

Engery Saving  
Inverter DC Silent Pump  
Penjimatkan Tenaga  
Pam Senyap Inverter DC



DWI SALURAN ELCB  
DWI HAD BATASAN PEMANAS



#### Earth Line Indicator

**LIGHT ON**  
Earth Line - OK

**BLINKING**  
Earth Line - Failed

**LAMPU NYALA**  
Earth Line - OK

**LAMPU BERKELIP-KELIP**  
Earth Line - Gagal

## WATER HEATER / PEMANAS AIR

## USER MANUAL / PANDUAN PENGGUNA

MODEL / MODEL

SALVO SERIES (S731D / S730N)

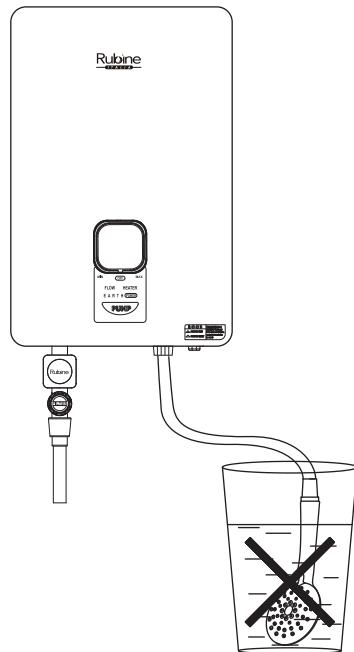
Please read this manual thoroughly and understand the content before use.  
*Sila baca panduan ini dengan teliti dan memahami isi kandungannya sebelum penggunaan.*



## SAFETY PRECAUTION LANGKAH-LANGKAH KESELAMATAN

1. Do not install reverse INLET & OUTLET and Stop Valve of heater.  
*Jangan memasang "INLET & OUTLET" dan Injap Hentian pemanas dalam keadaan terbalik.*
2. Do not install the heater where there is consistent spray directly over the unit.  
*Jangan memasang pemanas air dimana terdapat semburan konsisten terus ke atas unit.*
3. Do not connect the OUTLET to any tap or fitting that is not recommended by the manufacturer.  
*Jangan sambungkan "OUTLET" pada mana-mana paip atau pemasangan yang tidak disyorkan oleh pengeluar.*
4. Do not block the heater OUTLET in any way.  
*Jangan menghalang "OUTLET" pemanas dalam apa jua cara.*
5. Do not attempt to repair the heater without qualified technician.  
*Jangan cuba untuk membaiki pemanas tanpa juruteknik yang berkelayakan.*
6. This appliance is not intended for use by person (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been supervision or instruction concerning use of the appliance by a person responsible for their safety.  
*Perkakas ini tidak digalakkan untuk digunakan oleh orang (termasuk kanak-kanak) kurang upaya darisegi fizikal, deria atau mental, atau kurang berpengalaman atau pengetahuan, kecuali mereka diawasi atau diberi arahan mengenai penggunaan perkakas ini oleh orang yang bertanggungjawab keatas keselamatan mereka.*
7. Children should be supervised to ensure that they do not play with the appliance.  
*Kanak-kanak hendaklah diselia untuk memastikan mereka tidak bermain dengan perkakas ini.*

8. Engage qualified electrician for installation.  
*Gunakan juruelektrik yang berkelayakan untuk pemasangan.*
9. Test water temperature with hand before using the shower.  
*Uji suhu air dengan menggunakan tangan sebelum menggunakan pemanas air.*
10. Check the ELCB once a month (please refer to the Test Run of Heater) and consult professional for repair if there is any malfunction.  
*Pastikan ELCB diperiksa setiap bulan (sila rujuk Pengujian Pemanas) dan hubungi juruteknik untuk sebarang pembaikan.*
11. Metallic / chrome flexible hose and conductive control valve shall not be used.  
*Saluran getah logam / krom dan injap kawalan konduktif tidak boleh digunakan.*
12. Use only new hoses to connect the appliance to the water supply. The old hose-sets should not be reused.  
*Gunakan hos yang baru untuk menyambungkan perkakas kepada bekalan air. Hos yang lama tidak boleh digunakan semula.*
13. This appliance is not to be used for portable water supply.  
*Alat ini tidak boleh digunakan untuk bekalan air mudah alih.*
14. Do not leave the hand shower idle in the pail. (refer below)  
*Jangan meninggalkan alat pancuran terbiar di dalam baldi. (rujuk dibawah)*

