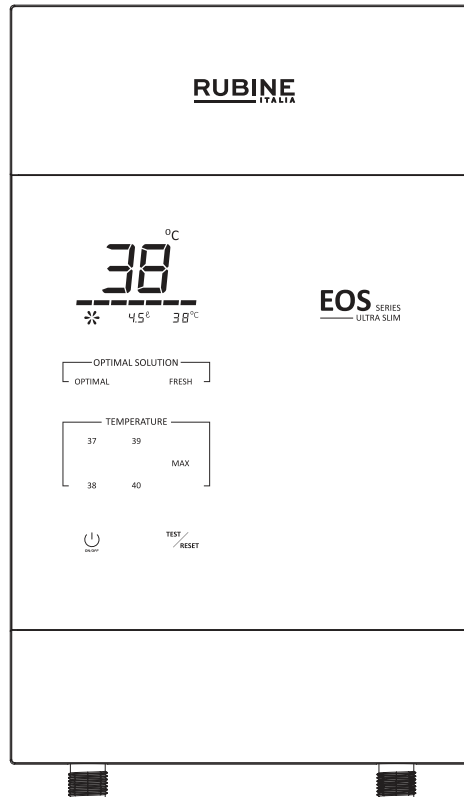


RUBINE

ITALIA



WATER HEATER / PEMANAS AIR

USER MANUAL / PANDUAN PENGGUNA

MODEL / MODEL

EOS ULTRA SLIM (EOS161D / EOS160N)

PATENT PENDING

Please read this manual thoroughly and understand the content before use.

Sila baca panduan ini dengan teliti dan memahami isi kandungannya sebelum penggunaan.

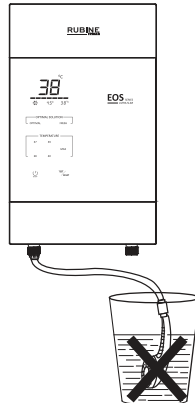


SAFETY PRECAUTION

LANGKAH-LANGKAH KESELAMATAN

1. Do not install reverse INLET & OUTLET of heater.
Jangan memasang "INLET & OUTLET" 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 ELSD once a month (please refer to the Test Run of Heater) and consult professional for repair if there is any malfunction.
Pastikan ELSD 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 bekal air mudah alih.
14. The water inlet of this appliance shall not be connected to inlet water obtained from any water heating system.
Saluran masuk alat ini tidak boleh dihubungkan dengan air masuk yang diperoleh dari mana-mana sistem pemanasan air lain.
15. Do not leave the hand shower idle in the pail. (refer below)
Jangan meninggalkan alat pancuran terbiar di dalam baldi. (rujuk dibawah)



WARNING !

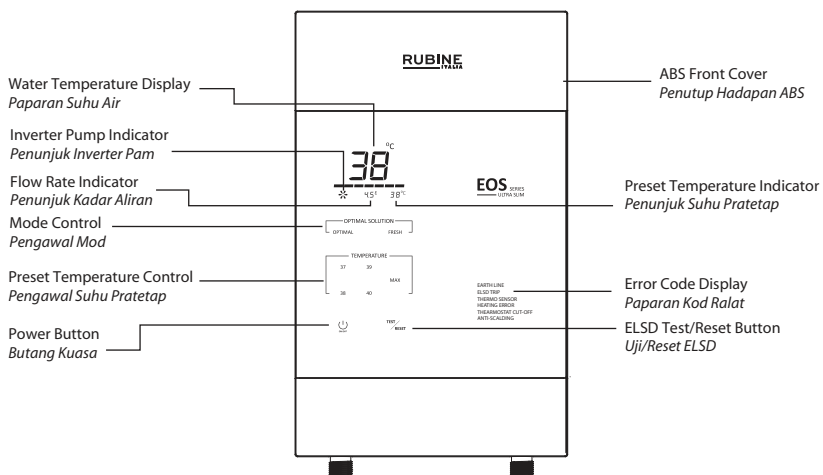
Metallic / chromed hose and conductive control valve shall not be used.

Plug, socket and undersize cable shall not be used. In the case where a direct connection cannot be made to the water heater, only correctly sized approved connector and connection shall be used.

