BATTERY MANAGEMENT SYSTEM (NON-SMART/I-Series)

NMC-10A - 03Cells

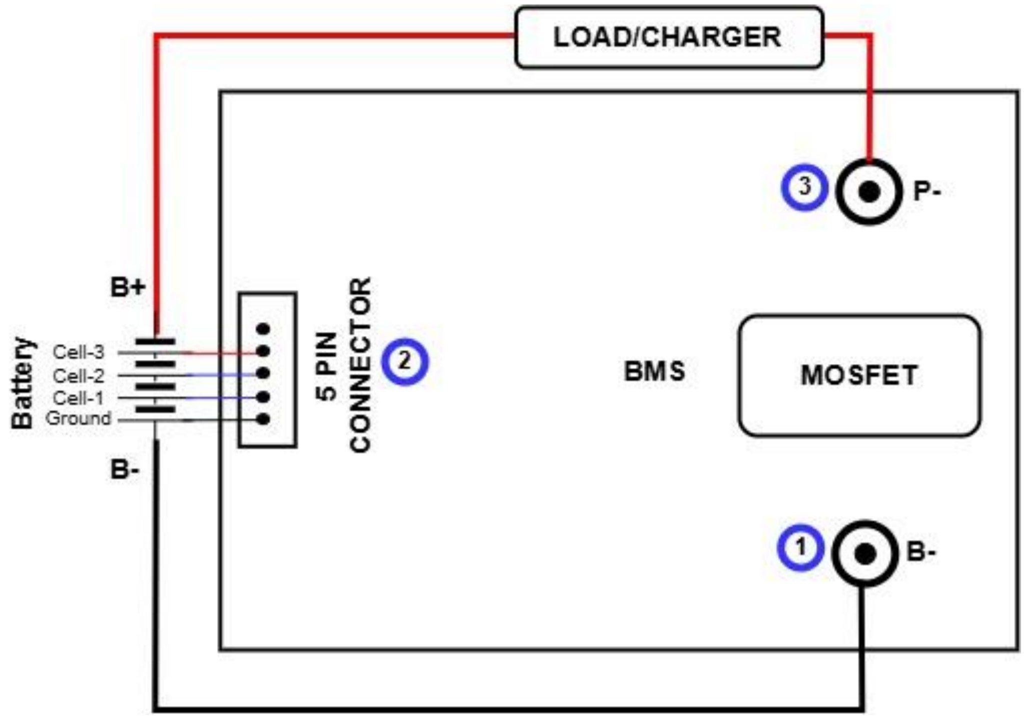
Technical Specification

No. of Cells in Series	03 cells				
Cell Chemistry	NMC				
Functions	**Test Parameter**	**Specification**			**Unit**
		Min	**Typical**	**Max**	
Operating Current	Continuous charging current	8			A
	Continuous discharging current	10			A
Charge Protection	Overcharge Voltage Protection	4.22	4.25	4.28	V
	Overcharge Voltage Protection Delay Time	500	1000	1500	mS
	Overcharge Protection Recovery Voltage	4.02	4.05	4.08	V
Discharge Protection	Over discharge Voltage Protection	2.77	2.8	2.83	V
	Over discharge Voltage Protection Delay Time	500	1000	1500	mS
	Over discharge Protection Recovery Voltage	3.17	3.2	3.23	V
		Connect Charger			
Over Current Protection	Charging Overcurrent Protection	8	10	12	A
	Charging Overcurrent Protection Delay Time	5	65	125	mS
	Charging Overcurrent Release	Connect Load			
	Discharging Overcurrent Protection	14	18	22	A
	Discharging Overcurrent Protection Delay Time	60	180	300	mS
	Discharging Overcurrent Release	Release Load			
	Short Circuit Protection Delay Time	528	960	1450	µS
	Short Circuit Protection Recovery	Release Load			
Balancing function	Balancing Start Voltage	3.67	3.8	3.93	V
	Balancing Current (Precision Mode)	35	50	65	mA
IR Resistance	IR of BMS	< 50			mΩ
Temperature Protection	Charging High Temperature Protection	45	50	45	50
	Charging High Temperature Protection Release	35	40	35	40
	Discharging High Temperature Protection	65	70	65	70
	Discharging High Temperature Protection Release	55	60	55	60
	Charging Low Temperature Protection	5	0	5	0
	Charging Low Temperature Protection Release	**5**	10	5	10
	Discharging Low Temperature Protection	-25	-20	-25	-20
	Discharging Low Temperature Protection Release	-15	-10	-15	-10
Dimension	LxBxH	40x33x8			mm

Accessories:

- Cable harness with connector
- Temperature Sensor

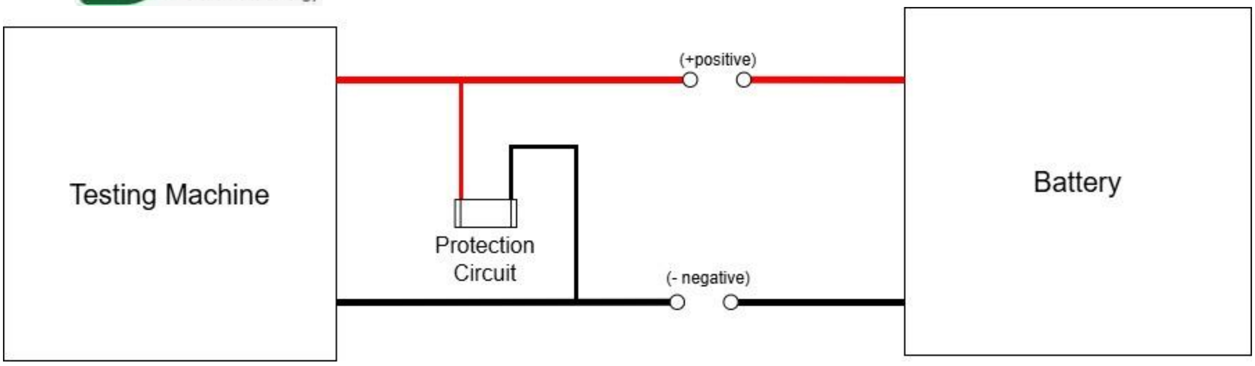
Connection Diagram: -



Sequence	BMS
1	Battery (B-negative)
2	5 Pin voltage sensing harness
3	Load/Charger (P-negative)

Note: - First connect the open end of wire harness to battery/load/communication device, then only insert the connector end of wire harness into BMS as per sequence.

Protection Circuit-


Testing Machine
(+positive)
Protection Circuit
(- negative)
Battery