

User Manual & Installation Guide

Electric Instant Shower Heaters

Compact



Alpine



Protek



- This booklet should be retained by the user after installation.
- Installation must be done by qualified or approved personnel only.

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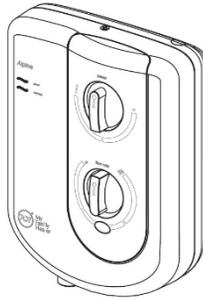
1. Introduction

707 Compact / Alpine / Protek Electric Instant Shower Heaters are intended for heating water to the temperature suitable for a shower.

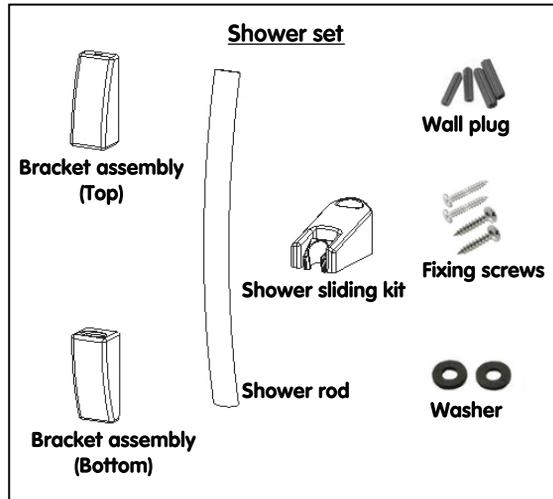
Specifications:

Brand	707		
Model	Compact	Alphine	Protek
Power rating	3.0kW / 3.3kW / 3.5kW / 3.65kW / 4.5kW		
Voltage	220V / 230V		
Ingress protection rating	IPX5		
Rated pressure	0 MPa		
Inlet & outlet water connection	Ø15mm (1/2" BSP)		
Minimum water flow rate	3ℓ/min		
Recommended water flow rate	4 – 6ℓ/min		
Permissible inlet water pressure	0.1 – 0.3 MP (1 – 3 bar)		
Recommended inlet water pressure	0.1 MPa (1 bar)		
Dimension (L x H x W)	215 x 270 x 88 mm	220 x 295 x 90 mm	222 x 340 x 90 mm
Weight	1.5 kg	1.6 kg	1.7 kg

2. Package – Standard Contents



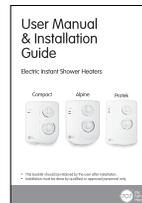
Main Unit



Luxurious shower head



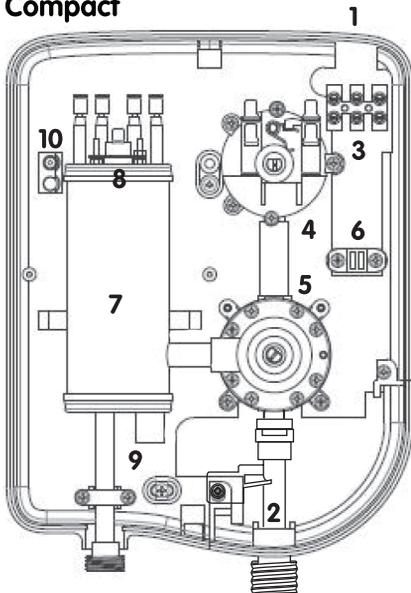
Shower hose



Instruction manual

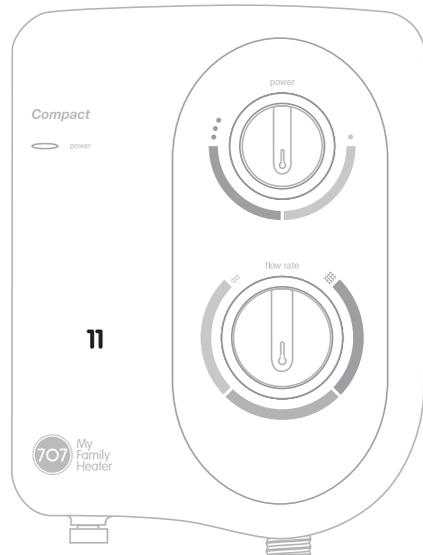
3. About Electric Instant Shower Heater

Compact



Compact Electric Instant Shower Heater Unit (without Front Cover)

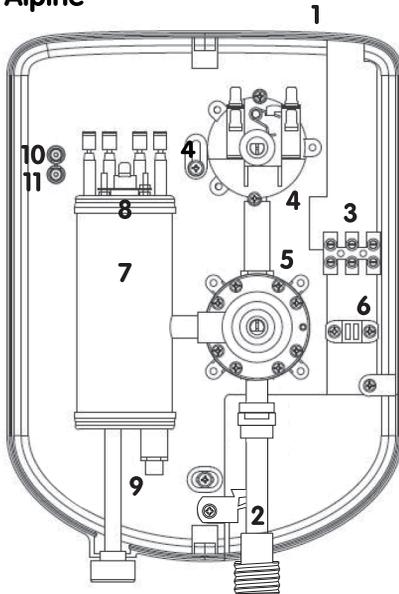
1. Power supply cable entry
2. Water inlet pipe
3. Terminal block
4. Power selector (PS)
5. Temperature flow control valve
6. Cable clamp
7. Heating tank
8. Thermostat
9. Pressure relief device (PRD)
10. Indicator light – Power



Compact Electric Instant Shower Heater Unit (with Front Cover)

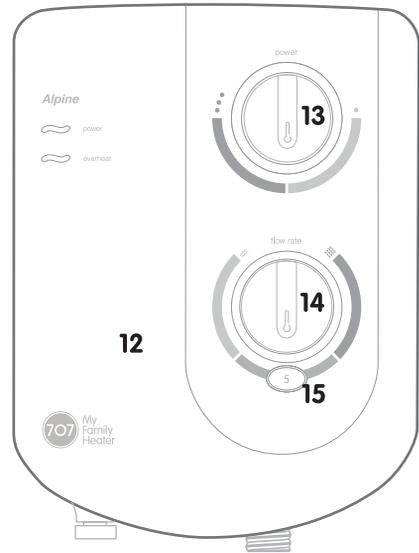
11. Front cover
12. Power selector knob
13. Temperature flow control knob

Alpine



Alpine Electric Instant Shower Heater Unit (without Front Cover)

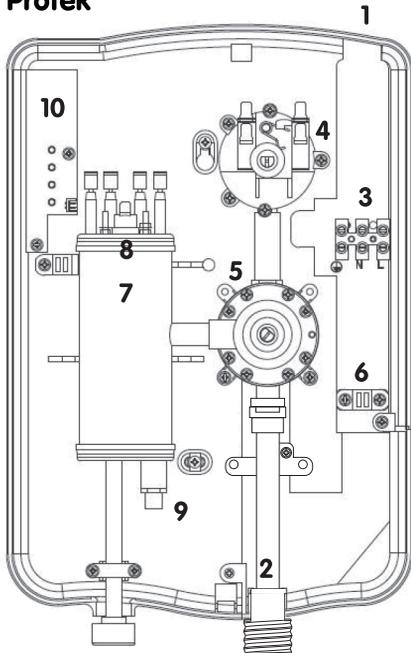
1. Power supply cable entry
2. Water inlet pipe
3. Terminal block
4. Power selector (PS)
5. Temperature flow control valve
6. Cable clamp
7. Heating tank
8. Thermostat
9. Pressure relief device (PRD)
10. Indicator light – Power
11. Indicator light – Over heat



Alpine Electric Instant Shower Heater Unit (with Front Cover)

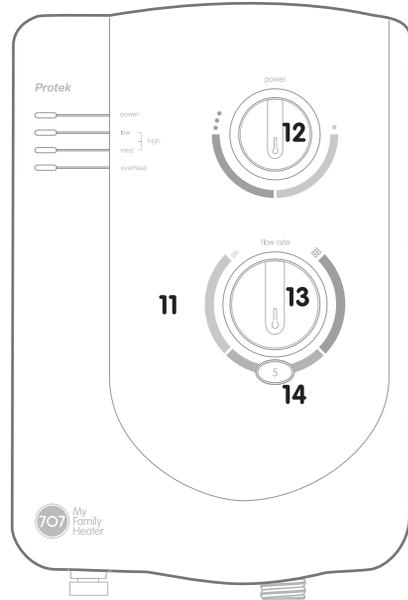
12. Front cover
13. Power selector knob
14. Temperature flow control knob
15. Temperature setting window

Protek



Protek Electric Instant Shower Heater Unit (without Front Cover)

1. Power supply cable entry
2. Water inlet pipe
3. Terminal block
4. Power selector (PS)
5. Temperature flow control valve
6. Cable clamp
7. Heating tank
8. Thermal cut-out
9. Pressure relief device (PRD)
10. PCB assembly indicator light



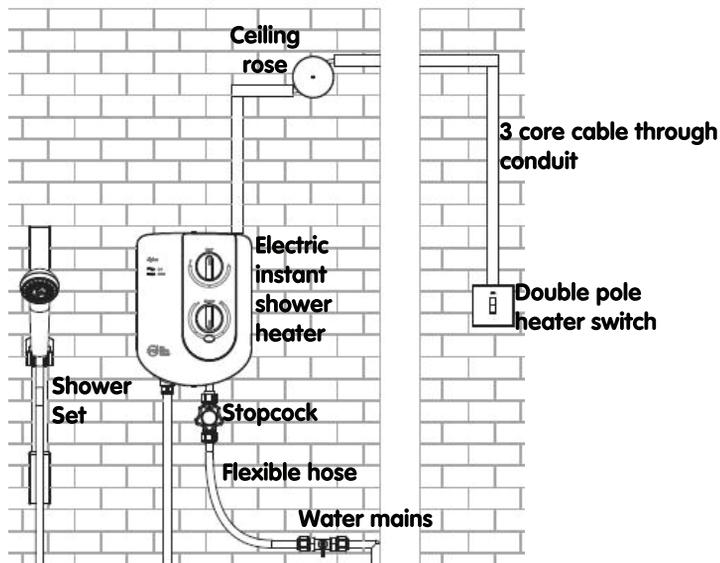
Protek Electric Instant Shower Heater Unit (with Front Cover)

11. Front cover
12. Power selector knob
13. Temperature flow control knob
14. Temperature setting window

Features:

- Copper class tank: 707 tanks are constructed of superior copper, and build to stringent specifications for reliability, longevity and performance
- Pressure relief device: Built-up pressure in the water tank is automatically released for added protection and safety
- Warning indicator: Lights up in the event the water temperature reaches scalding level
- Splash proofing: The internal circuitry of each heater is isolated by sturdy, splash-proof casing and manufactured in accordance with international safety standards
- Pledge of safety: 707 shower heaters are rigorously tested for compliance with multiple Singapore safety standards
- Temperature flow control: Temperature flow control regulates water flow for preferred shower temperature
- Anti-scald protection: 707 shower heaters automatically detect and correct when water temperatures reach un-safe levels

4. Site requirements – Plumbing & Electrical



- Please check that a 20 amps double pole heater switch is connected directly to the mains and installed outside the bathroom.
- If a ceiling rose connector is present, please ensure it is rated 20 amps and the 3 core cable between switch and connector should be at least 2.5mm² per wire.
- Pressure of water supply from mains should be at least 0.1 MPa (1 bar) and it should not exceed 0.3MPa (3bar).
- Required minimum inlet water flow rate is 3ℓ/min.
- Please proceed with installation only if you meet the above site requirements.

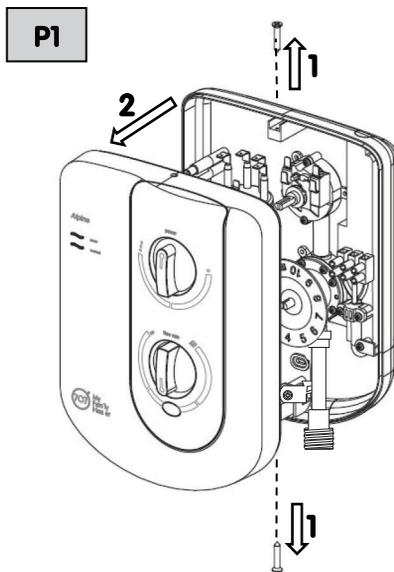
Materials and tools needed for installation:

- 3 core cable of at least 2.5 mm² per wire
- Flexible hose and/or copper pipes
- Spanner
- Power drill
- Hammer
- Cross head screw driver
- Flat head screw driver
- Marker

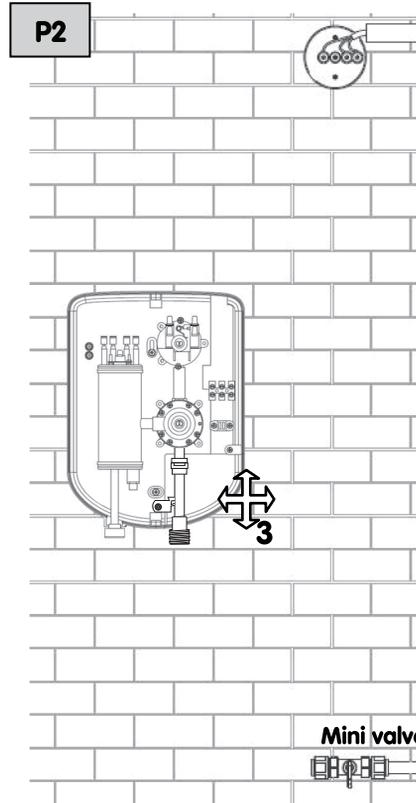
5. Product Installation

5.1 Plumbing Connections

- Turn off electricity supply.
- Turn on water supply and flush pipe to clear any debris.
- Install a mini valve at the mains water supply in the bathroom for ease of maintenance and servicing.

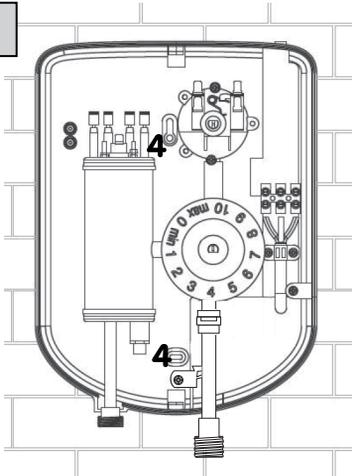


- Unscrew the bottom and top case mounting screws (1).
- Remove the front cover (2).



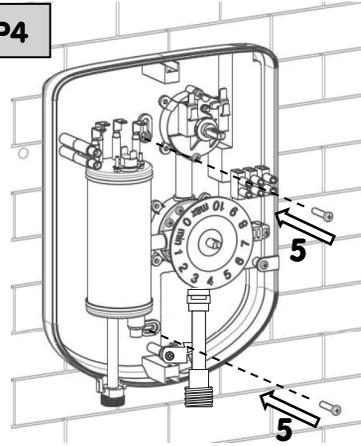
- Take note of the electricity and water supply location and find a suitable place for the heater unit. Make sure the unit is in an upright position (3).

P3



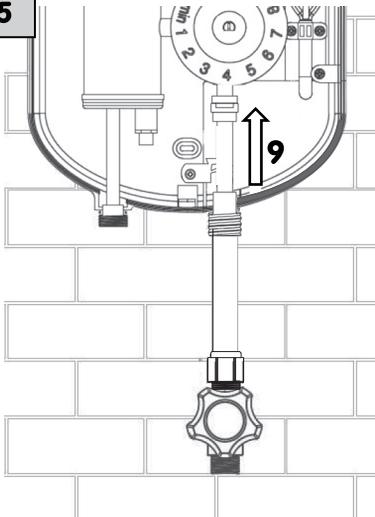
- Hold the heater on the desired location and mark the mounting hole positions on the wall. Put the heater down and drill the holes as per marking. Insert wall plugs into the holes (4).

P4



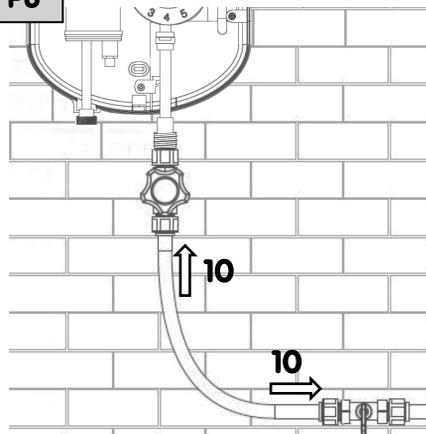
- Align the heater and screw it tightly onto the wall (5).

P5

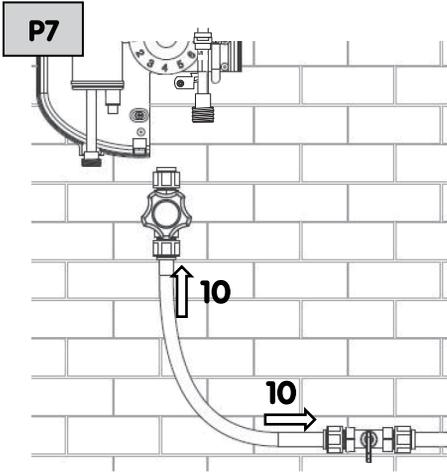


- Connect a stopcock to the inlet pipe (9).

P6

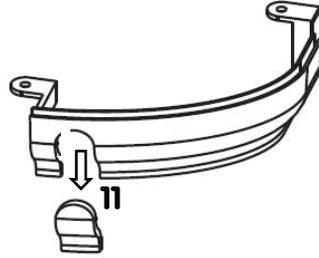


- Connect the stopcock to the mains supply using flexible hose or copper pipe (10).

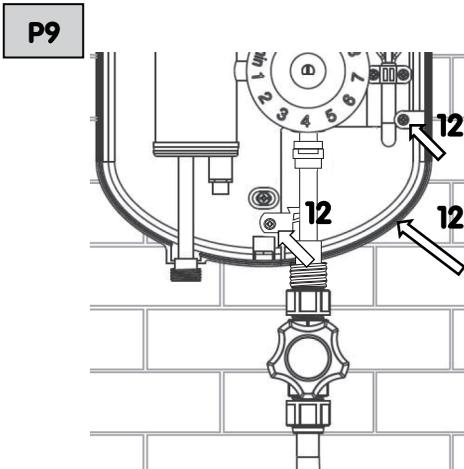


- Connect the stopcock to the mains supply using flexible hose or copper pipe (10).

P8



- Remove the inlet cover from base plate attachment (11).



- Fix back the base plate attachment using the respective screws (12).

5.2 Shower Set Installation

P7



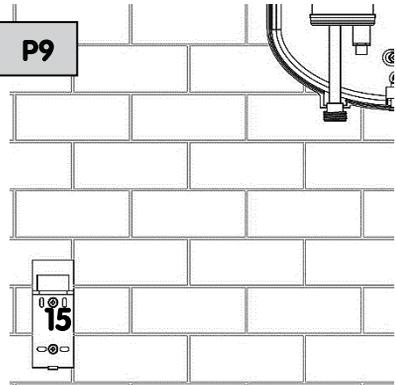
- Take the bracket and press to release the click fit at bottom (13).

P8



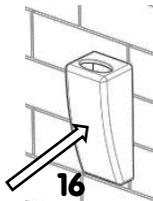
- Swing the top case to remove it completely (14).

P9



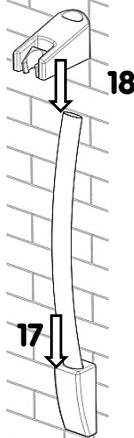
- Hold the base of bracket on the desired location on the wall. Mark, drill holes and fix it using screws (15).

P10



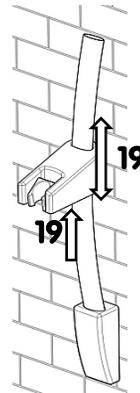
- Add back the cover (16).

P11



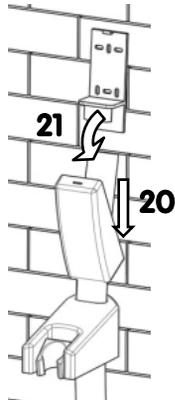
- Locate the shower rod into the bracket at the bottom first (17).
- Locate the shower head holder at the top end of shower rod using guides (18).

P12



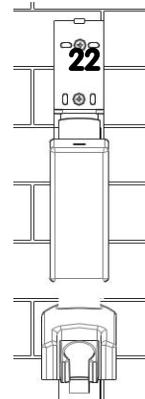
- To fix the holder at suitable height, press the friction release button at the bottom of the holder and move it up and down. Finally release the friction button at desired level (19).

P13



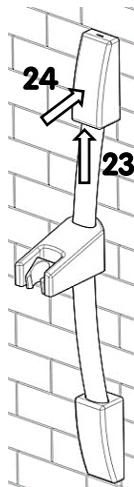
- Detach the other bracket assembly and insert the top case into the shower rod and lower it as much as possible (20).
- Assemble bottom case of bracket into the rod and hold it straight on the wall (21).

P14



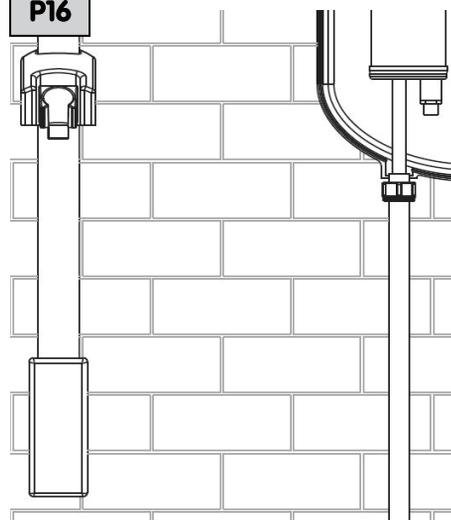
- Mark the holes on the wall, remove the base, drill holes, put back base and fix the screws (22).

P15

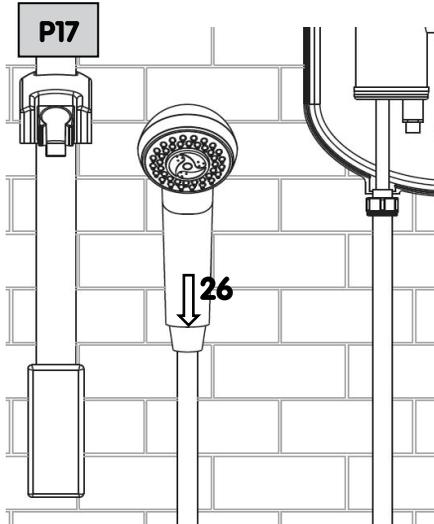


- Now raise the top case of the bracket well up to the base part (23).
- Swing and Press the top case against the base part to make a click fit (24).

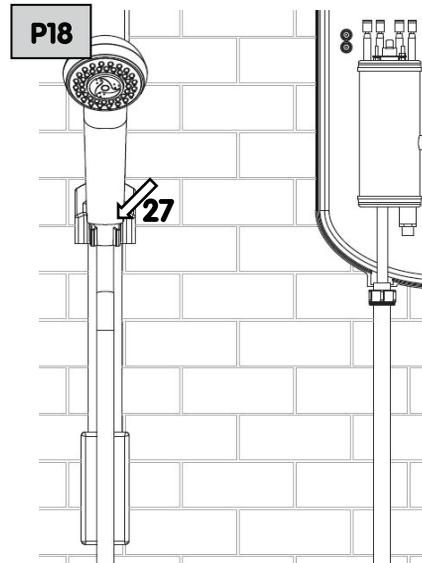
P16



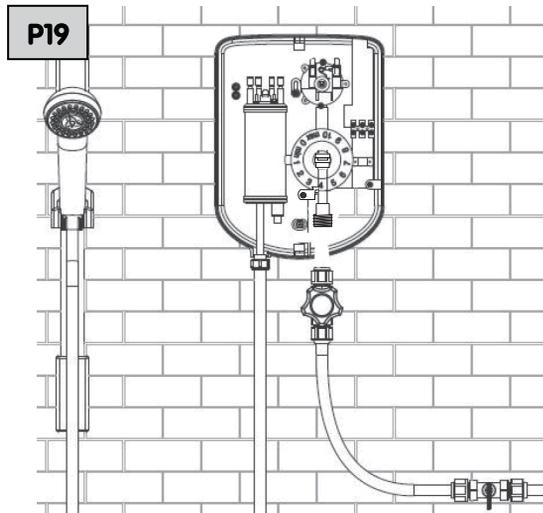
- Connect shower hose to heater outlet (25).



- Connect hose to shower head (26).



- Place shower head to shower holder (27).

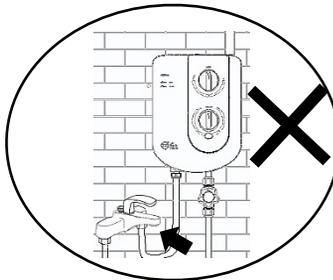


- Complete plumbing connections

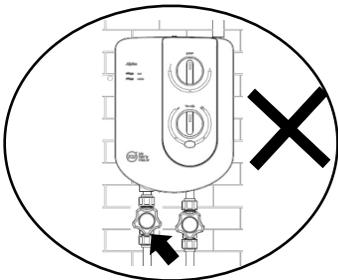
5.3 Testing Plumbing Connections

- Turn on the water supply and check all connections for leakage. Rectify if there is any leakage found.
- Test and adjust water flow rate to approximately 4 to 6 /min. Contact us for advice if water flow rate is too high or too low.

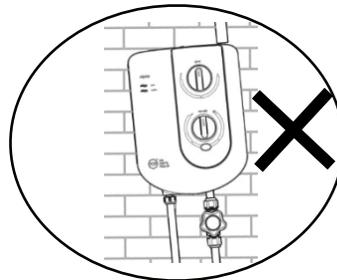
Common errors to avoid in plumbing connections:



- **Do not connect heater outlet to any mixed water faucet.**



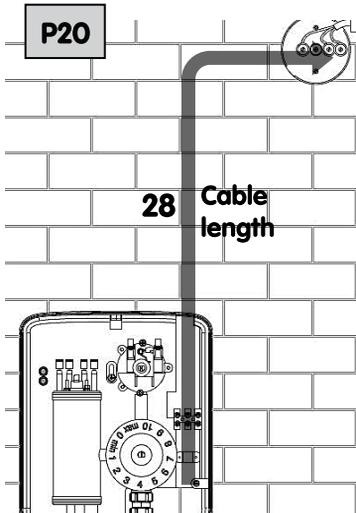
- **Do not add any open-close valve / stopcock at the outlet.**



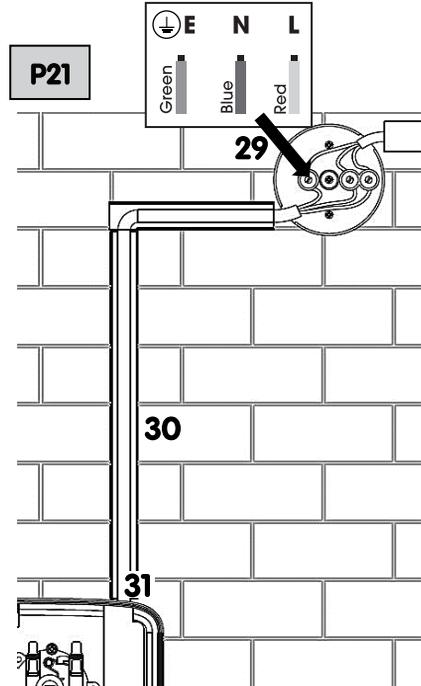
- **Ensure heater unit is not tilted. It must be in an upright position.**

5.4 Electrical Connections

Proceed with electrical connections only after completing plumbing connections.



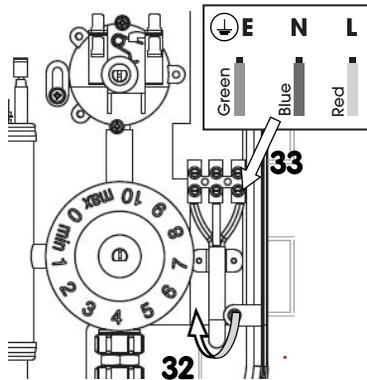
- Measure the cable length required to connect heater to the ceiling rose or heater switch (28).
- Cut the cable to the measured length with 10cm allowance.



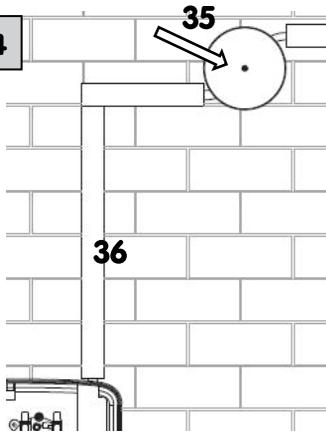
- Connect stripped end of 3 wires one by one to the ceiling rose/heater switch tightly (29).
- In order to secure the cable, fix the conduit base along its path, to reach the ceiling rose/heater switch in the fixed wiring (30).
- Route the cable over the conduit base to reach heater cable entry (31).

P22

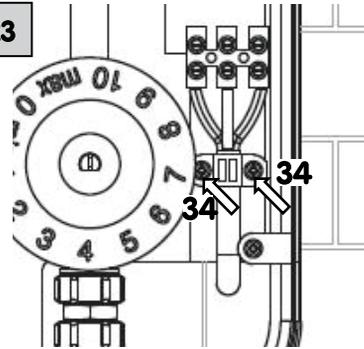
Live cable to terminal marked L
 Neutral cable to terminal marked N
 Earth cable to terminal marked E



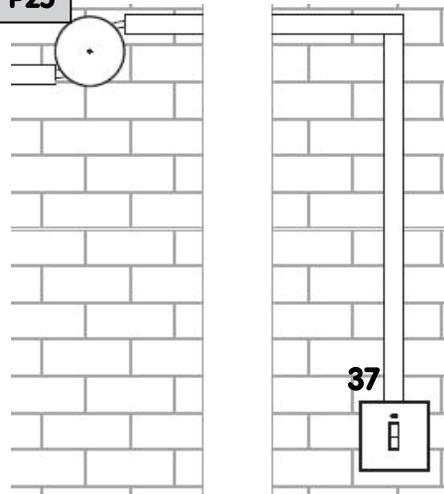
- Pull the cable inside the heater towards terminal block and strip the cable to the required length (32).
- Connect stripped end of 3 wires (one by one) to the terminal block using its in-built screws tightly (33).

P24

- Close the ceiling rose/heater switch with its cover and secure it with screw (35).
- Cover the conduit base with its cover (36).

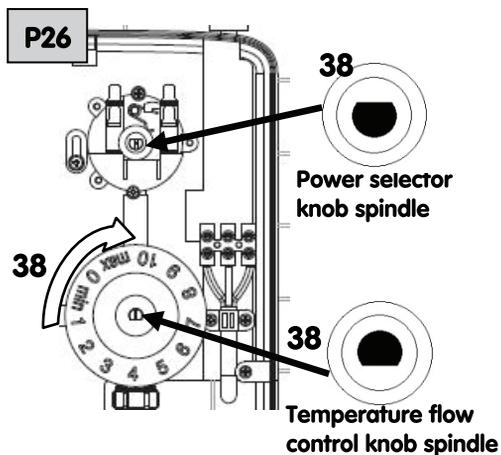
P23

- Clamp the cable using the cable clamp with screws (34).

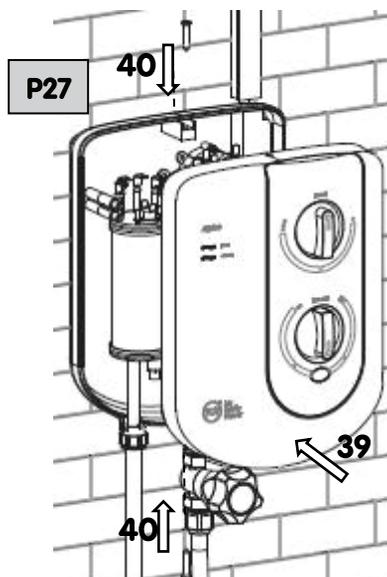
P25

- Complete rest of the electrical connections until double pole heater switch located at outside the shower room (37).

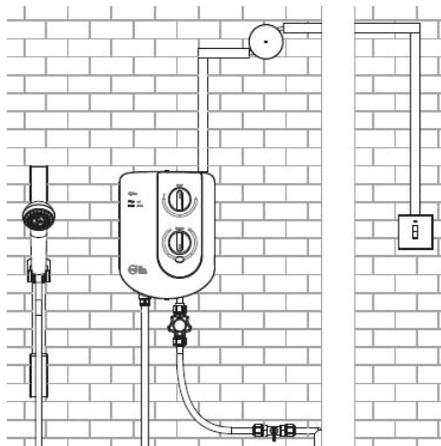
5.5 Front Cover Mounting



- In those heaters having the round number plate, make sure it is in position before closing with front cover. Adjust the orientation of temperature flow control & power selector by rotating their spindles such that the flat surface of D-shaped spindles are in positions as shown for easy alignment of the knobs with respective internals parts (38).



- Mount front cover onto the base plate by guiding through the ribs and slowly align the knobs with the spindles (39).
- Then secure casing using the respective screws (40).

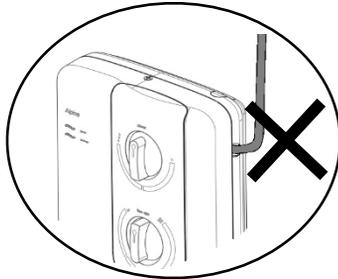


- Completed installation of heater.

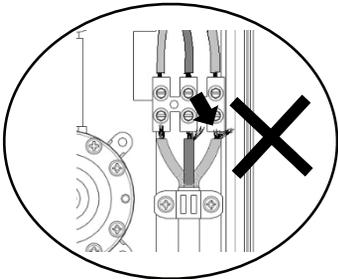
5.6 Testing Electrical Connections

- Turn on water supply to fill the tank with water.
- Turn on power supply
- Test for hot water at different power settings.

