

K-Type Smart Alternator - with CAN interface

O 030 650 035 XXX

This alternator has a specially wound stator to achieve high power output in a small, low weight package. High current diodes are used in the rectifier and internal fans provide forced air cooling. The output is controlled by a regulator inside the alternator and is configurable, and can be monitored, over the CAN interface. The units are assembled with stiff, rotor brush springs and extra flexible wire to connect the stator to the rectifier.

All screws are locked. High quality bearings are used to enable the alternators to run at high speeds (up to 18,000 rpm). The standard mounting method is intended for a belt drive, but the alternator may also be driven directly, if required.

ELECTRICAL

- Output voltage 14.3 V_{DC} default configurable over range 11 V to 16 V_{DC}
- Nominal output current at 10,000 rpm at 13.3 V

A detailed performance chart is shown on the next page

CABLE AND CONNECTION

- 22 AWG un-screened cable
- RW-200 jacketed cable
- Positive power output M8 stud (B+ terminal)
- Ground connection for power and regulator is through the case. Ensure that the case has a high current, low resistance connection to vehicle ground

Cable connection:

PIN No.	WIRE COLOUR	DESCRIPTION
Pin 1	Green	Ignition*
Pin 2	Red	Sense*
Pin 3	White	Lamp
Pin 4	Yellow	CAN H
Pin 5	Blue	CAN L

* Connection may be made internally to the power output stud (B+ terminal)

Get in touch

Email: sales@motionapplied.com

Website: www.motionapplied.com



Example K-Type Alternator

MECHANICAL

- Weight less than 5 kg
- Aluminium alloy body
- Machined billet rear cover
- Maximum speed 18,000 rpm
- Rectifier strapped for resilience to vibration
- Elastomer boot for strain relief of cable

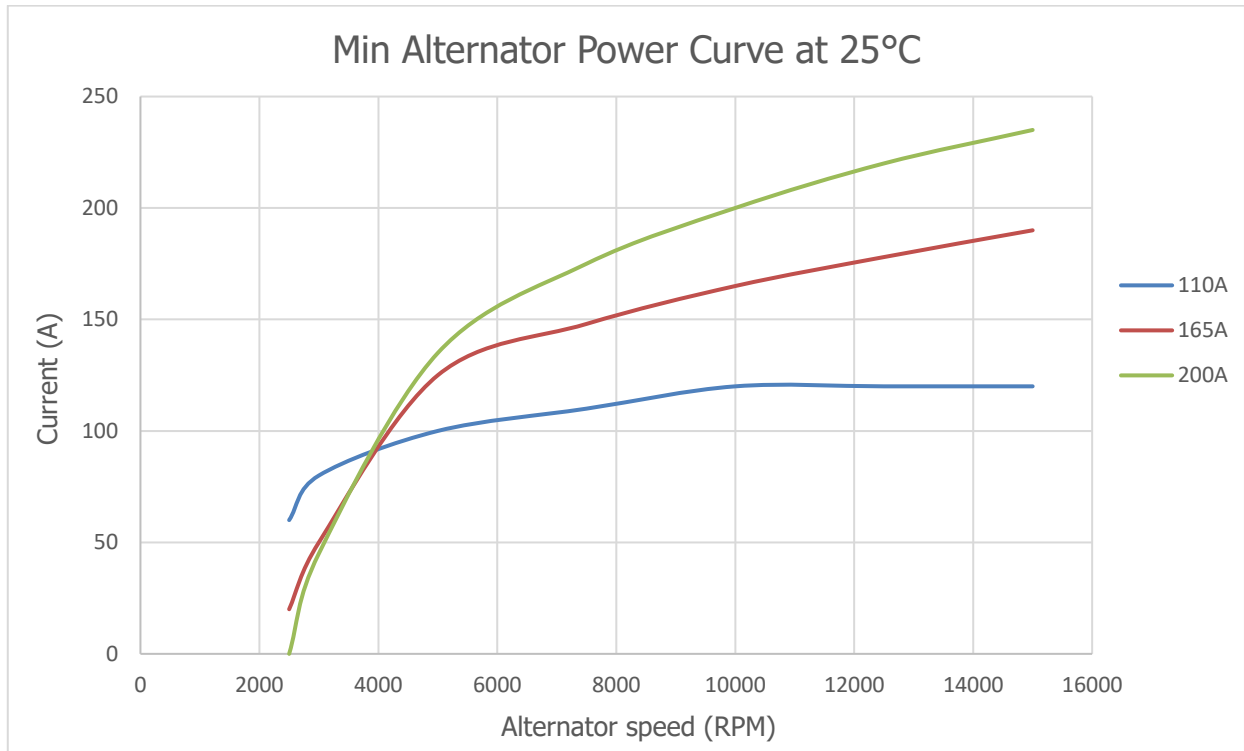
ENVIRONMENTAL

- Splash resistant to standard motorsport fluids
- Continuous ambient operating temperature - 30 °C to +90 °C
- Maximum ambient temperature: 110 °C short term - providing the following temperatures are not exceeded:
 - Stator 200 °C
 - Diodes 175 °C
 - Regulator 105 °C
 - Bearings 150 °C