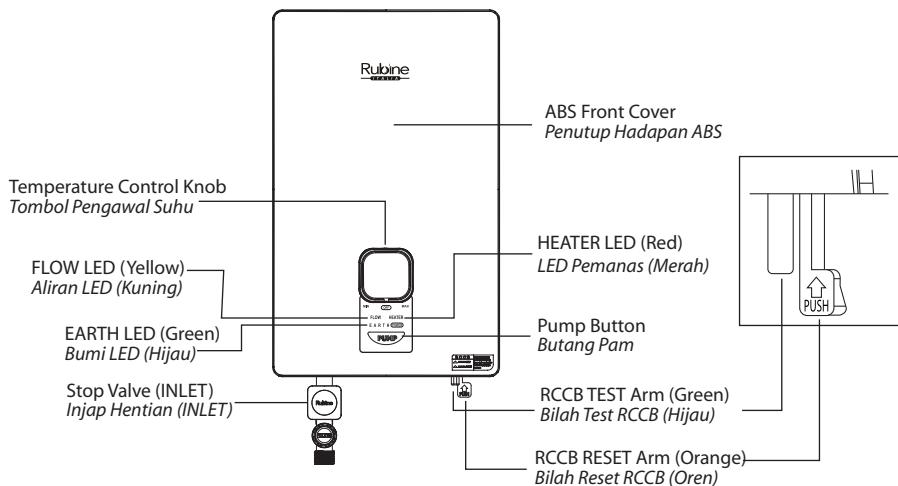


## 1. WATER HEATER PARTS IDENTIFICATION

### PENGENALAN BAHAGIAN – BAHAGIAN PEMANAS AIR

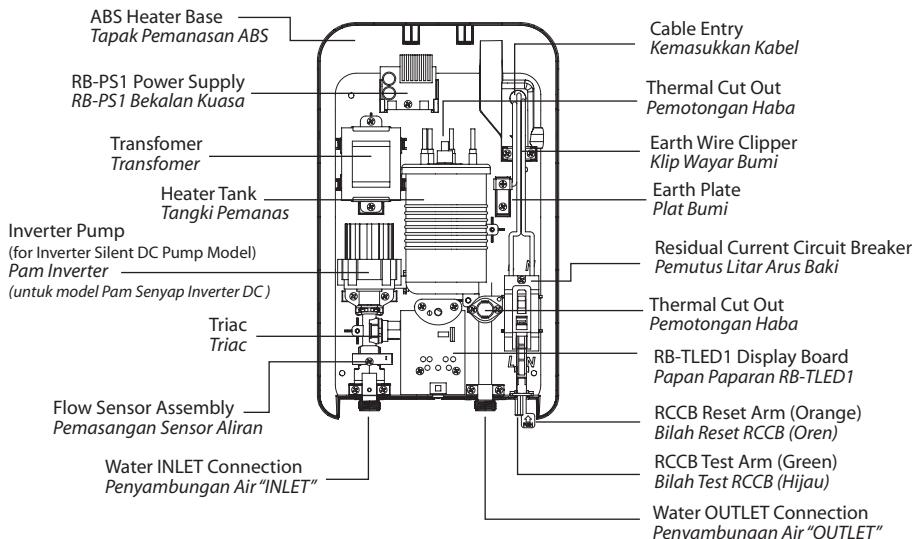
#### EXTERNAL PARTS IDENTIFICATION

##### PENGENALAN BAHAGIAN LUARAN



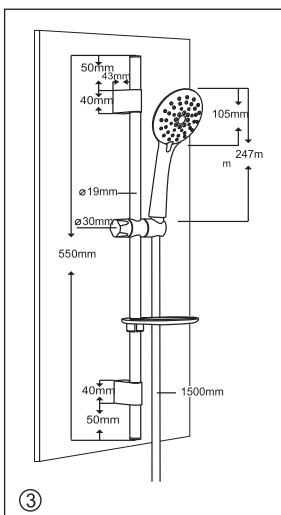
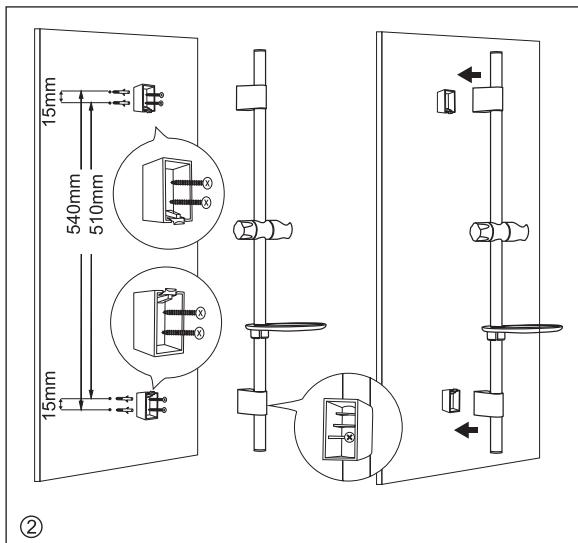
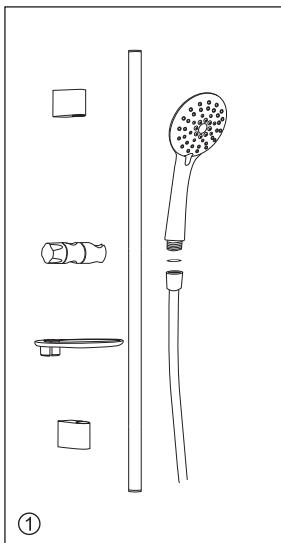
#### INTERNAL PARTS IDENTIFICATION

