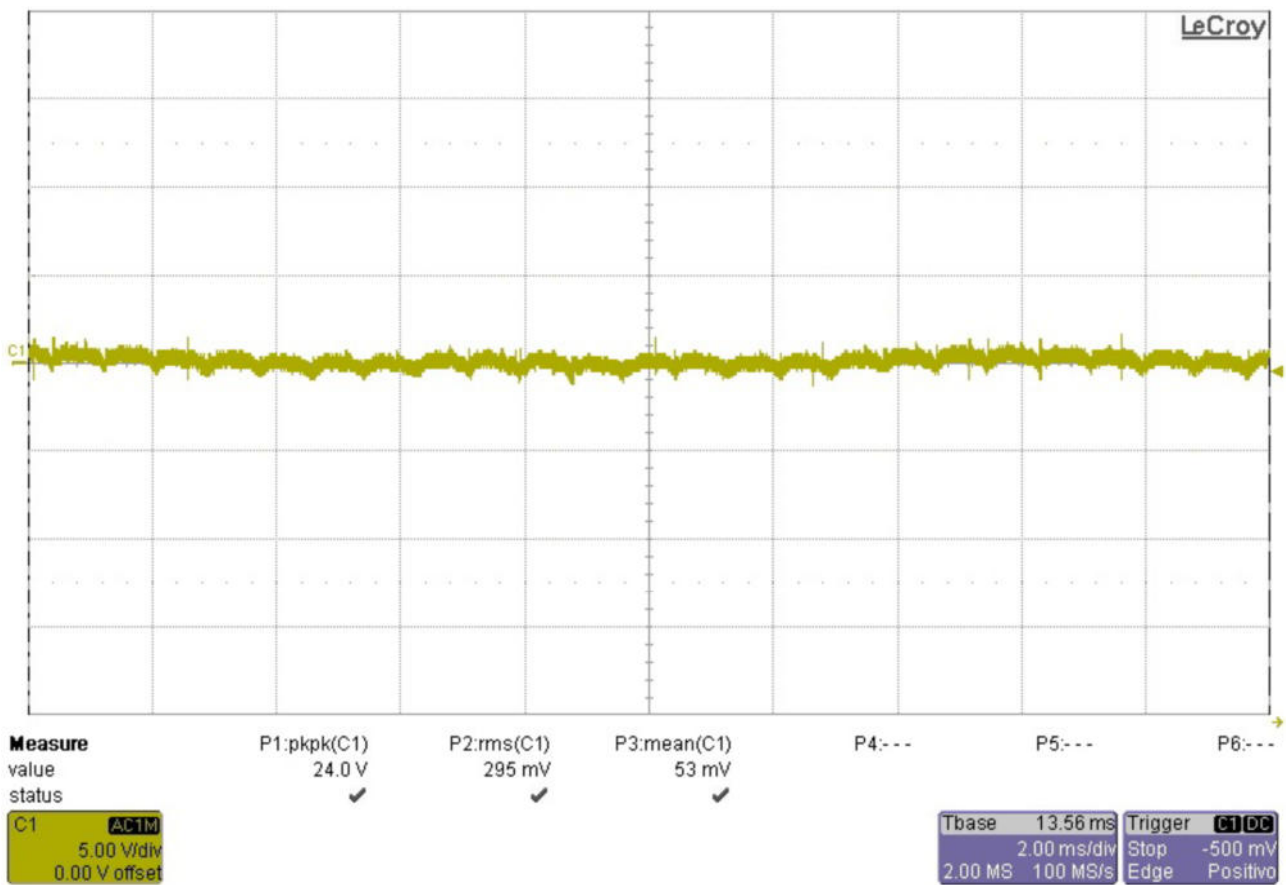
## TYPICAL FEATURES

- Very low output ripple: < 1% without battery (see picture 1)
- Output voltage: 48V<sub>DC</sub>
- Max. power output: 28kW @ 1500RPM (see picture 2)
- Max. rectified current: 500A<sub>DC</sub>
- 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 500A with air flow
- Protection of stator winding and rectifier with thermal trips
- Special socket to guarantee simple, safe and durable connections.
- IP23
- SAE Coupling