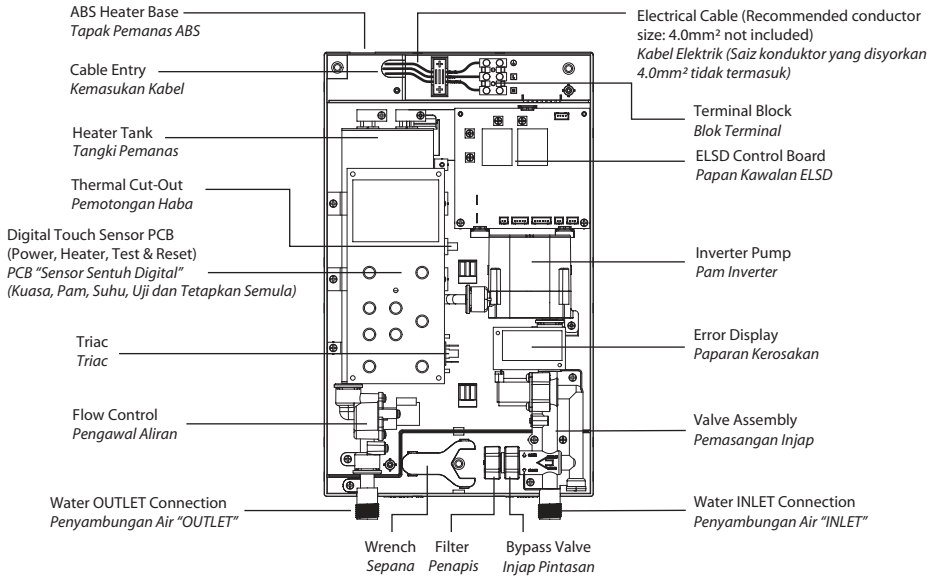
The user is advised to test the built-in RCD in the water heater itself and the RCD at the main switch board of the premise at least once a month.

1. WATER HEATER PARTS IDENTIFICATION PENGENALAN BAHAGIAN – BAHAGIAN PEMANAS AIR

EXTERNAL PARTS IDENTIFICATION PENGENALAN BAHAGIAN LUARAN

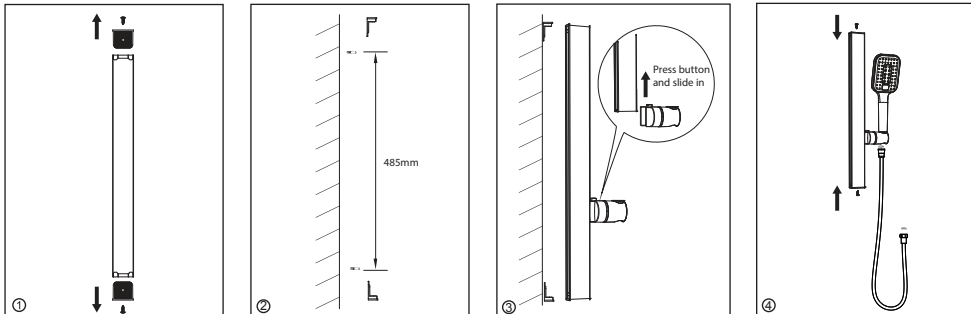


INTERNAL PARTS IDENTIFICATION PENGENALAN BAHAGIAN DALAMAN

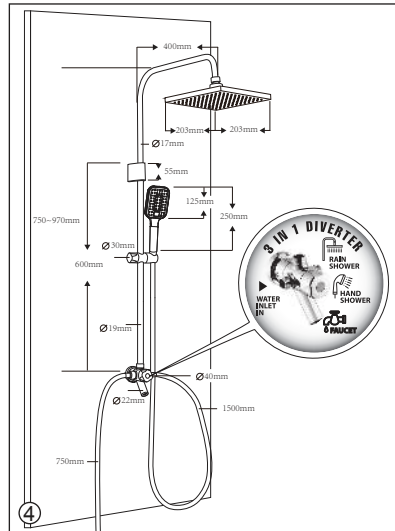
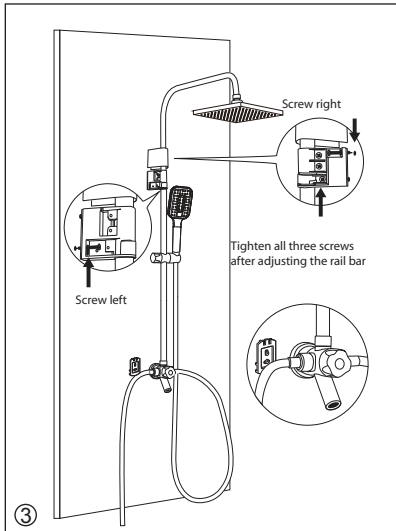
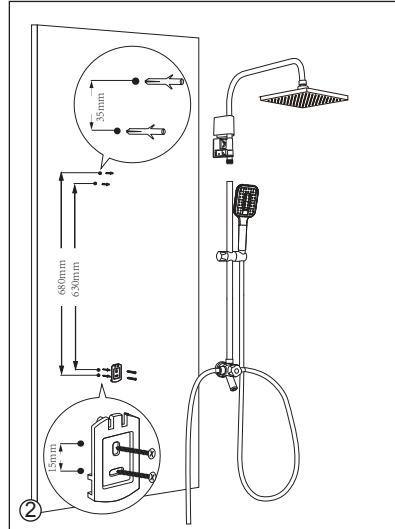
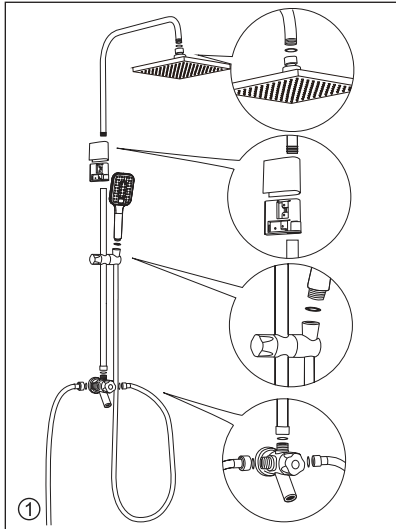