##### PENGENALAN BAHAGIAN DALAMAN

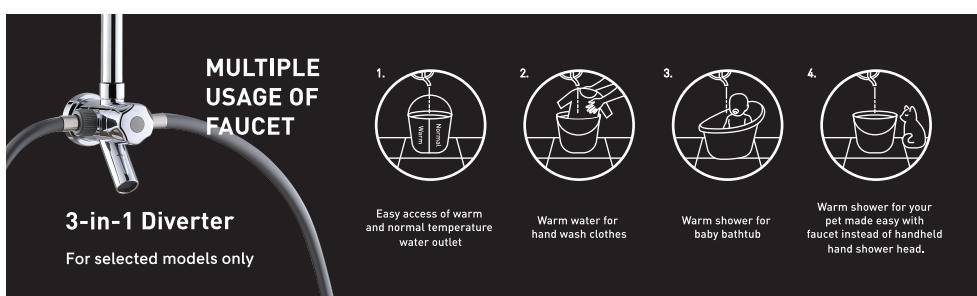
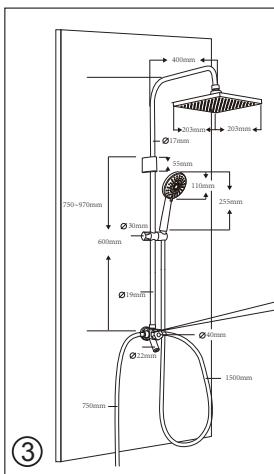
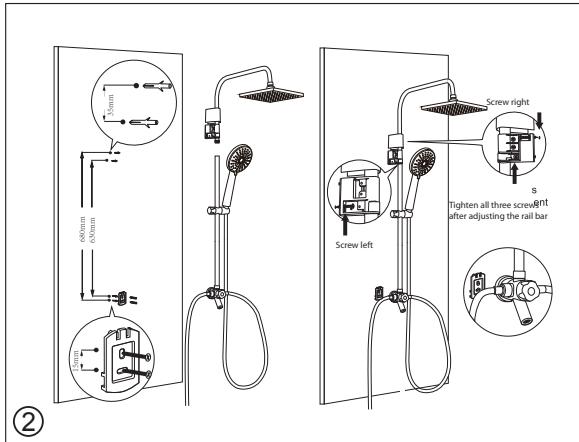
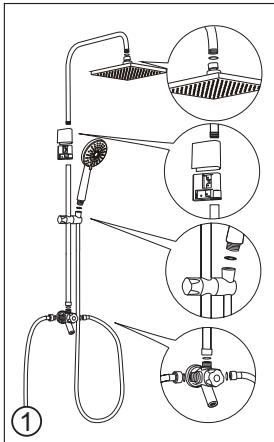


## SHOWER SET ACCESSORIES IDENTIFICATION PENGENALAN AKSESORI PANCURAN

### 1. BLACK ACCESSORIES AKSESORI HITAM



**2. RAIN SHOWER SET - 3 IN 1 DIVERTER** (For selected model only)  
**SET PANCURAN MANDIAN HUJAN**



## **2. GENERAL INFORMATION MAKLUMAT UMUM**

### **INSTALLATION PEMASANGAN**



**CAUTION:  
AWAS:**  
**THIS APPLIANCE MUST BE EARTHED  
PERKAKASINI MESTI DIBUMIKAN**

1. All plumbing work should be completed before proceeding to electrical wiring connection. (Table 1)  
*Semua pemasangan paip perlu diselesaikan sebelum memulakan kerja-kerja penyambungan wayar elektrik. (Jadual 1)*
2. Installation must be carried out by qualified electrician with close reference to this manual and in compliance with the local regulations.  
*Pemasangan mestilah dilakukan oleh juruteknik yang berkelayakan dengan merujuk pada panduan ini dan mengikut akta-akta tempatan.*
3. The unit works at minimum water flow rate of 1.6 litre/min, which then would trigger the built-in pump (only for pump model), boosting a stronger shower spray.  
*Unit ini berfungsi pada kadar aliran air minima 1.6 liter/min, yang mengaktifkan pam dan kemudiannya meningkat pancuran semburan.*
4. The built-in electronic Earth Leakage Circuit Breaker (ELCB) would cut-off the power supply to heater in the event of current leakage of as low as 15mA.  
*"Earth Leakage Circuit Breaker (ELCB)" akan memutuskan bekalan kuasa sekiranya berlaku kebocoran tenaga serendah 15mA.*
5. The Thermal Cut-Off would automatically shut off the power supply shall there is any abnormal rise of showering temperature.  
*Pemotongan haba berfungsi secara automatik akan memutuskan bekalan kuasa jika terdapat kenaikan suhu secara tidak normal.*
6. The unit only operates when there is sufficient water flow to trigger the flow switch.  
*Unit hanya akan beroperasi apabila terdapat aliran air yang cukup untuk mengaktifkan suis aliran.*

