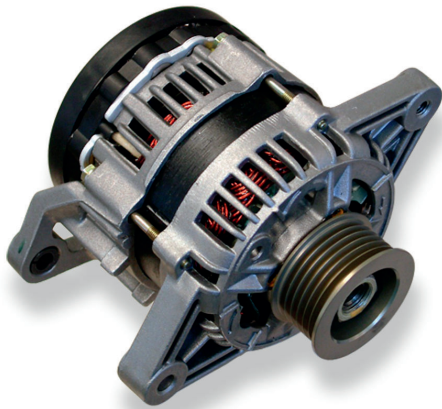




# Alternator GCM1



- ▶ **3,400 g**
- ▶ **110 to 140 A**
- ▶ **Clockwise or anticlockwise rotation**

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.

## Application

Temperature range	-30 to 90°C
Vibration	high protection
Installation without rubber mounting.	

## Technical Specifications

### Mechanical Data

Case material	aluminum
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

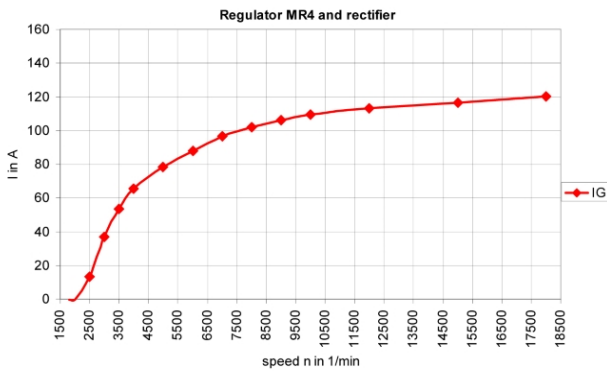
### Electrical Data

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

### Characteristic 110 A

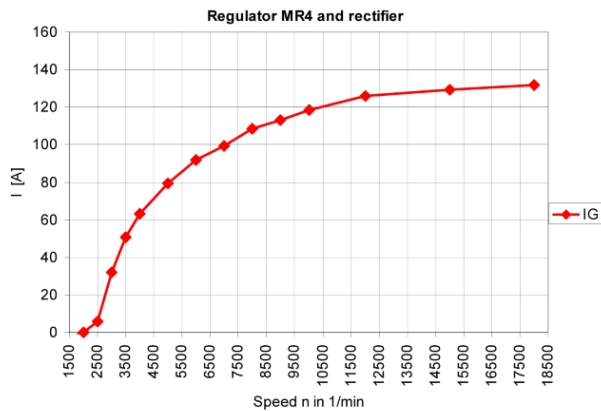
Rpm [1/min]	I <sub>G</sub> [A] at 90°C
2,000	0
2,500	13
3,000	37
3,500	54
4,000	65
5,000	78
6,000	88
7,000	96
8,000	102
9,000	105
10,000	108
12,000	113

15,000	117
18,000	120



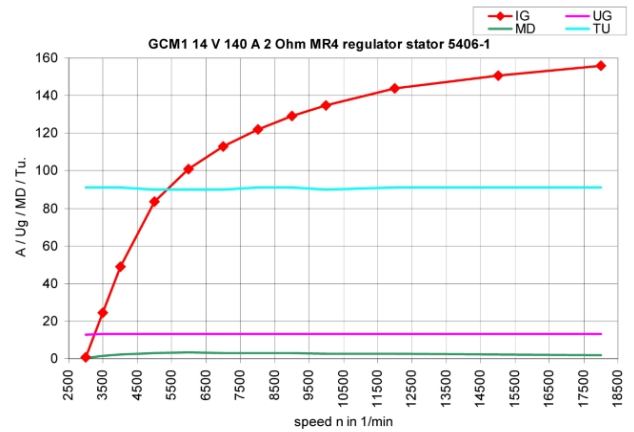
**Characteristic 130 A**

Rpm [1/min]	I <sub>G</sub> [A] at 90°C
2,000	0
2,500	6
3,000	32
3,500	51
4,000	63
5,000	80
6,000	90
7,000	98
8,000	105
9,000	111
10,000	116
12,000	121
15,000	127
18,000	131



**Characteristic 140 A / Nascar**

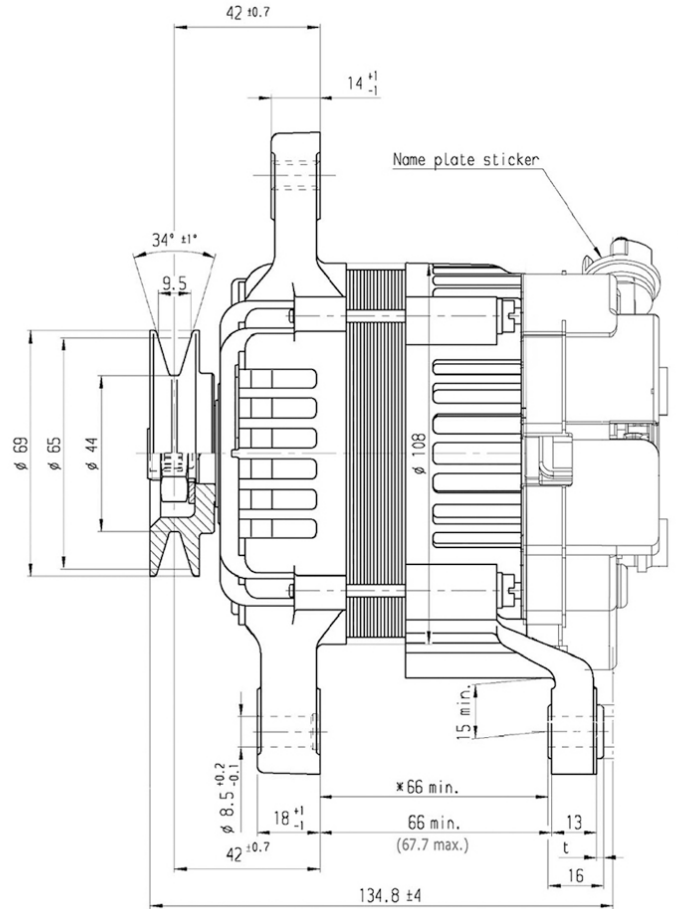
Rpm [1/min]	I <sub>G</sub> [A] at 90°C
2,000	0
2,500	0
3,000	1
3,500	25
4,000	49
5,000	83
6,000	101
7,000	113
8,000	122
9,000	129
10,000	135
12,000	144
15,000	151
18,000	156



**Installation Notes**

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. Installation without rubber mounting.





Design 140 A Nascar

### Ordering Information

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

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