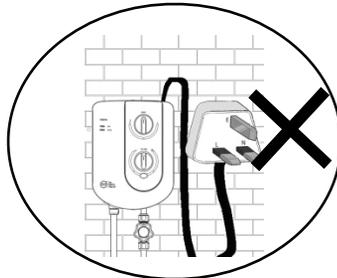
Common errors to avoid in electrical connections:



- **Do not cut heater casing to insert cable. Use existing cable slot at top right corner of the heater**



- **Avoid loose electrical connections**



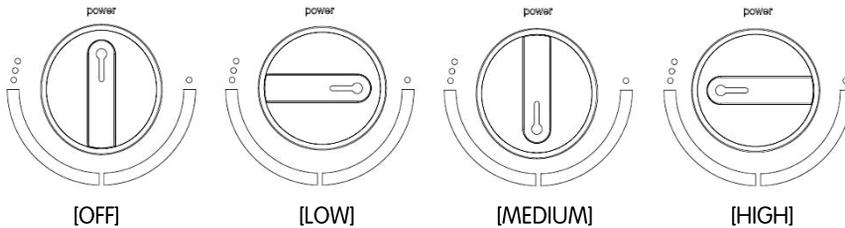
- **Do not use 3 pin power plug and socket for electrical connections**

6. Usage of Electric Instant Shower Heater

6.1 Operation Instructions

To turn on the shower heater:

- Turn on the heater switch
- Turn on the water supply
- Turn the power selector knob to LOW, MEDIUM or HIGH



To adjust shower temperature:

- Adjust the power selector knob to control power settings.
 - * [OFF] – Cold setting
 - * [LOW] – Low power setting for economy and lower temperature
 - * [MEDIUM] – Medium power setting
 - * [HIGH] – High power setting for maximum power and higher temperature
- Adjust temperature flow control knob to adjust flow rate.
 - * Turn knob towards anticlockwise setting for maximum water flow rate and lower temperature
 - * Turn the knob towards clockwise setting for minimum water flow rate and higher temperature
 - * For models having temperature setting window, user can take note of the number displayed for favorite setting so that it can be adjusted to this setting next time. The indicator range is from [1] to [10].

To turn OFF unit:

- Turn the power selector knob to [OFF]
- Turn off the water supply
- Turn off the heater switch

Turn off stopcock to temporarily turn off water supply:

When you want to apply soap during shower, you can turn off the water supply temporarily by turning off the stopcock.

Be careful when turning on the water supply to resume using the shower heater. The first flush of water will be very hot. The overheat indicator light may activate to warn you.

Turn the shower head away from you to avoid any contact from the first flush of hot water. Turn on the water supply and test that the water temperature is alright before you resume using the shower heater. Check that the overheat indicator light is no longer activated.

6.2 Safety Precautions

- Do not use shower heater if water pressure is less than 1 bar.
- Do not use shower heater if water flow rate is lower than 3ℓ/min or higher than 8ℓ/min.
- Children, elderly, physically disabled or any individual who has difficulty in operating the shower heater safely, should not be allowed to use the shower heater without supervision.
- Do not use shower heater when overheat indicator lights up.
- Do not use if the spray head is blocked. The spray head must be descaled regularly.

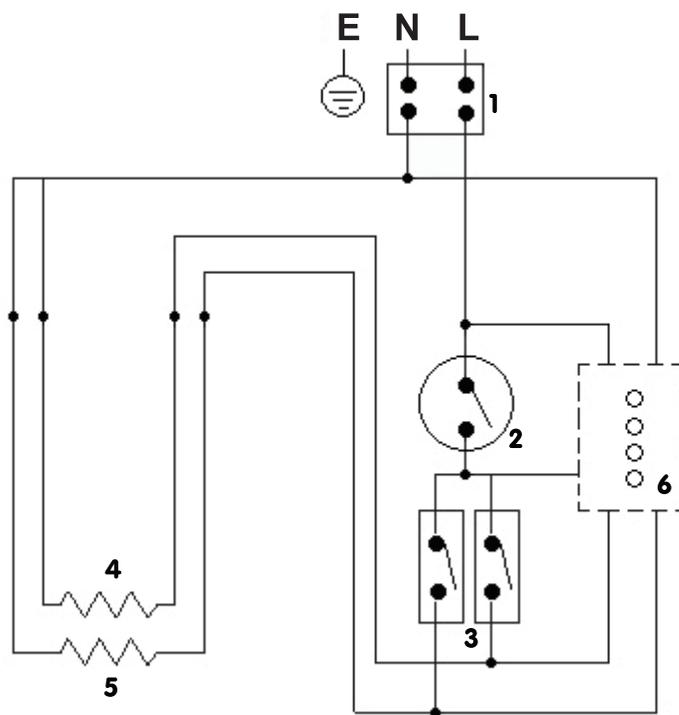
Warning: Do not switch on if there is a possibility that the water in the heater is frozen.

Stop using immediately when:

- Heater unit is damaged.
- Shower head, shower hose or any accessory is damaged.
- No water flow during operation.
- Heater functions significantly different from usual operation.

Turn off shower heater, water supply and heater switch and contact us for assistance if any of the above occurs

7. Electrical Information



- | | |
|-------------------|----------------------|
| 1. Terminal block | 4. Heating element 1 |
| 2. Thermostat | 5. Heating element 2 |
| 3. Micro switches | 6. Indicator lights |

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