

# USER MANUAL & WARRANTY CARD

**AP 1-1, 1-3, 3-3 PLUS &  
AP 1-1, 1-3, 3-3 GSM PLUS  
RO CONTROL PANEL**

## Models & Features:

AP 1:1 PLUS      GSM, TDS, VOLTAGE & CURRENT SENSE

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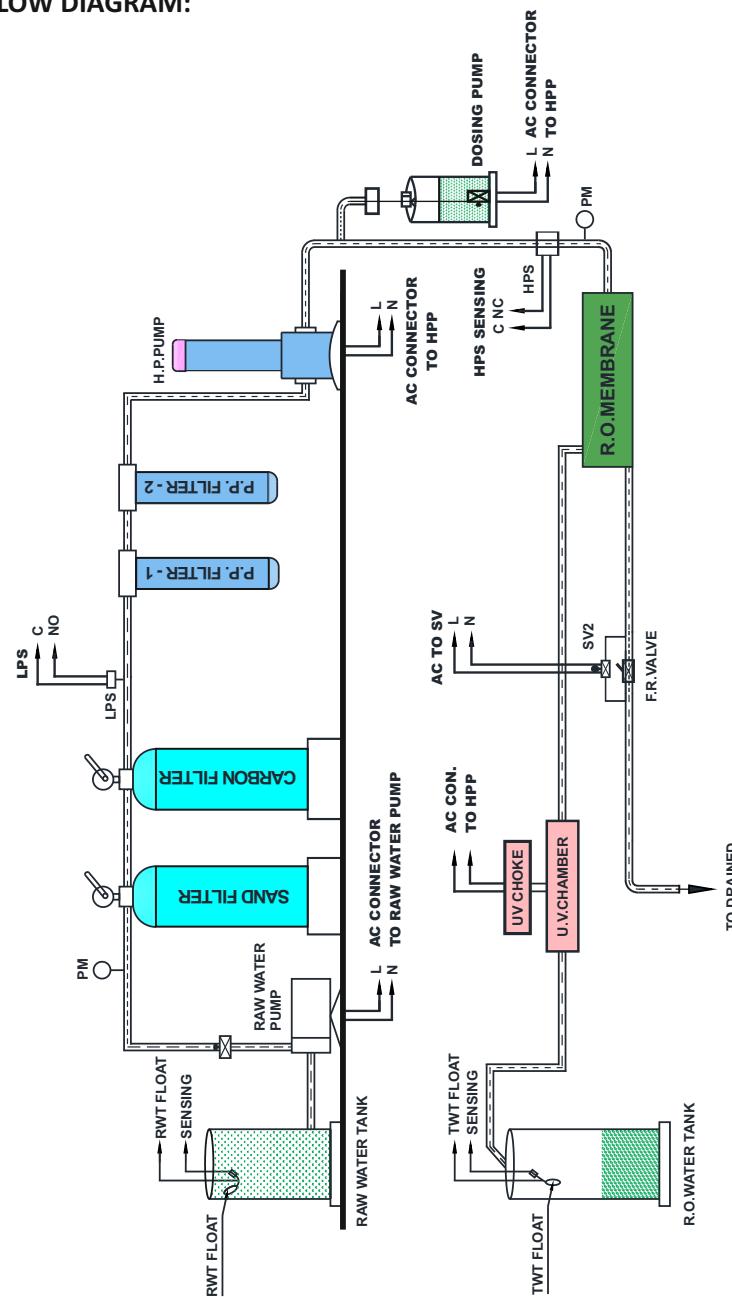
## 1.0 INSTALLATION & SAFETY INSTRUCTIONS:

To Comply with the published safety standards, The following must be served when using this control panel.

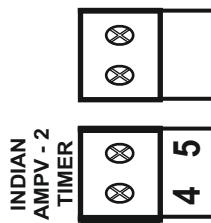
- Applicable Models: AP 1-1, 1-3, 3-3 Plus & AP GSM 1-1, 1-3, 3-3 Plus .
- Allow sufficient space around the control panel for proper air circulation.
- RO Control Panel designed to operate for “ INDORE USE ONLY ” for RO Plant.
- Operating voltage for single phase 230V & 3 - phase 440V only.
- High voltage inside, to be serviced by trained persons only.
- Protect the RO control from the water dropping.
- Do not connect more the specified load on RWP & HPP.
- Connect the proper earthlings.
- Connect the input connecting wires 2.5 Sqmm.
- Connect the proper phase sequence RYB & Neutral ( For 1-3 & 3-3 Model).
- Fix the panel properly with the nut bolts.
- Ro Control Panel can be fixed on the plain surface.

