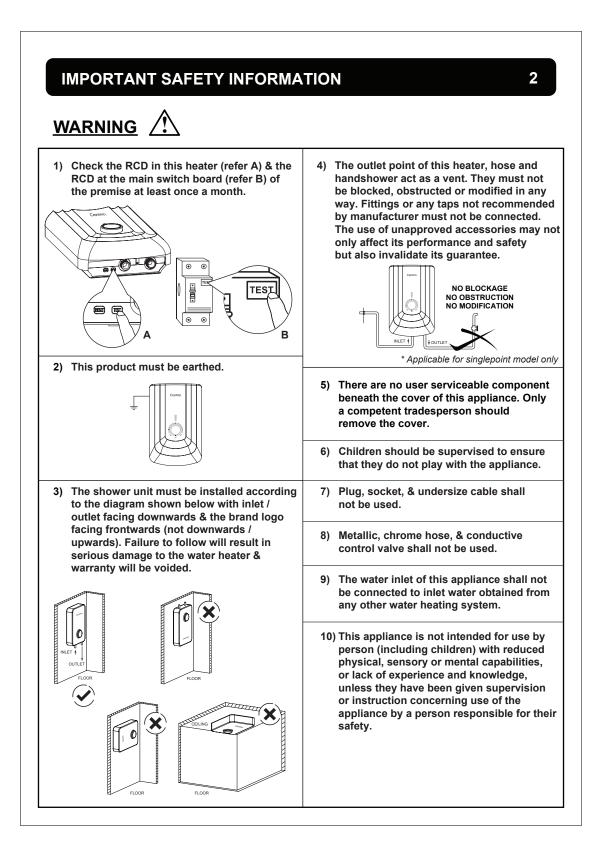


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1

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## IMPORTANT SAFETY INFORMATION

WARNING /

11) Storage water heater, solar thermal water heater with a provision of electrical heating element, and closed instantaneous water heater shall be fitted with non-conductive isolation barriers at both water inlet and outlet connections. 12) The non-conductive isolation barriers shall be installed at immediate connection to the water heater.

3

- 13) To account for future maintenance / servicing, please make sure that this product is installed with:
  - a. safe access that is free from obstacles for technicians to reach the location where the product is installed and to do their tasks, and
  - b. flexible piping connection (as opposed to fixed / permanent piping connection) so that this product can be detached / removed from its installed location without damaging the piping connection.

Failure to follow may result in additional removal works needed during maintenance / servicing (such as clearance of a pathway to access the location where this product installed, or cutting of fixed piping connection to dismantle this product), hence additional service charges may applied.

CENTON and its technicians will also not be liable to reimburse back any damages or replacement cost for such removal works.

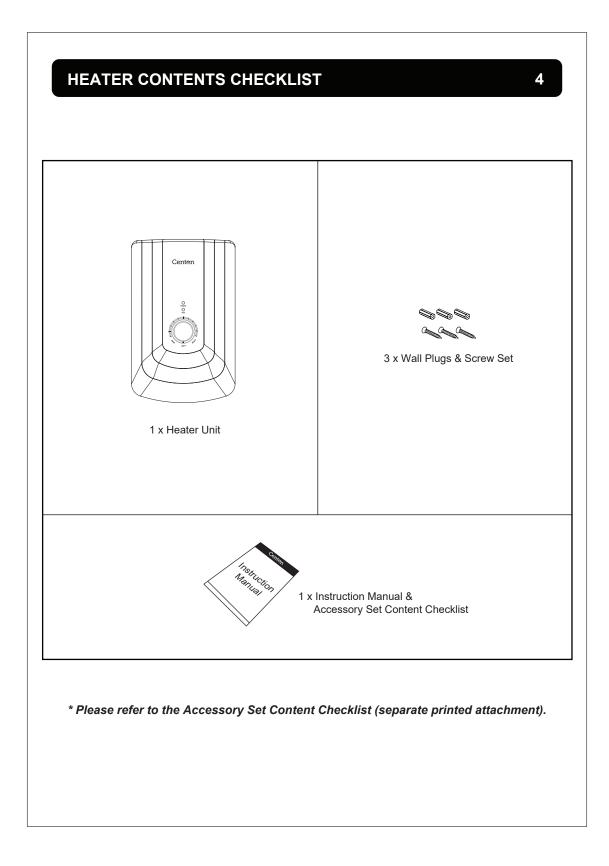
### SAFEGUARDING THE ENVIRONMENT

This product may not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. Disposal must be carried out in accordance with your local environmental regulations for waste disposal.