# PMC4-48/500

## TYPICAL TECHNICAL DATA

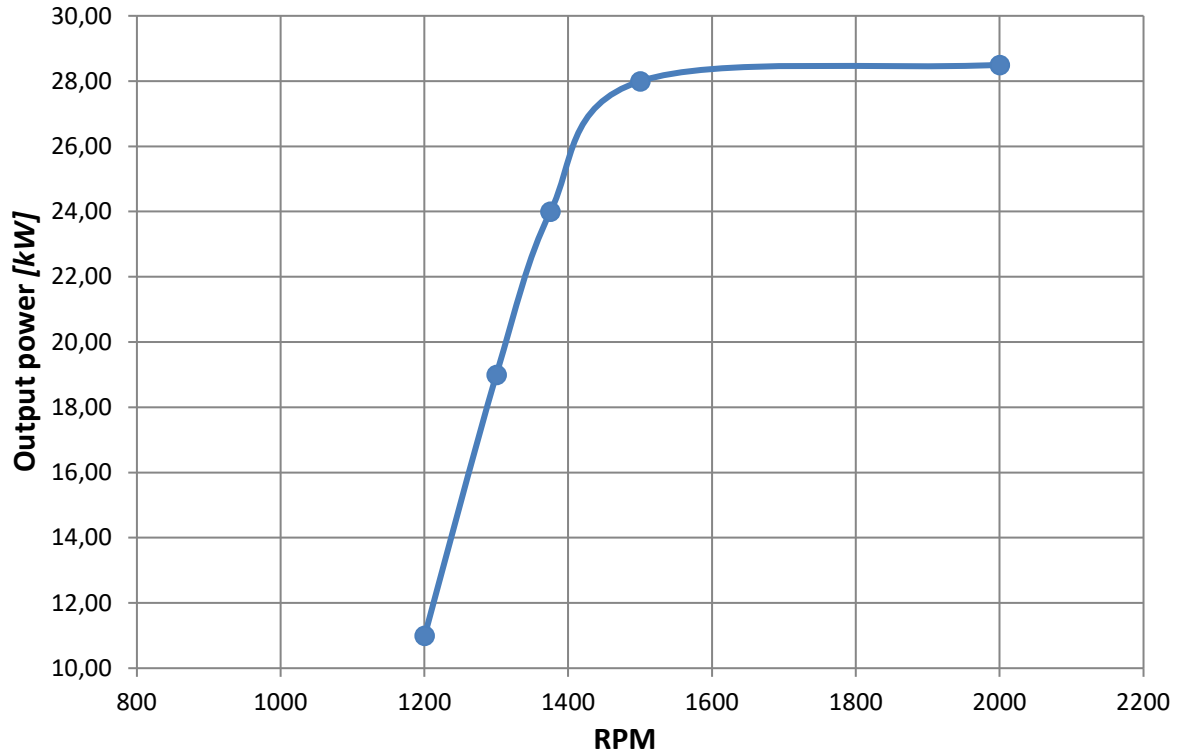
DC Output (Vdc)	45 ÷ 60
Power Outlet @ 1500RPM & 56Vdc	28 kW
DC Output Current @ 1500RPM	Up to 380A
Typical Efficiency	> 87%
RPM	From 1300 to 2100 RPM
Output Ripple	< 1% Without Battery (see picture 1)
Output Accuracy	± 0,5%



**Picture 1:** AC ripple waveform @ 55Vdc and full load. The RMS value of the ripple is 295mV that is 0.54% of the nominal output voltage.

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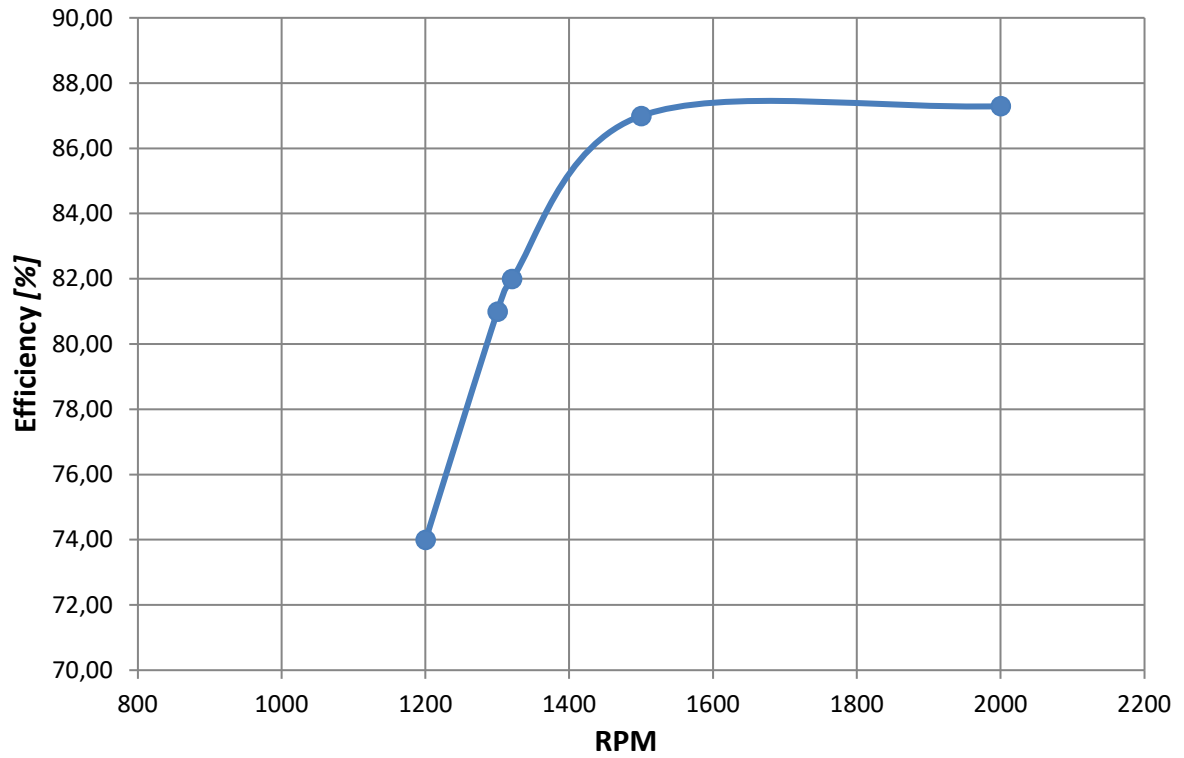
### TYPICAL OUTPUT POWER