**Note: Read manual completely before installing the RO Panel.**

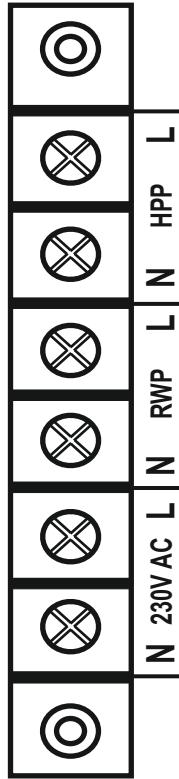
## 2.0 FLOW DIAGRAM:



### **3.0 CONNECTION DIAGRAM:**



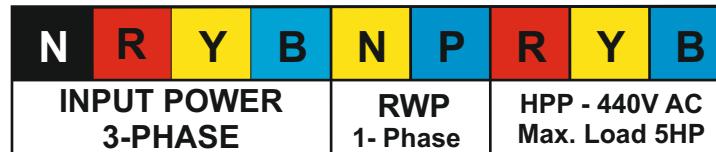
## RO PANEL - 1:1: ELECTRICAL CONNECTING DIAGRAM



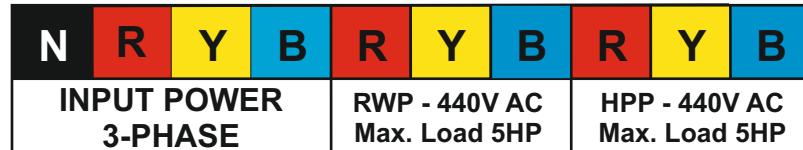
## SENSING DIAGRAM PANEL: 1-1

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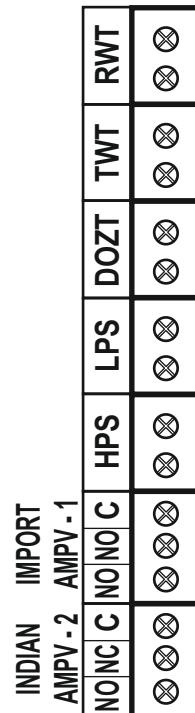
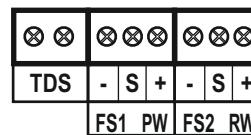
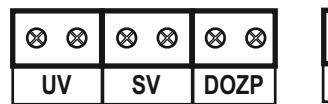
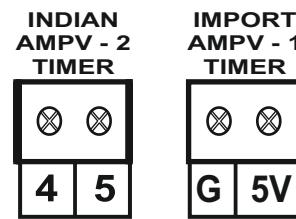
## 4.0 RO PANEL 1-3 : ELECTRICAL CONNECTION DIAGRAM



## 5.0 RO PANEL 3-3 : ELECTRICAL CONNECTION DIAGRAM



## **6.0 RO PANEL 1-3 & 3-3 : SENSING CONNECTION DIAGRAM**



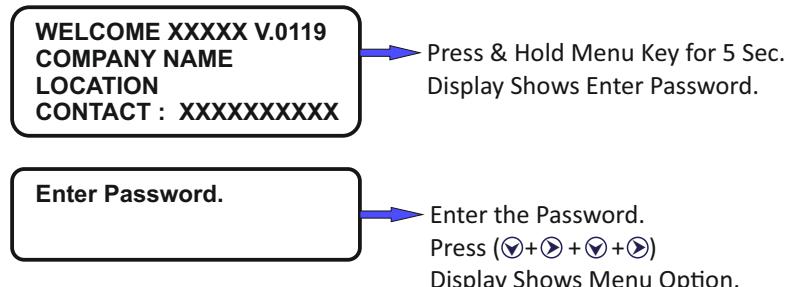
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## 7.0 OPERATING INSTRUCTIONS:

### 7.1 KEY FUNCTIONS:

<b>Menu</b>	Helps to enter into settings. Confirmation of selection of your choice. Also works as CENTER KEY FUNCTION .
<b>Back</b>	Previous Menu to Service Mode. One step backwards. Also works as LEFT KEY FUNCTION .
<b>UP</b>	Upward Movement. Increment of numbers & alphabets.
<b>Down</b>	Downward Movement. Decrement of numbers & alphabets.
<b>Scroll</b>	Helps to Left & Right Moment and Edit of the Numbers and Alphabets.