SHOWER SET ACCESSORIES IDENTIFICATION PENGENALAN AKSESORI PANCURAN

1. BLACK ACCESSORIES AKSESORI HITAM







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



MULTIPLE USAGE OF FAUCET

3-in-1 Diverter
 For selected models only

| | | | |
|--|--|--|---|
|  1. |  2. |  3. |  4. |
| Easy access of warm and normal temperature water outlet | Warm water for hand wash clothes | Warm shower for baby bathtub | Warm shower for your pet made easy with faucet instead of handheld hand shower head. |

2. GENERAL INFORMATION MAKLUMAT UMUM

INSTALLATION PEMASANGAN



**CAUTION:
AWAS:
THIS APPLIANCE MUST BE EARTHED
PERKAKAS INI MESTI DIBUMIKAN**

1. All the 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 shall be done by competent person recommended by the manufacturer.
Pemasangan hendaklah dilakukan oleh orang kompeten yang disyorkan oleh pengilang.
3. The unit will only operate when there is a minimum water flow of 2 litre/min. The built-in pump will automatically be activated to booster a stronger shower spray.
Unit ini hanya akan beroperasi apabila terdapat aliran air minimum sebanyak 2 liter/minit. Pam terbina dalam akan diaktifkan secara automatik untuk meningkatkan pancuran semburan.
4. The built-in electronic Earth Leakage Sensing Device (ELSD) would cut-off the power supply to heater in the event of current leakage of as low as 15mA.
"Earth Leakage Sensing Device (ELSD)" 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 installation shall comply with GP/ST/No.6/2016, Guideline for the Design, Installation, Inspection, Testing, Operation and Maintenance of water heater systems by Energy Commission.
Pemasangan hendaklah mematuhi GP/ST/No.6/2016, Garis Panduan bagi Reka Bentuk, Pemasangan, Pemeriksaan, Pengujian, Pengoperasian dan Penyelenggaraan sistem pemanas air oleh Suruhanjaya Tenaga.
7. For connection within the shower cubicle and below the ceiling, the connection box shall be IPX5 rated.
Bagi sambungan di dalam ruang pancuran mandi dan di bawah siling, kotak sambungan hendaklah mempunyai penarafan IPX5.

8. An approved, correctly sized copper flexible cable with maximum 1.5m length shall be used to connect the water heater to the connection box .

Kabel fleksibel tembaga yang diluluskan dan bersaiz dengan betul dengan panjang maksimum 1.5m hendaklah digunakan untuk menyambungkan pemanas air kepada kotak sambungan..

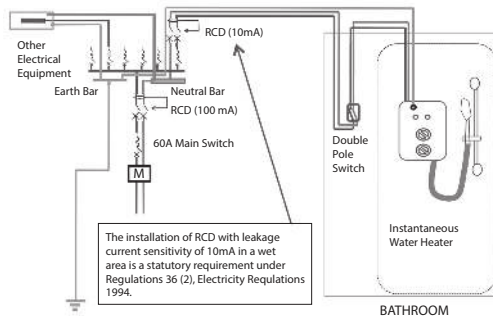
9. Electrical loading Table 1:

Pendawaian elektrik Jadual 1:

| Voltage (Vac) | Power (kW) | Amperes (A) | Recommended Conductor Size (csa) | | | Fuse/ MCB(A) | ON/OFF Switch (A) |
|----------------|------------|-------------|----------------------------------|---------------|----------------|--------------|-------------------|
| | | | mm ² | 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 |
| 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 | 38.3 | 6.0 | 7/1.04mm | 84/0.30 | 40 | 40 |
| 240 - 50/60Hz | 3.6 | 15.0 | 4.0 | 7/0.85mm | 56/0.30 | 32 | 32 |
| | 3.8 | 15.8 | 4.0 | 7/0.85mm | 56/0.30 | 32 | 32 |
| | 4.25 | 17.7 | 4.0 | 7/0.85mm | 56/0.30 | 32 | 32 |
| | 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 |