Picture 2: output power with different RPM.

## PMC4-48/500

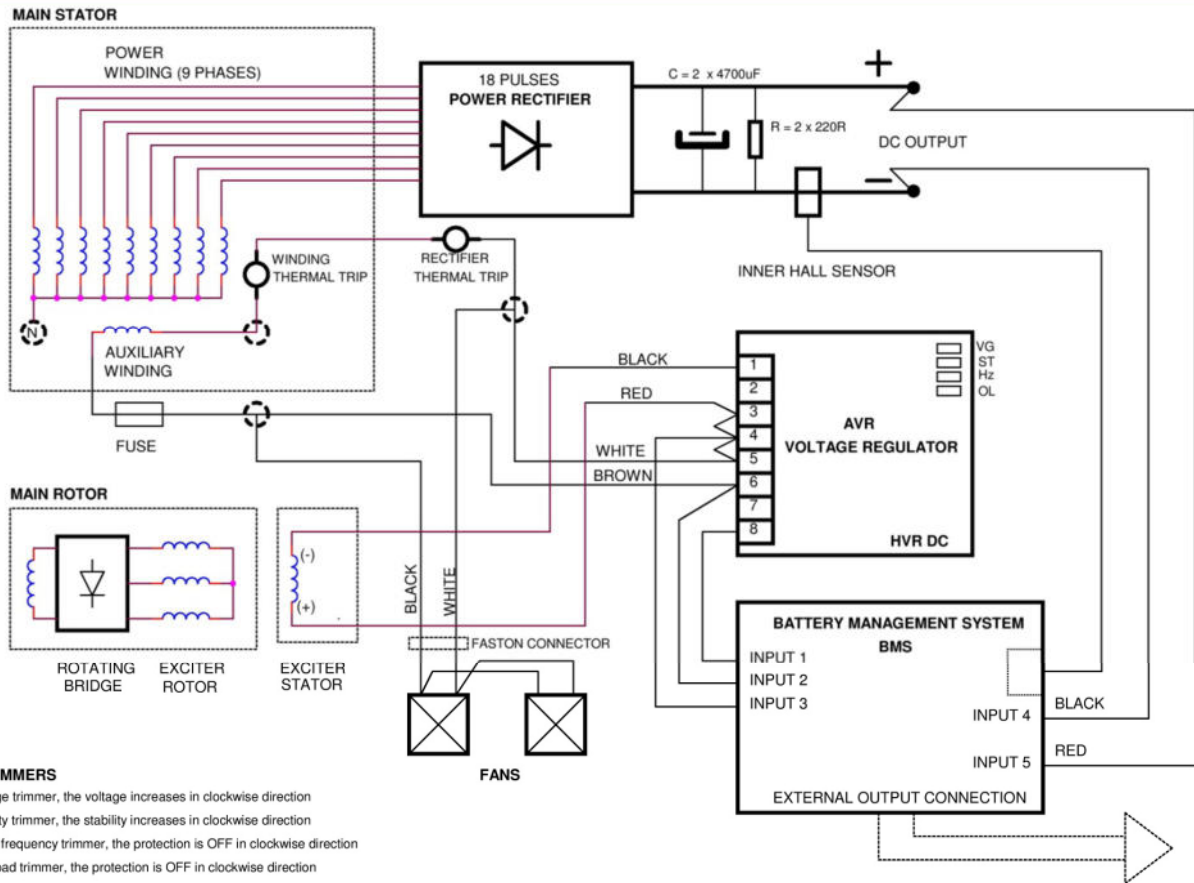
### TYPICAL EFFICIENCY



Picture 3: Efficiency with different RPM.