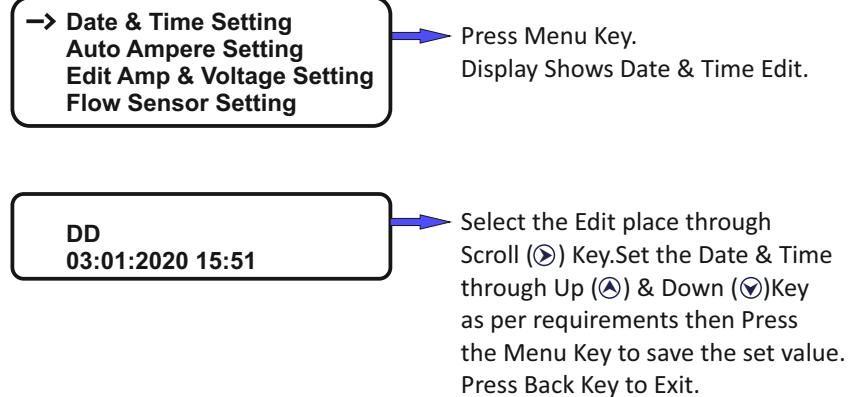
### 7.2 SETTINGS:



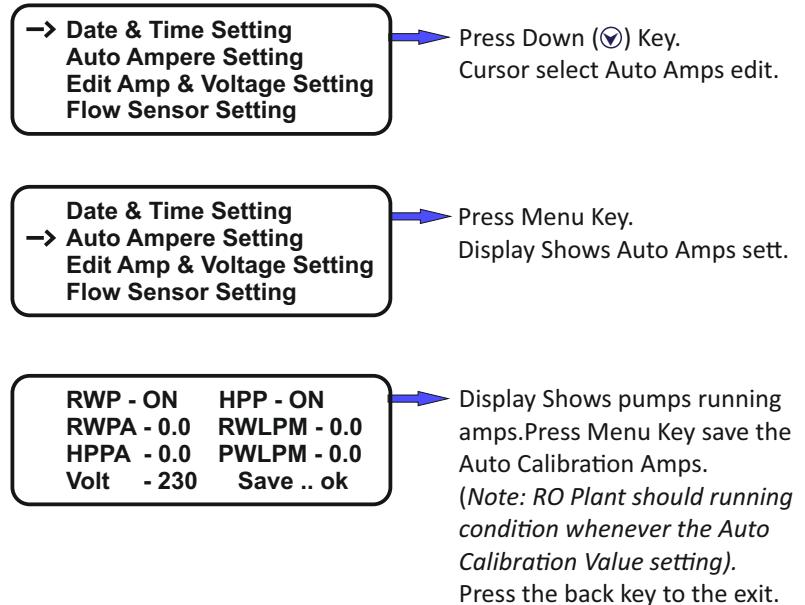
### 7.3 PROGRAMMABLE FEATURES:

- Date & Time Setting.
- Auto Amps Setting.
- Edit Amps & Voltage Setting
- Flow Sensor Setting.
- Panel Setting.
- GSM Setting.
- GSM Screen View.
- Default Setting.

### a. EDIT DATE AND TIME SETTING:



### b. AUTO AMP SETTING:



**c. EDIT AMPS & VOLTAGE SETTING:**

→ Date & Time Setting  
Auto Ampere Setting  
Edit Amp & Voltage Setting  
Flow Sensor Setting

Press Down (▽) Key.  
Cursor select Manual Amps Setting.

Date & Time Setting  
Auto Ampere Setting  
→ Edit Amp & Voltage Setting  
Flow Sensor Setting

Press Menu Key.  
Display Shows Edit Amps &  
Voltage Edit Mode.

>> RWP Amp-cut 0.0  
HPP Amp-cut 0.0  
RWP Dry Run OFF  
HPP Dry Run OFF  
Over Voltage 280  
Under Voltage 170

Select the Edit place through  
Up (Ⓐ) & Down (▽) Key as per  
requirements then Press the  
Menu Key to set the required  
value through Up (Ⓐ) & Down (▽)  
Key save the set value.  
Press Back Key to Exit.