10. The installation of RCD with leakage current sensitivity of 10mA in a wet area is a statutory requirement under Regulation 36(2), Electricity Regulations 1994. (refer below)

Pemasangan RCD dengan kepekaan arus bocor 10mA di kawasan basah adalah satu keperluan berkanun di bawah Peraturan 36(2), Peraturan-Peraturan Elektrik 1994. (rujuk dibawah)



11. 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 prngasing dan peranti arus berbaki.

3. INSTALLATION PROCEDURES TATACARA PEMASANGAN

1. INLET and OUTLET connection of the heater unit should not be reversed. (Diagram 1)
Sambungan unit pemanas "INLET" dan "OUTLET" tidak boleh terbalik. (Rajah 1)
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)
3. Mounting position
Penetapan tapak pemanas

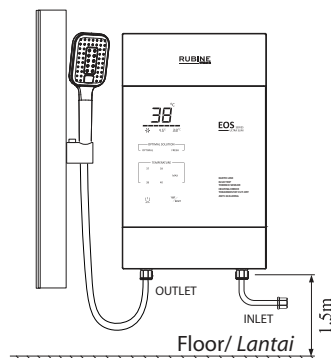


Diagram 1
Rajah 1

- Lift the plastic cover upward (Refer Diagram 2)
Buka penutup plastik pemanas. (Rujuk Rajah 2)
- Mark mounting position on the wall for all 3 screws
Tandakan posisi semua 3 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 mounting bracket on the wall and mount the unit onto the bracket.
Pasang pelekap pada dinding dan pasang unit pada pelekap.
- Fasten the third screw at the bottom of the unit.
Kencang skru yang ketiga di bahagian bawah unit.

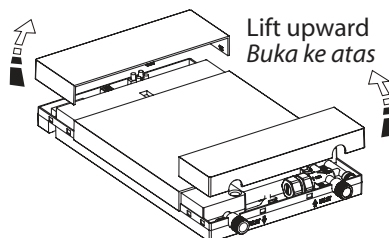


Diagram 2
Rajah 2

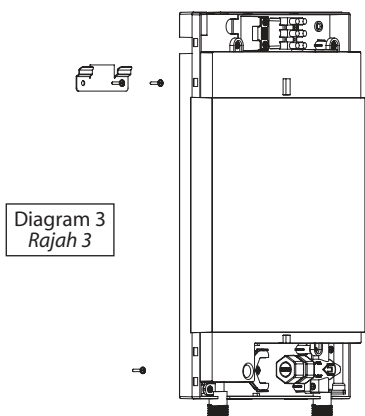


Diagram 3
Rajah 3

WARNING!

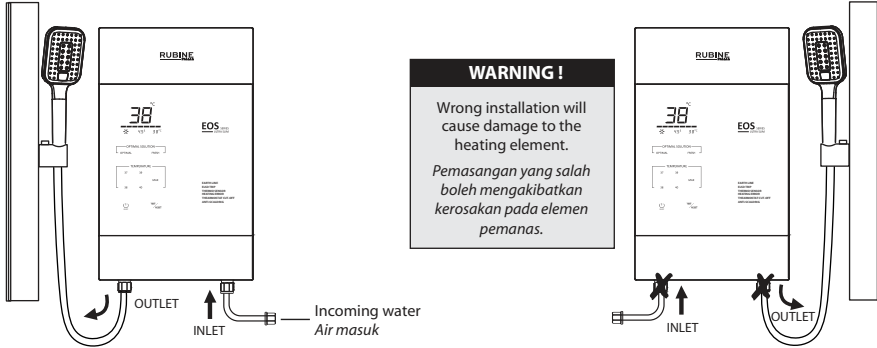
To prevent vibration, all 3 screws must be fully tightened.

Untuk mengelakkan getaran, semua skru hendaklah diketatkan sepenuhnya.

4. Installation of Heater INLET and OUTLET connection.(Diagram 4)
 Pemasangan "INLET" dan "OUTLET" pemanas. (Rajah 4)

✓ Correct installation
 Pemasangan yang betul

✗ Wrong installation
 Pemasangan yang salah



Connect flexible hose to heater OUTLET.
 Pasangkan hos fleksibel pada bahagian "OUTLET".

