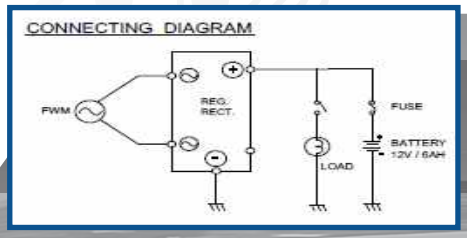
REGULATOR RECTIFIER

Single Phase Full Wave Series RR

This single phase full wave SCR based series RR being used in motorcycles and scooters for Battery charging when vehicle is running. It controls the battery voltage within desired voltage range throughout the vehicle RPM range. This RR is designed to operate with Battery and in no Battery connected. The advantages of this RR is to provide stable voltage in Battery less condition and the sufficient charge current at lower RPM.

Specifications:

- AC Input Voltage : 600Vpp
- AC Input Frequency : < 1KHz
- DC Output Current : 10 Arms with wind of 1m/s
- DC Output Voltage with and without battery : 14.30 ± 0.5V
- Temperature co-efficient of DC Output Voltage : ± 4.0mV/°C
- SCR Forward Voltage Drop : Max. 1.5V
- Terminal B & E Leakage Current @ Vb=13V : Max. 100uA
- Insulation Resistance : 100M Ohm
- Internal Device Allowed Temperature : 110°C



Protections:

- Output Short Circuit
- Output Over Voltage in Battery less condition
- Battery Reverse

Environment / Durability:

- Operating Temperature : 20°C to +60°C
- Storage Temperature : -20°C to +80°C

Mechanical:

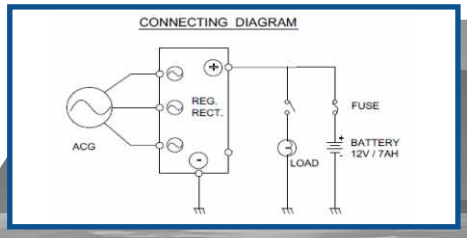
- Enclosure : Aluminium Case filled with epoxy resin
- Dimensions : W= 84 mm, H= 29.0 mm, L= 75.5 mm
- Weight : ~235 gms.

Three Phase Full Wave Shunt RR

This Three phase full wave SCR based shunt RR being used in motorcycles for Battery charging when vehicle is running. It controls Battery voltage within desired voltage range throughout the vehicle RPM range. The advantage of this RR is to achieve Battery charging commencement at lower RPM and less variations in Battery voltage through out the entire RPM range. This RR can be used to operate the vehicle in absence of Battery with external capacitor

Specifications:

- AC Input Voltage : 600Vpp
- AC Input Frequency : < 2.6KHz
- DC Output Current : 24 Arms with wind of 1m/s, 14A in No wind
- DC Output Voltage : 14.50 ± 0.3V
- Output Voltage in absence of battery : Max. 22V
- Temperature co-efficient of DC Output Voltage : ± 4.0 mV/°C
- SCR Forward Voltage Drop : Max. 1.5V
- Terminal B & E Leakage Current @ Vb=13V : Max. 100uA
- Insulation Resistance : 100M Ohm
- Internal Device Allowed Temperature : 125°C



Protections:

- Output Short Circuit
- Output Over Voltage in Battery less condition
- Battery Reverse

Environmental:

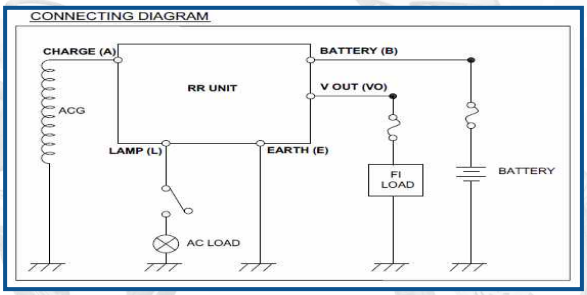
- Operating Temperature : -20°C to +60°C
- Storage Temperature : -20°C to +80°C

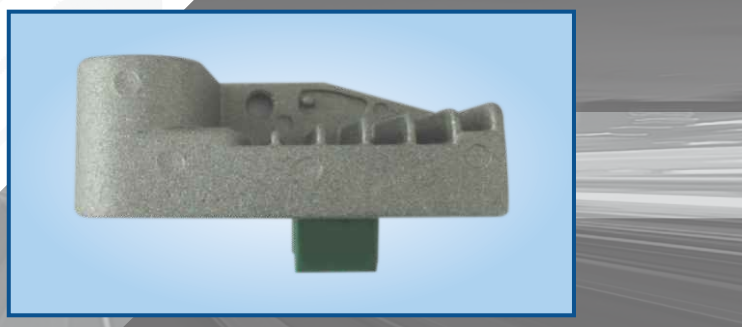
Mechanical:

- Enclosure : Aluminium Case filled with epoxy resin
- Dimensions : W= 80 mm, H= 28.0 mm, L= 80 mm
- Weight : ~300 gms.