7. Electrical loading Table 1:  
Pendawaian elektrik Jadual 1:

Voltage (Vac)	Power (kW)	Amperes (A)	Recommended Conductor Size (csa)			Fuse/ MCB(A)	ON/OFF Switch (A)
			mm <sup>2</sup>	Conduit Cable	Flexible Cable		
220 - 50/60Hz	3.5	16.0	2.5	7/0.67mm	50/0.25	20	20
	4.5	20.5	2.5	7/0.67mm	56/0.30	25	25
	5.5	25.0	4.0	7/0.85mm	56/0.30	32	32
	6.0	27.3	4.0	7/0.85mm	56/0.30	32	32
	6.5	29.6	4.0	7/0.85mm	84/0.30	32	32
	7.5	34.1	6.0	7/1.04mm	84/0.30	40	40
	8.0	36.4	6.0	7/1.04mm	84/0.30	40	40
230 - 50/60Hz	3.5	15.2	2.5	7/0.67mm	50/0.25	20	20
	5.5	24.0	4.0	7/0.85mm	56/0.30	32	32
	6.6	28.7	4.0	7/0.85mm	56/0.30	32	32
	8.8	28.3	6.0	7/1.04mm	84/0.30	40	40
240 - 50/60Hz	3.6	15.0	4.0	7/0.67mm	56/0.25	32	20
	3.8	16.3	4.0	7/0.67mm	56/0.25	32	20
	4.2	17.5	4.0	7/0.67mm	56/0.25	32	20
	7.7	32.1	6.0	7/1.04mm	84/0.30	40	40
	9.0	37.5	6.0	7/1.04mm	84/0.30	40	40

8. Instantaneous water heater shall be equipped with a 2-pole control switch and own residual current device.

*Pemanas air segera hendaklah dilengkapi dengan kawalan suis 2-kutub dan memiliki peranti arus berbaki.*

9. Water heaters exceeding 3kW shall be permanently connected to a 20A/30A rated circuit breaker/fuse with an isolator switch and residual current device.

*Pemanas air yang melebihi 3kW hendaklah disambung secara tetap pada 20A/30A nilai arus pemutus litar/fius dengan suis pengasing dan peranti arus berbaki.*

### 3. INSTALLATION PROCEDURES TATACARA PEMASANGAN

1. INLET and OUTLET connection of the heater unit should not be reversed, with stop valve installed on INLET. (Diagram 1)  
*Sambungan unit pemanas "INLET" dan "OUTLET" tidak boleh terbalik dan injap hentian mestilah di pasang pada "INLET".*
2. It is recommended that the unit should be mounted above 1.5m above the floor to bottom of the heater. (Diagram 1)  
*Pemasangan unit digalakkan mempunyai jarak 1.5m antara lantai dengan bahagian bawah pemanas. (Rajah 1)*

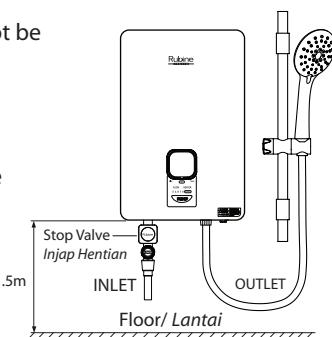


Diagram 1  
Rajah 1

### 3. Mounting position

#### Penetapan tapak pemanas

- Remove screw at the bottom of the heater  
*Keluarkan skru dari bawah pemanas*
- Lift the plastic cover upward (Refer Diagram 2)  
*Buka penutup plastik pemanas dari bahagian bawah. (Rujuk Rajah 2)*
- Mark mounting position on the wall for all 4 screws  
*Tandakan posisi semua 4 skru pada dinding*
- Drill the holes with 5.0mm diameter drill bit (Refer Diagram 3)  
*Gerudi lubang dengan menggunakan bit gerudi berdiameter 5.0mm (Rujuk Rajah 3)*
- Install the unit to the wall with plug  
*Pasang unit pada dinding bersama plug*

### 4. Installation of Heater INLET and OUTLET connection. (Diagram 4)

*Pemasangan "INLET" dan "OUTLET" pemanas. (Rajah 4)*

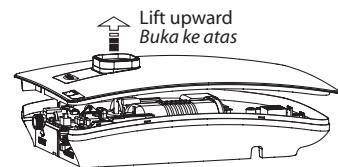
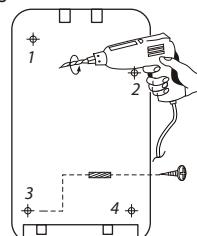


Diagram 2  
Rajah 2

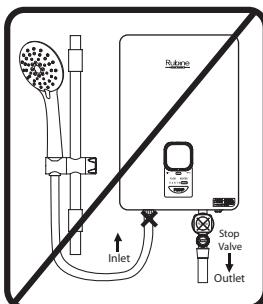
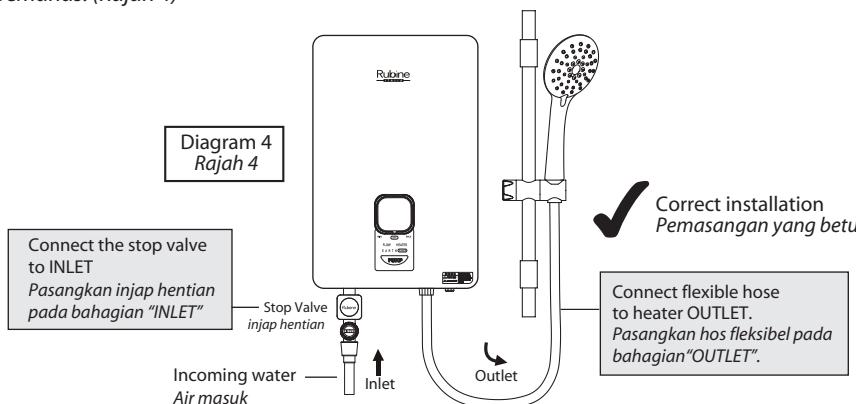