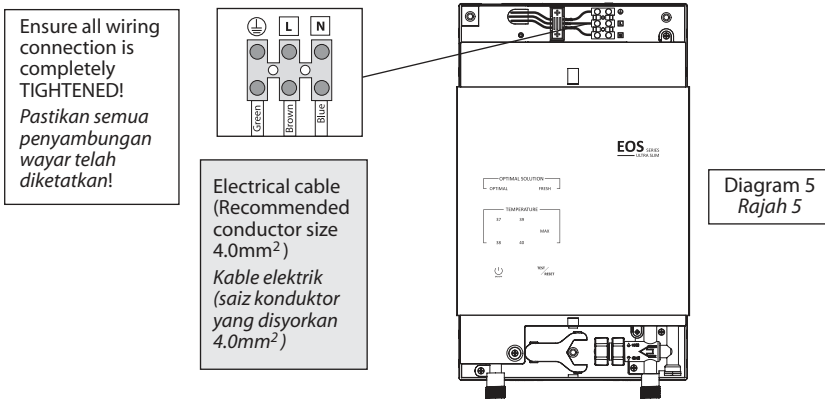
Diagram 4
 Rajah 4

5. Electrical Connection
 Penyambungan elektrik

IMPORTANT NOTE!
NOTA PENTING!

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

- a) Insert electrical cable through the base as (Diagram 5).
 Masukkan kabel elektrik melalui tapak pemanas seperti yang ditunjukkan pada (Rajah 5).
- b) Connect the cable to the terminal block and fully tighten as below :
 Sambungkan kabel ke blok terminal dan ketatkan sepenuhnya seperti berikut:



- c) Restore the cover. (Diagram 6)
 Pasangkan penutup pemanas. (Rajah 6)

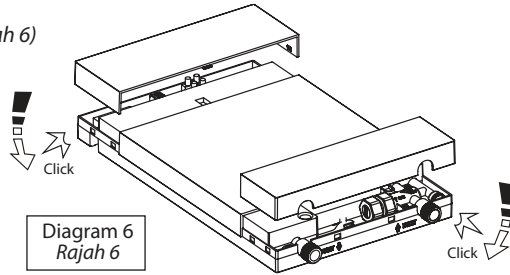
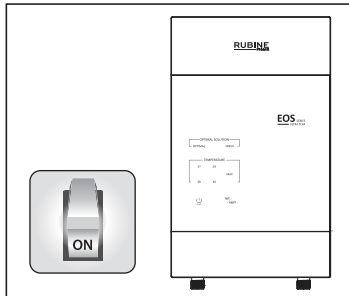


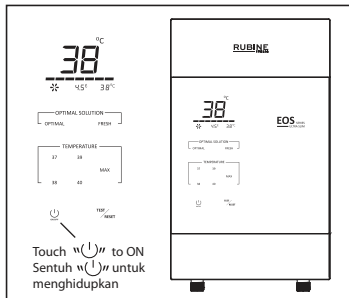
Diagram 6
 Rajah 6

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

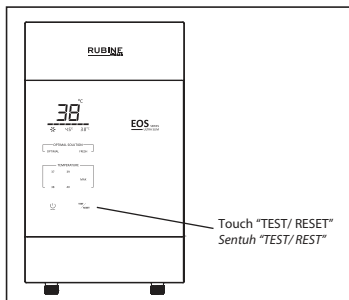


- ① Switching on the main power supply, the LED display will show a green light after 4 seconds. Refer to Flowchart 1 "AUTO INSPECT PROCEDURE" for more details.

Hidupkan bekalan kuasa utama, paparan LED akan menunjukkan lampu hijau selepas 4 saat. Sila rujuk kepada Carta Alir 1 "AUTO INSPECT INDICATION" untuk maklumat lanjut.

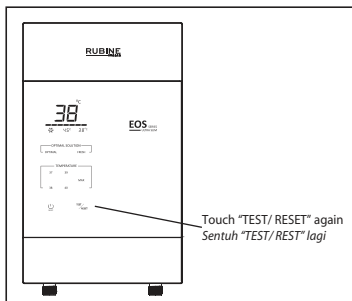


- ② Touch "ON/OFF" to turn ON the power and LED display will show the Water Temperature.
Sentuh "ON/OFF" untuk menghidupkan kuasa dan paparan LED akan menunjukkan suhu air.

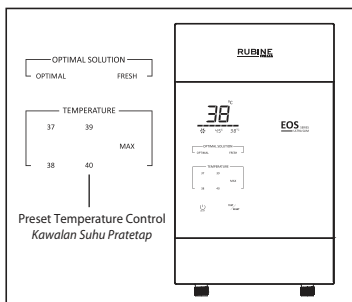


- ③ To initiate the ELSD test, touch the "TEST/RESET" button. The unit should trip, with "EE" and "ELSD TRIP" being displayed, accompanied by a beeping alert.

