

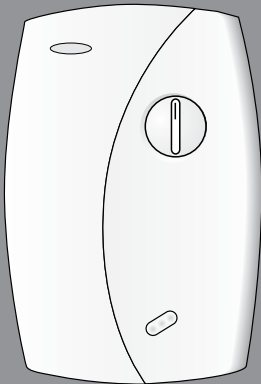
ATMOR

OPERATION OF THE BW-300 SERIES

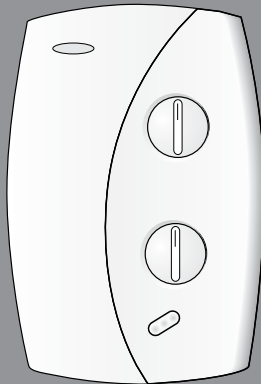
&

THE BW 405 THERMOSTATIC SHOWER

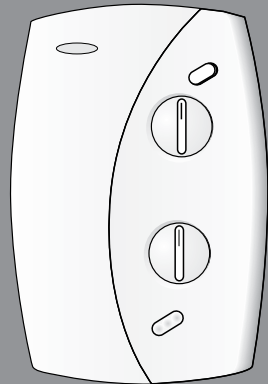
TOUCH BUTTON



BW300



BW301



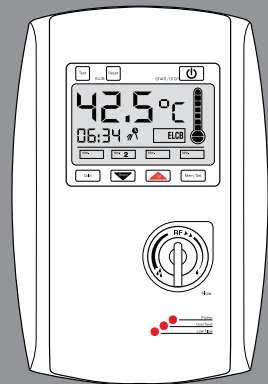
BW302



BW301D



BW302D



BW405

Siting of the shower

WARNING: The shower must not be positioned where it will be subjected to freezing conditions.

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

Refer to **Fig.1** for correct siting of shower.

Position the unit where it will NOT be in direct contact with water from the sprayhead.

Position the shower unit vertically.

Allow sufficient room between the ceiling and the shower to access the cover top screws.

If a showerhead can sit within a bath, basin or shower tray, you must fit a double check valve in the supply pipe work to prevent back siphonage.

Pressure relief safety device

A pressure relief device (**PRD**) is designed into the shower unit which complies with European Standards. The PRD provides a level of appliance protection should an excessive build up of pressure occur within the shower. **DO NOT OPERATE** the shower with a **damaged or kinked shower hose**, or a blocked sprayhead.

When commissioning, the sprayhead must be removed from the flexible hose, while at the same time the temperature control must be at the minimum flow position.

Ensure the shower is positioned over a bath or shower tray because if the PRD operates, then water will eject from the bottom of the unit.

Should this happen, turn off the electricity and water supplies to the shower at the isolating switch and stop valve. Contact Customer Service for advice on replacing the PRD.

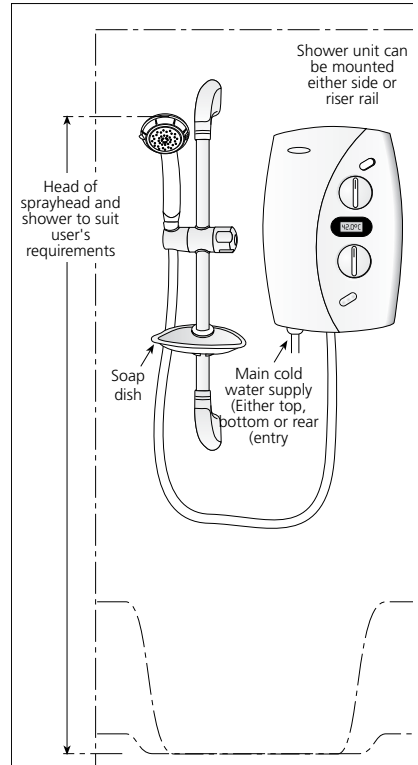


Fig.1 Diagrammatic view (not to scale)

Important: The unit must be mounted on a flat surface which covers the full width and length of the backplate. It is important that the wall surface is flat otherwise difficulty may be encountered when fitting the cover and subsequent operation of the unit may be impaired.

Planning your installation

Plumbing

The installation must comply with all water authority and building bye-laws and regulations.

To ensure the correct operation of the shower it must be installed to a mains water cold water supply with a **Minimum** running pressure of 0.3 bar (3.2 PSI) using standard 1/2"Ø compression inlet connection.

(See Fig.2)

This shower can be supplied from a cold water storage tank provided there is a maximum static head of 3 metres from the base of the tank to the handset position. If this is taken it must only be on a totally dedicated supply to the shower.

The shower must not be installed in an area subject to freezing conditions.

DO NOT USE THIS SHOWER IF YOU SUSPECT IT IS FROZEN.

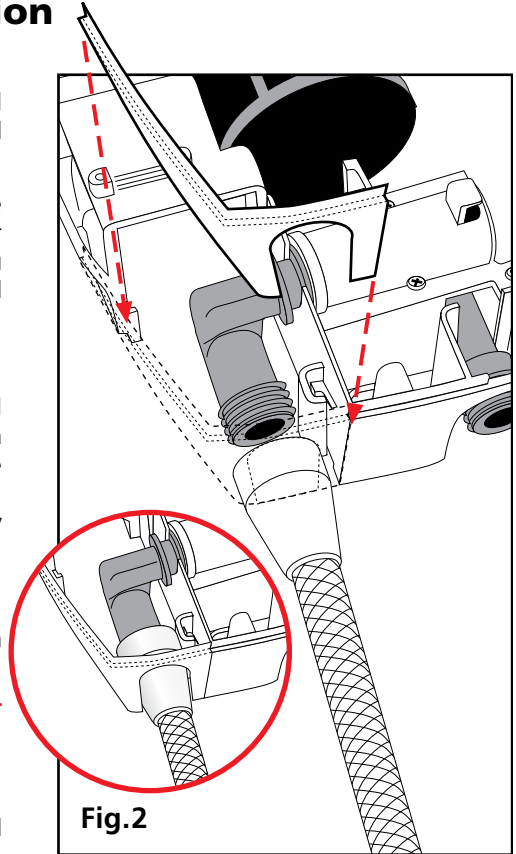
An additional service valve must be installed in the water supply to the shower as an independent means of isolating for future servicing requirements.

