

Alternator GCM1

110/130/140 A/140 A Nascar

This alternator is modified for motorsport demand and splash protected. The stator windings are handmade; the rotor is extra fine balanced. The alternators are e.g. used in Nascar. Clockwise and anticlockwise versions are possible, modifications are available on request.



Mechanical Data	
Case material	aluminium
Weight	3,400 g
Current regulator unit	integrated
Max. rotations	18,000 x 1/min
Diameter	108 mm
Length without shaft stub	128 mm
Distance between mounting points	154 mm

Application Hint

An external cooling can contribute to increase the performance. It will only be effective if the incoming air is 30 °Kelvin cooler than the ambient air. Otherwise, the restriction of the air flow will negate any cooling benefits. If these conditions are met, the cooling air should be distributed over the center axis at the rear of the alternator for optimal cooling. For the cooling air to be effective we must be sure that we do not encounter any vacuum effects. If there is a vacuum effect present the use of external blower fan will be required. Care should be taken that no excessive external contaminants are introduced into the cooling air stream. This could severely short the alternator service life. It would be prudent to perform comparative measurements on the alternator to determine the effectiveness of the external cooling air.

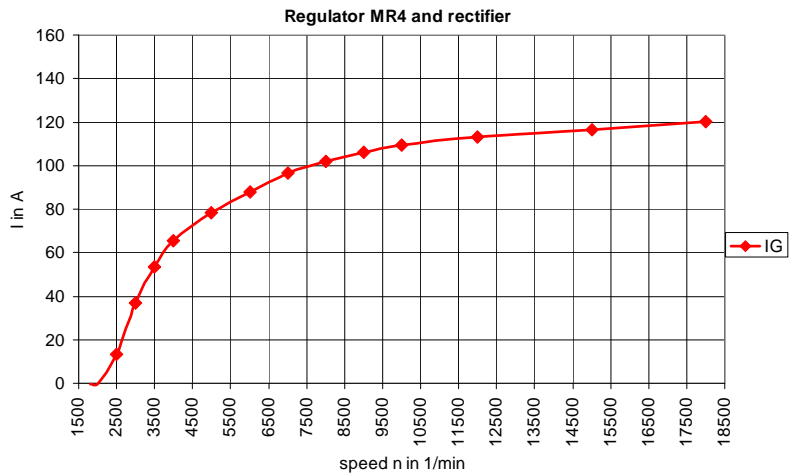
Electrical Data	
Rated current	110/130/140 A
Supply voltage	13.5 V
Cut-in speed	3,000 x 1/min
Coupling	screws
Battery B+	M6
Control lamp D+	flat-pin connector, see drawing
Internal D+ resistor	only GCM1 140 A Nascar

Conditions for Use	
Temperature range	-30 ... 90 °C
Vibration	high protection
Installation without rubber mounting	

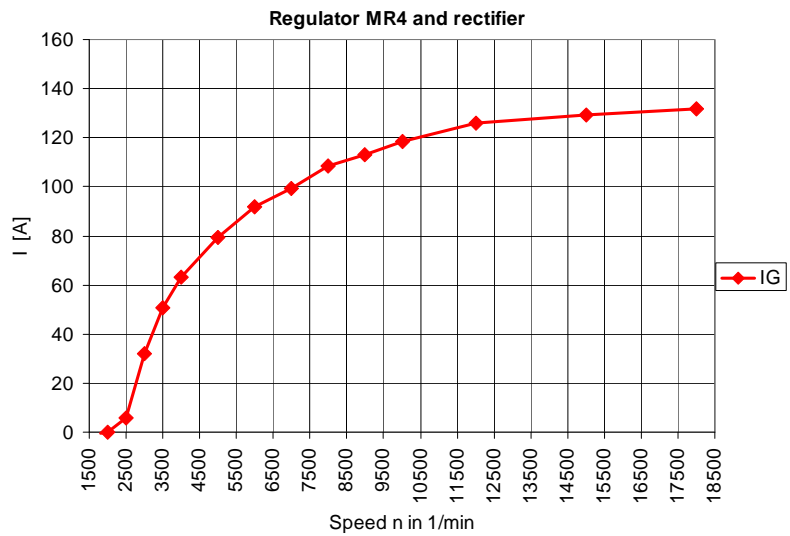
Part Numbers	
110 A	
Anticlockwise rotation	B 261 208 606-02
Clockwise rotation	B 261 208 607-03
130 A	
Anticlockwise rotation	B 261 208 604-02
Clockwise rotation	B 261 208 605-02
140 A	
Anticlockwise rotation	F 01E B01 857-02
Clockwise rotation	B 261 208 603-02
140 A Nascar	
Clockwise rotation	F 02U V00 004-05

Characteristic 110 A

Rpm	IG (A) at 90 °C
2000	0
2500	13
3000	37
3500	54
4000	65
5000	78
6000	88
7000	96
8000	102
9000	105
10000	108
12000	113
15000	117
18000	120


Characteristic 130 A

Rpm	IG (A) at 90 °C
2000	0
2500	6
3000	32
3500	51
4000	63
5000	80
6000	90
7000	98
8000	105
9000	111
10000	116
12000	121
15000	127
18000	131



Design 140 A Nascar