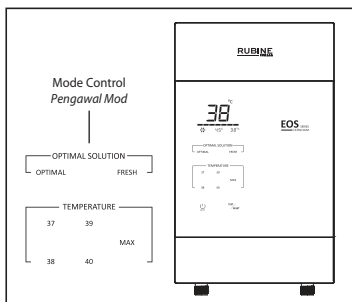
Lakukan ujian ELSD dengan menyentuhkan butang "TEST/RESET". Unit akan diputuskan bekalan kuasa. "EE" dan "ELSD TRIP" akan dipaparkan dan disertai dengan amaran berbunyi bip.



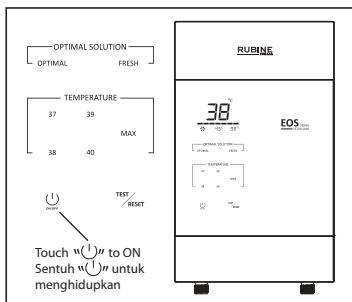
- 4 Touch the "TEST/RESET" button again to resume power connection.
Sentuh tombol "TEST/RESET" lagi untuk menyambung kuasa semula.



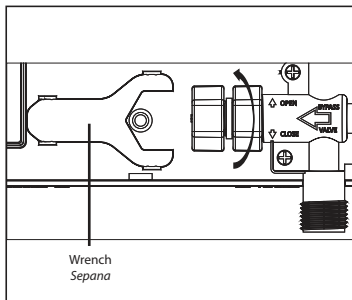
- 5 The heater is now ready for use. Select the desired temperature by touching the preset options under *Temperature Control*. The LED display will indicate the real-time water temperature, flow rate, and the selected temperature.
Pemanas kini sedia digunakan. Pilih suhu yang dikehendaki dengan menyentuh pilihan pratetap di bawah *Kawalan Suhu*. Paparan LED akan menunjukkan suhu air masa nyata, kadar aliran dan suhu yang dipilih.
Disclaimer: The displayed temperature may vary by $\pm 1^\circ\text{C}$.
Penafian: Suhu yang dipaparkan mungkin berbeza sebanyak $\pm 1^\circ\text{C}$.



- 6 The water heater is designed to optimize energy and water consumption by offering users two preset modes:
- Optimal:** Automatically adjusts the flow rate to 4.5L/min and sets the temperature to 37°C for a more comfortable shower experience
 - Fresh:** Maximizes the flow rate and turns off heating for a more refreshing shower
- Pemanas air direka bentuk untuk mengoptimalkan penggunaan tenaga dan air dengan menawarkan pengguna dua mod pratetap:
- Optimal:** Laraskan kadar aliran secara automatik kepada 4.5L/min dan tetapkan suhu kepada 37°C untuk pengalaman mandi yang lebih selesa.
 - Fresh:** Memaksimumkan kadar aliran dan mematikan pemanasan untuk pancuran mandian yang lebih menyegarkan.



- 7 Switch off the heater and main power supply when not in use. Padamkan suis pemanas dan bekalan kuasa apabila unit tidak digunakan.



- 8 In case of electricity shortage, water can still flow through the heater by turning the bypass valve counterclockwise using the wrench provided.
Sekiranya berlaku kekurangan elektrik, air masih boleh mengalir melalui pemanas dengan memusingkan injap pintasan ke arah lawan jam dengan sepana yang disediakan.

Flowchart 1
 Carta Alir 1

AUTO INSPECT PROCEDURE TATACARA "AUTO INSPECT"

The water heater will perform an automatic system inspection when the main power supply is switched on.
Pemanas akan melakukan pemeriksaan sistem automatik apabila bekalan kuasa utama dihidupkan.

A green light will blink four times to indicate the process.
Lampu hijau akan berkelip empat kali untuk menunjukkan proses.

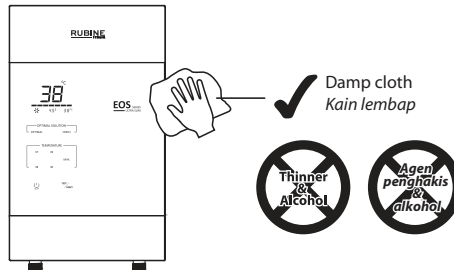
Scenario 1: Auto Inspection Pass
 The water heater is safe and ready for use once the green light stops blinking.
Senario 1: Pemeriksaan Auto Lulus
 Pemanas selamat dan sedia untuk digunakan sebaik sahaja lampu hijau berhenti berkelip.