Do not exceed the maximum inlet pressure.

Maximum pressure 10 bar

Minimum pressure (running) 0.3 bar

Rated pressure 0 bar



Electrical

Warning: This appliance must be earthed

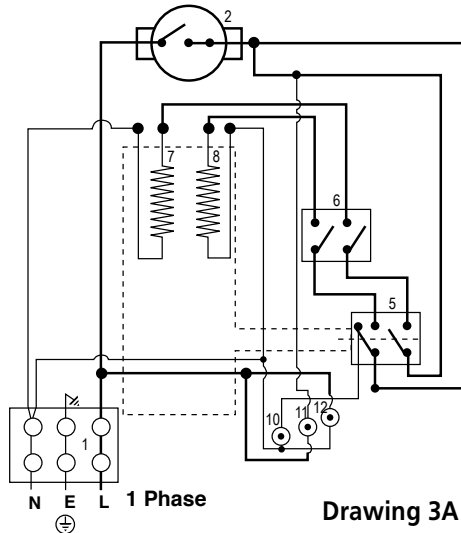
Model	Voltage/Power			Recommended		
	220V	230V	240V	Cable size (mm ²)	Fuse rating (Amps)	
300	3.0	2.8kW	3.0kW	3.3kW	2.5	16
300	3.3	3.0kW	3.3kW	3.6kW	2.5	20
300	3.5	3.2kW	3.5kW	3.8kW	2.5	20
300	4.0	3.6kW	4.0kW	4.4kW	4	25
300	5.0	4.6kW	5.0kW	5.5kW	4	25
300	5.5	5.0kW	5.5kW	6.0kW	4/6	25
300	6.0	5.5kW	6.0kW	6.5kW	4/6	25-32
300	7.5	6.3kW	6.9kW	7.5kW	6	40
300	8.5	7.0kW	7.8kW	8.5kW	6/10	40
300	9.5	8.0kW	8.7kW	9.5kW	6/10	40
300	10.5	8.8kW	9.6kW	10.5kW	10	45

Model	Voltage/Power			Recommended		
	220V	230V	240V	Cable size (mm ²)	Fuse rating (Amps)	
301	3.0	2.8kW	3.0kW	3.3kW	2.5	16
301	3.3	3.0kW	3.3kW	3.6kW	2.5	20
301	3.5	3.2kW	3.5kW	3.8kW	2.5	20
301	4.0	3.6kW	4.0kW	4.4kW	4	25
301	5.0	4.6kW	5.0kW	5.5kW	4	25
301	5.5	5.0kW	5.5kW	6.0kW	4/6	25
301	6.0	5.5kW	6.0kW	6.5kW	4/6	25-32
301	7.5	6.3kW	6.9kW	7.5kW	6	40
301	8.5	7.0kW	7.8kW	8.5kW	6/10	40
301	9.5	8.0kW	8.7kW	9.5kW	6/10	40
301	10.5	8.8kW	9.6kW	10.5kW	10	45

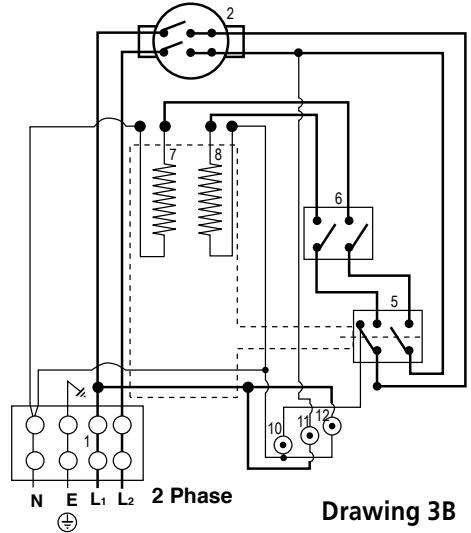
Model	Elcb	Voltage/Power			Recommended	
		220V	230V	240V	Cable size (mm ²)	Fuse rating (Amps)
302	3.0	2.8kW	3.0kW	3.3kW	2.5	16
302	3.3	3.0kW	3.3kW	3.6kW	2.5	20
302	3.5	3.2kW	3.5kW	3.8kW	2.5	20
302	4.0	3.6kW	4.0kW	4.4kW	4	25
302	5.0	4.6kW	5.0kW	5.5kW	4	25
302	5.5	5.0kW	5.5kW	6.0kW	4/6	25
302	6.0	5.5kW	6.0kW	6.5kW	4/6	25-32
302	7.5	6.3kW	6.9kW	7.5kW	6	40
302	8.5	7.0kW	7.8kW	8.5kW	6/10	40
302	9.5	8.0kW	8.7kW	9.5kW	6/10	40
302	10.5	8.8kW	9.6kW	10.5kW	10	45

Model	Elcb	Voltage/Power			Recommended		
		220V	230V	240V	Cable size (mm ²)	Fuse rating (Amps)	
405	3.0	E	2.8kW	3.0kW	3.3kW	2.5	16
405	3.3	E	3.0kW	3.3kW	3.6kW	2.5	20
405	3.5	E	3.2kW	3.5kW	3.8kW	2.5	20
405	4.0	E	3.6kW	4.0kW	4.4kW	4	25
405	5.0	E	4.6kW	5.0kW	5.5kW	4	25
405	5.5	E	5.0kW	5.5kW	6.0kW	4/6	25
405	6.0	E	5.5kW	6.0kW	6.5kW	4/6	25-32
405	7.5	E	6.3kW	6.9kW	7.5kW	6	40
405	8.5	E	7.0kW	7.8kW	8.5kW	6/10	40
405	9.5	E	8.0kW	8.7kW	9.5kW	6/10	40
405	10.5	E	8.8kW	9.6kW	10.5kW	10	45