#### WARNING !

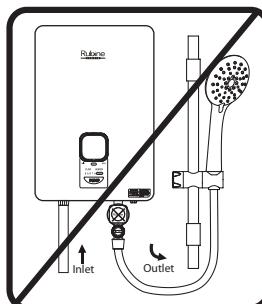
To prevent vibration, all 4 screw must be tightened fully.

Untuk mengelakkan getaran, semua 4 skru hendaklah diketatkan sepenuhnya.

Diagram 3  
Rajah 3



**X** inlet - outlet reverse  
(wrong installation)  
inlet - outlet terbalik  
(pemasangan yang salah)



**X** stop valve reverse  
(wrong installation)  
injap - hentian terbalik  
(pemasangan yang salah)

#### WARNING !

Wrong installation will caused damage to heating element.

Pemasangan yang salah boleh mengakibatkan kerosakan pada elemen pemanas.

## 5. Electrical Connection

Penyambungan elektrik

### IMPORTANT NOTE ! NOTA PENTING !

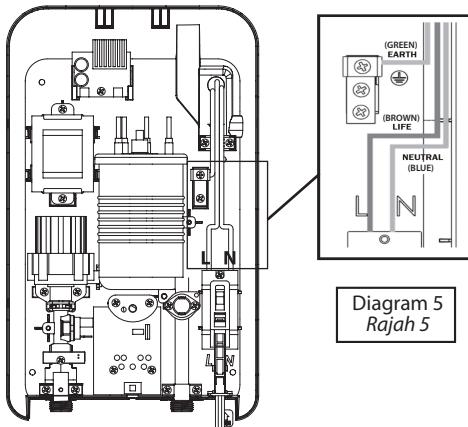
SWITCH OFF THE MAIN SUPPLY BEFORE ELECTRICAL WORK  
PADAMKAN SUIS UTAMA SEBELUM MELAKUKAN KERJA-KERJA  
PENDAWAIAN ELEKTRIK

- a) Insert electrical cable as (Diagram 5).

*Masukkan kabel elektrik seperti yang ditunjukkan pada (Rajah 5).*

- b) Connect the cable to RCCB and fully tighten as below :

*Sambungkan kabel ke blok RCCB terminal dan ketatkan sepenuhnya seperti berikut:*



Ensure all wiring connection is completely TIGHTEN!  
*Pastikan semua penyambungan wayar telah diketatkan!*

Electrical cable  
(Recommended conductor size 4.0mm<sup>2</sup>)  
*Kable elektrik (saiz konduktor yang disyorkan 4.0mm<sup>2</sup>)*

- c) Restore the cover. (Diagram 6)

*Pasangkan penutup pemanas. (Rajah 6)*

To install cover:

*Pemasangan penutup:*

- 1) Place top part into position & fit in nicely.

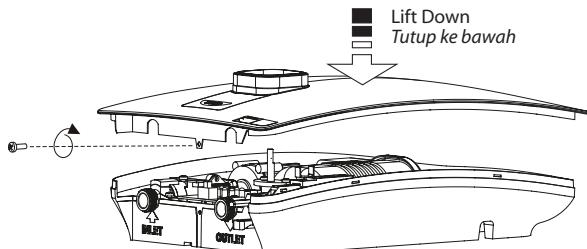
*Posisikan penutup & ketatkan bahagian atas dahulu.*

- 2) Press firmly the bottom part until "click" to secure the cover.

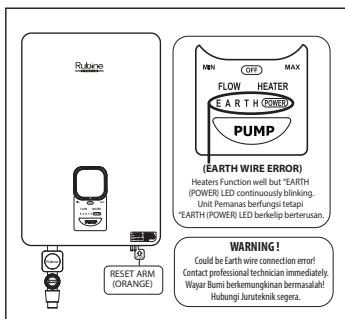
*Tekan bahagian bawah penutup sehingga bunyi "klik".*

- 3) Install screw at bottom to lock in position.

*Selepas penutup dipasang dengan ketat, pasangkan skru di bahagian bawah.*



## 4. OPERATION PROCEDURES / TEST RUN OF HEATER TATACARA OPERASI / PENGUJIAN PEMANAS



### STEP 1

#### Earth Line Indicator

LIGHT ON  
Earth Line - OK

LAMPU NYALA  
Earth Line - OK

Earth (POWER) LED Light (GREEN) should be switch on when Earth wire is connected.