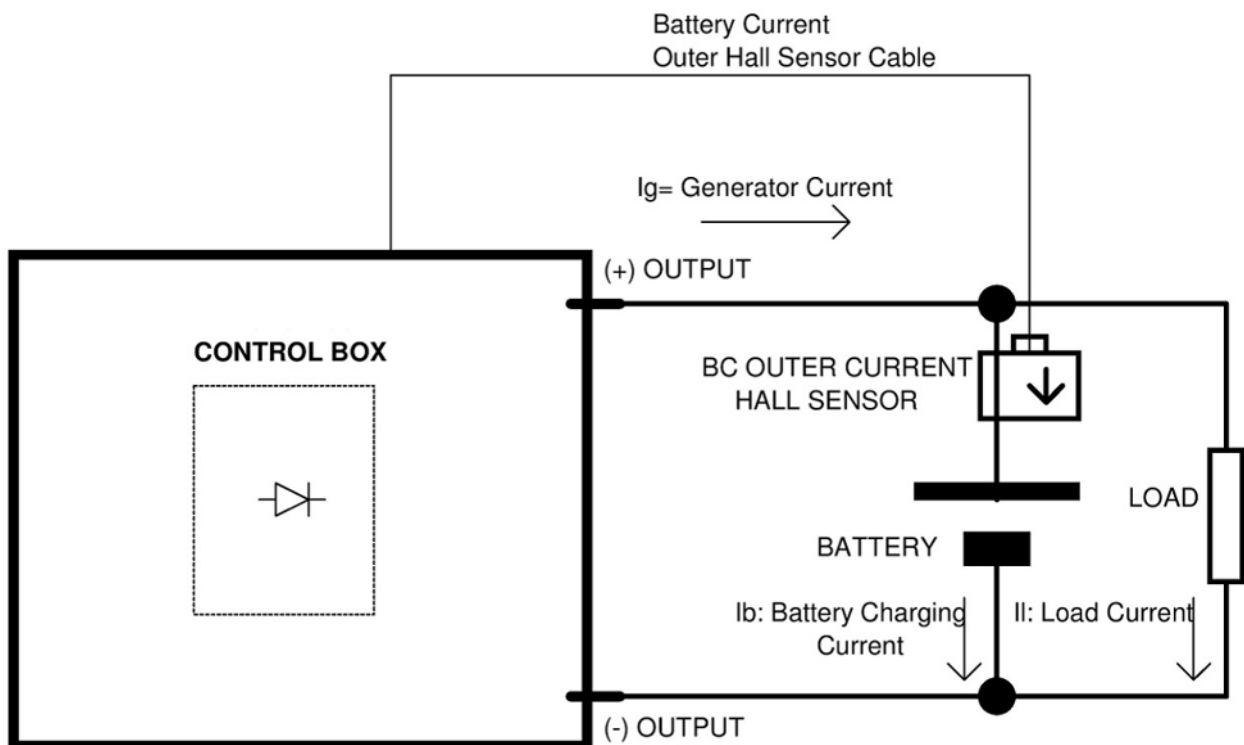
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## ELECTRIC DIAGRAM