Scenario 2: Auto Inspection Failed
 If the auto inspection failed, the water heater will display "EE" with the corresponding error code(s):
EARTH LINE: Earth line not detected or floating
ELSD TRIP: ELSD disconnected
Senario 2: Pemeriksaan Auto Gagal
 Jika pemeriksaan automatik gagal, pemanas air akan memaparkan "EE" dengan kod ralat yang sepadan:
EARTH LINE: Wayar bumi tak sambung
ELSD TRIP: ELSD terputus

ERROR CODES

| ERROR CODES | DESCRIPTION |
|--------------------|--|
| EARTH LINE | Earth line not detected or floating / Wayar bumi tak sambung |
| ELSD TRIP | ELSD disconnected / ELSD terputus |
| THERMOSENSOR | Water temperature not detected or unreadable / Suhu air tidak dikesan atau tidak boleh dibaca |
| HEATING ERROR | Water cannot be heated / Air tidak boleh dipanaskan |
| THERMOSTAT CUT-OFF | Overheating / Terlalu panas |
| ANTI-SCALDING | <p>When the water temperature exceeds the safety limit of 45°C, the power will be cut off. Heating will resume once the temperature drops back to 39°C. If this condition occurs three consecutive times, the unit will stop heating for safety. Please contact professional for assistance.</p> <p><i>Apabila suhu air melebihi had keselamatan 45°C, bekalan kuasa akan diputuskan. Pemanasan akan disambung semula apabila suhu turun semula kepada 39°C. Jika keadaan ini berlaku tiga kali berturut-turut, unit akan menghentikan pemanasan untuk keselamatan. Sila hubungi juruteknik untuk bantuan.</i></p> |

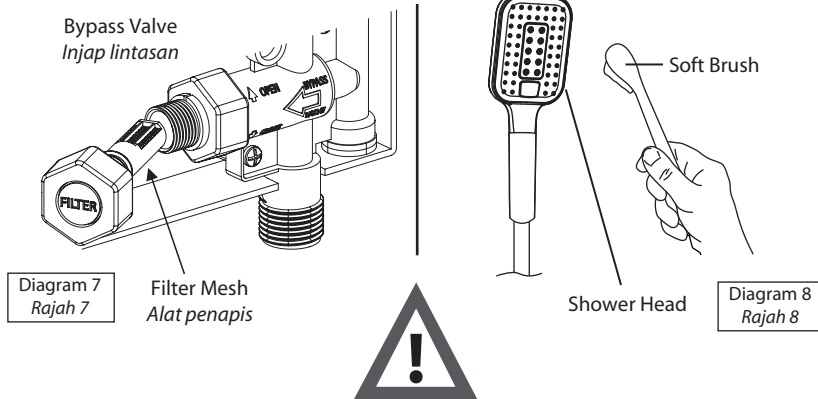
5. GENERAL MAINTENANCE PENYELENGGARAN AM



CLEAN FILTER REGULARLY (DIAGRAM 7 & 8)
BERSIHKAN PENAPIS SECARA TERAP (RAJAH 7 & 8)

- a) Remove the filter mesh from the valve assembly by turning the knob anticlockwise and pulling out the knob (Diagram 7). Flush it with water to remove any trapped sediments. Install the knob filter back to its original position.
- a) *Keluarkan penapis daripada injap henti dengan memusingkan tombol penapis lawan arah jam dan menarik keluar tombol (Rajah 7). Cuci dengan air untuk mengeluarkan sebarang mendapan yang terperangkap. Pasangkan penapis tombol kembali ke pada kedudukan asalnya.*

- b) Clear the shower head's holes by using a soft brush from time to time (Diagram 8). Recommended to clean it once a week. Be careful not to damage the holes of the shower head during cleaning.
- b) Bersihkan lubang kepala pancuran dengan berus lembut dari masa ke masa (Rajah 8). Disyorkan untuk membersihkannya sekali seminggu. Berhati-hati agar tidak merosakkan lubang kepala pancuran mandian semasa pembersihan.