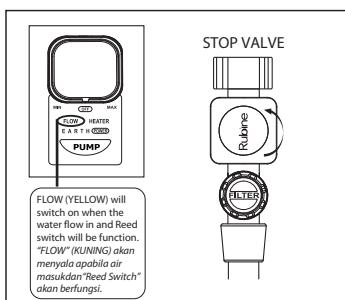
Earth (POWER) lampu LED (HIJAU) akan menyala apabila wayar Bumi disambungkan

BLINKING  
Earth Line - Failed

LAMPU BERKELIP-KELIP  
Earth Line - Gagal

Earth (POWER) LED Light (GREEN) will be blinking when Earth wire is error condition.

Earth (POWER) lampu LED (HIJAU) akan berkelip apabila wayar Bumi dalam keadaan masalah.



### STEP 2

Turn on stop valve (anti-clockwise) for water flow in and FLOW LED (YELLOW) will switch on.

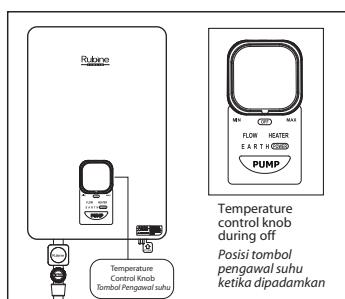
Hidupkan injap hentian (arah lawan jam) untuk air masuk dan Aliran LED (KUNING) akan menyala.



### STEP 3

Make sure water flow starts after stop valve had been turned on.

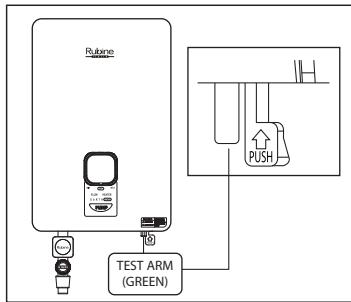
Pastikan pancuran air bermula selepas injap hentian dihidupkan.



### STEP 4

Turn on temperature control knob and HEATER LED (RED) will switch on.

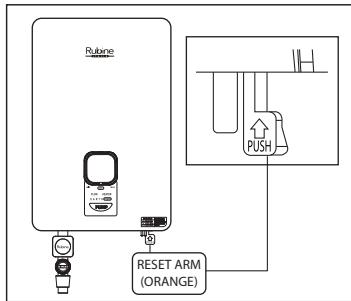
Pusing tombol pengawal suhu dan lampu LED merah "HEATER" akan menyala.



#### STEP 5

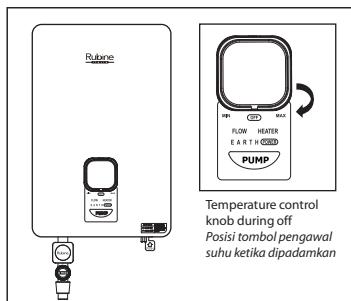
Test the RCCB by pushing "TEST" arm (GREEN).  
The unit should be cut off. "POWER" LED (GREEN) light and  
"HEATER" LED (RED) light would turn off.

*Uji RCCB dengan menekan slot "TEST" (HIJAU).  
Unit akan memotong bekalan kuasa. "POWER" LED (HIJAU)  
dan "HEATER" LED (MERAH) tidak menyala.*



#### STEP 6

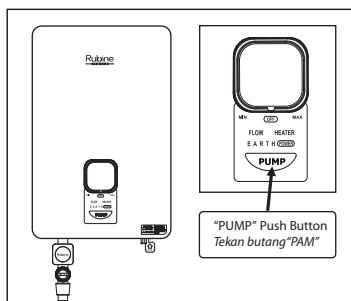
Pushing "RESET" arm (ORANGE) to resume power connection.  
*Tekan slot "RESET" (OREN) untuk penyambungan kuasa semula.*



#### STEP 7

The heater is now ready for use.  
Temperature will be increased accordingly as the knob being turned clockwise from "MIN" to "MAX".

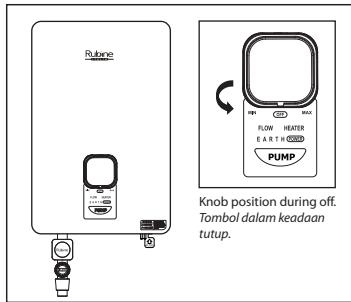
*Pemanas kini sedia digunakan.  
Suhu air akan meningkat sewajarnya apabila tombol dipusing mengikut arah jam dari "MIN" ke "MAX".*



#### STEP 8

Press the "Pump" button (only for DC pump model) for booster stronger shower spray.

*Tekan butang "Pam" untuk meningkatkan pancuran semburan.*



#### STEP 9

Switch off the heater by rotating the knob anti-clockwise and main power supply when not in use.