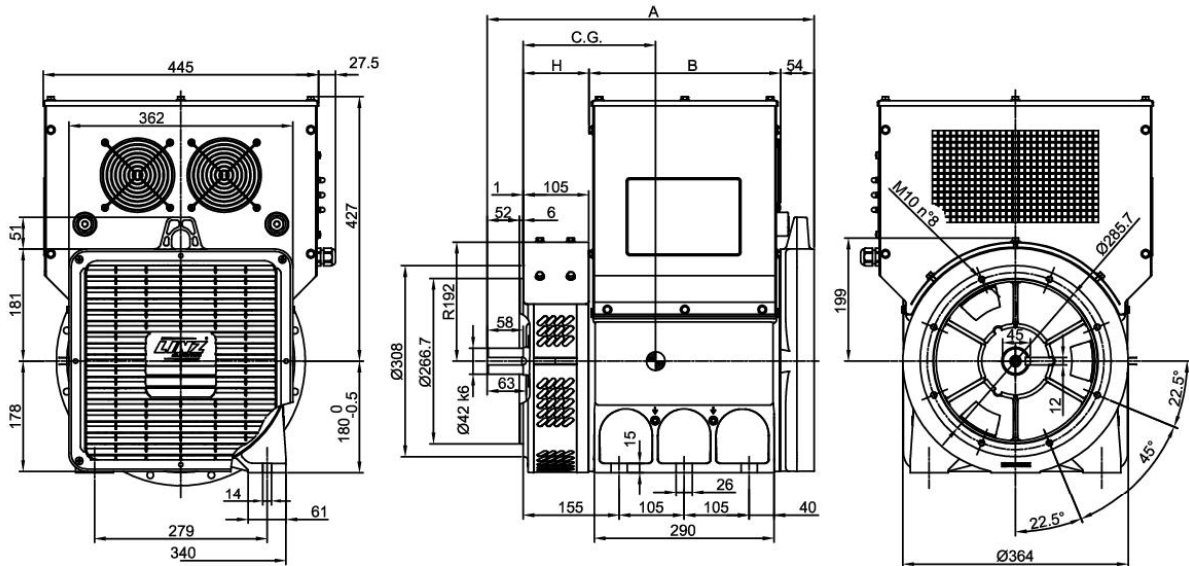
### AVR TRIMMERS

VG: Voltage trimmer, the voltage increases in clockwise direction  
 ST: Stability trimmer, the stability increases in clockwise direction  
 Hz: Under frequency trimmer, the protection is OFF in clockwise direction  
 OL: Overload trimmer, the protection is OFF in clockwise direction

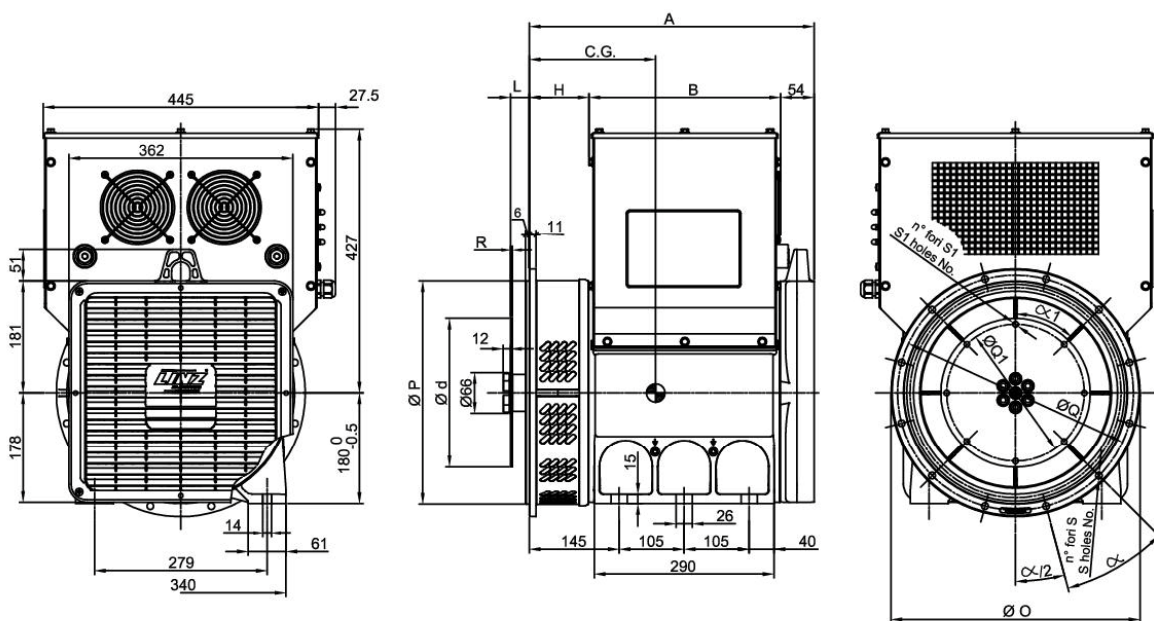


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FORMA - FORM B3/B14



FORMA - FORM SAE



FORMA - FORM		A	B	H
B3/B14	PS	528	309	107
	PM	598	383	103
SAE	PS	460	309	97
	PM	530	383	93

TIPO - TYPE	C.G.	TIPO - TYPE	C.G.
PSA4 B3/B14	226	PSA4 SAE	228
PSB4 B3/B14	229	PSB4 SAE	231
PMC4 B3/B14	255	PMC4 SAE	257
PMD4 B3/B14	258	PMD4 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	α 1	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	8			