

## Installation manual

( for Single phase motor starter only)

### *Float Sensor*



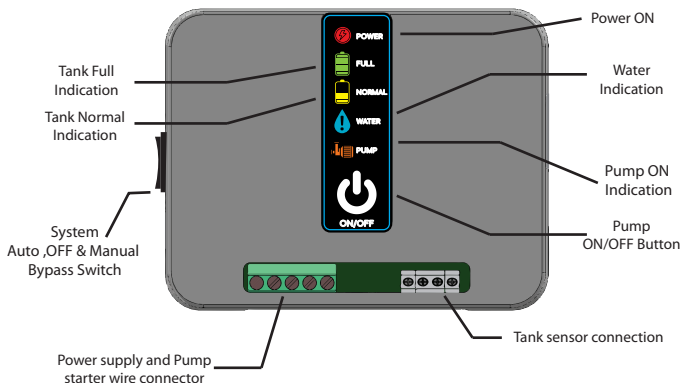
**Read this manual carefully before any operation.**

Keep this manual for future use

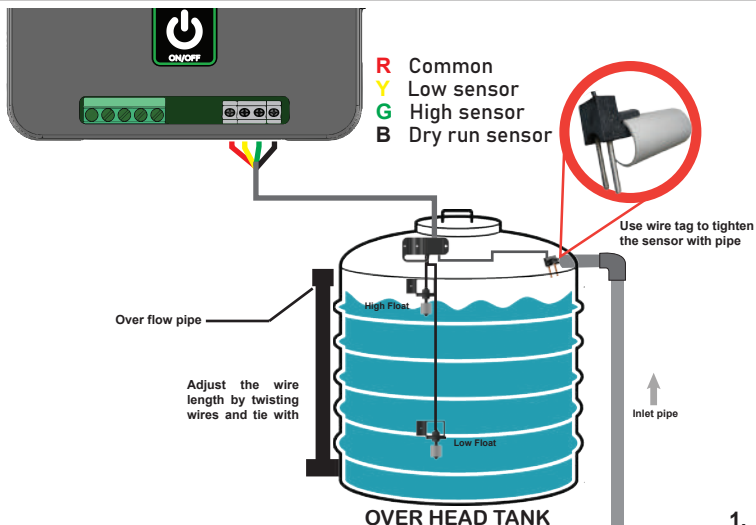
**Important** ⚠️

Before installing and operating this device, read & study this manual thoroughly. Proper installation is essential for safe operation of the device.

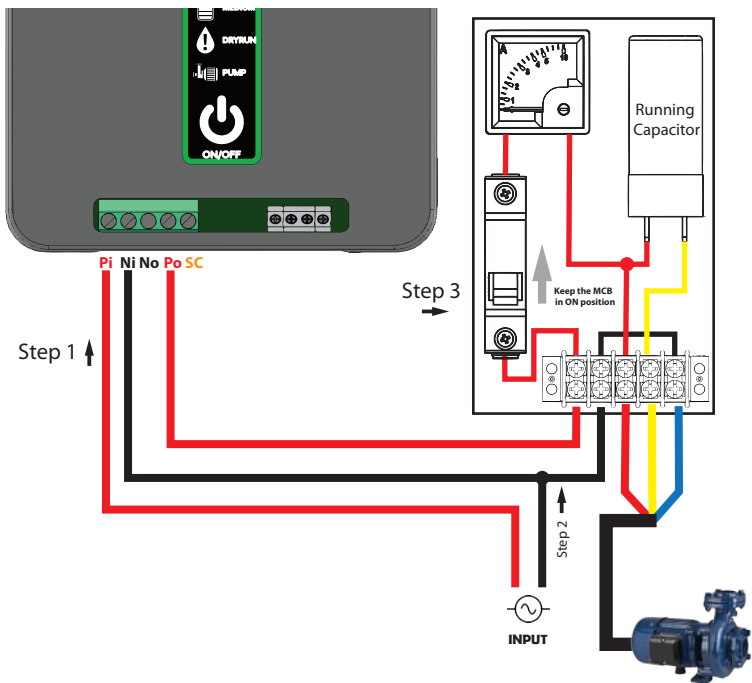
## Functional diagram.