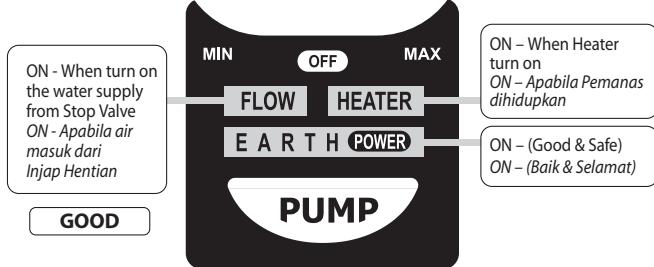
*Padamkan suis pemanas putar tombol kuarah lawan jam dan bekalan kuasa apabila tidak menggunakan.*

### EARTH INDICATION PETUNJUK BUMI "AUTO INSPECT"

#### GOOD AND SAFE

Safe to use when EARTH POWER (Green LED) and WATER FLOW (Yellow LED) is ON.

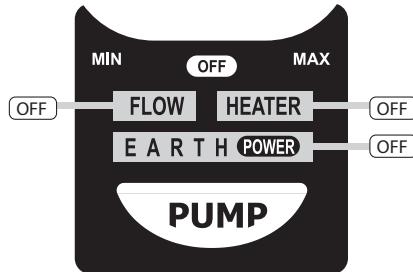
Selamat digunakan apabila "EARTH POWER" LED Hijau dan Aliran Air Masuk LED Kuning menyala.



#### TRIPPED RCCB

Tripped RCCB when EARTH POWER , WATER FLOW & HEATER is OFF.

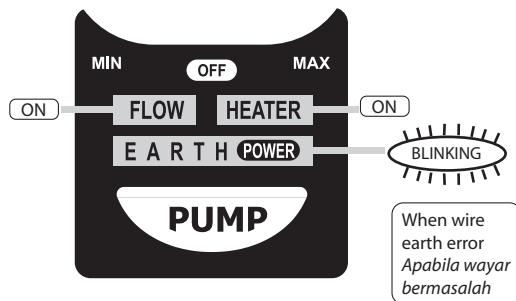
RCCB Bermasalah apabila "EARTH POWER", Aliran Air Masuk & Pemanas tidak menyala.



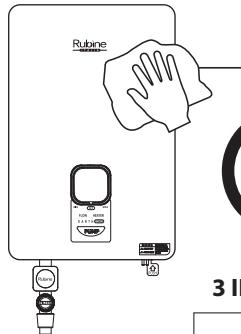
#### EARTH WIRE ERROR

When Earth wire is in error condition the EARTH POWER LED (GREEN) will blinking. At same time, Flow LED (YELLOW) and HEATER LED (RED) will maintain at ON position.

*Apabila Wayar Bumi berada dalam keadaan yang silap "EARTH POWER" LED (HIJAU) akan berkelip. Pada masa yang sama, FLOW LED (KUNING) dan HEATER LED (MERAH) kekal dalam posisi ON.*

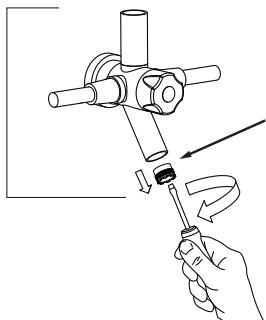


## 5. GENERAL MAINTENANCE PENYELENGGARAN AM



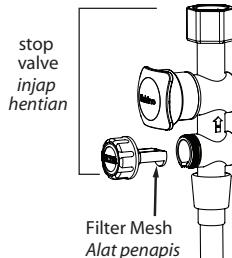
**3 IN 1 DIVERTER**

Diverter  
Pengalih



To Open: Use "Flat Screw Driver" unscrew Water Filter "Anti-Clockwise" to clean it.

Untuk membuka: Gunakan "Pernacu Skru Rata" buka tutup Penapis Air "Anti-Jam" untuk membersihkannya.