**d. SET FLOW SENSOR CALIBRATION:**

→ Date & Time Setting  
Auto Ampere Setting  
Edit Amp & Voltage Setting  
Flow Sensor Setting

Press Down (▽) Key.  
Cursor select Flow Sensor  
Calibration edit Mode.

Date & Time Setting  
Auto Ampere Setting  
Edit Amp & Voltage Setting  
→ Flow Sensor Setting

Press Menu Key.  
Display Shows Flow Sensor  
Calibration Edit Mode.

→ RO Capacity 1000  
F1 250 ·  
F2 250  
Auto Calibration

Press Menu Key change the Ro  
Capacity required Value through  
the Up (Ⓐ) & Down (▽) key.  
Press the Menu Key to save the  
set value. Press Down Key to  
select Auto Calibration Mode.

(Note: If RO Plant is 1000 LPH keep 1000 or If RO Plant is 500 LPH keep 500 hour's)

RO Capacity 1000  
F1 250 ·  
F2 250  
→ Please Wait 1 Minute

Press Menu Key.  
Wait for 1 Minute for Auto  
Calibration process to be save.

(Note: RO Plant should running condition whenever the AutoCalibration Value setting)  
After 1 Minute Auto calibration Buzzer will give the beep so that flow of water will automatically saved (FS1 & FS2 to connected). Then press the back key to the exit.

**e. PANEL SETTING:**

→ Date & Time Setting  
Auto Ampere Setting  
Edit Amp & Voltage Setting  
Flow Sensor Setting

Press Down (▽) Key.  
Cursor select Panel Setting edit Mode.

→ Panel Setting  
GSM Setting  
GSM Screen View  
Default Setting

Press Menu Key.  
Display Shows Panel Setting.

→ A/F Cycle 1 hr  
A/F Timer 20 Sec.  
LPS Delay Time 15 Sec.  
LPS Retry Time 30 Min.  
RWTDTS Calibration 1.64  
PWDTS Calibration 1.64  
TDS Alert 500  
AMPV Service Time OFF

Press Menu Key.  
Display Shows Auto Flush Edit.

→ Flush Cycle 4 hr

Press Menu Key.  
Display shows double arrow for edit  
cycle time.

>> Flush Cycle 4 hr

Select the Edit place through  
Up (Ⓐ) & Down (▽) key to set the  
as per required time.  
Press the Menu Key to save the  
set time. Press back key to exit.

(Note: Remaining all settings follow as per the flush cycle time settings)

**f. GSM SETTING: (Plant information will be update for given 2 phone number's)**

- Date & Time Setting  
Auto Ampere Setting  
Edit Amp & Voltage Setting  
Flow Sensor Setting
  - Press Down (▽) Key.  
Cursor select GSM edit Mode.
  
- Panel Setting  
→ GSM Setting  
GSM Screen View  
Default Setting
  - Press Menu Key.  
Display Shows GSM Number Edit.
  
- 9963000150 Admin  
9955555555 Operator  
Set SMS Time 12 Hr.  
Server Time Real
  - Press Menu Key.  
Display shows double arrow for edit 1st user number.
  
- » 9963000150 Admin  
9955555555 Operator  
Set SMS Time 12 Hr.  
Server Time Real
  - Select the Edit place through Scroll (▷) Key. Set the required number through Up (Ⓐ) & Down (Ⓑ) key as per requirements.  
Press the Menu Key to save the set number.

(Note: Follow the same for 2nd user number as 1st user number and through the 1st given phone number only the plant can be controlled for remote operating)

- 9963000150 Admin  
9955555555 Operator  
→ Set SMS Time 12 Hr.  
Server Time Real
  - Press the Down (▽) Key.  
Select SMS Time edit mode.
  
- 9963000150 Admin  
9955555555 Operator  
» Set SMS Time 12 Hr.  
Server Time Real
  - Press the Menu Key.  
Display shows SMS Time edit.  
Set the required time through Up (Ⓐ) & Down (Ⓑ) key then press the Menu Key to save the set time.