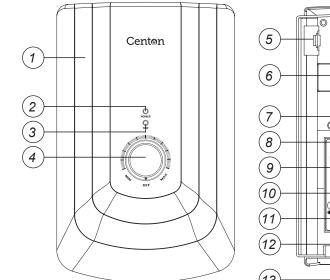
#### Malaysia

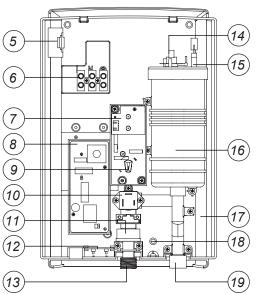
Government has launched e-Waste program (commonly known as electrical and electronic waste) to enhance the public awareness towards the responsible e-Waste disposal.

Please refer to link below to check compliance collection at your place; <u>https://ewaste.doe.gov.my/</u>



## PART DESCRIPTION





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### MODEL : UNIQUE UN411E

- 1. Heater Cover
- 2. Power Indicator
- 3. RCD Indicator
- 4. Temperature Control Knob
- 5. Cable Entry
- 6. Terminal Block
- 7. Indicator PCB
- 8. Built-in RCD
- 9. Electronic Control Unit
- 10. Triac

- 11. Flow Switch Assembly
- 12. Test and Reset PCB
- 13. Heater Inlet
- 14. Double Function Manual Reset Thermostat
- 15. Heating Element
- 16. Heater Tank Assembly
- 17. Heater Base
- 18. Mounting Holes (3 Nos)
- 19. Heater Outlet

### ELECTRICAL REQUIREMENT

### 6

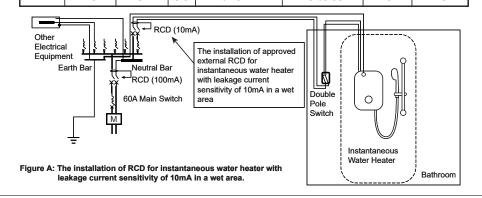
#### 1 WARNING THIS APPLIANCE MUST BE EARTHED

Note: An approved type of Residual Current Device (RCD) of 10mA sensitivity should be installed in conjunction with the heater.

- Installation must be carried out by a qualified electrician. 1)
- 2) The shower heater unit must be connected to its own independent electrical circuit.
- Lead the power cable from the indoor fuse distributor board or Miniature Circuit Breaker (MCB) to an 'ON/OFF' 3)
- Double-Pole switch outside the bathroom. 4) The water heater must be permanently connected to the electricity supply through a double-pole linked switch having a contact
- of separation of at least 3mm in all poles incorporated in fixed wiring.
- This switch must be out of reach of a person using a shower 5) 6)
- Correct size of wire conductor corresponding to different electrical loading should be used. Minimum cable size must not be less than specified in Table A with accordance to the rated power. For connection within the shower cubicle & below the ceiling, the connection box shall be IPX5 rated. 7)
- 8) Only fixed & permanent connection is allowed, plug & socket shall not be used. In the case where a direct
- connection cannot be made to the water heater, only correctly sized approved connector & connection box shall be used. An approved, correctly sized copper PVC insulated flexible cables with maximum 1.5m lengths shall be used to connect water heater to the connection box by referring cable size in the Table A as below.
- 9)
- 10) The installation shall comply with GP/ST/No.6/2016, Guideline for the Design, Installation, Inspection, Testing, Operation & Maintenance of Water Heater Systems by Energy Commission. Refer to Figure A.

