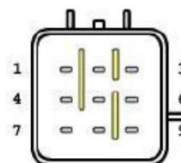
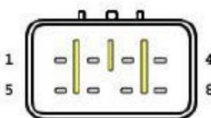


Legend
 B Black
 Bl Blue
 Br Brown
 G Green
 Gr Grey
 Lb Light Blue
 Lg Light Green
 Cr Orange
 P Purple
 R Red
 W White
 Y Yellow
 B/Bl Black-Blue
 B/Br Black-Brown
 B/W Black-White
 G/B Green-Blue
 G/W Green-White
 G/Y Green-Yellow
 R/B Red-Black
 R/W Red-White
 W/B White-Black
 W/R White-Red
 Y/P Yellow-Pink

Motor Controller Connector Pinouts



Throttle, Temperature, Hall Sensors
 1. R/W +5V Throttle
 2. G/W Throttle Signal
 3. B/W Ground Throttle
 4. R +5V Hall Sensors
 5. W Thermistor
 6. B -5V Hall Sensors
 7. Y Hall Signal
 8. G Hall signal
 9. Bl Hall signal



Speed, Ignition, Safety, Comms
 1. W/G Sport / Eco Mode
 2. R/B 60V Ignition
 3. Y/P Speedometer
 4. B/Br Tilt Safety Sensor
 5. G/Y Brake Cut Off
 6. G/Bl Kickstand Signal
 7. G/B Electronic Speed Limiter
 8. B/Bl Comms



Communications
 1. W/R RS485a
 2. W/B RS485b
 3. P Comms

Battery Power
 Red +60VDC (battery positive)
 Black -60VDC (battery negative)

60V to Wiring Harness
 Red +60VDC (battery positive)
 Green -60VDC (battery negative)

Ignition key-switch (fused)
 Red-White(IN) +60VDC
 Red-Black(OUT) +60VDC activates motor controller. 12VDC

Motor
 Yellow Motor Phase
 Green Motor Phase
 Blue Motor Phase

Motor Hall Sensors
 Red +5VDC (powers the sensors)
 Black -5VDC (powers the sensors)
 Blue Hall sensor signal output (pulsing 5V)
 Yellow Hall sensor signal output (pulsing 5V)
 Green Hall sensor signal output (pulsing 5V)

Motor Temperature Sensor
 White thermistor (temperature-sensitive resistor)

Throttle / Accelerator
 Red-White +5VDC
 Black-White Negative
 Green-White Throttle Output/Signal (0.83 to 3.62V)

DC-DC Converter (60VDC down to 12VDC)
 Red +60VDC Battery Positive
 Green Ground / Battery Negative
 Black +12VDC output

Display / Dashboard
 Yellow-Pink Signal Speedo (yellow hall pulses)
 Black +12V
 Green Ground / Negative
 White-Red RS485a data (voltage/SoC%/error codes)
 White-Black RS485b data (voltage/SoC%/error codes)
 Green-Blue Kickstand sensor
 Blue Right Indicator Lights
 Orange Left Indicator Lights

Comms / Data (Battery-Controller-Display)
 White-Red RS485a (data/programming/diagnostics)
 White-Black RS485b (data/programming/diagnostics)

Comms / Data (Battery-Controller)
 Purple Comms/data between controller and battery
 Black-Blue Comms/data between controller and battery

E-Brake Cut-Off
 Green-Yellow Normally open (0V) or 12V brakes engaged

Tilt Safety Sensor
 Black-Brown Normally +12V output / Error 0.36V output
 Black +12V
 Green Ground / Negative

Kickstand
 Green-Blue +6V Output signal
 Black +12V
 Green Ground / Negative

Sport / Economy Modes
 White-Green open switch Eco / closed Sport mode

Electronic Speed Limiter (45km/h max)
 Green-Black 5V signal, cut or join the loop wire to disable
 Loop Wire(Green) Ground / Negative

Front Light / Headlight

Headlight Harness
 Black +12V
 Green Ground / Negative

Headlight (3 possible circuits, not shown in diagram)
 Green Ground / Negative
 White Top light / High Beam
 Blue Bottom light / Low Beam
 Brown 6 small LEDs

Indicators / Flashers / Blinkers
 Grey +12V Blinker/flasher output
 Green Ground / Negative
 Blue Right Indicator Lights
 Orange Left Indicator Lights

Rear / Tail Brake Light
 Green-Yellow +12V brake light (e-brake)
 Black +12V red tail light
 Green Ground / Negative

Horn
 Light-Green +12v
 Green Ground / Negative

USB charger (5V 2.4A output)
 Black +12V
 Green Ground / Negative