Single Phase Half Wave Series RR (Every Cycle Control)

This single phase half wave series RR being used motorcycles and scooters for Battery charging when vehicle is running. It controls the Battery voltage within desired voltage range throughout the vehicle RPM range. This RR controls the Battery Charging voltage in every positive cycle and to illuminate AC lamp loads during negative half cycle of the input ac voltage which results in constant current control in every positive and negative half cycle. The main advantage of this RR is to provide constant voltage to the FI system in presence of Battery and Battery less condition. This RR will reduce the variations in Battery voltage and AC lamp voltage through out the entire RPM range. In this RR every cycle of the input ac voltage is utilised resulting in no fluctuation in lamp voltage and battery voltage irrespective of any lamp loads





Specifications:

AC Input Voltage	: 600Vpp
AC Input Frequency	: < 1KHz
DC Output Current	: 7.0 Arms with wind of 1m/s
FI Output Current	: 1.8 Arms
AC Output Current	: 3.5 Arms
DC Output Voltage	: 14.30 ± 0.5V
AC Output Voltage	: 13.50 ± 0.5V
Temperature co-efficient of DC Output Voltage	: ± 4.0 mV/°C
Temperature co-efficient of AC Output Voltage	: ± 8.0 mV/°C
SCR Forward Voltage Drop	: Max. 1.5V
Terminal B & E Leakage Current @ Vb=13V	: Max. 100uA
Insulation Resistance	: 100M Ohm
Internal Device Allowed Temperature	: 100°C

Protections:

- Output Short Circuit
- Output Over Voltage
- Battery Reverse

Environmental:

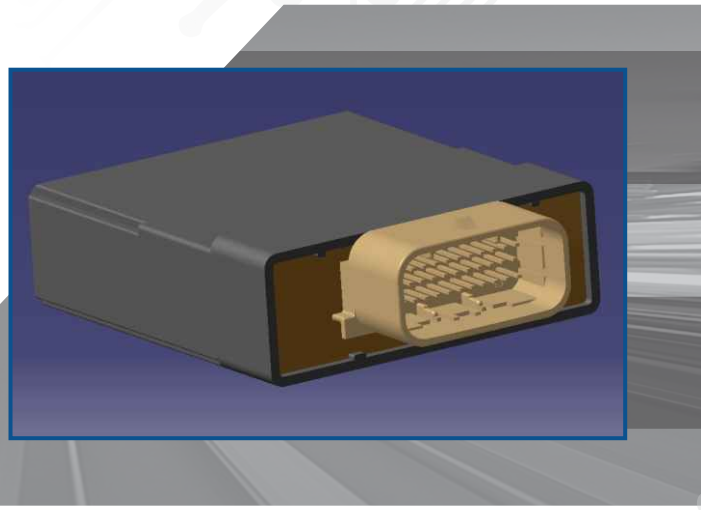
Operating Temperature	: -20°C to +60°C
Storage Temperature	: -20°C to +80°C

Mechanical:

Enclosure	: Aluminium Case filled with epoxy resin
Dimensions	: W= 46.5mm, H= 45.8mm, L= 83.5mm
Weight	: ~200 gm

Body Control Module (BCM)

This BCM unit being used in motorcycles and scooters for control & drive constant current through LED Lamps. controls & drive constant current within desired current range. The advantage of this BCM unit combine different LED lamp drivers, control, switch sensing, winker flasher, fault diagnosis through CAN circuit in one housing & fulfil automotive standards as per requirement. (Ex. Faulty winker will be off & complimentary winker flashing with double frequency)



Specifications:

- DC Input Voltage VDC : 9 – 16VDC
- DC Output Current High Beam : upto 1 A
- DC Output Current Low Beam : upto 1 A
- DC Output Current Position : 240 mA
- DC Output Current Winker : 155 mA
- DC Output Current Tail : 250 mA
- DC Output Current Stop : 250 mA
- DC Output Current Switch Illumination Current : 100mA
- DC Output Current Licence : 60mA
- Communication : CAN

Protections:

- Output Short Circuit
- Output Short to battery
- Battery Reverse

Environmental:

- Operating Temperature : -20°C to +70°C
- Storage Temperature : -20°C to +85°C

Mechanical:

- Enclosure : Nylon Case filled with epoxy resin
- Dimensions : W= 80 mm, H= 28 mm, L= 90 mm
- Weight : ~340 gms.