

BVRM-03

Small size voltage regulator
14 V - 22 A

Description

BVRM03 is a compact lightweight voltage regulator for permanent magnet alternators (advised the used with Magneti Marelli alternators A45-L, A55 and A92-A00).

The device has a power box section which provides 4 power outputs controlled by an on board microprocessor.

Internal signals of temperature, voltage and current are sampled and available to the ECU via CAN.

BVRM03 provides a PWM output controlled by software which can be used to reduce the load of the electrical fuel pump MGP01.



Main Features

- Power box with:
 - 2 high side driver (10 A)
 - 1 high side driver (5 A)
 - 1 PWM output (low side driver):
 - 6 A, 10 kHz, duty cycle from 0 to 100 %
 - 10 A if used as a low side driver (100 %)
- Availability of internal signals: load current, battery current and output/input voltage
- Availability of critical internal temperatures
- Small dimension & weight

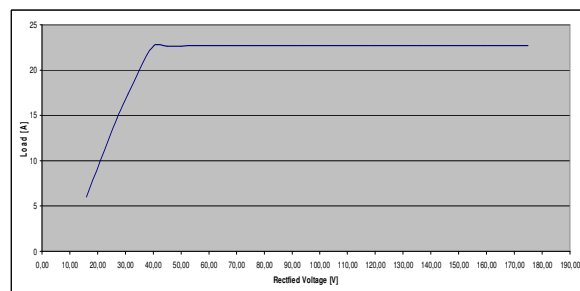
Benefits

- Output voltage settable from 10 V to 16 V
- Improved efficiency (86 %)
- PWM output usable with the electrical fuel pump MGP01

Typical Applications

In MotoGP and motorbike coupled with permanent magnet alternator supplying maximum rectified voltage of 180 V

Typical Performance

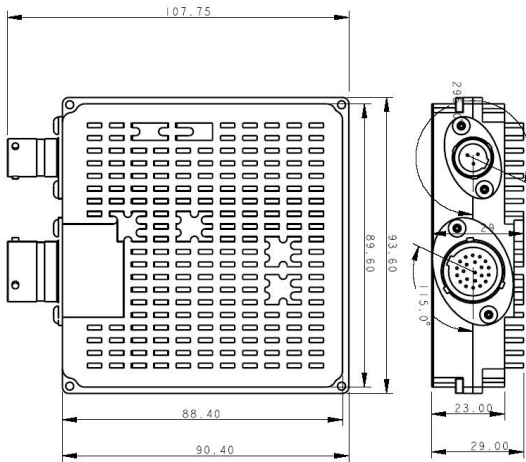


VOLTAGE REGULATORS

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Dimensions



Dimensions in millimetres

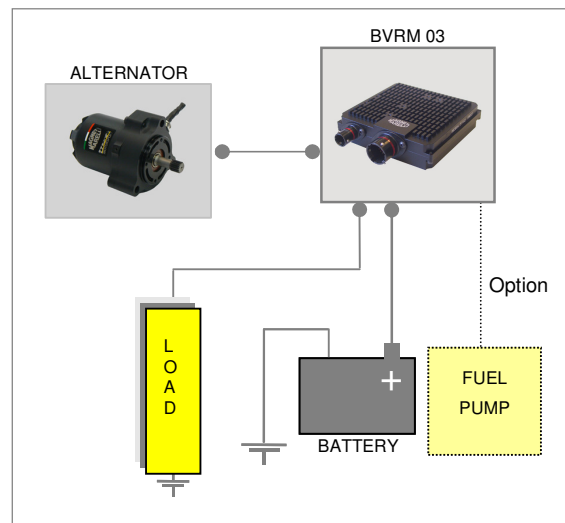
Technical Characteristics

Maximum continuous output.....	22 A
<i>(Without exceeding operating temperature)</i>	
Maximum repetitive output current.....	25 A*
Nominal output voltage.....	14 V
Output voltage ripple	2 %
Pressure sensor input.....	1
PWM	1
Protection class.....	IP 54
Operating temperature ⁽¹⁾	85° C
Protection class.....	IP 54
Connectors	
AS 212-35 PN.....	22 pin
AS 208-98PN.....	3 pin
Weight (approx.).....	350 g

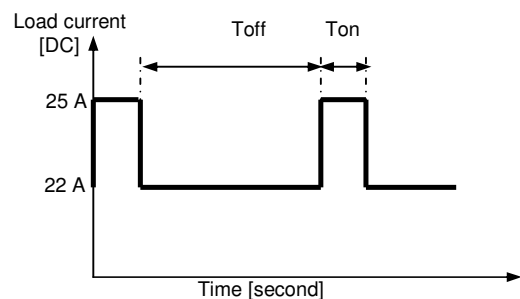
⁽¹⁾ Measured on the external case

Note: The relation between the case temperature and the internal temperatures, available via CAN, has been established and provided with the regulator once purchased.

Application Schematics



*Tested with 105 V rectified input,
Air cooling 25°C 15 m/s
Temperature: Tcase ≤ 85°C



Maximum Ton 60 sec with output current 25 A

Minimum Toff 140 sec with output current 22 A

For further information, please contact:



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