#### **Cable Sizes Table**

Voltage	Power	Amperes	Minimum Conductor Sizes			Fuse /	ON/OFF
(V~)	(kW)	(A)	mm <sup>2</sup> Cable for Fixed Wiring PVC Flexible Cables		MCB (A)	Switch (A)	
220~ 50/60Hz	3.5	16.0	4.0	7/0.85mm	56/0.30	20	20
	4.4	20.0	4.0	7/0.85mm	56/0.30	25	25
	4.5	20.5	4.0	7/0.85mm	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
	7.0	31.8	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	3.3	14.3	4.0	7/0.85mm	56/0.30	20	20
	3.5	15.2	4.0	7/0.85mm	56/0.30	20	20
	4.5	19.6	4.0	7/0.85mm	56/0.30	25	25
	6.0	26.1	4.0	7/0.85mm	56/0.30	32	32
240~ 50/60Hz	3.6	15.0	4.0	7/0.85mm	56/0.30	20	20
	3.72	15.5	4.0	7/0.85mm	56/0.30	20	20
	3.8	15.9	4.0	7/0.85mm	56/0.30	20	20
	4.2	17.5	4.0	7/0.85mm	56/0.30	20	20
	4.5	18.8	4.0	7/0.85mm	56/0.30	25	25
	5.4	22.5	4.0	7/0.85mm	56/0.30	32	32
	5.5	23.0	4.0	7/0.85mm	56/0.30	32	32
	7.0	29.2	6.0	7/1.04mm	84/0.30	40	40



## WATER REQUIREMENT

### PLUMBING SCHEMATIC DIAGRAM

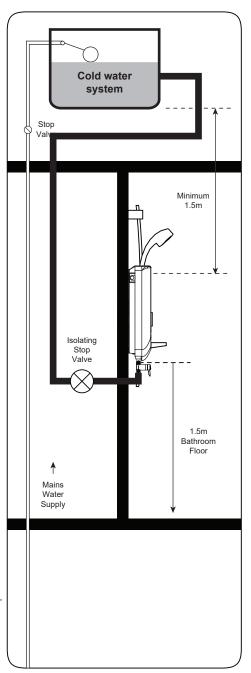
- 1. Diagram on right shows a typical system layout.
- 2. Do not use joining compounds on any pipe fittings for the installation.
- The unit works at minimum water flow rate of 2 litre/min. An incoming water flow rate of 5 litre/min and above would excel its performance.
- 4. The water inlet of this product shall not be connected to inlet water obtained from any other water heating system.
- 5. This product must be permanently connected to the water mains & not connected by a hose set.

### WARNING A THIS PRODUCT IS NOT TO BE USED FOR A POTABLE WATER SUPPLY

### SITTING OF THE SHOWER

FOR EASE OF SERVICING, THE UNIT MUST ALWAYS BE MOUNTED ON THE SURFACE OF TILED WALL. NEVER TILE UP TO THE UNIT.

- 1. This product is splash-proof rated and is approved for use in shower cubicles & over baths.
- 2. Do not install the unit in a position where the sprayhead will consistently direct water over it.
- 3. The shower unit MUST be positioned vertically.



## INSTALLATION PROCEDURES

FIXING THE SHOWER TO THE WALL

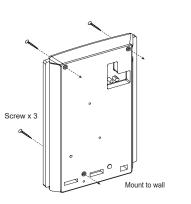
### CAUTION:

It is important to mount the shower unit to a flat surface otherwise difficulty may be encounter when fitting the cover and subsequent.

1. Unscrew the screw at bottom of heater and remove the cover by lifting the bottom of cover upward.

2. Determine the suitable position where electrical cable & inlet water supply is reachable.

Mark the position of the mounting holes on wall.



Mark the mounting holes

Remove the cover

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3. Drill the holes with 5.0mm diameter drill bit and insert the wall plugs provided.

Secure heater unit onto wall with screws provided.

## INSTALLATION PROCEDURES

#### PLUMBING CONNECTIONS

### CAUTION:

Complete the process before wiring connection

 Connect the water supply to the inlet of stop valve via 15mm plastic pipe using a 15mm x 15mm elbow compression fitting.

#### Note:

- i) DO NOT apply excessive force when making these connections.
- ii) If PVC glue is used during the installation, please ensure the glue is dried 30 mins after applying, to prevent interfering of flow switch operation & possibly blockage on the shower head
- 2. Feed the stop valve by securing it to the unit's inlet.