## Sensor wiring diagram with over head tank only. (for open well / bore well users)

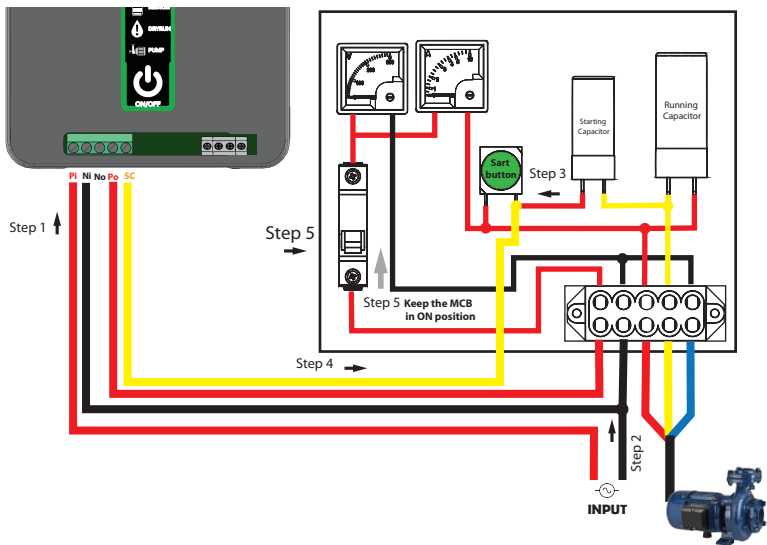


## 1. Singlephase Submersible Pump Starter with Running capacitor only



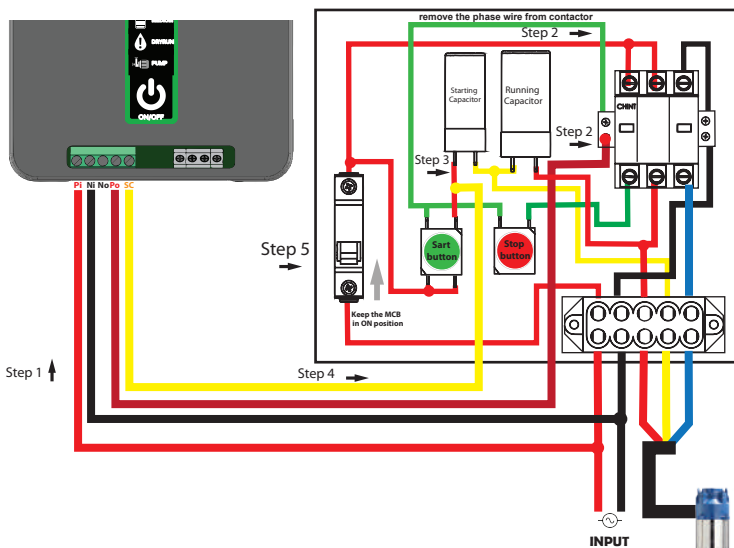
- Step 1 Remove the Phase from the pump starter panel and connect to Phase input of Motcon Mini connector **Pi** and connect phase output **Po** to phase input of pump starter.
- Step 2 Connect the Neutral **Ni** input as common to both Motcon Mini Controller and starter panel.
- Step 3 Keep the MCB in "ON" (up) position always.

## 2. Non contactor type single phase Submersible pump starter with starting and running capacitor (openwell / borewell).



- Step 1 Remove the Phase from the pump starter panel and connect to Phase input of Motcon Mini connector **PI** and connect phase output **PO** to phase input of pump starter.
- Step 2 Connect the Neutral **NI** input as common to both Motcon Mini Controller and starter panel.
- Step 3 Identify the Starting capacitor wire in "Push ON" Green button of starter panel, using with colour code to the starting capacitor.
- Step 4 Connect the **SC** terminal of Motcon Mini pump controller to the terminal of "Start ON" green button where the Starting Capacitor wire is connected.
- Step 5 Keep the MCB in "**ON**" (up) position always.