(Note: Follow the same for Server Time as per the SMS Time)

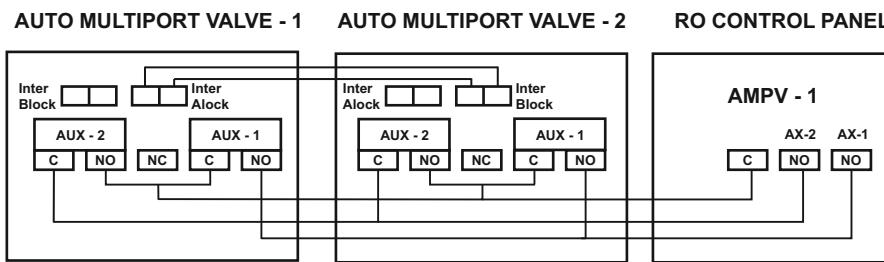
**10.0 TROUBLE SHOOTING GUIDE LINES:**

- Date & Time Setting  
Auto Ampere Setting  
Edit Amp & Voltage Setting  
Flow Sensor Setting
  - Press Down (▽) Key.  
Cursor select GSM Screen View
  
- Panel Setting  
GSM Setting  
→ GSM Screen View  
Default Setting
  - Press Menu Key.  
Display Shows GSM Screen View .
  
- Press Menu Key then Long Press the Up (Ⓐ) Key for 10 Sec. then back automatically message will send to admin number.

**h. SET DEFAULT SETTING: (Factory Setting will be updated Automatically)**

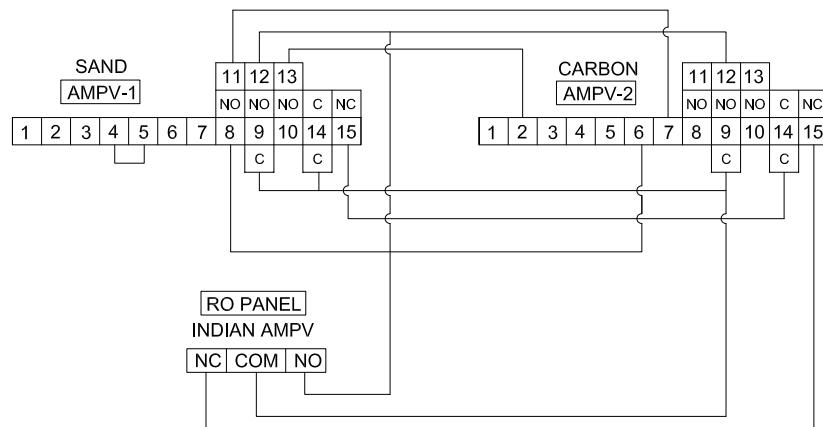
- Date & Time Setting  
Auto Ampere Setting  
Edit Amp & Voltage Setting  
Flow Sensor Setting
  - Press Down (▽) Key.  
Cursor select Default Setting Mode.
  
- Panel Setting  
GSM Setting  
GSM Screen View  
→ Default Setting
  - Press Menu Key.  
Display Shows Default setting mode.
  
- Long Press Button 5 For Factory Setting
  - Long Press Menu Key for 5 Seconds.  
Default setting automatically save.