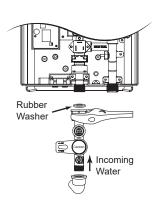
Note: Ensure the supplied rubber washer is in place before connecting stop valve to inlet.

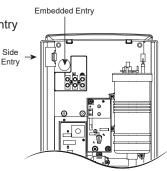
- 3. Feed the other point of stop valve to incoming water supply.
- 4. Turn ON water supply and check for leaks in the pipework connection to the shower.

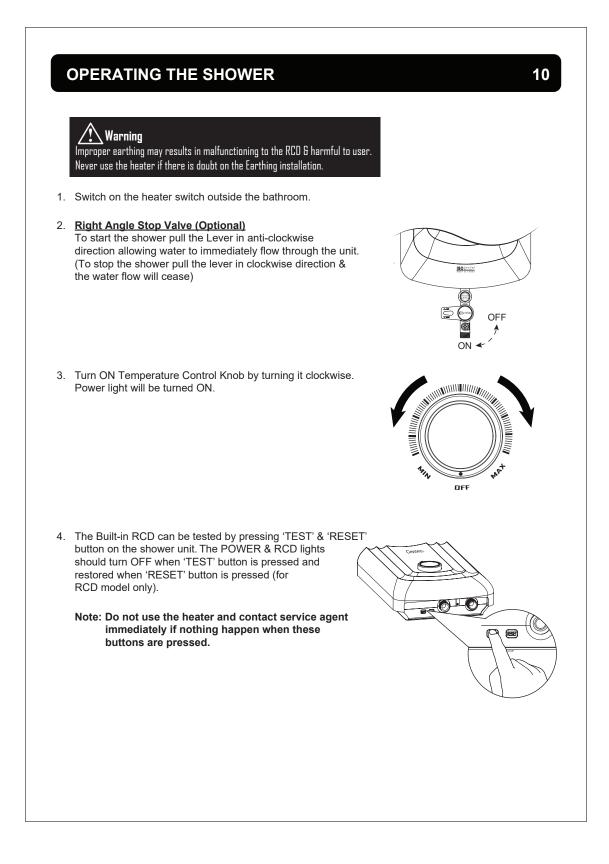
### **ELECTRICAL CONNECTIONS**



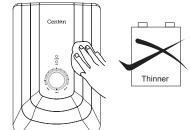
- 1. Switch OFF electical mains before carrying on the electrical work.
- 2. Insert electrical cable through the rubber grommet for side entry or wall embedded entry.
- 3. Connect cable to the Terminal Block and fully tighten them as follows: Red or Brown ...... Live







## USER MAINTENANCE

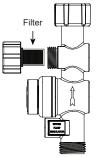


#### DO NOT USE THINNER, ALCOHOL OR PETROL

You may clean the heater with a damp cloth and mild detergent but do not use thinner, alcohol, petrol or any other corrosive solutions.







### **CLEAN FILTER REGULARLY**

The spray head & filter must be descaled regularly in order to maintain the performance of the shower.

- a) Disconnect the sprayhead from the hose.
  - Remove filter and clean it using a soft brush.Wash it under running water.

#### b) Right Angle Stop Valve (Optional)

- Disconnect the water filter from the stop valve.
- Flush the filter with water.
- Reassemble water filter to its position.

## **QUALITY ASSURED**

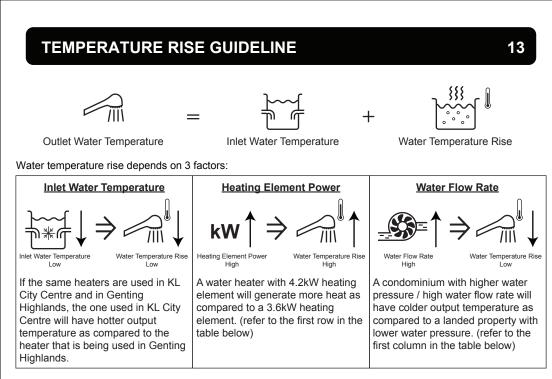
All Centon heaters are tested before leaving the factory. With proper care and usage, the heaters are durable, safe and reliable. Use only accessories recommended by the manufacturer.