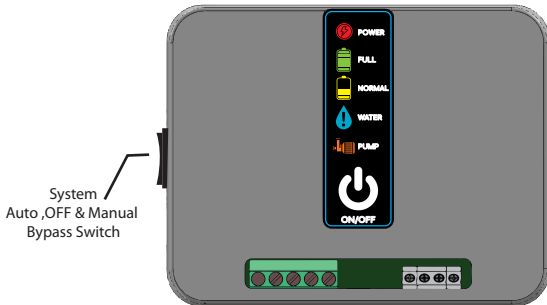
### 3. Contactor type Single phase submersible pump starter with starting & running capacitor (openwell / borewell).



- Step 1 Connect phase & neutral to the Motcon Mini Controller in parallel with phase & neutral of the starter box.
- Step 2 Identify the phase wire of the contactor coil inside the starter panel, disconnect it from the coil terminal, and connect the phase output **Po** of the Motcon Mini Controller to the contactor's phase terminal.
- Step 3 Identify the Starting capacitor wire in "Push ON" Green button of starter panel, using its colour code to the starting capacitor.
- Step 4 Connect the **SC** terminal of Motcon Mini pump controller to the terminal of "ON" green button where the starting capacitor wire is connected.
- Step 5 Keep the MCB in "ON" (up) position always.

## Emergency (Bypass) Switch Operation.

The Emergency (Bypass) Switch is a high-capacity 16A ON-OFF-ON switch designed to manually control the pump during emergencies or controller maintenance.



### Switch Positions Explained

#### UP Position (Manual ON):

In this mode, the system bypasses the automatic control logic and allows the user to manually operate the pump.

The switch ensures the pump can run independently, regardless of sensor input, which is useful during maintenance, troubleshooting, or sensor failure.

#### MIDDLE Position (OFF):

Turns off the pump entirely, disconnecting it from both automatic and manual control. Use this position to stop the pump manually in any situation.

#### DOWN Position (Automatic):

In this mode, the system operates based on the water level sensors.

The pump starts and stops automatically depending on the high and low water levels in the overhead tank and dry-run detection.

#### Important Guidelines

**Avoid Overload:** The switch is rated for 16A. Ensure the pump's current draw does not exceed this limit.

**Manual ON Use:** Only use the UP (Manual ON) position temporarily and monitor the water levels to prevent overflow or dry running.

**Switching Between Modes:** Always switch to the OFF position before moving to another mode to avoid electrical surges.

SENSORS SET DATA SHEET	
Sensing parameter	Tank low,Tank full,Dryrun
Sensing Material	Magnetic Float Sensor
4 Core wire length	1 meter, 6mm Diameter
Dry-run sensor wire length	0.9 meter
Low level sensor wire length	2 meter
High level sensor wire length	1 meter
Tank mounting	Two 5mm self screw
Mounting socket material	Poly propylene
Mounting socket Protection	IP65
Weight	230 gm

RECIEVER DATA SHEET	
Mode of operation	Wired
Control characteristics	Overhead tank only
Control method	Manual/ Auto
Rated output power	0.37.KW - 1.86KW(0.5HP-2.5HP)
Rated input power	AC 230V/50Hz Single phase
Trip response time of Dry run	10 sec
Output Load	All single phase panels
Protection functions	Dry run
	Transient surge
Unit dimention	105x85x35 mm
Weight	175 gms

# WARRANTY CARD

Saron

Product Name : .....

Model No: .....

Serial No : .....

Expiry Date : .....



Authorised Signatory / Seal

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## Dry-Run Timer Explanation

The Motcon Mini has a built-in dry-run timer set to 5 minutes. ***If no water is detected***, the pump will continue running for up to “**5 minutes**” before automatically shutting off. This protects the motor from damage while allowing time for water to return in case of temporary unavailability.



85mm



**Wall Mounting Reference Holes**