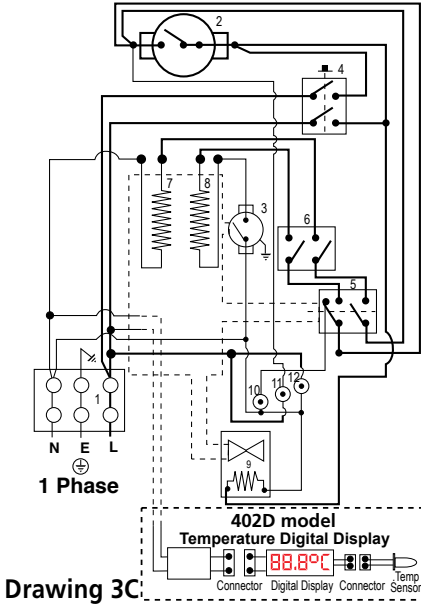
One phase 300 & 301 models



Two phase 300 & 301 models

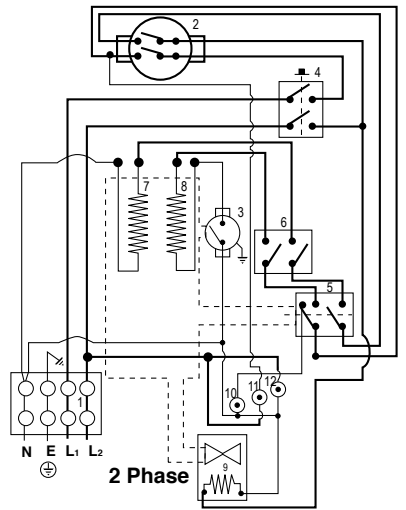


One phase 302 & 302D models



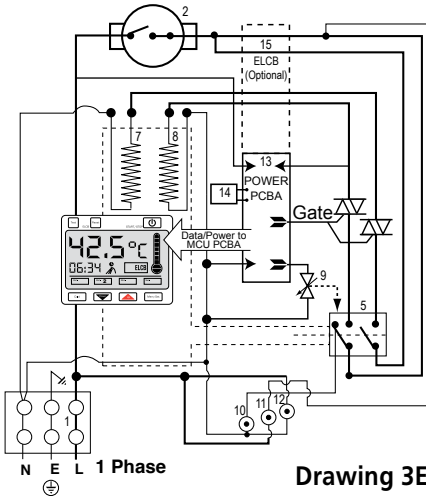
Drawing 3C

Two phase 302 & 302D models



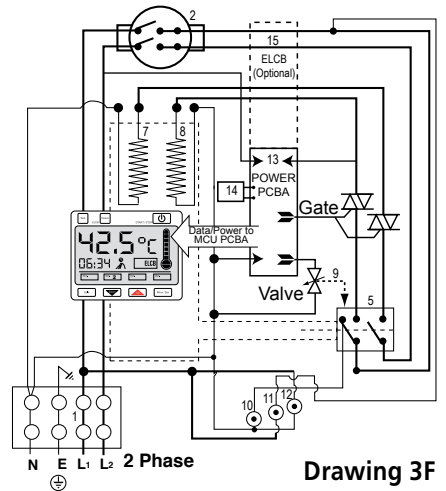
Drawing 3D

One phase 405 models



Drawing 3E

Two phase 405 models



Drawing 3F

- | | |
|-----------------------------|--------------------|
| 1. Terminal block | 5. Pressure switch |
| 2. Thermal cut-out (main) | 6. Power selector |
| 3. Thermal cut-out (outlet) | 7. Low element |
| 4. Start/Stop push button | 8. High element |

- | | |
|----------------------------|---------------------|
| 9. Solenoid valve | 13. Power PCBA |
| 10. Low flow LED indicator | 14. Solenoids |
| 11. Overheat LED indicator | 15. ELCB (Optional) |
| 12. Power LED indicator | |

The electrical installation and circuit protection of this shower must comply with IEE wiring regulations and should be checked by a qualified electrician prior to use.

Please note: It is important to switch off the power supply at the main switch at the consumer unit before connecting the cable. Please also check for the proximity of hidden pipes or cables before drilling the wall.

A separate and permanently connected cable must be taken from the consumer unit directly to the shower via a multi pole switch with a minimum contact separation gap of 3mm. It is recommended that a residual current device (RCD) formerly known as an earth leakage circuit breaker (ELCB) with a tripping current of 30mA is incorporated in the circuit.

In domestic installations you must ensure that the electrical supply and existing fuse board are adequately rated.

Important: Voltage drop in the supply to the household will affect performance.

This shower incorporates a Pressure Relief Device (PRD). We advise that the main unit is positioned over a bath or within a shower enclosure to ensure that in the unlikely event of the PRD operating it will discharge water without damage to surrounding fittings.