#### WARNING

- 1. The appliance must be earthed.
- 2. Do not use plumbing cement on connection. If necessary, use only thread or sealant tape.
- 3. If the RCD does not trip to 'OFF' position each time the 'TEST' button is pressed, contact your sales agent for repair immediately (for RCD model only).
- 4. If your water heater malfunctions, immediately switch off the mains. Then contact the sales agent for repair. Never attempt to repair the unit yourself.

#### TROUBLE SHOOTING

MALFUNCTIONING PROBLEMS	CAUSE OF PROBLEMS	SOLUTION
<ol> <li>No shower coming out from heater.</li> </ol>	<ul> <li>a) Dirt particles blocking inlet hole or incoming valve.</li> </ul>	a) Remove and clean incoming valve.
2) No hot water.	<ul> <li>a) Electrical malfunctioning.</li> <li>b) Thermal Cut-out has operated.</li> <li>c) Malfunctioning on Flow Switch Assembly.</li> </ul>	(a.b.c) Turn off the main switch and have the unit checked by qualified electrician/agent.
	d) Reduce in ambient water temperature.	d) Reduce the water flow rate.
<ol> <li>Water too hot even at low temperature.</li> </ol>	a) Not enough water flowing through the unit.	a) Refer to (1)
	<ul> <li>b) Increase in ambient water temperature.</li> </ul>	b) Increase the water flow rate.
<ol> <li>Water suddenly goes cold.</li> </ol>	a) Interrupted of power supply.	<ul> <li>a) Check supply or other appliances. Consult qualified electrician/ agent if necessary.</li> </ul>
	b) Thermostat (Auto) Cut-off	<li>b) Turn off the Temperature Control Knob from 'ON' to 'OFF', to have a warm or cold water to reset back the thermostat.</li>
<ol> <li>Water turn off, indicator light still on (power still on).</li> </ol>	a) Flow switch malfunction.	a) Turn off the main switch immediately, and replace Flow Switch by qualified electrician.



Average Instant Water Heater's heating element used for: — Malaysian Market - 3.6kW to 4.2kW

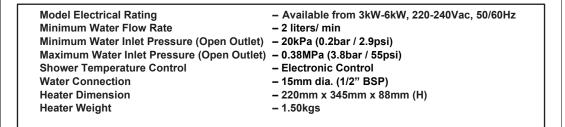
- Highlands (Genting, Cameron, Fraser Hills, etc.) - 4.8kW to 5.4kW

Flow Rate (LPM)		Heating Element				
		3.6kW	4.2kW	4.8kW	5.4kW	
Low Flow Rate	1	45.9	53.5	61.2	68.8	
	2	22.9	26.8	30.6	34.4	
Low How Rate	3	15.3	17.8	20.4	22.9	
	4	11.5	13.4	15.3	17.2	
	5	9.2	10.7	12.2	13.8	
Recommended Flow Rate	6	7.6	8.9	10.2	11.5	
	7	6.6	7.6	8.7	9.8	
	8	5.7	6.7	7.6	8.6	
	9	5.1	5.9	6.8	7.6	
	10	4.6	5.4	6.1	6.9	
	11	4.2	4.9	5.6	6.3	
	12	3.8	4.5	5.1	5.7	
	13	3.5	4.1	4.7	5.3	
High Flow Rate	14	3.3	3.8	4.4	4.9	
	15	3.1	3.6	4.1	4.6	
	16	2.9	3.3	3.8	4.3	
	17	2.7	3.1	3.6	4.0	
	18	2.5	3.0	3.4	3.8	
	19	2.4	2.8	3.2	3.6	
	20	2.3	2.7	3.1	3.4	

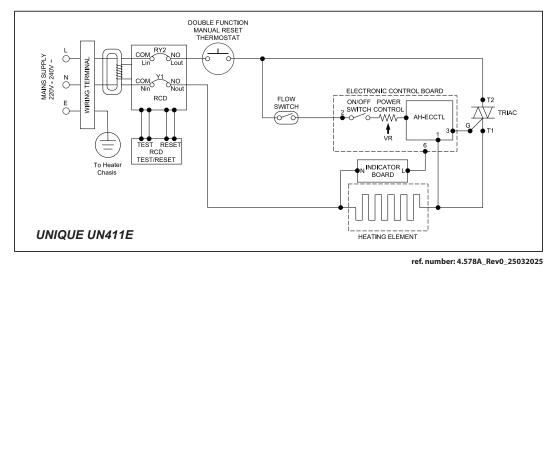
Table: Temperature Rise (°C) Based on Heater Element (kW) & Flow Rate (LPM) \*The temperature rise table above is solely for reference purposes only. Actual results may vary due to other factors such as heat loss.

## SPECIFICATION

## 14

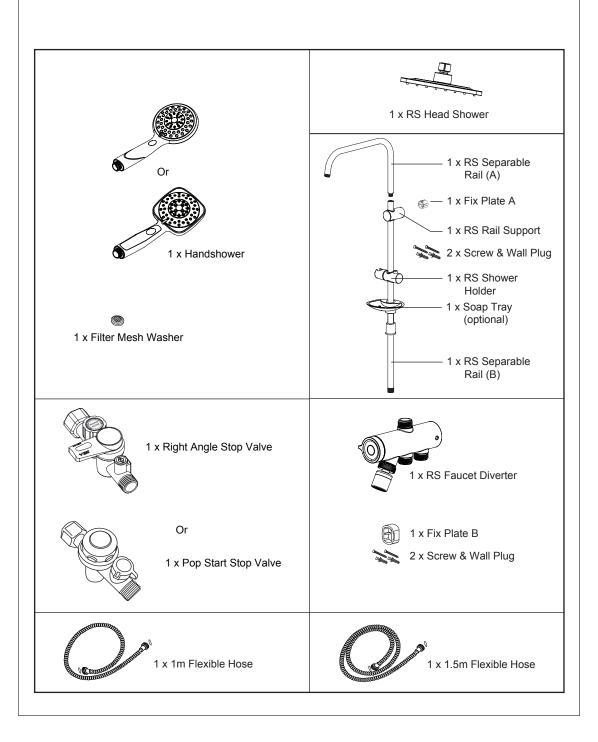


#### **Schematic Wiring Diagram**



In addition, this instruction manual shall also be available upon requested by email to support@centonia.my
 The product's specification & shower accessories shown in this instruction manual are correct at the time of printing & subject to change without prior notice

# ACCESSORY SET CONTENT CHECKLIST



## ACCESSORY INSTALLATION

#### Rain Shower Accessory

1. Drill holes & insert wall plugs provided according to the recommended dimension as shown (cater for Fix Plates). Note: Height of the dimension is at the discretion of the user

RS SEPARABLE RAIL (A)

FIX PLATE (A)

RS RAIL SUPPORT Split line covered by RS Rail Support

RS SHOWER HOLDER

- 6

RS HEAD

SHOWER

Ţ

- 2. Secure the Fix Plate (A) & (B) with screws provided.
- 3. Seperate Soap Tray and Soap Tray Bracket (optional). (refer to Picture 1)
- 4. Secure the RS Separable Rail (A) to RS Separable Rail (B).
- 5. Reposition the RS Rail Support toward top to cover the split line as shown.
- 6. Secure the RS Shower Head to RS Separable Rail A.
- 7. Secure the RS Faucet Diverter to RS Separable Rail B.
- 8. Secure the assembly into Fix Plates (A) & (B) by inserting both RS Rail Support & RS Faucet Diverter in correct position. The RS Rail Support will be secured by the hook on Fix Plate (A) once pressed firmly toward Fix Plate (A) direction.
- 9. Secure the RS Diverter into Fix Plate (B) by securing screw on RS Diverter.
- 10. Connect 1m Flexible Hose from water source (could be heater outlet) to 'IN' on RS Faucet Diverter.
- 11. Connect 1.5m Flexible Hose from 'OUT' on RS Faucet Diverter. Note: Be sure to insert a filter mesh washer before Hand Shower & rubber (provided) between Flexible Hose & 'IN/OUT' of **RS** Faucet Diverter. HAND SHOWER
- 12. Rain Shower assembly are now ready to use