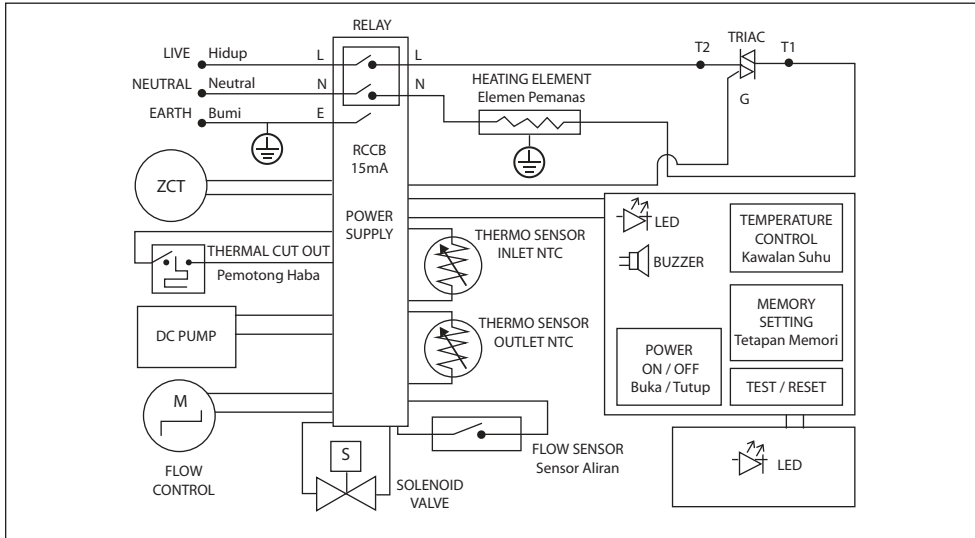
**CLEAN FILTER MESH REGULARLY
ALAT PENAPIS MESTI KERAP DIBERSIHKAN**

**6. TECHNICAL SPECIFICATIONS
SPESIFIKASI TEKNIKAL**

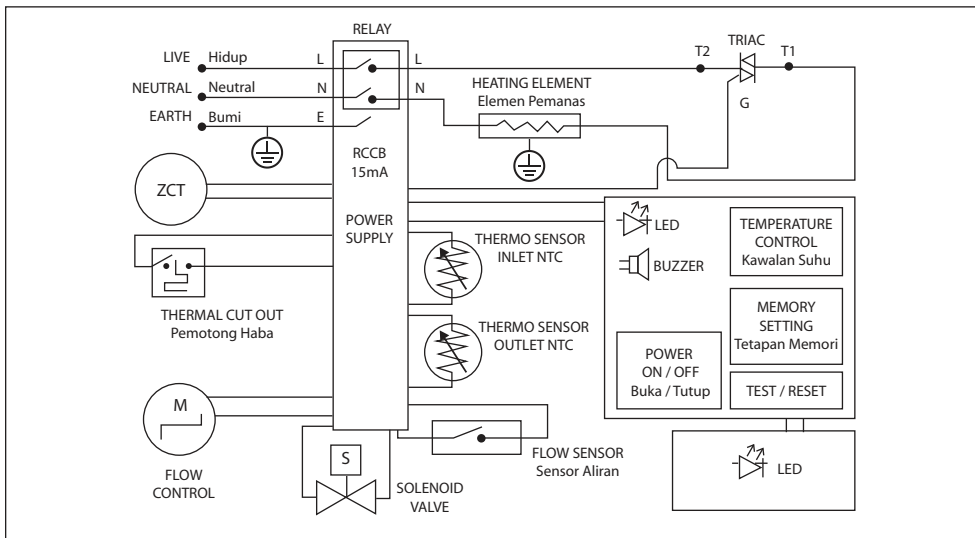
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| Electrical loading / Muatan elektrik | 4.5kW 240V 50/60Hz |
| Other loading / Muatan lain | Please refer Electrical loading table Rujuk jadual pendawaian elektrik |
| ELCB sensitivity / Sensitiviti ELCB | 15 mA |
| Operating condition / Keadaan berfungsi | 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 | 2 litre/ min |
| Min water pressure / Tekanan air min | 20kPa (0.2 bar / 2.9psi) |
| Max water pressure / Tekanan air max | 400kpa (4 bar/58psi) |
| Heater dimension (mm) / Ukuran pemanas | 392 (H) x 240 (W) x 45 (D) |
| Heater nett weight / Berat bersih pemanas | Inverter Silent DC Pump / Pam Senyap Inverter DC : 2.5kg Non pump / Tanpa pam : 2.2kg |

7. SCHEMATIC WIRING DIAGRAM RAJAH PENDAWAIAN SKEMATIK

INVERTER SILENT DC PUMP (EOS161D) PAM SENYAP INVERTER DC



NON-PUMP (EOS160N) TANPA PAM



Our Warranty

1
Year
Warranty

on Internal Parts
pada Bahagian Dalaman

7
Years
Warranty

on Heating Element
pada Unsur Pemanas

1.5
Year
Warranty

on Inverter AC Pump
pada pam Inverter AC

10
Years
Warranty

on Anti-Leakage Tank
pada Pencegahan Tangki Bocor

5
Years
Warranty

on Inverter DC Silent Pump
pada pam Senyap Inverter DC

6 mths Warranty Extension

Online Registration

1. Log on to 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
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)

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