## 8.0 RO CONTROL PANEL CONFIGURE WITH 2-MULTIPORT VALVE:



## 9.0 RO CONTROL PANEL CONFIGURE WITH INDIAN MULTIPOINT VALVE:

INDIAN MULTIPOINT VALVE CONNECTION DIAGRAM

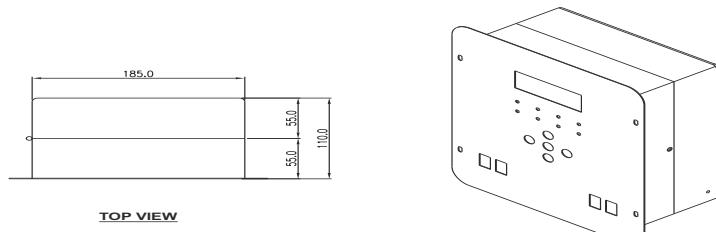


## g. GSM SCREEN VIEW SETTING:

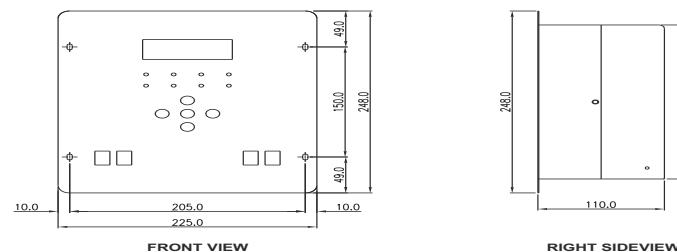
Sl.No.	Message ON Display	Cause & Action
1.	Raw Water Tank Empty	<ul style="list-style-type: none"> <li>• Actually tank is empty.</li> <li>• Floaty is not connected.</li> <li>• Check the float &amp; wires.</li> </ul>
2.	LPS Failed	<ul style="list-style-type: none"> <li>• Pressure lower than the set value.</li> <li>• Check the input water pressure.</li> <li>• Check the LPS Connections.</li> </ul>
3.	HPS1	<ul style="list-style-type: none"> <li>• Pressure Higher than the set Value .</li> <li>• Check the sand, Carbon Filters.</li> <li>• Check the HPS1 Connections.</li> </ul>
4.	Dosing	<ul style="list-style-type: none"> <li>• Actually tank is empty.</li> <li>• Floaty is not connected.</li> <li>• Check the float &amp; wires.</li> </ul>
5.	Treated Water Tank Full	<ul style="list-style-type: none"> <li>• Actually tank is Full.</li> <li>• Floaty is not connected.</li> <li>• Check the float &amp; wires.</li> </ul>
6.	RWP Overload	<ul style="list-style-type: none"> <li>• Check the Pump Amps rating.</li> </ul>
7.	HPP Overload	<ul style="list-style-type: none"> <li>• Check the Pump Amps rating.</li> </ul>
8.	Low Voltage	<ul style="list-style-type: none"> <li>• Check Low Voltage set point Or Low Voltage.</li> </ul>
9.	High Voltage	<ul style="list-style-type: none"> <li>• Check High Voltage set point or High Voltage.</li> </ul>
10.	GSM	<ul style="list-style-type: none"> <li>• Check GSM Signal and SIM balanced. Press back key to exit.</li> <li>• Check antenna wire.</li> </ul>
11.	Flow Sensor	<ul style="list-style-type: none"> <li>• Check flow sensor wiring &amp; Flow sensor.</li> </ul>

## 11.0 MECHANICAL 1-1 ENCLOSURE DIMENSIONS:

11.1 Dimensions: Length x Width x Height = 185 x 110 x 210 mm.



TOP VIEW

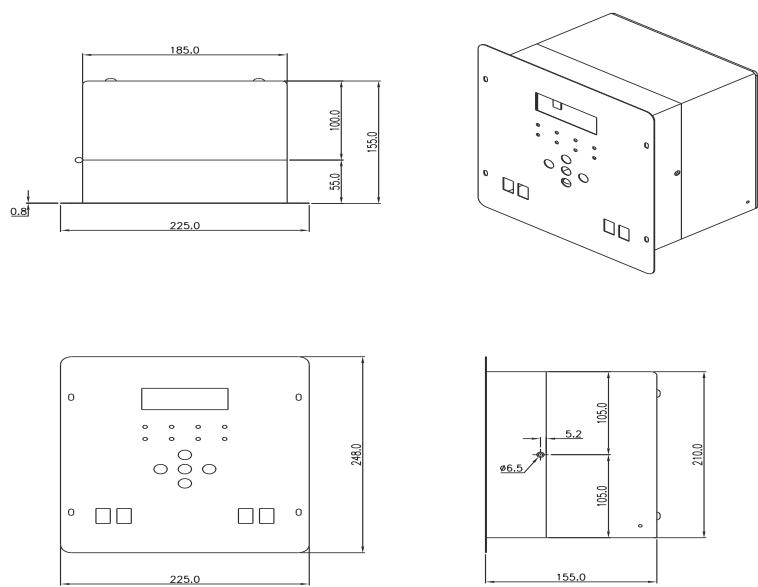


FRONT VIEW

RIGHT SIDEVIEW

## 12.0 MECHANICAL 1-3 ENCLOSURE DIMENSIONS:

12.1 Dimensions: Length x Width x Height = 185 x 155 x 210 mm.



## 13.0 WARRANTY:

- 13.1 Standards warranty 12 months from date of purchase.
- 13.2 Warranty voids if overload connected to the Control Panel.
- 13.3 Warranty covers against only manufacturing defects.
- 13.4 Keep this warranty card safely.
- 13.5 In case of water found inside warranty voids.
- 13.6 Follow the user manual instructions strictly before use.

Customer Name: ..... Ph.No: .....

Dealer / Distributor: ..... Sign: .....

Stamp: ..... Date: .....

Product Serial No.: .....

Product Model No.: .....

Dealer Stamp:

Customer Support: