

Installation ✂



Water level controller

Fully automatic for submersible

- RED - GREEN push button type [contactor based] starter
- Green button MCB type starter
- Digital pcb type starter [Double N.O button]
- Overload relay type starter.



Made in India

-AC Voltage-

Power Required:- 150V to 290V

Power Consumption:- 6.6W

Frequency:- 50Hz

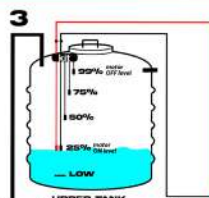
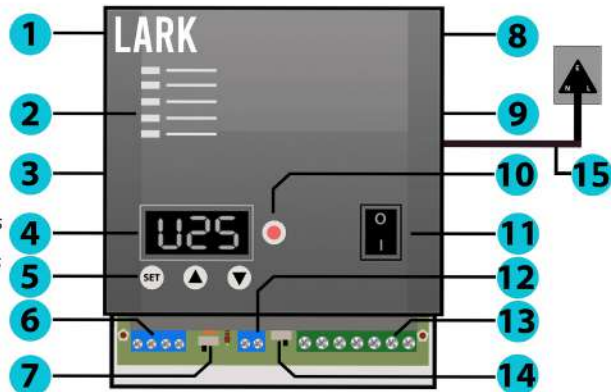
Discription

This is a fully automatic water level controller which is microcontroller based and has such programs that it can be used in many ways. This device can be installed with any type of submersible or monoblock motor or any other type of motor which has any type of starter panel to run it. The motor can be run in fully auto mode, that too with all kinds of protection of the motor. This device is also used for single tank and is also used for lifting water from underground tank to overhead tank. This device also shows the water level of both tanks.

With this, 2 wires have to be connected from the device to the tank and with the same 2 wires, it automatically turns the motor on and off and also tells the 5 levels of water inside the tank

1 About

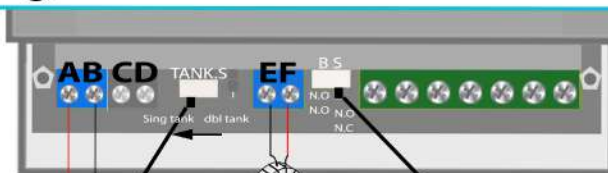
- 1 Metal body Cabinet
- 2 Error codes details
- 3 Setting Diagram sticker
- 4 Digital Display for show tanks levels, underload, overload, dry run Errors
- 5 3 Push buttons manual motor ON-OFF & program setting.
- 6 Tank connection ports
- 7 Tank select Switch- 1 side for underground and overhead tank, 2nd side for only overhead tank.
- 8 Circuit diagram sticker in the back side
- 9 Feature diagram sticker
- 10 Motor ON LED
- 11 Mode Switch- Auto, Manual, center OFF
- 12 CT coil connection ports
- 13 Starter connection ports
- 14 BS switch- 1 side for N.O-N.O setting 2nd side for N.O-N.C setting, (This may be needed depending on the starter)
- 15 power lead



If you have only overhead single tank then you have to use only A-B ports for the sensor And tank button needs to be placed on single tank side

Any wire of CT coil can be installed on any side

If the Red (OFF) button of your starter is N.O type then move the BS button to N.O-N.O side, if the Red (OFF) button of your starter is N.C type then move the BS button to N.O-N.C side.



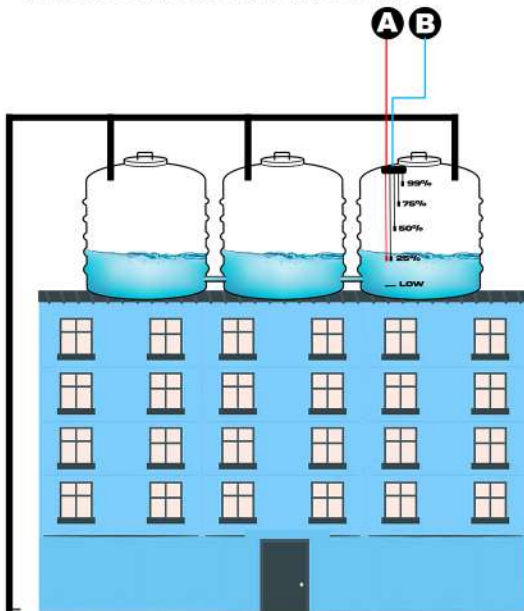
N.O- normally open button

N.C- normally close button

TANK CONNECTION SERIES AND PARALLEL

CONNECTION DIAGRAM FOR WATER TANKS AT SAME LEVEL.

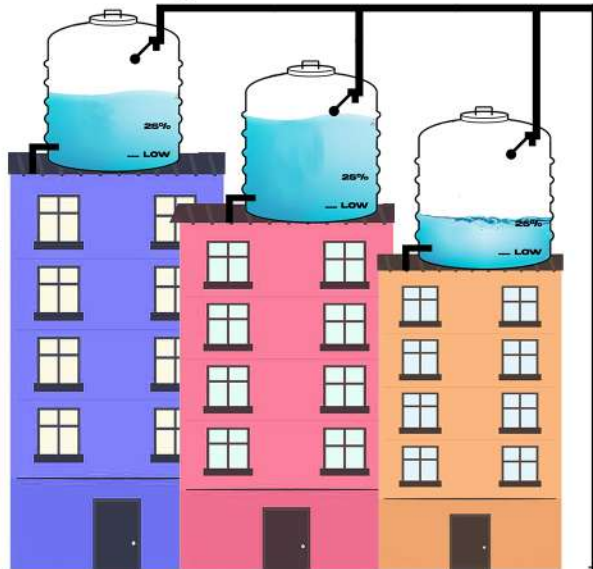
- If all tanks bottom is connected with each other through pipes then install sensor kit in only one tank.



CONNECTION DIAGRAM FOR WATER TANKS NOT AT SAME LEVEL.

- In this condition sensor kit wires should be connected in series.

If your house is in such a condition, then you should consult our experts.



ERROR CODES

drd

Dry run delay

When motor dry runs then display shows this error for 50 minutes and runs again after duration.
[To reset - OFF/Auto]

LOc

Low voltage cut

When voltage falls down from set voltage then it shows this error [To reset - OFF/Auto]

Hi c

high voltage cut

When voltage rise up from set voltage then it shows this error [To reset - OFF/Auto]

OLc

Overload cut

When ampere goes high then it shows this error
[To reset - press button for 4 seconds then display shows **CL** (clear) then press button]

Er1

U tank wire break

U - Upper Tank

Er2

U tank wire short

Check wires
U/L tank

Er3

L tank wire break

Er4

L tank wire short

L - Lower Tank

FEATURES

upper tank level low

Uc0

upper tank level 25%

U25

upper tank level 50%

U50

upper tank level 75%

U75

upper tank level 99%

U99

Tank water level Indication
low to 99 (U- upper) on display

lower tank level low

Lc0

lower tank level 25%

L25

lower tank level 50%

L50

lower tank level 75%

L75

lower tank level 99%

L99

Tank water level Indication
low to 99 (L- lower) on display

PROTECTIONS

Press & Hold **SET**

For 4 sec. Then the display will show

Hi Voltage

Set HIGH voltage with **▲ ▼** Buttons

Press **SET** Then the display will show

LO Voltage

Set LOW voltage with **▲ ▼** Buttons

Press **SET** Then the display will show

OLP %

Set Overload % with **▲ ▼** Buttons

Press **SET** Then the display will show

drP %

Set Dryrun % with **▲ ▼** Buttons

Press **SET** Then the display will show

Cur CT coil

You can enable/disable CT coil
with up down button

En ENABLE / **di** DISABLE

THEN

PRESS **SET** BUTTON

IT WILL BE SAVED AUTOMATICALLY

Type of Starter सार्टर के प्रकार

First, check what type of starter you have. Mostly it is of 4 types
सबसे पहले यह देखो की आपके सार्टर का प्रकार क्या है, ज्यादातर यह 4 प्रकार के होते हैं



RED-GREEN push button type of starter (contactor based)

लाल-हरे पश बटन वाला सार्टर (कंटेक्टर आधारित) ज्यादातर यह सार्टर का ही प्रयोग किया जाता है

If you have this starter then follow the diagram on page number (A)

अगर आपके पास यह सार्टर है तो आप डायग्राम का पेज नंबर (A) को देख कर कनेक्शन करें



MCB type of starter only MCB or direct switch for motor ON-OFF

सिर्फ MCB स्विच वाला सार्टर या जिसके ऊपर मोटर को आन-आफ करने के लिए डायरेक्ट स्विच लगी होती है

If you have this starter then follow the diagram on page number (B)

अगर आपके पास यह सार्टर है तो आप डायग्राम का पेज नंबर (B) को देख कर कनेक्शन करें



Digital PCB type of starter (printed circuit board + contactor based)

डिजिटल सार्टर जिसके अन्दर मोटर की परोटैक्शन के लिए एक प्रिंटेड सर्किट बोर्ड लगा होता है और यह सार्टर भी कंटेक्टर या रिले आधारित होता है

If you have this starter then follow the diagram on page number (C)

अगर आपके पास यह सार्टर है तो आप डायग्राम का पेज नंबर (C) को देख कर कनेक्शन करें



L&T MU Dol starter (contactor with over load relay based)

डोल सार्टर जिसके अन्दर एक बड़ा कंटेक्टर उबर लोड रिले के साथ लगा होता है, रिड-ग्रीन पश बटन कंटेक्टर के बटन को सीधा पेश करते हैं

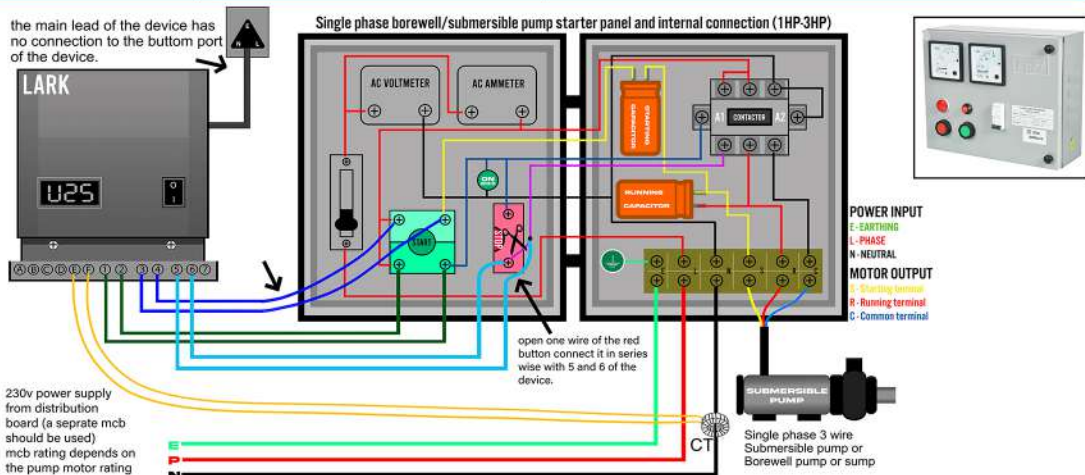
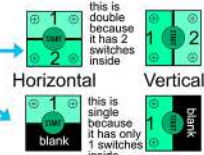
If you have this starter then follow the diagram on page number (D)

अगर आपके पास यह सार्टर है तो आप डायग्राम का पेज नंबर (D) को देख कर कनेक्शन करें

If you have any other type of starter apart from this then you can contact our experts on the given number
अगर आपके पास इसके इलावा कोई और टाइप का सार्टर है तो आप हमारे माहिर से दिए हुए नंबर पर सम्पर्क कर सकते हैं

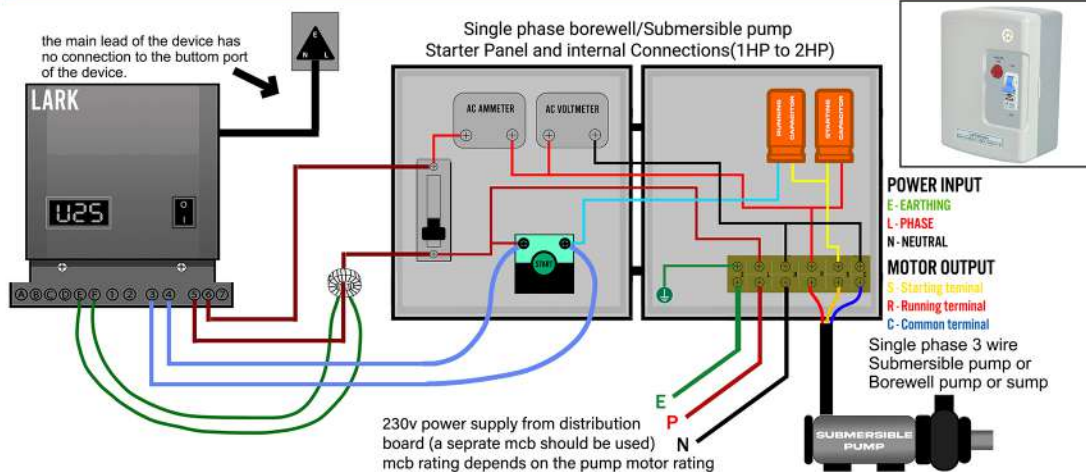
(A) Connections For RED-GREEN push button type of starter (CONTACTOR BASED)

- Green button can be double or single (half) inside starter and it can be vertical or horizontal position.
- If there is single green button then use single pole of controller For example 1 and 2 or 3 and 4.
- If there is double green button then connect 1 and 2 in one button parallel wise and 3 and 4 in second button parallel wise
- CT coil can be pass through in input neutral or in motor's blue wire. and connect CT coil wire with E and F of device
- open the wire from one side of the RED button of the starter, and connect the 5 number wire of the device to the open wire, and connect the 6 number wire to the place from where the wire is open so these connection will be in series wise.
- if you want to run the motor manually then keep the main button of the device on manual then you can start and stop the motor from the RED- GREEN push button of the starter.



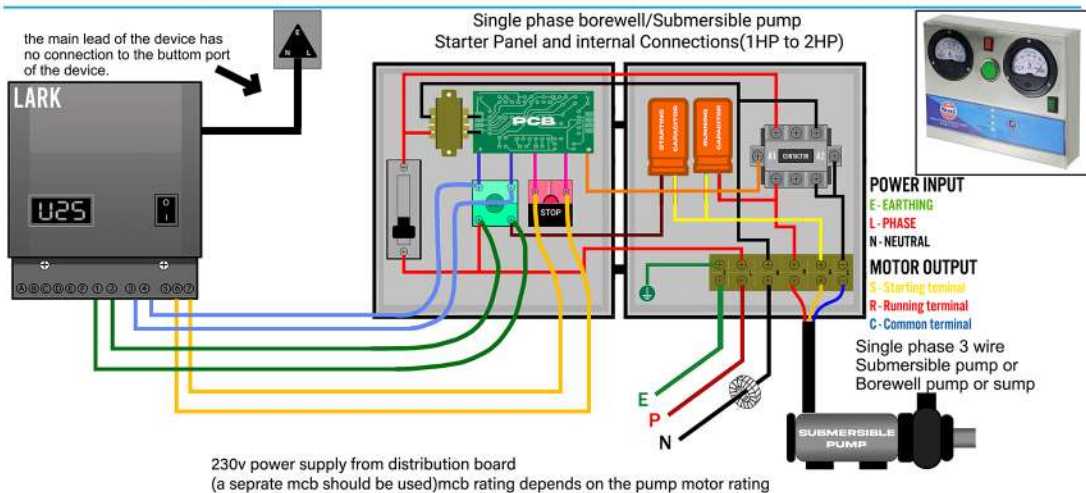
(B) Connections without contactor MCB type of starter

- 3-4 of the device - connect wire number 3 to any one side of the green button of the starter, and wire number 4 to the other side of the green button
- 5-6 of device - Wire number 5 of the device connect to any one side of the starter's MCB, above or below, and wire number 6 connect to the other side of the MCB. These connections will be parallel to the MCB
- Insert the CT coil in the input phase wire of the starter or the MCB wire. or insert both the wires of CT coil into port E and F of the device
- Keep the device on auto and keep the starter's MCB off, the motor will keep operating automatically, if you want to turn the motor on and off manually then by putting the device on OFF mode, the motor can be turned on and off manually with the starter's MCB



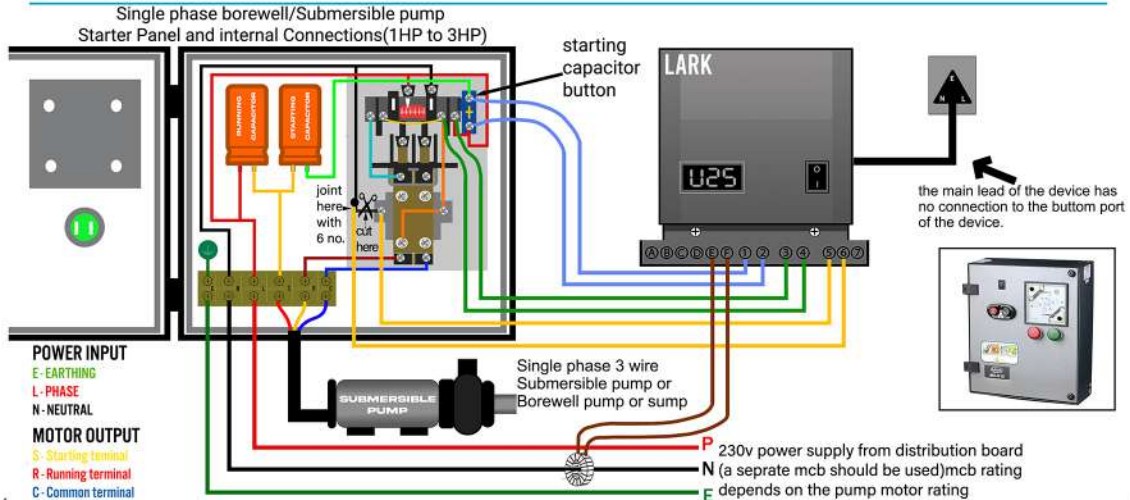
(C) Connections PCB type Digital starter

- Green button can be double or single (half) inside starter and it can be verticle or horizontal postion.
- If there is single green button then use single pole of controller For example 1 and 2 or 3 and 4.
- If there is double green button then connect 1 and 2 in one button parallel wise and 3 and 4 in second button parallel wise
- CT coil can be pass through in input neutral or in motor's blue wire.and connect CT coil wire with E and F of device
- connect 5-6 with starter RED button parallel wise 5 no.with any side,6 no. with other side.
- if you want to run the motor manually then keep the main button of the device on OFF then you can start and stop the motor from the RED- GREEN push button of the starter.



(D) Connections for L&T MU-DOL starter

- 1-2 of the device - connect wire number 1 to any one side of the Green (starting capacitor button) of the starter, and wire number 2 to the other side of the Green (Starting capacitor button)
- 3-4 of the device - connect wire number 3 to any one side of the Green push button Port of the starter, and wire number 4 to the other side of the Green push button Port.
- 5-6 of the device - open the wire from contactor coil neutral side of the starter, and connect the 6 number wire of the device to the open wire, and connect the 5 number wire to the place from where the wire is open so these connection will be in series wise..
- CT coil can be pass through in input neutral or in motor's blue wire, and connect CT coil wire with E and F of device



Scan after installtion / आखिर मैं सकैन करना

After installing this model, it has to be scanned only then it will be able to save the data of the motor according to the ampere of your motor, load of the motor, condition of the motor, depth of the motor in the borewell

इस मॉडल को लगा लेने के बाद इसको स्कैन मोड पे लगाना होता है, तभी यह आपकी मोटर के एम्पीयर, मोटर के लोड, मोटर की हालत, मोटर की बोरेवेल में गहराई के मुताबक मोटर के डेटा को सेव कर पाएगा।



For proper scanning, the water in the tank should be above the motor on level. If there is less water in the tank, first turn on the motor manually and increase the water level in the tank to above the motor on level. The tank should not be (99%) completely full.

सही स्कैन करने के लिए टैंक में पानी 'मोटर आन लेवल' से ऊपर होना चाहिए, अगर टैंक में पानी कम है तो पहले आप मोटर को मैनुअल चला कर टैंक में पानी 'मोटर आन लेवल' से ज्यादा कर लें। टैंक पूरा फुल (99%) भी नहीं होना चाहिए।

Start the scan
सकैन शुरू करें



डिवाइस को ऑटो मोड पर करें
put device on auto mode

Place both fingers on the Device Set button and the Motor On green button



डिवाइस के सेट बटन और मोटर आन (हरा) बटन पर दोनों उंगलियां रखिये

Press and hold the green button on the device with one finger, the motor will start. after the motor starts without releasing the green button press and hold the SET button with another finger, now both buttons are pressed, the scan will start in 4 seconds, release both buttons when SCAN **SCAN** shows on the display In 1 minutes the device will save all the data of the submersible and come out of the scan.



डिवाइस पर हरे बटन को एक उंगली से दबाएँ और दबाकर रखें, मोटर सटारट हो जाएगी मोटर सटारट होने के बाद हरे बटन को बिना छोड़े दूसरी उंगली से सेट बटन को भी दबाएँ और दबाकर रखें 4 सेकंड में स्कैन शुरू हो जाएगी, जैसे ही डिसपले में स्कैन **SCAN** शो हो, दोनों बटन छोड़ दें। 1 मिनट में डिवाइस आपके सबमर्सिबल का पूरा डाटा सेव करेगा और स्कैन से बाहर आ जाएगा।