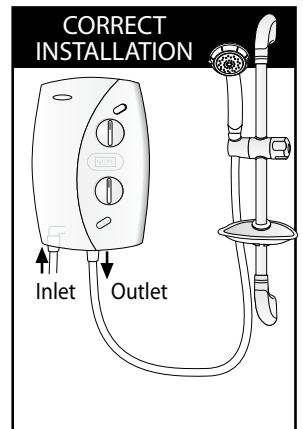
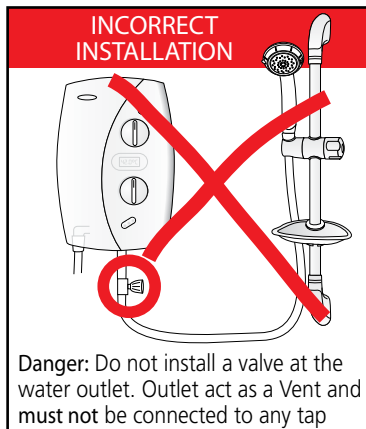
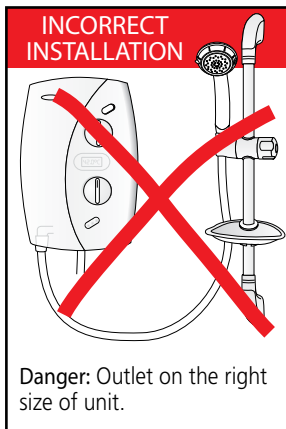
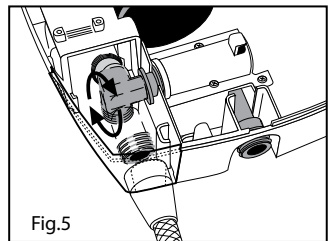
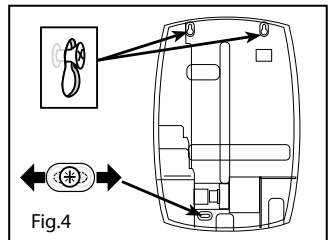
Fitting your shower

Fixing the shower to the wall.

Select the desired position for the shower unit ensuring all users can easily reach the controls. Offer it up to the wall and mark the three fixing points (**Fig 4**). Drill holes, insert wall plugs provided and screw the shower to the wall.

Plumbing connections

Connection into the unit is with standard 1/2"Ø thread inlet connection.



Supply pipework can enter the unit from above, below or behind and entry is into the **bottom left hand corner** of the unit. The bottom left hand corner of the base moulding is removable to access the inlet elbow and assist plumbing (**Fig. 5**).

The outlet acts as a vent and must not be connected to any tap or similar fitting.

All plumbing connections must be completed before electrical work is undertaken.

Use the hoses supplied with the appliance, do not re-use old hoses

An additional service valve must be fitted to enable future servicing requirements. Flush out pipework before connecting to the shower.

Electrical connections.

Warning: This appliance must be earthed.

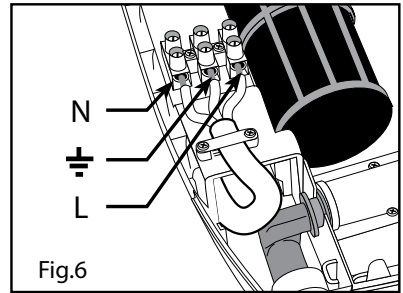
Ensure the earth continuity conductor is securely and permanently connected to all exposed metal parts of other appliances or components within the bathroom.

All cables must conform to the relevant tables within the IEE regulations. The supply cable can be surface mounted and clipped, recessed or enclosed within conduit.

Connection to terminal block (fig 6):

- | | |
|--|----------------------------------|
| Live (cable coloured brown or red) | Terminal marked L. |
| Neutral (cable coloured blue or black) | Terminal marked N |
| Earth (cable coloured green or green/yellow) | Terminal marked (earth symbol) ⊕ |

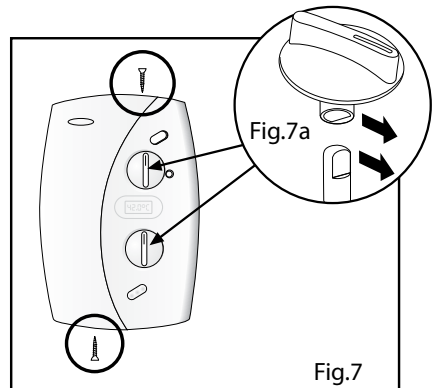
The earth cable, where stripped must be sleeved prior to connection to the terminal block. All terminals must be carefully tightened to avoid trapping the cable insulation with retaining screws.



Fitting your shower (continued)

Warning: Do not turn on the electrical supply until the front cover is replaced.

Before refitting the cover ensure both the power selector (**A**) and temperature control (**B**) spindles are aligned with their respective knobs. (**Fig.7a**) Close cover with 2 screws. (**Fig.7**) When the installation is completed and the power switched on to the unit the 'power' warning and "Low Flow" lamp should be illuminated.



User instructions.

Without supervision the use of the appliance by young children or infirm person is forbidden.

Playing with the unit by young children is forbidden.

Shower operation: 300 & 301 Models

Ensure that both, the water and electrical supplies, are turned on. The 'Power' lamp and 'Low Flow' should be illuminated.

A- Power Setting

When the incoming temperature of the water supply is high, during summer for instance, it may be necessary to reduce the power setting to position 3 or 2 to get the desired shower temperature. Equally, when the temperature is low it will be necessary to select power setting 3/4.

For 300 & 301: Power setting 1 enables you to have a cold shower. In this case For 301 the temperature knob (B) will operate the shower but you will not be able to increase the shower temperature.

B- For 301 Model:

Turn the **temperature knob (B)** anti-clockwise to turn the shower on. To decrease the temperature, continue to turn the knob anti-clockwise. For model 300 use entral inlet valve.