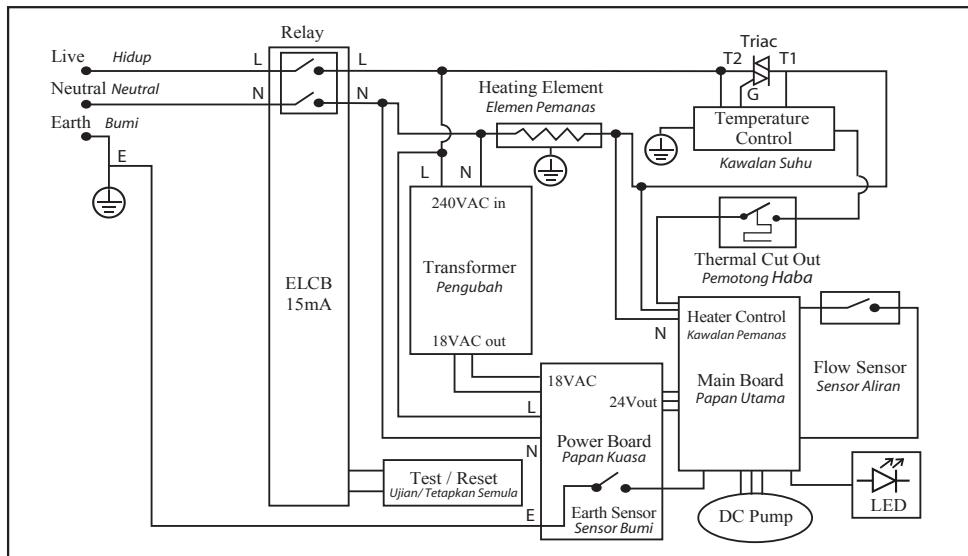


## 6. TECHNICAL SPECIFICATIONS SPESIFIKASI TEKNIKAL

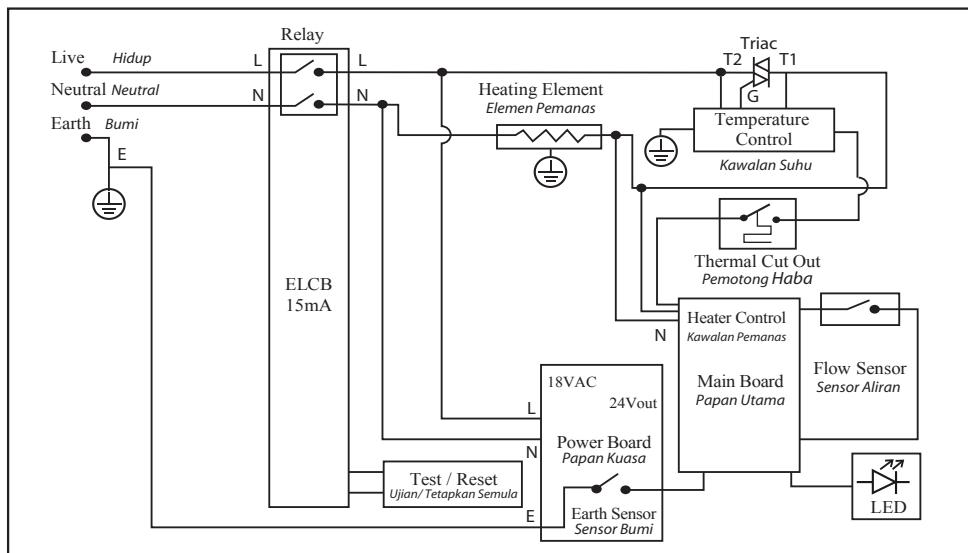
Electrical loading / Muatan elektrik	4.25kW 240V 50/60Hz 4.5kW 220V 50/60Hz
Other loading / Muatan lain	Please refer Electrical loading table Rujuk jadual pendawaian elektrik
ELCB sensitivity / Sensitiviti ELCB	15mA
Operating condition / Keadaan berfungsi	Open system (Open outlet) / Sistem terbuka
Water connection / Sambungan air	Ø15mm (1/2" BSP)
Degree of protection / Tahap perlindungan	IP25
Min water flow rate / Kadar aliran air min	1.6 litre/ min
Min water pressure / Tekanan air min	0.2 bar ( 20kPa / 2.9psi )
Max water pressure / Tekanan air max	4 bar ( 0.4MPa / 58psi )
Heater dimension (mm) / Ukuran pemanas	380 (H) x 235 (W) x 89 (T)
Heater nett weight / Berat bersih pemanas	Non pump / Tanpa pam : 1.5kg Inverter Silent DC Pump / Pam Senyap Inverter DC : 2.5kg

## 7. SCHEMATIC WIRING DIAGRAM RAJAH PENDAWAIAN SKEMATIK

DC PUMP (S731D)  
PAM DC



NON-PUMP (S730N)  
TANPA PAM



# Our Warranty



on Internal Parts  
*pada Bahagian Dalam*



on Heating Element  
*pada Unsur Pemanas*



on Inverter DC Silent Pump  
*pada pam Senyap Inverter DC*



on Anti-tank Leakage  
*pada Pencegahan Tangki Bocor*

**6 mths Warranty Extension**

## Online Registration

1. Log on to [www.rubine.com.my](http://www.rubine.com.my)
2. Click on 'Support', followed by 'Product Warranty Registration' to proceed. You're required to sign up as a member.
3. You'll receive a notification of warranty registration confirmation via email.
4. Please keep your online warranty certificate for reference / future warranty claim.

## Pendaftaran Di Laman Web

1. Layari [www.rubine.com.my](http://www.rubine.com.my)
2. Klik pada 'Support', diikuti dengan 'Product Warranty Registration'. Anda dikehendaki mendaftar sebagai ahli Rubine.
3. Anda akan menerima e-mel sijil pengesahan dengan data pendaftaran jaminan.
4. Pastikan anda simpan e-mel sijil pengesahan untuk tuntutan jaminan.

# Customer Care

## AFTER - SALES SERVICE:

Tel : **03-6279 8899**

Email : **ftcrm@fiamma.com.my**

## OPERATION HOURS:

**09:00am – 05:00pm**

(Monday – Friday, except public holiday)

This specification is subject to change without prior notice,  
FIAMMA TRADING SDN. BHD. will not be held responsible for the use of superseded or voided specification.



**FIAMMA TRADING SDN BHD** 330476-P (A member of Fiamma Holdings Berhad)

2-1, Wisma Fiamma, No.20, Jalan 7A/62A, Bandar Manjalara, 52200 Kuala Lumpur. Tel: 03-6279 8943

**[rubine.com.my](http://rubine.com.my)**