K-Type Smart Alternator - with CAN interface

O 030 650 035 XXX

Typical Alternator Performance



		Minimum Output (Amps) @ 13.3V		
Rated Output Current:		110A	165A	200A
Typical Cut In Speed (RPM):		1300	2000	2500
RPM	2500	60	20	0
	3000	80	50	45
	5000	100	125	135
	7500	110	148	175
	10000	120	165	200
	12500	120	178	220
	15000	120	190	235

Motion Applied can service and repair alternators.
Please contact our technical consultancy service for more information.

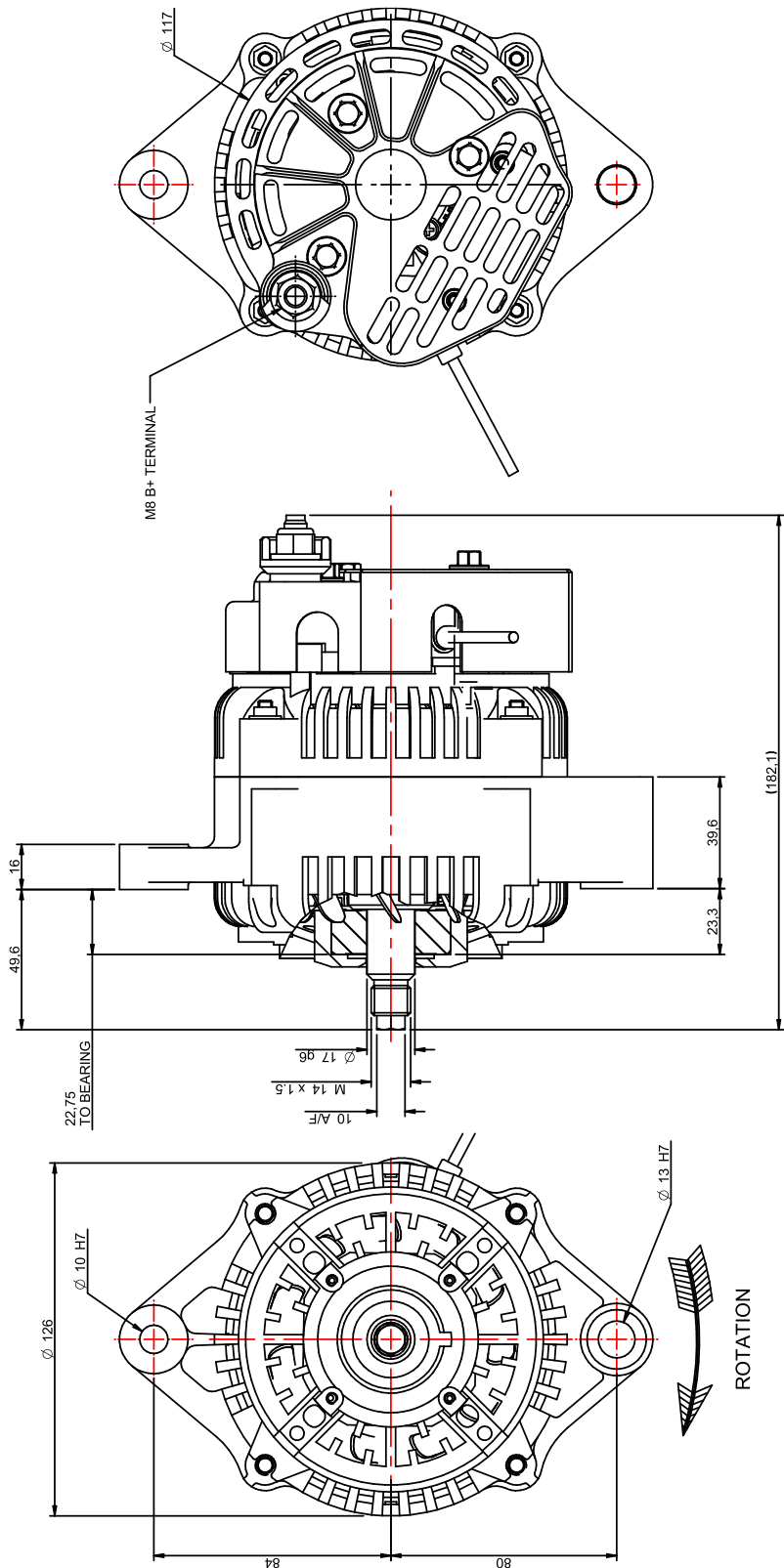
Get in touch

Email: sales@motionapplied.com

Website: www.motionapplied.com

K-Type Smart Alternator - with CAN interface

O 030 650 035 XXX



Get in touch

Email: sales@motionapplied.com

Website: www.motionapplied.com