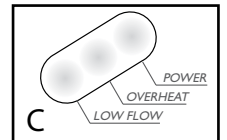
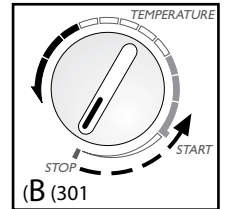
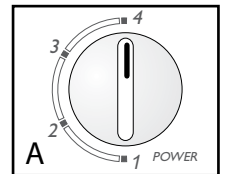
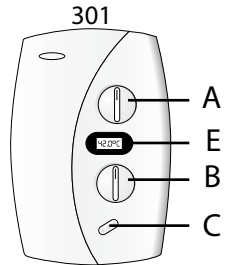
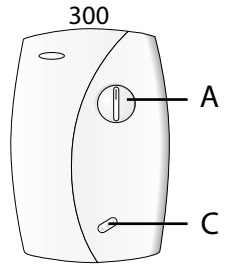
C- Led Indicators

If the **overheat lamp** is illuminated then the temperature of the shower is too high and the automatic temperature thermostat has switched off the heating elements in the shower. Reduce the shower temperature and allow it to run for a few seconds until they have cooled sufficiently.

If the **Low flow** is illuminated the supply water pressure is too low and the heating elements will be automatically switched off to avoid user discomfort.

E- Digital Temperature Display (Digital model only)

Show the user the outlet water temperature for comfortable use



301 Model - Turn the temperature control knob clockwise to turn the shower off.

Preparation for first use:

Ensure the power selector (A) is turned to position 1.

Turn the shower on and rotate the temperature control knob (B) fully anti-clockwise. Check for any water leaks.

Turn to power selector (A) to position 2 and rotate the temperature knob clockwise - the temperature should gently increase.

Turn the power selector to positions 3 and 4.(Clockwise for Stepless) In both cases the temperature should increase.

Adjust the shower to the desired temperature using the temperature control knob (B) . Increasing the temperature (turning this knob clockwise) will reduce the flow).

You can use the 4 spray positions in the handshower (Fig. 10) to adjust the recommended temperature. Turn off the shower. It is now ready for use.

Shower operation for: 302 & 302D models

Ensure that both the water and electrical supplies are turned on. The power lamp should be illuminated.

Turn power selector (A) to position 4.

Press the Stop/Start (D) button to turn the shower on.

B - To increase the temperature turn the temperature control knob clockwise, anti-clockwise to decrease.

When the incoming temperature of the water supply is high, during summer for instance, it may be necessary to reduce the power setting to position 3 or 2 to get the desired shower temperature. Equally, when the temperature is low in winter for instance it will be necessary to select power setting 3 or 4. Power setting 1 enables you to have a cold shower.

E- Digital Temperature Display (Digital model only)

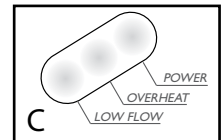
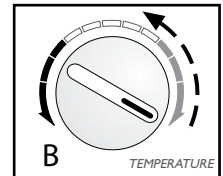
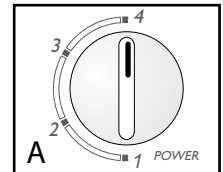
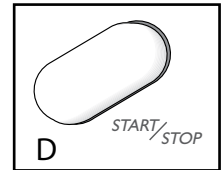
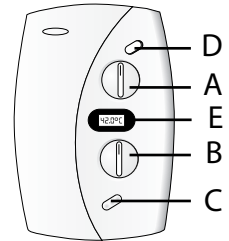
Show the user the outlet water temperature for comfortable use

User instructions.

If the **overheat** lamp is illuminated then the temperature of the shower is too high and the automatic temperature thermostat has switched off the heating elements in the shower. Reduce the shower temperature and allow it to run for a few seconds until they have cooled sufficiently.

If the **Low flow** is illuminated the supply water pressure is too low and the heating elements will be automatically switched off to avoid user discomfort.

302-Deluxe



302 & 302D Models: Press the Start/Stop (D) button to turn the shower off.

Preparation for first use: 302 models.

Ensure the power selector is turned to position 1.

Turn power selector to position 2.

Press the Start/Stop button **(D)** . Rotate the temperature control knob **(B)** fully anti-clockwise.

Check for any water leaks.

Turn to the Power Selector **(A)** to position 2 and rotate the temperature knob **(B)** clockwise - the temperature should gently increase.

You can use the 4 positions spray **(Fig. 11)** in the handshower to adjust the recommended temperature.

Turn the power selector to positions 3 and 4. In both cases the temperature should increase.

Adjust the shower to the desired temperature using the temperature control knob **(B)**. Increasing the temperature (turning this knob clockwise) will reduce the flow. Turn off the shower. It is now ready for use.

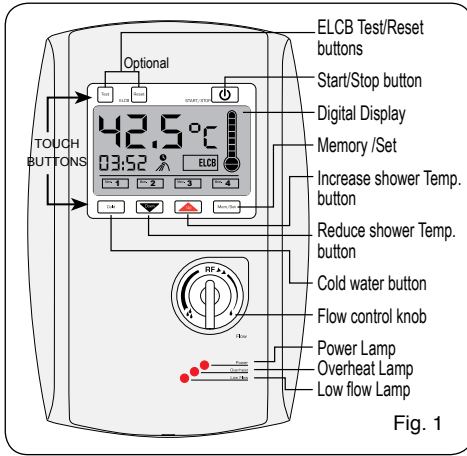


Fig. 1

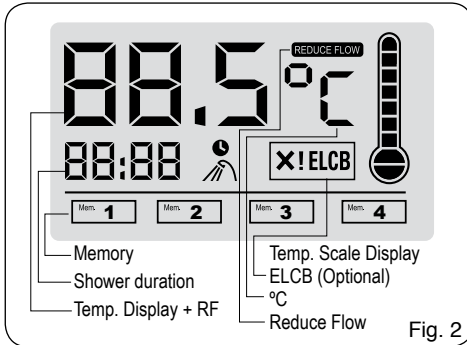


Fig. 2

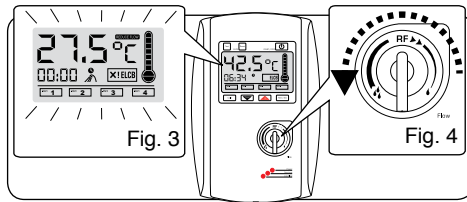


Fig. 3

Fig. 4

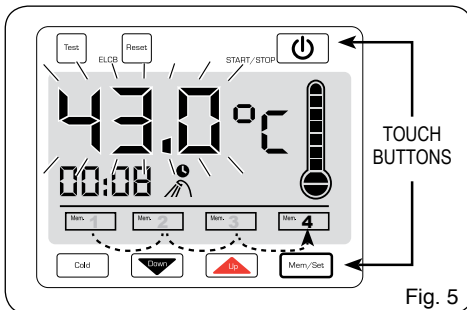


Fig. 5

OPERATING THE THERMOSTATIC SHOWER

WARNING!

Before operating the shower heater, It is essential that the commissioning procedure has been completed correctly.

CAUTION: It is recommended that persons who may have difficulty understanding or operating the shower controls should not be left unattended while using the shower.

Make sure the water supply is turned fully on. Turn the "Flow control Knob" maximum anti-clockwise. (Fig. 4)

Switch the electric supply back on at the isolating switch.

Immediately, the start up routine commences and the display shows all information for 3 seconds. (Fig. 3)

To start the shower

For your convenience, 4 shower temperature settings can be stored in memory.

Before the memory is set the default temp setting shows as follows:

Mem.1=40°C, Mem.2=41°C, Mem.3=42°C, Mem.4=43°C.

Press on touch button Start/Stop and water will flow.

The digital display will switch on and **Start** will display for 3 seconds.

The last temperature setting will show in the display [**Cold, M1, M2, M3, M4**] and the unit will begin to heat the water until it reaches the preset temperature.

To choose a different memory setting press on Mem/Set touch button and choose one of the 4 memory settings [**M1; M2; M3; M4**], (Fig. 5). The last used temperature reading in the display will flash for 3 seconds and will change to steady indicating current temperature. The unit is working now to the new preset showering temperature. (Fig. 6)

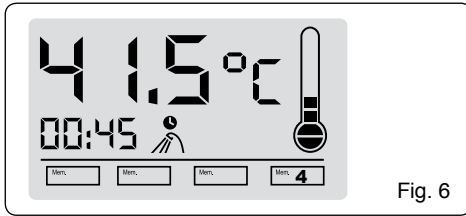


Fig. 6

When the temp. scale display is not full, the unit didn't yet reach desired temp. (Fig.6)

When the temp. scale display is full, the unit reached the temperature desired. (Fig.7)

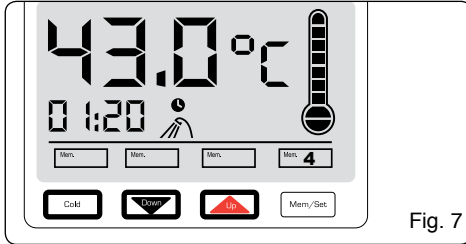


Fig. 7

Adjust shower temperature

You can adjust your shower temperature with the Up/Down arrows by increments of 0.5°C (Fig.7).

To preset shower function refer to **Control buttons** "Set Memory".

Cold shower option can be reached by touching the Cold button . (Fig. 7)

Shower duration displayed as follow: ^{Minutes} ^{Seconds} **MM:SS**

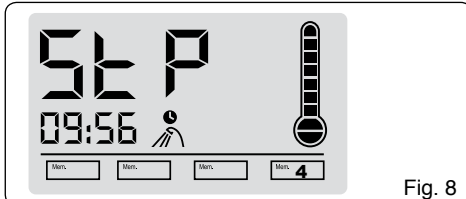


Fig. 8

To stop the shower

Press the touch button Start/Stop

The display will show 5tP, the unit and water will turn off after 5 seconds.(Fig.8)

Last temperature setting will be memorized for next shower.

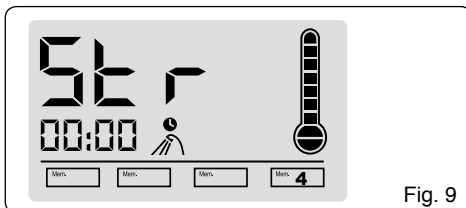


Fig. 9

Control buttons

Set Memory

If any of the default memory settings is not suitable for you, you can reset them.

Press the Power touch button Start/Stop , water will flow, 5tP will display for 3 seconds. (Fig. 9). The unit is on.

Last preset used will appear on display.

Move to the desired on the display with the touch button Mem/Set to reach one of the 4 memorised temp. positions [M1-M4] (Fig.5)

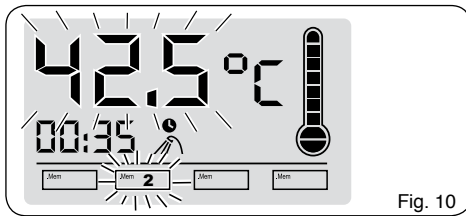


Fig. 10

The memorized temperature will flash for 3 sec. Use the Up/Down arrows touch button to Increase/Decrease temperature settings by increments of 0.5°C ,when desired temp. appears, press on the Mem/Set touch button continuously for 5 seconds. and temperature will flash (Fig.10), indicating that the memory set is saved.

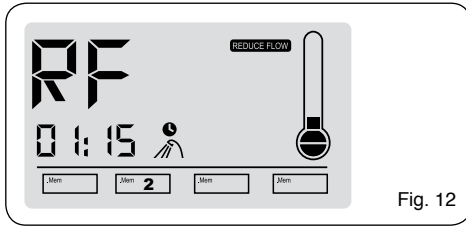


Fig. 12

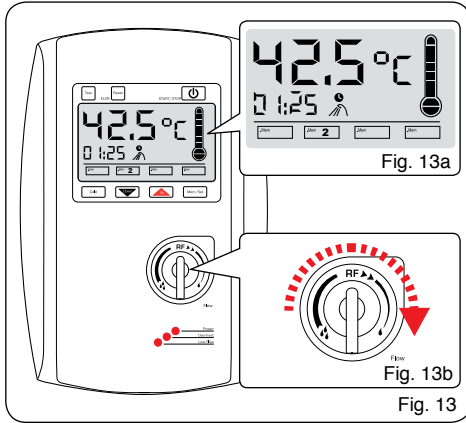


Fig. 13a

Fig. 13b

Fig. 13

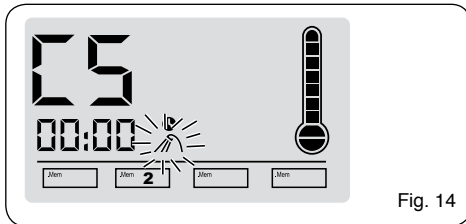


Fig. 14

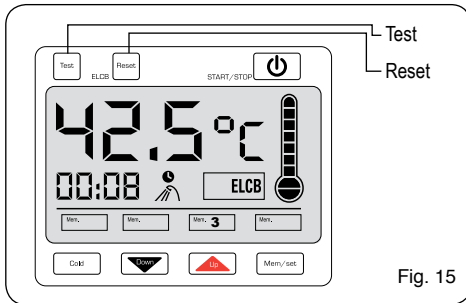


Fig. 15



Fig. 16

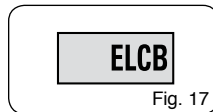


Fig. 17

Reduce Flow - "RF"


When unit fails to reach the desired temperature the display will show **RF** and **REDUCE FLOW** will flash (Fig.12). Turn the "Flow control" knob (Fig.13b) slowly clockwise to reduce flow until **RF** disappears and shows the temperature setting (Fig.13a)

Note: It is advisable to hand test water temperature before stepping under the showerhead.


There will always be a time delay of a few seconds between selecting a temperature and the water reaching the selected temperature.



OPERATING FUNCTIONS

Clean Showerhead - [CS]

After a preset number of Start/Stop button operations [nominally 100], the startup routine acts as normal but the display will show flashing **CS** & . (Fig. 14)

This is a reminder to clean the showerhead. It does not indicate any defect to the shower.



To remove the **CS** and stop the  symbol from flashing, press Start/Stop button for 3 seconds.


Alternatively, you can choose to wait 8 seconds, the **CS** will disappear from the display automatically, but the  symbol will continue to flash. For an additional five shower operations the symbol **CS** and  will show after which it will stop [whether you clean the shower head or not].

The shower will then reset automatically for a further preset number of shower operations before repeated flashing of reminder.

Models with ELCB - Optional

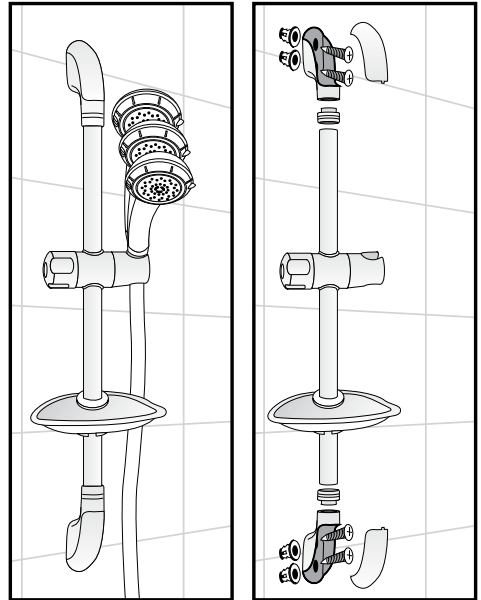
Units with residual current device incorporated, known as ELCB (Earth Leakage Circuit Breaker), must be periodically tested (once a week).

Press on the Start/Stop button , then press on the TEST button  (Fig. 14). The symbol **X!** on the display will flash (Fig. 16) The ELCB will disconnect the unit from power and water will stop. (The display will stay on).

Press on the RESET button . The **X!** on the display will disappear. (Fig. 17) **ELCB** The units power will turn ON, the unit is ready for use.

Using the riser rail

1. The handset holder (Fig.9) can be positioned on the riser rail at the required height by twisting the grip ring clockwise. Select handset and re-tighten. The angle of shower spray is adjusted by moving the handset in its holder.
2. When choosing the position of the riser rail, (Fig.10) allowances should be made to accommodate the tallest person using the shower on a regular basis.
 - Fit the slider assembly to the rail.
 - Fit the rail ends to the rail, ensuring that the crimp on the end of the rail fits into the key way in the bottom rail end.
 - Offer the rail assembly up to the wall in the desired position and mark the fixing hole centers through the fixing holes in the rail ends.
 - Drill the wall using a 6 mm masonry drill and insert the wall plugs (provided).
 - Fix the rail to the wall using the screws (provided) and fit the rail end caps.
 - Clip the soap dish to the riser rail.
 - When installation has been completed the handset can be connected to the hose and can be placed in its holder ready for use. It is the conical connector of the hose which grips into the holder.

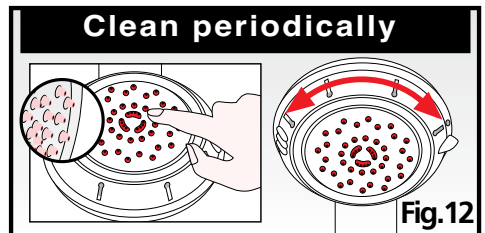
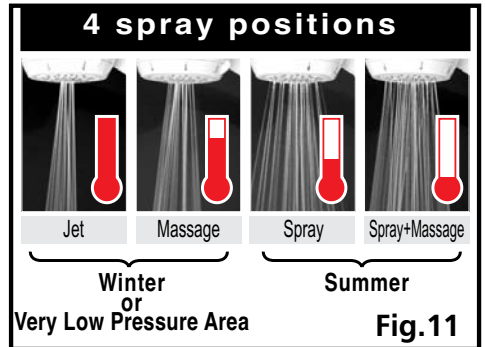


Using the handshower

In order to achieve the maximum efficiency from the unit please use the 4 spray positions to adjust the required temperature and the water flow to the user's comfort. (Fig. 11)

For winter time use the Jet or Massage position For summer time use the Spray or Spray+Massage position. (Fig. 11)

For enjoyable use and in order to **avoid scale**, the **shower-head rub niddle** should be periodically cleaned by **finger brush**. (Fig. 12)



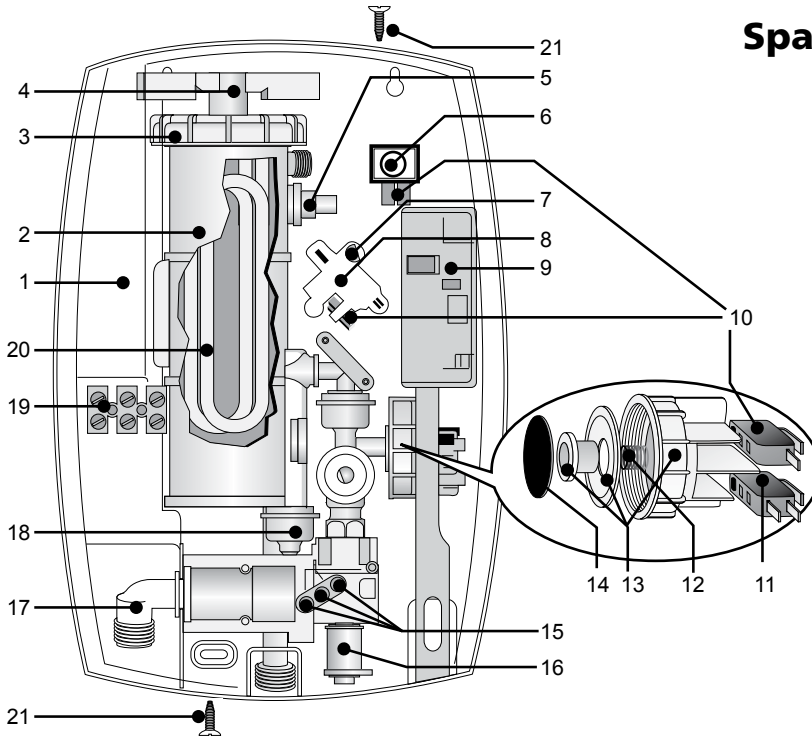
Trouble shooting

Warning: Before carrying out general repairs or testing ensure the electrical supply is turned off at the mains and the correct circuit is removed or MCB is switched off.

Problem / Symptom	Probable cause	Action / Remedy
Power light not on, no water flow.	A. Fuse blown or tripped. B. Power supply interrupted	A. Reset MCB or replace fuse. If this fails again consult an qualified electrician. B. Are other appliances working. Contact electrical supply company for advice.
No water flow but power light is on.	A. Isolating valve not turned on. B. Interruption to water supply.	A. Turn on isolating valve. B. Check if other outlets are working. Contact water supply company for advice.
Low flow light is on.	Water pressure has fallen below minimum requirement.	Check pressure. Supply pressures vary throughout the day and the shower may work at a different time. Adjust shower head to Jet position. (Fig. 10)
Water temperature is too high	Insufficient water flow through shower unit.	A. Increase the flow by reducing the temperature (B) (anticlockwise) and/or reducing the power settings (3 or 2). B. Clean the handset. C. Adjust shower head to spray/massage position. D. Incorrect installation.
Shower runs hot and cold during use.	Water pressure is at minimum requirement.	A. Adjust shower head to spray/massage position. B. Check pressure. Supply pressures vary throughout the day and the shower may work at a different time.
Overheat light is on.	Insufficient water flowing through unit.	A. Increase the flow by reducing the temperature. B. Reduce the power setting. C. Adjust shower head to spray/massage position. D. Incorrect installation.
Water running from bottom of unit.	Pressure relief device operating	A. Clean handset. B. Check if hose is not blocked.

Note: The Pressure relief device is self-resetting.

Spare Parts



	300	301	302	PN.	Description
1				191030 191130	Base-White Base with ELCB-White
2	—	—	—	191032 191032B	Container without small thermostat (at outlet) Container with small thermostat (at outlet)
3				121018	O-Ring for heating element
4				192019C	Main thermostat (One phase)
5				112021	Outlet thermal cut out
6				191040	Start/Stop push bottom + filter
7				191037C 191037D	Spindle 2 stages Spindle 3 stages
8				191020B 191023	Housing for 2 power switches Housing for 3 power switches
9	Optional	Optional	Optional	192010	ELCB
10				112036	Microswitch with 2 contacts
11				112032	Microswitch with 3 contacts
12				113003B	Spring for pressure-switch
13				190951B	Pressure-switch Plastic set
14				111020B	Membrane
15	✓	✓	✓	112053 112051 112051	Led Indicator: Low flow Led Indicator: High Temperature Led Indicator: Power
16	—	—		122021	Hydraulic valve
17				191036B	Inlet elbow 1/2 "
18				191035	P.R.D. set
19				112014B	Terminal Block (One phase)
20				*	Heating Element * (Mention Model & Rate)
21				114016	Screw connecting cover to base
*				*	Wire set * (Mention Model & Rate)
*				*	O-Ring set for B.W. * (Mention Model)